

**INFLUENCE OF PERFORMANCE CONTRACTING ON
PERFORMANCE OF ROAD CONSTRUCTION PROJECTS IN
NAIROBI COUNTY GOVERNMENT, KENYA.**

BY

KALARA OMARI ALFRED

**A research project report submitted in partial fulfillment of the requirement for the
award of the degree of Master of Arts in Project Planning and Management of the
University of Nairobi.**

2017

DECLARATION

This research project report is my original work and has not been submitted to any other university for the award of a degree:

Signature..... Date.....

Kalara Omari Alfred

L50/82580/2012

This research project report has been submitted for examination with our approval as the university supervisors:

Signature..... Date.....

Dr. Agnes Magu

School of Continuing and Distance Education

University of Nairobi

Signature..... Date.....

Dr. John Mbugua

School of Continuing and Distance Education

University of Nairobi

DEDICATION

I dedicate this work to my wife Millicent Alando and my children Brilliant Atsieno and Brighton Otsieno.

ACKNOWLEDGEMENT

I take this opportunity to express my profound gratitude and deep regards to my supervisors Dr. John Mbugua and Dr. Agnes Magu for their exemplary guidance, valuable feedback and constant encouragement throughout the duration of this study.

I am thankful to the University of Nairobi for giving me a chance to pursue the Master of Arts in Project Planning and Management course. I would also like to appreciate all the lecturers in the School of Continuing and Distance Education who worked as a unified team to equip me with consolidated knowledge that laid down the foundation for this study. I am grateful to the librarians at the Jomo Kenyatta Memorial Library and College of Education and External Studies (CEES) library at Kikuyu campus who facilitated me in getting the necessary resource material.

Finally, I recognize the administrative and moral support from the staff at the Nairobi Extra Mural Centre and the input of the entire Master of Arts in Project Planning and Management class of September 2012 intake.

TABLE OF CONTENT

	PAGE
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	v
LIST OF TABLES	ix
LIST OF FIGURES	xi
ABBREVIATIONS AND ACRONYMS	xii
ABSTRACT	xiii
CHAPTER ONE: INTRODUCTION	1
1.1 Background to the study	1
1.2 Statement to the problem	2
1.3 Purpose of the Study	3
1.4 Objectives of the study.....	3
1.5 Research questions.....	4
1.6 Significance of the study.....	4
1.7 Delimitations of the study.....	5
1.8 Limitations of the study	5
1.9 Assumptions of the study.....	6
1.10 Definitions of significant terms	6
1.11 Organization of the study.....	6
CHAPTER TWO: LITERATURE REVIEW	8
2.0 Introduction.....	8
2.1 The Concept of performance in government projects.....	8
2.2 The concept of performance contracting	9
2.3 Performance contracting in Kenya.....	10
2.4 Performance contract negotiation and performance of roads construction projects	11
2.5 Performance monitoring and evaluation, and performance of roads construction projects	12
2.6 Rewards and sanctions; and performance of roads construction projects.....	14
2.7 Lessons learnt and performance of road construction projects	15
2.8 Theoretical framework.....	17
2.9 Conceptual framework.....	18

2.10 Gaps in literature review	19
2.11 Summary of the chapter	19
CHAPTER THREE: RESEARCH METHODOLOGY	21
3.0 Introduction.....	21
3.1 Research design	21
3.2 Target population.....	22
3.3 Sample size and sampling procedure	22
3.4 Methods of data collection.....	24
3.5 Research instruments	24
3.6 Validity and reliability of the instruments	24
3.7 Operationalization of the variables	25
3.8 Methods of data analysis.....	27
3.9 Ethical issues.....	27
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION	28
4.0 Introduction.....	28
4.1 Response rate	28
4.2 Demographic and respondents' profile information	28
4.2.1 Gender.....	29
4.2.2 Age of the respondents.....	29
4.2.3 Current position in the organization.....	30
4.2.4 Work experience	31
4.2.5 Terms of employment	31
4.2.6 Level of education.....	32
4.2.7 Occupational qualifications	33
4.2.8 Work duration in the current department.....	33
4.3 Knowledge of performance contracting.....	33
4.3.1 Performance contracting	34
4.3.2 Duration on performance contracting	34
4.3.3 Training during introduction of performance contracting	35
4.3.4 Knowledge on performance contracting	35
4.3.5 Processes of performance contracting.....	36
4.3.6 Participation in the processes of performance contracting	36

4.3.7 Rating processes of performance contracting	37
4.3.8 Negotiating targets for the performance contracts	39
4.3.9 Improving the success of performance contracts	39
4.3.10 Lessons learnt during the previous performance contracting cycles.....	39
4.3.11 Frequency of activities executed.....	39
4.3.12 Average percentage scores.....	40
4.3.13 Rewarding for exemplary performance	41
4.3.14 Sanctions for poor performance.....	42
4.3.15 Influence of moderating and extraneous factors on performance contracting	42
4.4 Implementation of projects	43
4.4.1 Duties in implementation of projects	43
4.4.2 Other duties.....	44
4.4.3 Involvement in the implementation of projects	44
4.4.4 Challenges facing implementation of projects.....	45
4.4.5 Rating the success of projects at Nairobi City County	45
4.5 Influence of performance contracting on time of completion of projects.....	46
4.6 Influence of performance contracting on the cost of implementing projects.....	47
4.7 Influence of performance contracting on completion rate of projects	47
4.8 Influence of performance contracting on quality of projects	48
4.9 Influence of performance contracting on integration of projects management processes	49
4.10 Inferential statistics	50
CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND	
RECOMMENDATIONS.....	53
5.0 Introduction.....	53
5.1 Summary of findings.....	53
5.2 Discussion of findings.....	55
5.3 Conclusions of the study	56
5.4 Recommendations of the study	56
5.5 Suggestions for further research	57
REFERENCES.....	58
APPENDICES.....	64
Appendix A: Letter of transmittal.....	64

Appendix B: Questionnaire.....	65
Appendix C: Interview questions.....	75
Appendix D: Krejcie and Morgan table.....	76
Appendix E: Research permit	77

LIST OF TABLES

Table 2.1: Performance rating scale.....	13
Table 2.2: Rewards and sanctions for managers and employees.....	15
Table 3.1: Target population.....	22
Table 3.2: Sample size	23
Table 3.3: Operational definition of variables	25
Table 4.1: Response rate	28
Table 4.2: Gender of the respondents	29
Table 4.3: Age of the respondents	29
Table 4.4: Current position	30
Table 4.5: Work experience.....	31
Table 4.6: Terms of employment.....	31
Table 4.7: Level of education	32
Table 4.8: Work duration in the current department.....	33
Table 4.9: Performance contracting.....	34
Table 4.10: Duration on performance contracting	34
Table 4.11: Training during introduction of performance contracting	35
Table 4.12: Understanding the processes of performance contracting	36
Table 4.13: Participation in the processes of Performance Contracting	36
Table 4.14: Rating processes of performance contracting	37
Table 4.15: Frequency of activities executed.....	40
Table 4.16: Rewarding for exemplary performance	41
Table 4.17: Sanctions for poor performance.....	42
Table 4.18: Influence of moderating and extraneous factors on performance contracting.....	43
Table 4.19: Involvement in the implementation of projects	44
Table 4.20: Rating the success of projects at Nairobi City County	45

Table 4.21: Influence of performance contracting on time of completion of projects.....	46
Table 4.22: Influence of performance contracting on the cost of implementing projects	47
Table 4.23: Influence of performance contracting on completion rate of projects	48
Table 4.24: Influence of performance contracting on quality of projects	49
Table 4.25: Influence of performance contracting on integration of projects management processes	50
Table 4.26: Reliability statistics.....	50
Table 4.27: Pearson Correlation Analysis.....	51

LIST OF FIGURES

Figure 2.1: Conceptual framework	18
--	----

ABBREVIATIONS AND ACRONYMS

AAPAM	: African Association for Public Administration and Management
CCN	: City Council of Nairobi
CIDP	: County Integrated Development Plan
DFID	: Department for International Development
EIU	: Economic Intelligent Unit
ERS	: Economic Recovery Strategy
GoK	: Government of Kenya
KPI	: Key Performance Indicator
MDAs	: Ministries, Departments and Agencies
MDGs	: Millennium Development Goals
MOU	: Memorandum of Understanding
MTP II	: Mid Term Plan II
NCC	: Nairobi City County
OECD	: Organization of Economic Cooperation Development
PC	: Performance Contracting
PSR	: Public Sector Reforms
PAS	: Performance Appraisal System
SPS	: Sector Performance Standards

ABSTRACT

The purpose of this study was to investigate the influence of performance contracting on the performance of roads construction projects in Nairobi City County Government. The objectives of this study were to investigate the influence of performance contract negotiations, performance monitoring and evaluation, rewards and sanctions, and the application of lessons learnt on the performance of roads construction projects. The project performance indicators considered in the study are time of completion, utilization of funds on planned projects, completion rate, quality and integration of project processes in implementing projects. This study is significant because Nairobi County should invest in effective and efficient infrastructure in order to achieve vision 2030 objectives. Most economic and social services are delivered on the platform of good roads infrastructure. The study gave an overview on the development of the concept of performance contracting in supporting public sector reforms in Kenya. Further, the researcher demonstrated the extent to which performance contracting influences service delivery and implementation of government projects. The descriptive survey design used in this study was supported by a literature review on performance contracting. The literature review explored the concept of performance and performance contracting initiatives and their implementation in Public Service Sector. The researcher utilized primary data collection whereby questionnaire and interview methods were used to gather required information. The researcher used a sample size of 63 respondents drawn from a population of 75 employees within the sector of Roads, Public Works and Transport of Nairobi County Government who are responsible for implementation of roads construction projects. Given that the population from which the sample was drawn was not homogeneous, stratified proportionate random sampling technique was used to obtain a representative sample. The researcher collected both quantitative and qualitative data. The quantitative measures were used to generate descriptive statistics to analyze frequencies, means and percentages while the qualitative methods were used in sorting out data from questionnaires. The data was analyzed using Statistical Package for Social Science software and presented in the form of tables to establish statistical relationship between variables. The study revealed a strong positive relationship between performance contracting and project performance. The findings were used to make inferences. The study found out that the Nairobi County Government should improve on project management procedures to make roads construction projects more successful and develop proper training programmes to curb areas of weakness among poor performers. Further studies could be done in other county governments to compare the relationship between performance contracting and projects performance in different geographical, social, cultural, economic and political settings.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

A Performance contract is a means by which an organization enters into a performance agreement with its staff for the purpose of assessing the output against the bargained performance goals. Performance contracts were first practiced in Europe in early 1960s as frameworks for accomplishing public projects. Performance contracting in Kenyan government institutions is a segment of the expansive public sector reforms initiated in 1993 with the aim of improving efficiency and effectiveness in the administration of public service in the state corporations and government ministries. To date, most governments and international entities actualize policies through performance agreements as a state-of-art instrument to boost productivity, good governance and accountability. (Organization of Economic Cooperation Development, 1997).

County governments play a vital role in setting up and maintaining infrastructure. Access to basic services in Nairobi is below the expected standards; the reality is that systems are not properly functional (DFID, 2015, p.20). There have been hindrances to satisfactory service delivery by the defunct City Council of Nairobi ranging from taking too long to implement projects, stalled projects, financial constraints, procuring projects at inflated contract prices, logical factors, political interferences, non-procedural procurement and implementation of works; compromised quality of works and low levels of accountability of public resources entrusted to public officers. The Nairobi County government being the host of the capital city of Kenya is under heavy criticism from other best leading cities in terms of effective and efficient service delivery (EIU, 2016).

During the project life cycle, project managers focus attention to on five project performance indicators, these are; cost, time, quality, scope and integration of all project processes. These indicators form a basis for project monitoring, evaluation, control and reporting (Kezner, 2006). The success of a project is measured on achieving the project performance indicators. The indicators are clearly defined during project design and

communicated to project team and relevant stakeholders. A successful completed project is one that is completed and fulfills all the five performance indicators. Project performance objectives are put in consideration during the processes of performance contracting. The indicators for performance contracting are negotiation engagements, performance monitoring and evaluation; rewards and sanctions and application of the lessons learnt to improve successive performance contracting cycles.

This study targets projects' performance because implementation of successful roads construction projects is vital to the overall contribution of Nairobi County to transform Kenya into a middle income nation status by 2030. Successful implementation of roads infrastructure is of great support to achieving the Millennium Development Goals. County governments are encouraged to invest in infrastructure projects if they are to achieve urbanization. (Wahinya, 2016).

1.2 Statement to the problem

This research intends to assess the extent to which performance contracting has influenced the performance of projects at Nairobi City County. The public sector faces many challenges ranging from inefficiencies in administration to implementation of policies at workplaces (GoK, 2010). Audit reports revealed diversion of project funds to other purposes, discrepancies between actual projects costs and budgeted amounts, lack of competitive tendering process, sub-standard works, stalled projects and non performing projects among other irregularities by government agencies (GoK, 2014). Another report on audit exposed that contractors were abandoning roads construction works because of nonpayment (GoK, 2015, p.14). This had a negative impact on the county government absorption of development funds, failure to deliver timely services to the Nairobi citizens and contractors not getting value for their capital money invested in county projects. Delays in making timely payments exposed county government to more losses in forms of interests payable to contractors.

An audit report (GoK, 2013, p.25) indicated that Nairobi residents were particularly concerned about the poor state of roads in parts of the city The Nairobi County Government incurs heavy expenditures to develop and maintain infrastructure in

order to improve quality of service delivery. The Financial Estimates – Program-Based Budget, 2016/2017 for Nairobi County government confirmed that roads and other engineering services were allocated the second highest budget of KSh.6.2 Billion for new projects and maintaining existing infrastructure. The Nairobi residents, being the taxpayers expect services worth the budget allocation.

Towards this end, need arises to scrutinize how various aspects of performance contracting are influencing the success of road construction projects. Therefore, this study is designed to examine and analyze whether introduction of performance contracting in public sector has changed the manner in which Nairobi county government manage roads construction projects.

1.3 Purpose of the Study

This study was to investigate the influence of performance contracting on the performance of roads construction projects in the county government of Nairobi.

1.4 Objectives of the study

- i. To examine the influence of performance agreement negotiations on the performance of roads built by Nairobi County.
- ii. To analyze the influence of performance contract supervision on the performance of roads constructed by Nairobi County.
- iii. To assess how rewards and sanctions influence the performance of roads put up by Nairobi County.
- iv. To establish how lessons learnt from performance contracting influence the performance of roads built by Nairobi County.

1.5 Research questions

The research answered the following questions:-

- i. How do performance agreement negotiations influence the performance of roads built by Nairobi County?
- ii. How does supervision of performance contracts influence the performance of roads constructed by Nairobi County?
- iii. To what extent do rewards and sanctions influence the performance of roads put up by Nairobi County?
- iv. How do lessons learnt from performance contracting influence the performance of roads built by Nairobi County?

1.6 Significance of the study

Nairobi County government implements roads construction projects to enhance physical infrastructure to support delivery of services. The findings from this study were used to compel the Nairobi County Government to implement projects efficiently in order to facilitate delivery of better services to its population. The implementation of successful projects implies that the funds allocated to the Nairobi County government by the National Government are utilized efficiently to provide quality services for the benefit of Nairobi population. The sum positive effect is to improve economic and living standards of the Nairobi people. Improved performance of roads construction projects has a positive ripple effect on the country's drives to achieve the Millennium Development Goals.

The study also acted as a trigger to entire management of Nairobi County Government to embrace continuous learning and discover new innovations for the purpose of continuous improvement of service delivery.

1.7 Delimitations of the study

In this study, the researcher addressed how various objects of performance contracting influence the performance of roads projected constructed by Nairobi County government. The projects under consideration are the roads construction projects funded by Nairobi County government. The researcher did not address other projects like electricity distribution, water supply and sewage systems which are managed by the National Government. The jurisdiction of the study is confined to 17 sub-counties with a total of 85 wards within Nairobi County. The Nairobi County government mandates the sector of Roads, Public Works and Transport to implement roads construction projects. The researcher collected data from the employees of Roads, Public Works and Transport sector who are engaged in project implementation. The researcher was confined to four aspects of a performance contracting that influence the performance of roads construction projects, namely negotiation, monitoring and evaluation, rewards and sanctions and application of lessons learnt. The performance indicators of a project considered in this study were time of completion, utilization of funds on planned projects, completion rate of projects, quality of projects and integration of project processes in implementation of projects.

1.8 Limitations of the study

The researcher faced constraint of time due to the pressure of workload at the work place. However, the researcher managed to complete the study by utilizing the available time. Financial challenge was another limitation that the researcher had to battle with to carry out this study successfully. The researcher made financial sacrifices by foregoing financial commitments that could be attended to at a later date.

Confidentiality was also an issue whereby some respondents were not willing to disclose information that may seem to expose personal or institutional weakness for fear of the unknown. The researcher assured the respondents that the study was meant for academic purposes only and that they should not indicate their names on the research instruments.

1.9 Assumptions of the study

It was assumed that the respondents were honest and that the information they provided was true and reliable. The study also assumed that the sampled population represented the whole population studied.

1.10 Definitions of significant terms

Cost effectiveness: value for money in project implementation and whether the ultimate cost was within the budget. Nairobi County Government provides the budget for the project(s) during negotiations and a variance analysis at the end of the performance period.

Negotiation: consensus to settle a matter of mutual concern.

Performance appraisal: a system used to assess achievements against the agreed goals and assign a performance score to an employee.

Project completion rate: is the number of projects completed against the projects planned.

Performance contract: a binding agreement between parties to perform and meet goals.

Performance monitoring: daily basis collection and recording of data on project activities.

Performance of government project: a measure of how the project meets the scope, time, cost, quality and integration of all project processes.

Time of completion: refers to actual time spent in implementing the project.

1.11 Organization of the study

The study has five chapters. The first chapter comprises of the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, delimitations of the study, limitations of the study, assumptions of the study, definition of significant terms and the organization of the study.

Chapter two contains a comprehensive literature review of related studies and publications on performance contracting and projects performance within the public sector. The section contains a theoretical framework that discusses theories which support the application of performance contracting to improve performance and a conceptual framework that gives the relationship between variables.

Chapter three contains a description of the methodology. Methods of data collection, analysis and presentation are discussed. The chapter concludes with the operational definitions of variables which associate the research objectives with the methodology and provided a map to the expected results.

Chapter four analyzes, presents and provides interpretation to the data. It explains the questionnaire return rate and the demographic characteristics of the respondents. This chapter further explains how the responses obtained from the questionnaires helped to answer the research questions. The understanding of this chapter prepares the researcher on how to use the findings.

Chapter five summarizes and discusses the findings in comparison to the previous knowledge cited in the literature review. Finally, this chapter makes conclusions and recommendations for further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews literature that covers the concept of government projects' performance and performance contracting, how various variables affect the performance of engineers in implementation of projects. The chapter also contains the theoretical framework, conceptual framework and the relationships of variables in the conceptual framework. The reviewed literature reveals knowledge gaps that the researcher intended to fill in this study.

2.1 The Concept of performance in government projects

According to (Campbell et al., 1993, p. 40), performance is the best execution of assignments by an individual as expected by the hiring institution. This implies that the output cannot be described solely by the action but by undertaking some judgment and evaluation procedures (Borman & Schmit, 1997). Furthermore, measurable activities are used to assess and rate the performance of an individual (Campbell et al., 1993). There is a consensus among authors that performance has to be conceptualized by distinguishing distinct behavioral aspects; what an individual does in the work situation and the results of the individual's behaviour (Roe, 1999).

However, not any action that is relevant to organizational goals contributes to performance, hence the need for a criterion for assessing the extent to which an individual's productivity adds up to the objectives of an institution. Generally, researchers agree that the output of a job can be described by the conduct and activities undertaken by an individual to enable an organization to achieve its goals (Campbell, 1990). Traditionally, supervisors were used to rate individual's performance. However, because of the shortfalls experienced in the traditional systems, many organizations have changed to performance measurement systems where performance appraisal of the target employee is provided to his or her seniors. According to the New Public Management theory, performance measurement is vital because it enables an organization to offer

better services. The manner in which to describe performance is becoming clear to many public organizations. Efforts to reform are gradual which demands the best output.

2.2 The concept of performance contracting

Public institutions should ensure that performance indicators are aligned with the Ministries, Departments and Agencies (MDAs) goals. Nairobi County Government staffs are required to be accountable while discharging their duties. Previously, before introduction of performance contracting engineers were discharging their duties without clear lines of accountability, relevance to organizational vision, works were not precisely verifiable and quantifiable. Implementation of project did not adhere to set timelines. There were no prior plans for projects. Projects could be initiated but only implemented at the convenience of the availability of funds. The decision on the kind of projects to be implemented was solely handled by political leaders without involving the participation of members of the public who are the major stakeholders and users of the services (Menzwa & Misati, 2014). As such, it was not transparent to measure the performance of public servants as there were no clear guidelines of doing so. This contributed to laxity among most employees as they could not be pinned down for non-performance. The burden to deliver services to people was left to a small percentage of employees who could not provide satisfactory services. The public was so dissatisfied with poor services offered by the government and demand public officers to improve on the quality of services and be fully accountable for public resources entrusted to them.

The introduction of performance contracting helped to set clear performance indicators for projects implementation by engineers. The process of performance contracting starts with negotiation of performance targets, vetting, signing the performance contract, implementing and reporting on performance, monitoring and evaluating the performance, moderation of performance contract, rewarding and sanctioning of officers and finally drawing up lessons to improve the performance contracting as a tool of service delivery. All through the processes of performance contracting, engineers were put on task to ensure that projects are completed within set contract periods, works are done within approved budgets, all the projects initiated are

implemented to completion and that proper management procedures and practices are applied at all times during project life cycle.

2.3 Performance contracting in Kenya

Kenya Railways Corporation and National Cereals and Produce Board were the first public institutions in Kenya to implement performance contracting during the years 1989 and 1990 respectively. The two performance agreements suffered a setback for lacking performance incentives and provision to accommodate impact of external factors. Performance contracting was re-introduced in 2003 with an aim of enhancing a strategy to boost the economy and job creation, in pursuit of the goal of performance improvement in the public sector.

The key objectives for introducing performance contracting were drawn from the strategic plans of the public institutions (GoK, 2003). The performance targets are cascaded to all levels of staff through the performance appraisal system. The targets form the basis for evaluating institutional performance as well as appraising individual performance. Performance contracting outlines the indicators used to monitor its performance and delivery, and attach rewards and sanctions to the attainment of the goals attached to these indicators. Identifying and agreeing on indicators is therefore a critical part of the performance contracting (PC) process. Before the introduction of the PC, the civil service did not have a clear strategic direction hence the public sector had become an impediment to economic growth and recovery of the economy because the government sector was not efficient and effective in their service delivery.

Nzuve and Bakari (2012) did a study for the City Council of Nairobi to assess how empowerment of employees relates to their output. Another study by Awino and Saoli (2014) recommended the council to ensure adequate funding for satisfactory implementation of projects. Further, the study suggested the council to adhere to right procedures when executing performance contracting to fulfill employees, Council and public interests.

The idea of performance agreements is a new approach to organizations and employees and faces hurdles like stakeholders engagement, target setting, setting of

standards, monitoring and evaluation of performance, (GoK, 2010). Performance contracting aims at specific, measurable, accurate, realistic and time-bound (SMART) targets, specifying agent performance in terms of results and assigning accountability for those results, increasing the transparency of the accountability relationship in public institutions, establishing clear reporting, monitoring and evaluation mechanisms of the projects and providing a basis for assessment of performance. Performance contracting also provides a basis for renegotiation for the performance.

2.4 Performance contract negotiation and performance of road construction projects

Negotiation is a bargaining process between two or more parties seeking to discover a consensus to settle a matter of mutual concern or resolve a conflict (GoK, 2014). To obtain a profitable outcome it is necessary for negotiating parties to have a common understanding of their beliefs, values and objectives. This means a long term, profitable relationship. Therefore, the skills that support negotiation process are important during negotiation of performance targets. It is essential that the parties should be willing to listen; see things from other people's point of view; check out beliefs and assumptions of both sides; identify areas of agreement; identify points of leverages and blockages; impress multilateral thinking in order to develop other ways of achieving an agreement; and be flexible and sensitive.

The performance contract is normally signed to inspire accountability and demonstrate commitment by the relevant Senior Management Authority and the Institutions Accounting Officers. The main objective of a project engineer is to deliver successful projects in line with the project performance objectives. In addition, project engineers need to engage relevant stakeholders to implement successful projects per user expectations. A criterion is formulated to measure the viability of the project to determine whether the project will be a success or a failure. The criterion is devised based on project relevance, effectiveness, efficiency, impact, sustainability, conformity, replicability, cost effectiveness, participation ownership and feasibility.

Both projects and performance contracts are time-bound to deliver results. As such the project must be executed and delivered within the performance contract period in question. A study conducted by Mbawi and Muchelule (2015) indicates that management support has a significant influence to the success of a project. In this study, the researcher considered to address how of management can spearhead the negotiation of performance contract to enable successful delivery of projects by engineers.

2.5 Performance monitoring and evaluation, and performance of road construction projects

Monitoring is a continuous process that involves collecting data of daily project activities. Evaluation assesses how well the outcomes of activities fulfill the objectives of the project. Therefore, monitoring and evaluation is involves collection and analysis of data during project implementation to obtain useful information to all the stakeholders at various levels of engagement (Nyonje, Kyalo & Mulwa, 2012). Public institutions implement performance contracts following their commitment to each target. An institution may realize some difficulty in achieving some targets within the prescribed time-frame due to extraneous hindrances beyond its control (Kervasdoue, 2007).

Reporting, monitoring and evaluating performance quarterly helps to determine whether the initiated projects proceeded according to plan. Otherwise, the number of projects to be implemented is reviewed during midterm evaluation. A summative evaluation is done. The parameters of the performance contract matrix are filled by the appraisee and appraiser, in consultation. These parameters include the performance target, performance indicators, weight, unit of measure for individual performance target, individual achievement, percentage change, raw score, weighted score and composite score. The computation of raw, weighted and composite scores is guided by the formula applicable in the performance contract guidelines. Verifiable evidences on the achievements form an addendum to quarterly performance reports. The rating scale in table 2.1 is used to rate the performance of the appraisee.

Performance appraisal is part of the system of managing performance within an institution and its employees. Appraisal is a means for assessing the productivity of an

employee, recommending areas that need improvement and giving recognition to better performance. Appraisal brings together goals assigned to an employee, how an employee works to meet the agreed goals, reporting on the achievements and rating the performance. If an employee is promoted, transferred, redeployed or assigned other duties besides those stated at the commencement of the appraisal period, the employee's output is appraised proportionately.

It is essential to consider the purpose of appraisal prior to designing and its application. Annual appraisal is used to assess performance, identify future training and development needs, set new performance objectives and can be linked to salary review (Adams, 1968). However, linking the appraisal to reward system may degrade the quality and exchange of information at the appraisal interview especially if the appraiser is not well knowledgeable as the employees may opt to avoid mentioning areas of work they find difficult. If the appraisal is focused on development, targets for individual employees should be set based on business needs of the organization. This gives employees better understanding of their roles and their contribution to they make. The performance of the appraisee is rated based on table 2.1.

Table 2.1: Performance Rating Scale

Achievements of Performance Targets	Performance Level	Performance Grade	Raw Scores
Achievement above 130% above the agreed performance target	130% - 200%	Excellent	1.00 – 2.40
Achievement of the agreed performance target upto 130% of the target	100% -130%	Very Good	2.40 – 3.00
Achievement between 70% and 100% of the agreed performance target	70% - 100%	Good	3.00 – 3.60
Achievement between 50% and 70% of the agreed performance target	50% - 70%	Fair	3.60 – 4.00
Achievement between 0% and 50% of the agreed performance target	0% - 50%	Poor	4.00 – 5.00

Source: GoK, Rewards and Sanctions Framework Policy for Civil Service (2014).

2.6 Rewards and sanctions; and performance of road construction projects

Rewards is about appreciating the good work whereas sanction is the denial and imposing a punishment for non-performance. According to Nganyi (2014), administration of rewards and sanctions is a way of encouraging competition within public institutions. Reward is the use of inducements in form of intrinsic and extrinsic motivators to appreciate good performance. Some scholars argue that manipulating employees with rewards leads to automatic failure and may yield to long term harm (Kohn, 1999).

Rewards can be both financial and non-financial. The rewards for good performance can be in form of bonuses, promotions, contract renewal, National Honours and Awards; and Letters of Commendation, (GoK, 2014). Employees who perform below average can be sanctioned through warnings and demotions. However, the employer may want to understand causes for poor performance by identifying and training the affected employees in the areas of their needs prior to taking sanctions. This can give employees a chance to get equipped with the required job specifications to improve their performances.

Sanction is the denial of reward, use of threats and fear to cause an employee improve his performance. However, sanctions do not necessarily cause an employee to improve his performance. Although punishment is a strong motivator, it is not sustainable because it can contribute to low quality of work and rebellion among non performers. A sanctioned employee may also avoid and counterattack the manager imposing the sanction. This may be expressed through sabotage or malicious obedience. It is important that the manager pre-investigates the outcome of sanctions prior to administering. Sanctions can be combined with positive reinforcement in order to eliminate some negative reactions.

Table 2.2: Rewards and sanctions for managers and employees

Achievements of Performance Targets	Performance Grade	Performance Level	Reward/Sanction
Achievement above 130% above the agreed performance target	Excellent	130% - 200%	13 th month salary based on graduated composite score for “Excellent” performance and Roll of
Achievement of the agreed performance	Very Good	100% -130%	Letter of Commendation
Achievement between 70% and 100% of the agreed performance	Good	70% - 100%	1 st year – cautionary letter 2 nd year – warning letter
Achievement between 50% and 70% of the agreed performance	Fair	50% - 70%	1 st – warning letter 2 nd – reprimand
Achievement between 0% and 50% of the	Poor	0% - 50%	1 st - reprimand

Source: GoK, Rewards and Sanctions Framework Policy for Civil Service (2014).

Rewarding good performance acts as a motivator for project engineers to track the process of implementing projects right from the initiation to closure stage. Projects are initiated by the users or members of the public through public consultative forums. The number of projects to be implemented by engineers during a financial year are negotiated and agreed on as a measure of their performance targets.

2.7 Lessons learnt and performance of road construction projects

All the efforts put into the processes of performance contracting in order to influence the achievements of project engineers in implementing projects are geared towards providing effective and efficient services to the citizens (Joby, 2003). Public service is expected to deliver service with customer as a focal point. Customer focus is not an event, mind-set but a continuous process. Public institutions need to do continuous

evaluation of customer satisfaction and get their feedback to improve on the service delivery. The success of roads construction projects is influenced by how best the performance contracting is implemented. Continuous Improvement Strategy has been identified as the cornerstone for representing technologies, procedures and resources as system components (Kano et al., 1984). To achieve and sustain continuous improvement in each of the processes of performance contracting and project implementation, it is recommended to adopt: “5S scheme” (sort, set in order, shine, standardize and sustain); creativity and Deming Wheel also known as the PDCA (Plan, Do, Check, Adjust) cycle (Erevelles & Leavitt, 1992).

Every effort should be taken to instill team spirit among employees and whole-hearted involvement of everyone has to be ensured for successful implementation of performance contracting and projects implementation (Dahlgaard, Kanji & Kristensen, 2012). It is vital for organizations to learn how to instill an all inclusive approach and motivation among its employees. Thus, lessons learnt from previous performance contracts should be applied to improve achievements in the successive performance contracts. A study by Nganyi (2014) recommended sensitization and training of public officers to demystify performance contracting. The process should be more inclusive by involving all stakeholders.

Employee meetings are part of means for administering performance management that is undervalued by most public institutions. Many organizations make the mistake of holding meetings with senior staff only excluding staff involved in operations. Meetings of performance contracting stakeholders are important because they create room for discussion and making proper decision.

A study on performance contracting in Kenya by Obong'o (2009) did not address the influence of performance contracting on implementation of projects. Instead, the study proposed continuous review of performance contracts to enable public entities improve on service delivery. Therefore, this research will address how lessons can be learnt from predecessor performance contracts to improve achievements in the successive performance contracts.

2.8 Theoretical framework

In this study, performance contracting was used as a means for assessing performance. A Performance contract clearly states the responsibilities and maximized benefits of each party involved, (Jody et al, 2004). The New Public Management and the Principal Agent theories were used in this study since they emphasize the shift from traditional public administration to public management.

The New Public Management (NPM) theory borrows the best practices for maximizing benefits used in the private sector (Balogun, 2003). The New Public Management theory has closely been associated with theory performance contracting after consensus (Mutahaba, 2014). Under this theory, focus is to ensure that government becomes more efficient in delivering services. Government employees have to change from traditional way of public service to impress a performance oriented approach. In some way, public servants have to have a different perspective and view themselves as part of the public. In this way, government employees will endeavour to deliver the best while discharging their duties.

Ayee (2008) and Petri (2002) argue that performance contracting (PC) is based on Principal Agent theory. The Principal Agent theory is enforced when the agent is in position to make decisions on behalf of the principal. This study applies the relationship that the County government, represented by project engineers is the agent and the public as beneficiaries is the principal. The theory anchors on the premise that both the principal and the agent want to maximize benefits. The agent sets performance goals with minimal risks of not meeting the interests of the public (Ssenkooba, 2010). The point to content with in the application of this theory is how the principal can tame the action of the agent to create a balanced fulfillment of interests of stakeholders. Various mechanisms may be applied to match the interests of the agent with those of the principal. The performance contracting is but a tool used by citizens to hold public officials accountable and the government agencies accountable (Larbi, 2010).

2.9 Conceptual framework

This study will be guided by the conceptual framework in figure 2.1

Independent variables

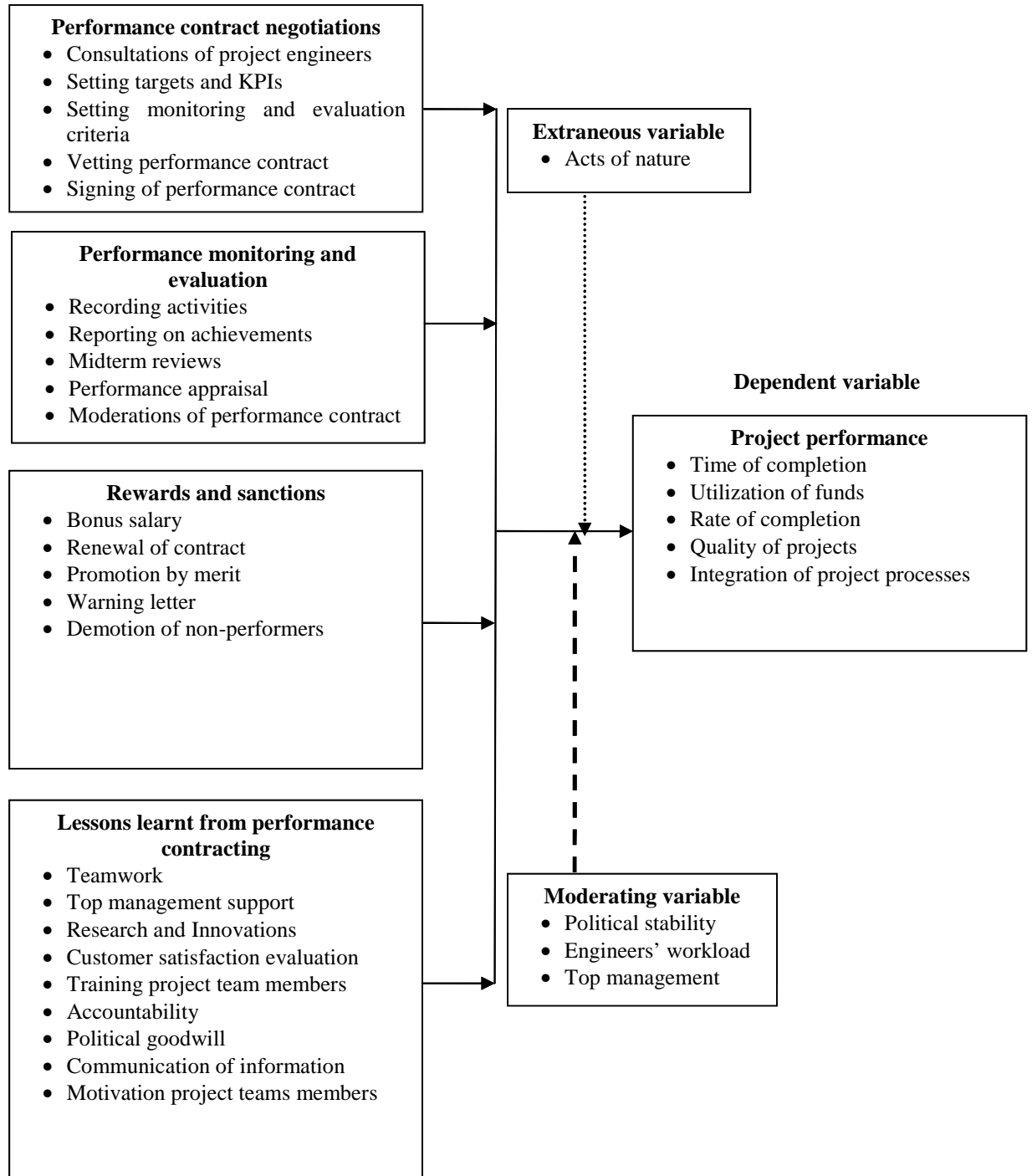


Figure 2.1: Conceptual framework

In this study, the independent variable was the performance contracting and the dependent variable was the performance of roads construction projects. The objects of performance contracting are negotiation, performance monitoring and evaluation; rewards and sanction; and application of lessons learnt to improve performance contracting. The indicators of performance of roads construction projects were time of completion, utilization of funds, rate of projects completion, quality and integration of project processes during the project life cycle.

The researcher therefore sought to verify whether the performance of roads construction projects can be varied through manipulation of performance contracting objects. The moderating variables were political stability and pressure of work on projects engineers which may influence performance of roads projects. The extraneous variable was acts of nature. Moderating and extraneous variables influence the strength of the relationship between the independent and dependent variables. All the moderating variables were put under control so as not to interfere with the influence of the primary independent variable on the dependent variables.

2.10 Gaps in literature review

The literature reviewed above showed that no detailed study has been carried out to specifically explain the effects of performance contracting on the performance of roads construction projects within Nairobi County Government. Studies addressing performance contracting on performance effectiveness, concentrating on the organizational productivity, organizational culture, organizational effectiveness and employees' motivation have been done.

This research therefore is tailored to examine the influence of performance contracting on the performance of roads constructed by Nairobi County Government.

2.11 Summary of the chapter

This chapter explored the concept of performance in Government projects and the concept of performance contracting. The chapter discussed and reviewed literature on

how performance contracting influence time of completion, cost efficiency, number of projects implemented and adherence of engineers to good management procedures and practices as indicators of engineers' performance in Government projects. The New Public Management and Principal Agent theories were used to support how performance contracting can influence performance of engineers' in projects implementation. The conceptual framework was used to explain the relationship between the independent variable; performance contracting and the indicators of dependent variable, that is, engineers' performance in Government projects. Gaps identified in the reviewed literature are to be addressed by this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter discusses the methodology to be used in the study. It explains research design, target population, sample size and sampling procedures, data collection methods, research instruments, pilot testing of the instruments, validity and reliability of instruments, operational definition of the variables, data analysis techniques and ethical considerations observed in this study.

3.1 Research design

The research design explains the entire approach used by the researcher to put together various parts of this study to ensure that the research problems were effectively addressed. The research design was applied to structure and bind various components of this research project so as to demonstrate interdependence of all major components (Trochim, 2005).

In this study, the researcher used a descriptive survey design. Descriptive surveys are designed to measure the characteristics of a particular population, either at a fixed point in time or comparatively over time (Gay, 2004). The study adopted descriptive research because the method applies both qualitative and quantitative approaches to research. Descriptive survey was considered appropriate for the study since the study was concerned with collecting and analyzing data at various times under prevailing conditions (Kothari, 2004). According to Cooper and Schindler (2003) the objective is to learn who, what, when, where, and how of a topic. The descriptive design attempts to describe possible behaviors, attributes, values and characteristics (Mugenda, 2003). A descriptive research as the name implies aims at describing the characteristics of the population under study (Quee, 1999).

3.2 Target population

The target population was 75 employees within the sector of Roads, Public Works and Transport of Nairobi City County engaged in the implementation of roads and streetlighting projects. The source of this information was obtained from the employees' record of Nairobi County government guided by the job group. The respondents comprised of senior managers, middle level managers, project engineers, supervisors and subordinate staff comprising of revenue officers, accountants and administrative officers. Table 3.1 shows the target population under the study.

Table 3.1: Target population

Category of respondent	Target population
Senior managers	4
Middle level managers	15
Project engineers	21
Project supervisors	30
Support staff	5
Total	75

3.3 Sample size and sampling procedure

A sample of 63 respondents were selected from 75 employees of Nairobi City County management staff, project team members and support staff engaged in projects implementation within the sector of Roads, Public Works and Transport. Table 3.2 shows various categories of the respondents drawn from the target population.

Table 3.2: Sample size

Category of respondent	Target Population	Sample size	Percentage of target population	Percentage of total sample size
Senior managers	4	3	4.0	4.8
Middle level managers	15	13	17.3	20.6
Project engineers	21	18	24.0	28.6
Project supervisors	30	25	33.3	39.7
Subordinate staff	5	4	5.3	6.3
Total	75	63	84.0	100.0

From Krejcie and Morgan's (1970) table, for a population of 75, a sample size of 63 respondents was suitable to stand for a cross-section of the population at 95% confidence interval, population proportion at 50% and degree of accuracy at 5%. Stratified random sampling method enabled the researcher to group population subjects with similar characteristics into strata (Mugenda and Mugenda, 2003). Each category of the employees formed a stratum. Thus, the researcher had five strata. To get a sample size from each stratum, the researcher used a proportionate method by taking the ratio of the number of employees in the stratum to the total target population and multiplying by the total sample size of 63 employees. The resultant respondents from each stratum were then subjected to a simple random sampling technique since the population of each stratum was homogeneous. The selected sample of 63 respondents was a representative of the population and thus the findings could be generalized. The sample consisted of 84% (N = 75) of the total population comprising of senior managers, middle level managers, resident engineers, supervisors and subordinate staff.

3.4 Methods of data collection

A questionnaire was used to collect data from respondents. The questionnaires had both structured and unstructured questions. The respondents were literate and therefore reading and interpreting the questions was not a problem. The researcher also used face to face interviews. The interviews gave an opportunity for the researcher to get the feelings and the thinking of the interviewees for in-depth data and clarification of issues as well as probing. Questionnaires were used to interview resident engineers as they were endowed with greatest responsibility of supervising projects within Nairobi City County. The resident engineers were therefore expected to have more information concerning the research questions of this study. It was deemed an effective instrument because not all questions were asked through the questionnaire.

The researcher applied for a research permit from the National Commission for Science, Technology and Innovation through the Department of Extra Mural Studies, School of Continuing and Distance Education, University of Nairobi. Consent letter from Nairobi City County was obtained to conduct research within its sectors and departments. The researcher engaged the services of two research assistants to distribute questionnaires to the respondents. The collection date of the duly filled in questionnaires was to be agreed upon. The filled in questionnaires were collected for analysis.

3.5 Research instruments

In this study, questionnaires were used to collect primary data from the respondents. The questions were designed in relation to objectives of this study so as to get required feedback to answer the research questions. Face to face interviews with project team members entailing open ended questions were conducted to enable respondents open up to provide more information.

3.6 Validity and reliability of the instruments

A pilot study helped the researcher in the identification of the items in the research instruments that might have been ambiguous or wrongly constructed. The researcher conducted a pilot study before administration of the questionnaires to check on

validity of the questionnaires. Reliability refers to the consistency of the research and the extent to which studies can be replicated (Wiersman, 1986). To ensure reliability, the researcher employed the test – retest technique. This involved administering the test to one appropriate group selected randomly. After two weeks the same test would be administered to the same group. Correlation coefficient which is also called “the coefficient of reliability or stability” was calculated. The coefficient of reliability 0.8 was considered sufficient enough that the instrument would be deemed reliable for the study.

3.7 Operationalization of the variables

Operational definition of variables refers to how the researcher defined and measured specific variables as used in the study. Table 3.3 shows how the researcher operationalized the variables in the study.

Table 3. 3: Operational definition of variables

Objective	Type of variable	Indicators	Measurement scale	Data collection tools	Method of data analysis
To examine the influence of performance agreement negotiations on the performance of roads built by Nairobi County.	Independent variable: Performance agreement negotiations	<ul style="list-style-type: none"> • Number of meetings held • Number of targets set • Number of KPIs • Number of vetted performance contracts • Number of signed performance contracts 	Ratio	Questionnaires Documents analysis Interviews	Inferential Correlation Mode

<p>To analyze the influence of performance contract supervision on the performance of roads constructed by Nairobi County.</p>	<p>Independent variable: Performance contract supervision</p>	<ul style="list-style-type: none"> • Number of performance reports • Number of evaluation reports • Number of reviews done • Number of staff appraised 	<p>Ratio</p>	<p>Questionnaires Documents analysis Interviews</p>	<p>Inferential Correlation Mode</p>
<p>To assess how rewards and sanctions influence the performance of roads put up by Nairobi County.</p>	<p>Independent variable: Rewards and sanctions</p>	<ul style="list-style-type: none"> • Number of employees rewarded • Number of employees sanctioned • Number of employees neither rewarded nor sanctioned 	<p>Ordinal Ratio</p>	<p>Questionnaires Documents analysis Interviews</p>	<p>Inferential Correlation</p>
<p>To establish how lessons learnt from performance contracting influence the performance of roads constructed by Nairobi County.</p>	<p>Independent variable: Lessons learnt</p>	<ul style="list-style-type: none"> • Level of top management support • Number of new innovations done • Scores of performance achievements • Number of communications 	<p>Ordinal Interval Ratio</p>	<p>Questionnaires Documents analysis Interviews</p>	<p>Descriptive Mode</p>

It is clear that the tabulation has the variables as identified, the objectives of the study and the indicators for measuring the variables. The researchable variables were specified and operationalized into measurable indicators that could be quantified. The table also shows the type of data that the researcher gathered, tools used to collect data and how the method used to analyze data.

3.8 Methods of data analysis

The researcher used percentages alongside tables and brief notes. The analysis was conducted on the basis of research objectives and research questions formulated. Statistical Package for Social Science software was used to analyze data. Pearson's Correlation coefficient was applied to analyze the data in line with research objectives so as to give answers to the research questions. In qualitative analysis, themes emerging from various responses were identified and each theme given a description. The findings were interpreted in reference to theory, practice and experience. The findings were then presented using tables and frequency distributions.

3.9 Ethical issues

The researcher explained the purpose of the study to the respondents and requested them to participate voluntarily. The researcher gave respondents an assurance that the information about their responses will be confidential. The respondents were advised not to indicate their names on the questionnaires. The questionnaires were issued to respondents on voluntary basis.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Introduction

This chapter analyzes data collected, presents the data in form of tables for ease of interpretation of the influence of performance contracting on the performance of road construction projects in Nairobi County. Both qualitative and quantitative data were used in data analysis. Additionally, a qualitative content analysis was also employed.

4.1 Response rate

The researcher administered questionnaires and sought to analyze the number of questionnaires which were returned. Table 4.1 illustrates the response rate of respondents.

Table 4.1: Response rate

Category	Frequency	Percent (%)
Questionnaire administered	63	100
Questionnaire returned	52	82.5

The researcher administered 63 questionnaires. Fifty Two (52) out of 63 questionnaires were returned, fully filled. This represented 82.5% response rate. A 50% response rate is adequate and a response rate greater than 70% is very good (Mugenda and Mugenda 2003). Hence the response rate was satisfactory as outlined in Table 4.1.

4.2 Demographic and respondents' profile information

The respondents were requested to provide their demographic and profile information. The researcher sought to understand facts concerning the gender, age, position in the organization, duration of service, terms of employment, levels of education, occupational qualifications and duration of service in the current department.

4.2.1 Gender

The respondents were requested to indicate their gender. The responses are presented in Table 4.2.

Table 4.2: Gender of the respondents

Gender	Frequency	Percent (%)
Male	31	59.6
Female	21	40.4
Total	52	100

According to the findings of table 4.2, majority of respondents were male as shown by 59.6% response rate compared to 40.4% of their female counterparts. The findings illustrate that most of the staff were male implying that roads construction work is male oriented.

4.2.2 Age of the respondents

The study requested the respondents to indicate their age in years. The findings are illustrated in Table 4.3.

Table 4.3: Age of the respondents

Age Bracket	Frequency	Percent (%)
21-25 years	1	1.9
26-30 years	10	19.2
31-35 years	18	34.6
36-40 years	7	13.5
41-45 years	5	9.6
46-50 years	3	5.8
51-55 years	8	14.4
Total	52	100

From the findings in table 4.3, 34.6% of the respondents stated that they were between 31-35 years of age, 19.2% of the respondents stated that they were between 26-30 years of age, 14.4% of the respondents stated the they were between 51-55 years of age, 13.5% of the respondents indicated the they were between 36-40 years of age, 9.6% of the respondents were between 41-45 years of age, 5.8% of the respondents aged were between 46-50 years while 1.9% of the respondents were between 21-25 years. The study findings implied that respondents were well distributed in terms of age.

4.2.3 Current position in the organization

The researcher needed to know from the respondents how the following best describe their current position in the organization. The responses are outlined in Table 4.4.

Table 4.4: Current position

Current Position	Frequency	Percent (%)
Unionizable	24	46.1
Lower Management	16	30.7
Middle Management	7	13.5
Senior Management	4	7.7
Total	52	100

As seen from table 4.4, 46.1% of respondents described their current position in the organization as unionizable, 30.7% described their current position in the organization as lower management, and 13.5% described their current position in the organization as middle management while 7.7% describe their current position in the organization as senior management. This implies that majority of the respondents were unionizable employees and therefore their welfare and working conditions are protected by Trade Unions.

4.2.4 Work experience

The respondents were asked to provide information on their work experience in the organization. This information is represented in Table 4.5.

Table 4.5: Work experience

Work duration	Frequency	Percent (%)
0 – 5 years	9	17.3
6 – 10 years	28	53.8
11 -15 years	4	7.7
16 -20 years	7	13.5
Over 20 years	4	7.7
Total	52	100

As indicated in table 4.5, 28 employees (53.8%) had worked in the organization between 6 to 10 years, 17.3% for less than 5 years, 13.5% for 16 to 20 years while 7.7% for a period of 11 to 15 years and over 20 years respectively. This implies that majority of the respondents had acquired enough experience to discharge their duties.

4.2.5 Terms of employment

The study explored the terms of employment for the respondents. This information is represented in Table 4.6.

Table 4.6: Terms of employment

Terms of employment	Frequency	Percent (%)
Permanent	52	100
Contract	0	0
Total	52	100

From table 4.6, all the 52 respondents (100%) were on permanent terms of employment. This implies that they were eligible to join Trade Unions, enjoy social and financial benefits that motivate them in discharging their duties.

4.2.6 Level of education

Information on the respondents' highest academic attainment is shown in table 4.7.

Table 4.7: Level of education

Level of Education	Frequency	Percent (%)
Certificate	23	44.2
Diploma	16	30.8
First Degree	9	17.3
Masters	3	5.8
PhD	1	1.9
Total	52	100

In reference to the findings from table 4.7, it was established that 44.2% of the respondent stated certificate as their highest education level, 30.8% of the respondent stated diploma as their highest education level, 11.5% of the respondent stated first degree as their highest education level, 17.3% of the respondent stated first degree as their highest education level. Some of the respondents (5.8%) indicated masters as their highest education level respectively while only 1.9% had a PhD. Thus, most of the respondents had at least a diploma as their highest level of education which is a minimum requirement for supervisory role in projects implementation.

4.2.7 Occupational qualifications

From the findings, majority of respondents were qualified electricians and clerks. Some respondents indicated mechanic, cleaner delivery and painting as their occupational qualifications. The findings therefore implied that project management teams at Nairobi county were interdisciplinary with broader knowledge on projects implementation.

4.2.8 Work duration in the current department

The respondents provided information on the number of years they had worked in their current department. The findings are illustrated in the table 4.8.

Table 4.8: Work duration in the current department

Work duration in the current department	Frequency	Percent (%)
Less than 3 years	24	46.2
4 – 6 years	11	21.2
7 - 9 years	4	7.8
Over 10 years	13	23.5
Total	52	100

From table 4.8, (46.2%) had worked in their current department for duration of less than 3 years, 23.5% did a period of over 10 years, and 21.2% for 4-6 years while 7.8% had done 7-9 years. This implies that majority of employees extensive information on their current department, contributing effectively on the influence of performance contracting on projects performance.

4.3 Knowledge of performance contracting

The researcher sought to understand the knowledge of respondents about performance contracting.

4.3.1 Performance contracting

The study asked the respondents to indicate whether they were on performance contracting. The findings are outlined in Table 4.9.

Table 4.9: Performance contracting

Performance contracting	Frequency	Percent (%)
Yes	52	100
No	0	0
Total	52	100%

According to the findings of table 4.9, all the respondents (100%) were on performance contracting. The results therefore indicated that Nairobi City County staffs were conversant with aspects of performance contracting.

4.3.2 Duration on performance contracting

The study also asked the respondents to indicate how long they had been on performance contracting. The findings are illustrated in table 4.10.

Table 4.10: Duration on performance contracting

Duration of performance contracting	Frequency	Percent (%)
Less than 3 years	4	7.7
4 – 6 years	6	11.5
7 -9 years	25	48.1
Over 10 years	17	32.7
Total	52	100

The findings of table 4.10, (48.1%) indicated that they had been on performance contracting for a duration of 7-9 years, 32.7% of the respondents stated that they had been on performance contracting for a period of over 10 years, 11.5% of the respondents stated that they had been on performance contracting for a period of over 4-6 years while 7.7% had been on performance contracting for a period of less than 3 years. This findings indicate that majority of the respondents had been on performance contracting for a duration of 7-9 years and therefore were well experienced in delivering services in line with performance contracting principles.

4.3.3 Training during introduction of performance contracting

The respondents were asked whether they had been taken through training during introduction of performance contracting. The response is indicated in Table 4.11.

Table 4.11: Training during introduction of performance contracting

Training during introduction of performance contracting	Frequency	Percent (%)
Yes	44	84.6
No	8	15.4
Total	52	100%

From the study findings of table 4.11, most of the respondents (84.6%) indicated that they had been taken through training during introduction of performance contracting while 15.4% indicated that they had not. The results therefore indicated that most staff had been taken through training and as such they were equipped with prerequisite knowledge prior to engagement in performance contracting.

4.3.4 Knowledge on performance contracting

The respondents provided information to indicate whether they learnt about performance contracting. Respondents were taken through training during introduction of

performance contracting. According to the findings, most of the respondents stated that they learnt about performance contracting through staff sensitization.

4.3.5 Processes of performance contracting

The study further asked the respondents to state if they understood the processes of performance contracting. The findings are indicated in Table 4.12.

Table 4.12: Understanding the processes of performance contracting

Processes of performance contracting	Frequency	Percent (%)
Yes	49	94.2
No	3	4.8
Total	52	100%

From the findings of table 4.12, 94.2% understood the processes, while 4.8% indicated that they did not. The results therefore indicated that most staff understood the processes of performance contracting which contributed to better performance in road construction works.

4.3.6 Participation in the processes of performance contracting

In this study the respondents disclosed their participation in the processes of performance contracting. The responses are shown in table 4.13

Table 4.13: Participation in the processes of Performance Contracting

Process of Performance Contracting		Frequency	Percentage
Negotiation	Yes	31	60%
	No	21	40%
Implementation	Yes	52	100%
	No	0	0%
Preparation of reports	Yes	28	54%

	No	24	46%
Appraisal	Yes	31	60%
	No	21	40%
Monitoring and evaluation	Yes	27	52%
	No	25	48%

Arising from the findings of table 4.13, all the respondents (100%) participated in the process of implementing performance contracts. Of the respondents, 60% indicated that they participated on negotiations while another 60% of the respondents indicated that they conducted appraisals during performance contracting. More than half of the respondents (54%) also stated that they participated in the preparation of reports while 52% participated in monitoring and evaluation process. The results therefore indicated that all the respondents took part in the implementation stage of performance contracting which shows that the performance contracting is an all inclusive process at Nairobi City County.

4.3.7 Rating processes of performance contracting

The respondents were asked to rate the process of performance contracting by employees at Nairobi City County. The outcomes were rated by use of a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high. The responses are indicated in Table 4.14.

Table 4.14: Rating processes of performance contracting

Statements	Mean	Std. Deviation
Performance targets are negotiable	3.35	1.071
Consultation meetings are held before setting targets	3.78	1.085
Every target has a key performance indicator	4.04	0.833
Performance contracts are vetted	4.31	0.713

Engineers sign performance contracts	3.47	1.243
Performance contracts are implemented as agreed	3.64	0.819
Engineers report on achievements	3.71	1.036
Performance is monitored and evaluated	4.23	0.857
Performance contracts are moderated	3.79	0.798
There are rewards and sanctions	3.17	1.257
New lessons are learnt in every performance contract	4.00	1.062
Lessons learnt are applied to improve performance	3.64	0.959

Table 4.14, shows that to a high extent most agreed with the statement that performance contracts are vetted, performance is monitored and evaluated, every target has a key performance indicator, new lessons are learnt in every performance contract, performance contracts are moderated, consultation meetings are held before setting targets, staff report on achievements, lessons learnt are applied to improve performance, performance contracts are implemented as agreed with mean scores of 4.31, 4.26, 4.04, 4.00, 3.79, 3.78, 3.71, 3.64 and 3.64 respectively. Some of the respondents also agreed to a moderate extent with the statement that county staff sign performance contracts, performance targets are negotiable and there are rewards and sanctions with mean scores of 3.47, 3.35 and 3.17 respectively. The findings insinuate that most staff at Nairobi City County agreed to a high extent that performance contracts are vetted, performance is monitored and evaluated, every target has a key performance indicator, new lessons are learnt in every performance contract, performance contracts are moderated, consultation meetings are held before setting targets, engineers report on achievements, lessons learnt are applied to improve performance, performance contracts are implemented as agreed.

4.3.8 Negotiating targets for the performance contracts

This study explored the opinion of the respondents on what guides county staff in negotiating targets for performance contract. Respondents stated available resources such as funds, time and equipment as the tools that guide project engineers in negotiating targets for performance contract. Most of the respondents also indicated work plan and public demands as the tools that guide engineers in negotiating targets for performance contract.

4.3.9 Improving the success of performance contracts

The respondents were also asked whether the project engineers learn and apply new lessons to improve the successive performance contracts. From the findings, sampled project engineers learn and apply new lessons to improve the successive performance contracts. This is because they apply new innovations and cost reduction methods to improve the successive performance contracts. A relatively small number of the respondents indicated that project engineers did not learn and apply new lessons to improve the successive performance contracts because lack of commitment.

4.3.10 Lessons learnt during the previous performance contracting cycles

The study further sought for the respondents' elaboration on lessons they learnt during the previous performance contracting cycles. According to the findings, most of the respondents indicated the need to breakdown targets into sub targets as the performance contracting arranged downwards while other respondents indicated the need to do early planning and execute processes in time.

4.3.11 Frequency of activities executed

The respondents were also requested to indicate the frequency of the following activities that they executed or participated during the last performance contracting cycle. Table 4.15 illustrates the findings.

Table 4.15: Frequency of activities executed

S/No.	Item description	Once		More than		Not at all	
		Freq	Perc	Freq	Perc	Freq	Perc
i.	Performance targets negotiation	48	92%	4	8%		0%
ii	Targets set		0%	52	100%		0%
iii	Actual targets achieved	15	29%	32	62%	5	10%
iv	Vetted performance contracts	52	100%		0%		0%
v	Signed performance contract	52	100%		0%		0%
vi	Subordinates under you who signed		0%	48	92%	4	8%
vii	Reviews done on your performance	52	100%		0%		0%
viii	Performance evaluations done		0%	52	100%		0%
ix	Performance reports prepared		0%	52	100%		0%
x	Performance appraisals done		0%	52	100%		0%
Xi	Rewarded for exemplary performance	52	100%		0%		0%
Xii	Sanctioned for poor performance	52	100%		0%		0%
Xiii	New lessons are learnt in every	52	100%		0%		0%
xiv	Lessons applied to improve successive	52	100%		0%		0%

According to the findings of table 4.15, all the respondents had vetted performance contracts, signed performance contract, reviewed their performances and sanctioned for poor performance once during the last performance contracting cycle. All the respondents had also learnt lessons in every performance contract cycle and the lessons applied to improve successive performance contracts. However, 92% of the respondents had more than two subordinates under them who signed performance contracts and 62% of the respondents had achieved their actual targets more than once.

4.3.12 Average percentage scores

In addition, the study sought to know how the average percentage scores were during the last three performance contracting period. According to the study findings,

there was a high percentage in the year FY 2015/2016, followed closely by FY 2014/2015 and finally FY 2013/2014. This implied that the performance of road construction projects at Nairobi City County was on a progressive course as a result of adhering to processes of performance contracting.

4.3.13 Rewarding for exemplary performance

The respondents were asked to state whether they had been rewarded for exemplary performance during the previous performance contracts. The findings are indicated in Table 4.16.

Table4. 16: Rewarding for exemplary performance

Rewarding for exemplary performance	Frequency	Percent (%)
Yes	12	23.1
No	40	76.9
Total	52	100%

From the findings of table 4.16, 76.9% of the respondents indicated that they had not been rewarded for exemplary performance during the previous performance contracts while 23.1% indicated they had been rewarded for exemplary performance during the previous performance contracts. The results therefore indicated that most staff of NCC had not been rewarded for exemplary performance during the previous performance contracts. Failure to reward exemplary performance could demoralize staff and lead to poor performance of road construction in future. Those who agreed to having been rewarded for exemplary performance during the previous performance contracts were asked how many times they had been rewarded. Most of the respondents indicated that they had been rewarded three times while other respondents indicated that they had been rewarded 4, 6, 2 and once respectively.

4.3.14 Sanctions for poor performance

The respondents were also requested to state whether they had been sanctioned for poor performance during the previous performance contracts. The findings are outlined in Table 4.17.

Table 4.17: Sanctions for poor performance

Sanctioned for poor performance	Frequency	Percent (%)
Yes	44	84.6
No	8	15.4
Total	52	100%

44 respondents (84.6%) had been sanctioned for poor performance during the previous performance contracts while 15.4% indicated that they had not been sanctioned for poor performance during the previous performance contracts. The results therefore indicated that most staff of NCC had been sanctioned for poor performance during the previous performance contracts, an action that could have activated most staff to improve their performance in order to avoid sanction.

Those who agreed to having been sanctioned for poor performance during the previous performance contracts were asked how many times they had been rewarded. Most of the respondents indicated that had been rewarded 4 times while other respondents indicated that they had been rewarded 2, 3 and 5 times respectively.

4.3.15 Influence of moderating and extraneous factors on performance contracting

The respondents were requested to rate the influence of moderating and extraneous factors on performance contracting. The outcomes were rated by use of a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high. The table 4.18 illustrates the responses.

Table 4.18: Influence of moderating and extraneous factors on performance contracting

Statements	Mean	Std. Deviation
Top management support	3.61	0.771
Political support	2.90	1.375
Engineers' workload	3.38	1.005
Acts of nature	3.56	1.074

The findings in table 4.18, top management support and acts of nature influence performance contracting with mean scores of 3.61 and 3.56 respectively. Furthermore, most respondents were in agreement to a moderate extent that other workloads handled by project engineers and political support influence performance contracting with mean scores of 3.38 and 2.90 respectively. This implies project engineers encounter some moderating and extraneous conditions beyond their control that end up affecting the performance of road construction projects.

4.4 Implementation of projects

The researcher sought to understand the roles of engineers and their involvement in implementing roads construction projects, challenges encountered during implementation of projects and rating the success of projects at Nairobi City County.

4.4.1 Duties in implementation of projects

The respondents indicated their duties in implementation of projects at Nairobi City County. Most engineers indicated supervision and valuation of works done for payment as their duties in implementation of projects at Nairobi City County. Most of the respondents also stated evaluation of tenders, project design, supervision of projects implementation, participation in public consultation meetings to collect public opinion on projects and preparation of bid documents as their duties in implementation of projects at Nairobi City County. This implies that implementation of road construction projects at

Nairobi City County has various phases and project team members participate in different phases.

4.4.2 Other duties

The study further asked respondents to state other duties handled by project team members besides project management. According to the findings, most of the respondents stated maintaining maintenance of roads infrastructure besides project management. Additionally, majority of the respondents indicated drawing, deliveries, mechanic and preparing operation reports as the other duties they handle at Nairobi City County besides project management.

4.4.3 Involvement in the implementation of projects

The study gathered information on the duration that the respondents had been involved in implementation of projects at Nairobi City County. Table 4.19 outlines the responses.

Table 4.19: Involvement in the implementation of projects

Involvement in implementation of projects	Frequency	Percent (%)
Less than 3 years	14	26.9
4 – 6 years	29	55.8
7 -9 years	3	5.8
Over 10 years	6	11.5
Total	52	100

From the findings of table 4.19, 55.8% had been involved in implementation of projects for a duration of 4-6 years, 26.9% for a period of less than 3 years, 11.5% had been involved in implementation of projects for a period of over 10 years while 5.8% for 7-9 years. This implies that majority of the respondents had been involved in

implementation of projects at Nairobi City County for a duration of 4-6 years and were therefore well experienced in managing projects.

4.4.4 Challenges facing implementation of projects

The respondents enumerated indicate some of the challenges that were hindering implementation of roads projects at Nairobi City County (NCC). According to the findings, majority of the respondents expressed lack of adequate funds as the major obstacle. Furthermore, most of the respondents indicated poor planning. In addition, most of the respondents indicated poor time management, political interference and duplication of projects of similar nature by other public organizations in a poorly coordinated way as challenges.

4.4.5 Rating the success of projects at Nairobi City County

The study asked the respondents to rate the success of projects at Nairobi City County prior to the implementation of performance contract on the following indicators. The information is provided in table 4.20.

Table 4.20: Rating the success of projects at Nairobi City County

Statements	Mean	Std. Deviation
Timely completion of projects	2.88	1.111
Utilization of funds on planned projects	3.25	1.000
Completion rate of projects	3.19	0.911
Implementation projects within scope of work	2.88	1.204
Executing projects as specified (quality)	3.31	0.793
Delivery of projects as per users' needs	3.06	0.929
Integration of projects processes	3.47	0.516

From the findings of table 4.19, most of the respondents rated 30-50% with the statement that integration of projects processes, executing projects as specified (quality), utilization of funds on planned projects, completion rate of projects and delivery of projects as per users' needs. In addition, majority of the respondents rated 15-30% with the statement that timely completion of projects and implementation projects within scope of work. This insinuates that integration of projects processes, executing projects as specified (quality), utilization of funds on planned projects, completion rate of projects and delivery of projects as per users' needs influence the success of projects at Nairobi City County prior to the implementation of performance contract.

4.5 Influence of performance contracting on time of completion of projects

The respondents were requested to indicate effect of following processes of performance contracting on time taken to complete implementation of projects. The outcomes were rated by use of a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high. The responses are indicated in the Table 4.21.

Table 4.21: Influence of performance contracting on time of completion of projects

Statements	Mea	Std.
Performance contract negotiation	3.07	0.808
Performance monitoring and evaluation	3.44	0.743
Rewards and Sanctions	2.66	0.938
Application of lessons learnt to improve performance	3.22	0.852

The findings revealed to a moderate extent with the statement that performance monitoring and evaluation, application of lessons learnt to improve performance contracting, performance contract negotiation, rewards and sanctions with mean scores of 3.44, 3.22, 3.07 and 2.66 respectively. This implies that performance monitoring and evaluation, application of lessons learnt to improve performance contracting,

performance contract negotiation, rewards and sanctions affect time taken to complete implementation of projects and thus the performance of roads projects.

4.6 Influence of performance contracting on the cost of implementing projects

In this study, respondents indicated how various processes of performance contracting influence the cost of implementing projects by engineers. The outcomes were rated by use of a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high. Table 4.22 illustrates the responses.

Table 4.22: Influence of performance contracting on the cost of implementing projects

Statements	Mea	Std.
Performance contract negotiation	3.07	0.997
Performance monitoring and evaluation	3.07	0.973
Rewards and sanctions	3.07	1.197
Application of lessons learnt to improve performance	3.64	1.303

According to the findings of table 4.22, a high extent with the statement that applications of lessons learnt to improve performance contracting with mean score of 3.64. Most of the respondents also agreed to a moderate extent with the statement that performance contract negotiation, rewards and sanctions and performance monitoring and evaluation with mean scores of 3.07 respectively. This implies that applications of lessons learnt to improve performance contracting influence the cost of implementing projects and thus the performance of projects.

4.7 Influence of performance contracting on completion rate of projects

The study asked the respondents to rate to what extent had processes of performance contracting influenced the number of projects being implemented and completed successfully by engineers. The outcomes were rated by use of a 5-point scale

of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high. Table 4.23 outlines the responses.

Table 4.23: Influence of performance contracting on completion rate of projects

Statements	Mea	Std.
Performance contract negotiation	3.60	0.989
Performance monitoring and evaluation	3.67	1.074
Rewards and sanctions	3.21	1.180
Applications of lessons learnt to improve performance	3.76	1.165

The findings in table 4.23, agree to a high extent with the statement that applications of lessons learnt to improve performance contracting, performance monitoring and evaluation and performance contract negotiation with mean scores of 3.76, 3.67 and 3.60 respectively. Most of the respondents also agreed to a moderate extent with the statement that rewards and sanctions with mean score of 3.21. This implies that applications of lessons learnt to improve performance contracting, performance monitoring and evaluation and performance contract negotiation influence the number of projects being implemented and completed successfully and thus the performance of projects.

4.8 Influence of performance contracting on quality of projects

The study also asked the respondents to rate how the processes of performance contracting influence the quality of projects implemented by engineers. The outcomes were rated by use of a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high. Table 4.24 outlines the responses.

Table 4.24: Influence of performance contracting on quality of projects

Statements	Mea	Std.
Performance contract negotiation	2.95	0.776
Performance monitoring and evaluation	3.55	0.761
Rewards and sanctions	3.32	1.272
Applications of lessons learnt to improve performance	3.74	1.115

According to the findings of table 4.24, main stream of the respondents agreed to a high extent with the statement that applications of lessons learnt to improve performance contracting and performance contract negotiation with mean scores of 3.74 and 3.55 respectively. Most of the respondents also agreed to a moderate extent with the statement that performance contract negotiation and rewards and sanctions with mean score of 3.32 and 2.95 respectively. This implies that applications of lessons learnt to improve performance contracting and performance contract negotiation the processes of performance contracting influence the quality of projects.

4.9 Influence of performance contracting on integration of projects management processes

The study examined the extent to which the processes of performance contracting influence the integration of project management procedures during implementation of the project. The outcomes were rated by use of a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high. Table 4.25 outlines the responses.

Table 4.25: Influence of performance contracting on integration of projects management processes

Statements	Mea n	Std. Deviation
Performance contract negotiation	3.36	1.036
Performance monitoring and evaluation	3.23	0.774
Rewards and sanctions	3.21	1.166
Applications of lessons learnt to improve performance contracting	3.48	1.131

As of table 4.25, moderate respondents agree with the statement that applications of lessons learnt to improve performance contracting, performance contract negotiation, performance monitoring and evaluation and rewards and sanctions with mean scores of 3.48, 3.36, 3.23 and 3.21 respectively. This implies that applications of lessons learnt to improve performance contracting, performance contract negotiation, performance monitoring and evaluation and rewards and sanctions influence the integration of project management procedures during implementation of the project.

4.10 Inferential statistics

In order to test for reliability, the study used Cronbach statistics to test for reliability. In Cronbach, any alpha of more than 0.8 shows that data was reliable. Table 4.26 illustrates the findings.

Table 4.26: Reliability statistics

Cronbach's Alpha	N of Items
.821	6

The findings of table 4.26 shows Cronbach alpha of 0.821 which is more than 0.8 indicating that data was reliable. Therefore, if Cronbach's reliability coefficient was more than 0.8, the instruments were deemed reliable.

Furthermore, the study wanted to determine the description of the variables by use of averages and standard deviations in describing the relationship between variables. Pearson product correlation was used in the study to scrutinize the influence of performance contracting on engineers' performance in selected government projects with Nairobi County Government being the case study. Table 4.27 indicates the findings.

Table 4.27: Pearson Correlation Analysis

		Project performa nce	Contract negotiatio ns	M & E	Rewards and sanctions	Lessons learnt
Project performance	Pearson Correlation ^a	1				
Contract negotiations	Pearson Correlation	.479**	1			
Monitoring and evaluation	Pearson Correlation	.599**	.312	1		
Rewards and sanctions	Pearson Correlation	.587**	.432*	.371*	1	
Lessons learnt	Pearson Correlation	.422*	.234*	.304	.449	1

** Significant correlation at the 0.01 level (2-tailed).

* Significant correlation at the 0.05 level (2-tailed).

The findings in Table 4.27, suggest existence of a strong positive relationship between monitoring and evaluation and project performance as indicated by a correlation of 0.599. This infers that effective tracking of project activities promotes accountability on time and project progress thus achieving a better project performance.

The findings also indicate a high level of correlation between rewards and sanctions and project performance with a correlation of 0.587. This suggests that public institutions should operate efficiently and effectively to ensure better project performance.

Furthermore, the findings show a positive strength with correlation coefficient of 0.479 between contract negotiations and project performance. This shows that better bargaining process between two or more parties seeking to discover a consensus to settle a matter of mutual concern or resolve a conflict results to effective project performance.

Additionally, the findings reveal a moderate uphill linear relationship between project performance and lessons learnt with a correlation of 0.422. This reveals that the demand for effective and efficient services by the citizens who are the customers tend to influence the engineers to become innovative and improve on projects' performance.

CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND
RECOMMENDATIONS

5.0 Introduction

This chapter summarizes and discusses the findings of the research generated from data analysis. Conclusions are drawn in regard to the objectives of the study. The researcher makes recommendations and finally suggests further studies to be carried out.

5.1 Summary of findings

The study focused on variables which included contract negotiation, monitoring and evaluation, rewards and sanctions, and lessons learnt. The study revealed that all employees were on performance contracting. Majority of the respondents had been on performance contracting for duration of 7-9 years and that they were taken through training during introduction of performance contracting. The study further established that most of the respondents had learnt about performance contracting through staff sensitization and they understood the processes of performance contracting. The study found that performance contracts at Nairobi City County are negotiated, vetted, monitored and evaluated, every target has a key performance indicator, performance contracts are moderated, consultation meetings are held before setting targets, project team members report on achievements, performance contracts are implemented as agreed and new lessons are learnt in every performance contract cycle and applied to improve performance.

The study exposed that available resources such as funds, time and equipment were the tools that guided project engineers in negotiating targets for performance contracts. The study established that new lessons are learnt in every performance contract cycle. Sampled respondents were in agreement that engineers learn and apply new lessons to improve the successive performance contracts due to the fact that they apply new innovations and cost reduction methods to improve the successive performance contracts.

The study revealed that most employees of Nairobi City County had not been rewarded for exemplary performance during the previous performance contracts.

On matters concerning implementation of projects, the study showed that project engineers do valuation of works done for payment as their duties in implementation of projects at Nairobi City County (NCC). The study also revealed that engineers are engaged into supervision of maintenance works, administration of staff under their jurisdictions and attending management meetings as other duties besides project management. The researcher learnt that most staff had been engaged in implementation of projects at Nairobi City County for duration of 4-6 years. Majority of the respondents indicated that delayed payment to contractors was a major setback to completion of within NCC. The study found that integration of projects processes, executing projects as specified, utilization of funds on planned projects, completion rate of projects and delivery of projects as per users' needs influence the success of projects at Nairobi City County prior to the implementation of performance contract.

In regard to effect of processes of performance contracting on time taken to complete implementation of projects, the study uncovered that performance monitoring and evaluation, application of lessons learnt to improve performance contracting, performance contract negotiation, rewards and sanctions affect the processes of performance contracting on time taken to complete implementation of projects.

Concerning the influence of performance contracting on the cost of implementing projects, the study exposed that applications of lessons learnt to improve performance contracting influence the cost of implementing projects by engineers. Furthermore, the study established that applications of lessons learnt to improve performance contracting, performance monitoring and evaluation and performance contract negotiation affect the number of projects implemented and completed successfully by engineers. In addition, the study found that applications of lessons learnt to improve performance contracting and performance contract negotiation as the processes of performance contracting influence the quality of projects implemented by roads projects engineers.

5.2 Discussion of findings

The study found out that monitoring and evaluation was strongly related to project performance. This is in line with Omboi and Kabui (2011) who note that delivery of targeted service as a result of high involvement in performance contracts from the initial stages tend to make managers to improve in performance contracting. Employees' participation in setting targets, utilization of resources, training sessions and increase in revenue are some of the measure that can be used to determine the level of employees' involvement in performance contracting.

A strong positive relationship was found to exist between rewards and sanctions and project performance. The study found that when public institutions operate efficiently and effectively lead to better project performance. Martin (2005) noted that rewards and sanctions is a recipe for accountability in service delivery. The study results are supported by Tilaye (2007) which asserted that when employees are responsible for their actions and accountable for their results, their performance increases. Rewards and sanctions enhance service delivery as well as customer and employees satisfaction.

The findings of the study exposed a positive relationship between contract negotiations and project performance. It found that using a consensus to settle a matter of mutual concern or resolve a conflict results to effective project performance. Performance agreements make it easy to identify and assign roles holding each stakeholder distinctly accountable. Each party in the contracts directly bears a sense of ownership to the performance agreement (Obong'o, 2009).

The study illustrated a strong constructive relationship between project output and lessons learnt. It found that effective and efficient services to the citizens who are the customers tend to improve the achievements of engineers in implementing projects. According to Candido and Santos (2008), the influence of performance contracts on staff performance, found that implementation of performance contracts led to increased staff output, performance measurement creating the desire to accomplish targets, promoted team work spirit and led to continuous communication between employees and supervisors as well as reward for good performance.

5.3 Conclusions of the study

The study concluded that monitoring and evaluation and project performance are strongly related as indicated by a correlation of 0.599. It concluded that effective tracking of project activities leads to better project performance. Performance contracting is therefore an effective instrument for enforcing accountability and productivity within public institutions.

The study concluded that rewards and sanctions policy has been consistently identified as the most important and crucial success factor in project performance in Nairobi City County. It concluded that rewards and sanctions help public institutions to operate efficiently and effectively to achieve better project performance.

The study concluded that a better negotiation of performance targets is fruitful to achieving the desired goals by each party involved in the performance contract. Each party makes a commitment to deliver based on its capacity. This prevents over burden which could result to ineffective service delivery.

In regard to the last objective, the study concluded that there was a positive relationship between project performance and lessons learnt. This reveals that the need for effective and efficient services by the citizens who are the customers tend to make roads project engineers learn new ways of administering projects. Lessons learnt from previous performance contracts should be applied to improve achievements in the successive performance contracts.

5.4 Recommendations of the study

The study recommends that organizations should concentrate on developing a proper training programme because with a proper training in place, productivity will be enhanced. This is because after evaluation the supervisors get to know where the gaps are and the areas in which their staff need training, where the gap is. Trained employees other than acquiring knowledge, become confident in discharging their duties. Therefore training is also a motivator.

5.5 Suggestions for further research

A study could be done in other county governments to compare the relationship between performance contracting and projects performance under different geographical, social, cultural, economic and political settings.

Also, a study can be carried out on how various negotiation strategies promote performance contracting by making cost of implementing projects by engineers at county government offices in Kenya.

Furthermore, a study can be conducted to assess the knowledge of the public about performance contracting within the public sector and evaluate their responses on the extent to which performance contracting drives engineers to deliver services as required.

REFERENCES

- AAPAM (2006). *Towards an effective Delivery of Public Services in Africa: The Kenyan experience with Performance Contracting*. Paper presented on 28th AAPAM Annual Roundtable Conference, Arusha, Tanzania.
- Alfie, K. (1999). *Punished by Rewards: The Trouble with GoldStars, Incentive Plans, A's, Praise, and Other Bribes*. Boston: Houghton Mifflin.
- Aosa, Evans (2000). "*Development of Strategic Management: An Historical Perspective*." Nairobi: University of Nairobi Press.
- Armstrong, M. & Baron, A. (2004). *Managing performance: performance management in action*. London: Chartered Institute of Personnel and Development.
- Armstrong, M. (2006). *Performance Management: Key Strategies and Practical guidelines* (3rd ed). Bodmin, Cornwall: MPG Books ltd.
- Balogun, M. J. (2003) *.Performance Management and Agency Governance for Africa*
- Dahlgaard, J., Kanji, G. & Kristensen, K. (2012). *Fundamentals of Total Quality Management*. London and New York: Taylor and Francis.
- Development: *The search for common cause on Excellence in the Public Service*. UNCEA, Addis Ababa.
- Domberger, S. "*Public sector contracting: does it work?*" *The Australian Economic Review* (3rd ed.). qtr, pp. 91-96, 1994.
- Domberger, S, "*The Contracting Organization*", Oxford University Press, New York, NY, 1998.
- DPMD (2003). *Public sector management reforms in Africa: lessons learned, Economic Commission for Africa ECA/DPMD/PSM/TP/03/1*.
- Enzo, F. & Dennis, C. (20012). *The Practice of Management: A Guide to the Business-Focused Approach*. London, UK: The Bass Press Limited.

- Erevelles, S. & Leavitt, C. (1992). *A Comparison of Current Models of Customer Satisfaction/Dissatisfaction. Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour*. 5, 194-114, 1992.
- Eric, V. (2005). *The Fast Forward MBA in Project Management* (2nded.). Hoboken, New Jersey: John Wiley & Sons, Inc.
- Eva W. Wairiuko (2014). *Performance Contracting in Service Delivery at City Council of Nairobi. Published on Faculty of Arts (<http://arts.uonbi.ac.ke>)*.
- Gabe, T.W & Keumjae, P. (2016). *Student Research and Report Writing: From Topic Selection to the Complete Paper*. West Sussex, UK: John Wiley & Sons Ltd.
- Gakure R.W., Stephen M., & George O. (2013). *Role of Performance Contracting in Enhancing Effectiveness of Performance in the Civil Service in Kenya, State Department of Infrastructure. IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 14, Issue 6 (Nov. - Dec. 2013), PP 73-82 www.iosrjournals.org*.
- Government of Kenya (2001). "A Strategy for Performance Improvement in the Public Service", Nairobi: Nairobi: Government Printer.
- Government of Kenya (2003). *Economic Recovery Strategy for wealth and employment creation*. Nairobi: Government Printer.
- Government of Kenya (2004). *Guidelines for drafting Performance Contract for State Corporation: The Performance Contracts scheme Steering Committee*. Nairobi: Government Printers.
- Government of Kenya (2004). *Guidelines on Terms and Conditions of service for state corporations*. Nairobi: Government Printers.
- Government of Kenya (2004). *Kenya, Sensitization Training Manual*. Nairobi: Government Printers.

- Government of Kenya (2005). *Result Based Management Guide. Results Based Management: Training Manual. Kenya 9 (3)*. Nairobi: Government Printers.
- Government of Kenya (2005). *Sensitization/Training Manual on Performance Contracts in the Public Service. Performance Contracts Steering Committee*. Nairobi: Government Printers.
- Government of Kenya (2012). *Urban Areas and Cities Act. Laws of Kenya*. Nairobi: Government Printer.
- Government of Kenya (2015). *Performance Contracting Guidelines for the FY 2015/16 (12th ed.)*. Nairobi: Government Printer.
- Government of Kenya (2016). *Report of the Auditor General on the financial statements for National Government for the year 2013/2014*. Nairobi, Kenya: Auditor-General.
- Government of Kenya, Office of the Prime Minister (2010). *Performance contracting department report on evaluation of the performance of public agencies for the financial year 2008/2009*. Nairobi: Government Printer.
- Government of Kenya, Office of the Prime Minister (2012). *Performance contracting department report on evaluation of the performance of public agencies for the financial year 2010/2011*. Nairobi: Government Printer.
- Harold, K. (2005). *Project Management. A Systems Approach to Planning, Scheduling and Controlling (9th ed)*. John Wiley & Sons, Inc. United State of America.
- Hope, R. H. (2012). *Managing the Public Sector in Kenya: Reform and Transformation for Improved Performance. Journal of Public Administration and Governance*. ISSN 2161-7104 2012, Vol. 2, No. 4
- Joby, J. (2003). *Fundamentals of Customer-Focused Management: Competing Through Service*. West Port, Connecticut: Praeger.

- Kempe, R. H. (2001). *The New Public Management: Context and Practice in Africa*. *International Public Management Journal*. 4 (2001) 119–134
- Kervasdoue, J. (2007). *Rating and Evaluating Health Systems: Reinforcing the Partisan Spirit or Investigating the Public Good?* Paper prepared for the IPMN Workshop, 'Ranking and Rating Public Services', Worcester College, Oxford, 7th -9th August 2007.
- Kobia, M. & Mohammed, N. (2006). *Towards an Effective Delivery of Public Services in Africa: The Kenyan Experience with Performance Contracting*. Paper presented at 28th African Association for Public Administration and Management Annual Roundtable Conference, Arusha, Tanzania.
- Korir, P. (2006). *The Impact of Performance Contracting in State Corporation: A case study of East African Portland Cement*. Kenya, Unpublished MBA Research Project, University of Nairobi.
- Kothari, C. (2004). *Research Methodology. Methods and Techniques*. New Dekhi, India, New Age. International Publishers.
- Lienert, I. (2003). *Civil Service Reform in Africa: Mixed Results After 10 Years'*. *International Monetary Fund*. Finance and Development, Vol. 35 No. 2 (June).
- Mbawi, G. & Muchelule, Y. (2015). *Factors Influencing Project Performance among Kenyan Universities in Kisumu County*. *International Journal of Innovative Social Sciences & Humanities Research* 3(3):1-12, July-Sept 2015.
- Mbua, P. & Ole Sarisar, J. (2013). *Concept of performance contracting –Kenyan scenario/experience*. *Developing Country Studies*. ISSN 2224-607X (Paper) ISSN 2225-0565 (Online). Vol.3, No.2, 2013.
- Mugenda, O. M., & Mugenda, A. G (2003). *Research Methods: Quantitative and Qualitative approaches*. Nairobi, Acts Press. Nairobi City County. Nairobi Integrated Urban Development Master Plan (NIUPLAN).

- Muthaura F. (2008). *Restoring and Building trust in Government through innovations to promote quality of Public Service*. Government Printer, Nairobi Kenya.
- Muthaura, F. (2003). *Presentation on Performance Contracts*. Retrieved on July 11, 2011 from www.unpan.org/innovmed/documents/Vienna07/28June07/03_Kenya.ppt.
- Mwenzwa, E.M. (n.d) *Transparency and Accountability in Kenya: A Review of the Institutional Framework for Public Service Delivery*.
- Nairobi County Government. (2016). *Financial Estimates - Program Based Budget for Financial Year 2016/2017*. Nairobi, Kenya.
- Nairobi County Government. (2014). *Nairobi County Integrated Development Plan*. Retrieved June 3, 2016, from <http://cog.go.ke/images/stories/CIDPs/Nairobi.pdf>.
- Nganyi, E. J., Owano, E., & Shigogodi, M. J. (2014). *The Effectiveness of Performance Contracting in Service Delivery in Public Universities in Kenya*. Masinde Muliro University of Science and Technology. Kakamega, Kenya.
- Ngechu M., (2004). *Understanding the Research Process and Methods: An Introduction to Research Methods*. Nairobi, Acts Press.
- Nyonje, R. O, Kyalo, D. N., & Mulwa, A. S. (2012). *Monitoring and Evaluation of Development Projects and Programmes: A Handbook for Students and Practitioners*. Nairobi, Kenya: Aura Publishers.
- Obong'o O. (2009). *Historical Perspective of the Performance Contracting in Kenya*.
- Obong'o, S. O. (2009). *Implementation of performance contracting in Kenya*, *International Public Management Review*, 10(2).
- OECD (1999). *Performance contracting : Lessons from Performance Contracting Studies and a Framework for Public Sector Performance Contracting*. Organization of Economic Cooperation and Development , Paris France .

- Omondi, J. D. (2015). *A Study on Effects of Performance Contracting Implementation on Service Delivery at Kenya Ports Authority*. A research paper. Jomo Kenyatta University of Agriculture and Technology .Volume: 4 | Issue: 6 | June 2015. ISSN No 2277 – 8179, Volume: 4 | Issue.
- Orodho, A. J. and Kombo, D. K. (2002). *Research Methods*. Nairobi: Kenyatta University, Institute of Open Learning.
- Paul, C. P. (n.d.). *Complex Research Designs. Psychology Research Methods: Core Skills and Concepts* v. 1.0. Unnamed publisher.
- Prasanna Chandaria (2006). *Projects Planning, Analysis, Selection, and Review* (6th ed.).
- Salome, C. R., Korir, Rotich, J., & Bengat, J. (2015). *Performance Management and Public Service Delivery in Kenya. European Journal of Research and Reflection in Management Sciences*. Vol. 3 No. 4, 2015 ISSN 2056-5992
- Sternberg, R.J & Sternberg, K. (2010). *The Psychologist's Companion: A guide to writing scientific papers for students and researchers* (5th ed.). New York: Cambridge University Press.
- Trivedi, P. (2000). *How to Evaluate Performance of Government Agency: A manual for Practitioners*. World Bank.
- Trochim, W. (2005). *The Research Methods Knowledge Base* (2nd ed.). Mason, Ohio: Atomic Dog Publishing.
- Wanyande, P., Omosa, M & C. Ludeki (Eds). *Governance and Transition Politics in Kenya*. Nairobi: University of Nairobi Press, 1-20.
- William R. D. (1996). *A Guide the Project Management Body of Knowledge*. North Carolina, USA: Project Management Institute Publishing Division.
- World Bank (1989). *World Bank development report*. Washington, D.C : World Bank.

APPENDICES

APPENDIX A: LETTER OF TRANSMITTAL



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
N A I R O B I

4th November, 2016

REF: UON/CEES/NEMC/24/366

TO WHOM IT MAY CONCERN

RE: KALARA OMARI ALFRED - REG NO L50/82580/2012

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 Master of Arts in Project Planning and Management.

He is proceeding for research entitled "influence of performance contracting on engineers' performance in selected government projects". A Case of Nairobi County Government, Kenya

Any assistance given to him will be appreciated.


CAREN AWILLY
CENTRE ORGANIZER
NAIROBI EXTRA MURAL CENTRE



APPENDIX B: QUESTIONNAIRE

The purpose of this questionnaire is to gather information on the influence of performance contracting on the performance of engineers in implementation of Government projects: a case study of Nairobi County Government.

Confidentiality: The responses you provide will be strictly confidential. No reference will be made to any individual (s) in the report of this study.

Instruction: Please respond to the following questions and where applicable, mark the relevant box with a tick ()

PART A: DEMOGRAPHIC AND RESPONDENTS PROFILE INFORMATION

Name of the department

Designation and job group of the respondent.....

Designation	Job Group

1. Gender?

Male Female Widowed Divorced

2. Age (Years)

21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	Above

3. Which of the following best describe your current position in the organization?

Unionizable Lower Management Middle Management Senior Management

4. How long have you worked in the organization?

0 – 5 years 6 – 10 years 11 -15 years 16 -20 years Over

20 years

5. Terms of employment: Contract

Permanent

6. Highest level of education

Secondary	Certificate	Diploma	First	Master's	PhD	Other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. What is your occupational/professional qualifications.....

.....
.....
.....

8. How many years have you worked in your current department?

Less than 3 years 4 – 6 years 7 -9 years Over 10 years

PART B: KNOWLEDGE OF PERFORMAMNCE CONTRACTING

1. Are you on performance contracting?

Yes No

2. If yes, for how long have you been on performance contracting?

Less than 3 years 4 – 6 years 7 -9 years Over 10 years

3. Were you taken through training during introduction of performance contracting?

Yes No

4. If the answer above is No, how did you learn about performance contracting?

.....
.....
.....
.....

5. Do you understand the processes of performance contracting?

Yes

No

6. If yes, among the processes listed below, tick the ones that you participate

Performance negotiation

Performance contract implementation

Preparation of performance quarterly reports

Performance monitoring and evaluation

Performance appraisal

Award of rewards and sanctions

7. How do you rate the process of performance contracting by engineers at Nairobi City County?

Use a 5-point scale of 1-5 where; 1= Strongly disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Disagree, 5= Strongly agree.

S/No.	Influences of processes of performance	1	2	3	4	5
i.	Performance targets are negotiated					
ii	Consultation meetings are held before setting					
iii	Every target has a key performance indicator					
iv	Performance contracts are vetted					
v	Engineers sign performance contract					
vi	Performance contract is implemented as agreed					
vii	Engineers report on achievements					
viii	Performance is monitored and evaluated					
ix	Performance contracts are moderated					
x	There are rewards and sanctions					
xi	New lessons are learnt in every performance					
xii	Lessons learnt are applied to improve performance					

8. In your opinion what guide engineers in negotiating targets for performance contract?

.....
.....
.....
.....
.....

9. Do engineers learn and apply new lessons to improve the successive performance contracts?

.....
.....
.....
.....

10. If yes, explain how?

.....
.....
.....
.....
.....
.....

11. If no state why?

.....
.....
.....
.....
.....

12. Elaborate lessons that you learnt during the previous performance contracting cycles

.....

13. During the last performance contracting cycle, indicate the frequency of the following activities that you executed or participated.

S/No.	Item description	Qty
i	Performance targets negotiation meetings attended	
ii	Targets set	
iii	Actual targets achieved	
iv	Vetted performance contracts	
v	Signed performance contract	
vi	Subordinates under you who signed performance contract	
vii	Reviews done on your performance targets	
viii	Performance evaluations done	
ix	Performance reports prepared	
x	Performance appraisals done	
Xi	Rewarded for exemplary performance	
Xii	Sanctioned for poor performance	
Xiii	New lessons are learnt in every performance contract cycle	
xiv	Lessons applied to improve successive performance contracts	

14. What have been your average percentage scores during the last three performance contracting period? FY 2015/2016 FY 2014/2015 FY 2013/2014

15. During the previous performance contracts, have you been rewarded for exemplary performance? Yes No

16. If the answer to Q15 is yes, how many times have you been rewarded?.....

17. During the previous performance contracts, have you been sanctioned for poor performance?

Yes No

18. If the answer to Q17 is yes, how many times have you been rewarded?.....

19. In your opinion how would you rate the influence of the following to performance contracting? Use a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high.

S/No.	Other influences	1	2	3	4	5
i.	Top management support					
ii	Political support					
iii	Level of customer complains					
iv	Level of feedback to customer complains					
v	Level of customer feedbacks					
vi	Improvement in achieving performance targets					
vii	Engineers other workloads					
vii	Acts of nature					

PART C: IMPLEMENTATION OF PROJECTS

1. What are your duties in implementation of projects at Nairobi City County?

.....

2. Besides project management, what other duties do you handle at Nairobi City County?

.....

3. For how long have you been involved in implementation of projects at Nairobi City County? Less than 3 years 4 – 6 years 7 -9 years
 Over 10 years

4. What are some of the challenges facing implementation of projects within Nairobi City County?

.....

5. How would you rate the success of projects at Nairobi City County prior to the implementation of performance contract on the following indicators?

Projects performance indicators	Rating			
	Less than 15%	15-30%	30-50%	Above 50%
Timely completion of projects				
Utilization of funds on planned projects				
Completion rate of projects				
Implementing projects within scope of work				
Executing projects as specified (quality)				

Delivering projects as per users needs				
Integration of project processes				

PART D: EFFECTS OF PERFORMANCE CONTRACTING ON TIME OF COMPLETION OF PROJECTS

What is the effect of following processes of performance contracting on time taken to complete implementation of projects? Use a 5-point scale of 1-5 where; 1= Very low, 2= Low,

3= moderate, 4= High, 5= Very high.

S/No.	Performance contracting and time of completion of	1	2	3	4	5
i	Performance contract negotiation					
ii	Performance monitoring and evaluation					
ii	Rewards and sanctions					
iv	Application of lessons learnt to improve performance					

PART E: EFFECT OF PERFORMANCE CONTRACTING ON THE COST OF IMPLEMENTING PROJECTS.

How do the following processes of performance contracting influence the cost of implementing projects by engineers? Use a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high.

S/No.	Performance contracting and project cost	1	2	3	4	5
i	Performance contract negotiation					
ii	Performance monitoring and evaluation					
iii	Rewards and sanctions					
iv	Application of lessons learnt to improve performance					

PART F: EFFECTS OF PERFORMANCE CONTRACTING ON COMPLETION RATE OF PROJECTS IMPLEMENTED BY ENGINEERS

To what extent has processes of performance contracting influenced the number of projects being implemented and completed successfully by engineers?

Use a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high.

S/No.	Performance contracting and completion rate of projects	1	2	3	4	5
i	Performance contract negotiation					
ii	Performance monitoring and evaluation					
iii	Rewards and sanctions					
iv	Application of lessons learnt to improve performance					

PART G: INFLUENCE OF PERFORMANCE CONTRACTING ON QUALITY OF PROJECTS IMPLEMENTED BY ENGINEERS.

How do the processes of performance contracting influence the quality of projects implemented by engineers? Use a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high.

S/No.	Performance contracting and quality of projects	1	2	3	4	5
iii	Performance contract negotiation					
iv	Performance monitoring and evaluation					
iii	Rewards and sanctions					
iv	Application of lessons learnt to improve performance					

PART H: INFLUENCES OF PERFORMANCE CONTRACTING ON INTEGRATION OF PROJECTS MANAGEMENT PROCESSES.

To what extend do the processes of performance contracting influence the integration of project management procedures during implementation of the project? Use a 5-point scale of 1-5 where; 1= Very low, 2= Low, 3= moderate, 4= High, 5= Very high.

S/No.	Performance contracting and integration of project	1	2	3	4	5
i	Performance contract negotiation					
ii	Performance monitoring and evaluation					
iii	Rewards and sanctions					
iv	Application of lessons learnt to improve performance					

APPENDIX C: INTERVIEW QUESTIONS

- 1.** Suggest some of the ways through which Nairobi County Government can improve performance contracting.
- 2.** What do you think is the best approach when it comes to conceiving and setting performance targets?
- 3.** What are some of the gains and challenges Nairobi County government is experiencing in implementing performance contracting?
- 4.** Given a chance, what are some of the improvements you will make on the current performance contract document under implementation by Nairobi County Government?
- 5.** Considering the number of employees at Nairobi County Government, do you think the government has got enough capacity to evaluate each employee?
- 6.** What do you know about Rewards and Sanction Policy Framework for Civil Servants in Kenya? Do you know any employee who has been rewarded for exemplary performance or sanctioned for poor performance? If yes what was the reward/sanction?
- 7.** What factors determine the number of projects you supervise in a given financial year?
- 8.** What are some of the successes and failures you have experienced when implementing projects?
- 9.** Elaborate how a project life cycle is managed at Nairobi County Government, starting from the initiation stage to project closure.
- 10.** What motivates you in discharging your duties?

APPENDIX D: KREJCIE AND MORGAN TABLE

Table 3.1									
<i>Table for Determining Sample Size of a Known Population</i>									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size

Source: Krejcie & Morgan, 1970

APPENDIX E: RESEARCH PERMIT

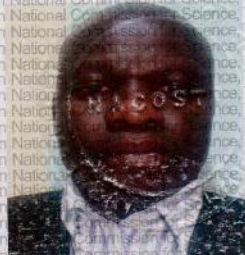
Permit No : NACOSTI/P/16/20246/14659
Date Of Issue : 6th December, 2016
Fee Received : Ksh 1000

THIS IS TO CERTIFY THAT:
MR. ALFRED OMARI KALARA
of UNIVERSITY OF NAIROBI, 12914-400
Nairobi, has been permitted to conduct
research in Nairobi County

on the topic: INFLUENCE OF
PERFORMANCE CONTRACTING ON
ENGINEERS' PERFORMANCE IN
SELECTED GOVERNMENT PROJECTS: A
CASE OF NAIROBI COUNTY
GOVERNMENT, KENYA.

for the period ending:
6th December, 2017

[Signature]
Applicant's
Signature


[Signature]
Director General
National Commission for Science,
Technology & Innovation

ORIGINAL

AC **13170**

OFFICIAL RECEIPT

Station: Nairobi Date: 28.11.2016

RECEIVED from: Alfred Omari Kalara

Shillings: One thousand Kenya Shillings

Only cents

on account of: Research permit fee

Vote: 43

Head: 43

USD: _____

Kshs: 1000/-

AC: _____

No: _____

Cash: Direct deposit

Cheque No: _____

[Signature]
Signature of Officer receiving remittance