ORGANIZATIONAL FACTORS INFLUENCING PERFORMANCE OF CONTRACTORS IN PUBLIC BUILDING PROJECTS IN POKOT CENTRAL SUB-COUNTY, KENYA

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A Research Project Submitted in partial fulfillment of the requirements for the award of the Degree of Master of Arts in Project Planning and Management, University of Nairobi

2019

DECLARATION

This Project is my original work and has not been presented for a degree in any other university.

..... 12/11/2019

Signature Date

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This Project has been submitted with my approval as the University Supervisor

..... 22/11/2019

Signature Date

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DEDICATION

This Research Project is in memory of my loving father, Mr. Wellingtone Kunyu Mang'eni who was inexhaustible source of inspiration to my studies, my mother Grace Nambuya Kunyu and my wife Akinyi Iska who with patience, understanding and extended overwhelming support towards my studies.

ACKNOWLEDGEMENT

First and foremost, I wish to sincerely thank the University of Nairobi for according a chance to further my studies and career development.

My special gratitude and appreciation go to Dr. Joash Migosi, my supervisor his willingness and acceptance to guide and take me through this proposal process development with patience, understanding and all support thereof. Moreover, I return thanks to all lecturers for all their support and imparting of noble skills and knowledge valuable to carry out the research proposal processes.

I would like also to appreciate the ministry of Public works, Transport and Infrastructure, west Pokot County all staff that accorded me necessary support during my studies. Not forgetting my classmate for their teamwork, co-cooperation, and encouragements. Lastly, my special thanks go to all I have not mentioned but have participated in one way or another in this process. May God Bless abundantly.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACRONYMS AND ABBREVIATIONS

BC:	Building Contractors
CIDP:	County Integrated Development Plan
GDP:	Gross Domestic Product
IFMIS:	Integrated Financial Management System
KNBS:	Kenya National Bureau of Statistics
NACOSTI:	National Council for Research, Science, Technology and Innovation
NCA:	National Construction Authority
NEMA:	National Environmental Management Authority
PBC:	Performance of Building Contractors
PMI:	Project Management Institute
PPDA:	Public Procurement and Disposal Act
QMS:	Quality Management System
SPSS:	Statistical Package for Social Science

ABSTRACT

This study determined the influence organizational factors have on performance of contractors in building public projectsin Pokot Central Sub-County. Specific objectives were to determine the influence of communication systems, staff competence, financial service and procurement procedures on performance of building contractors. The study was anchored on the Theory of Constraints as proposed by Goldratt in 1984. The study adopted descriptive survey research design, which considered the use of structured questionnaires and interview schedules. The Target population was estimated to be 1500 (contractors and officials from regulatory agency) while the sample size was determined using Mora and Kloet (2010) formula and was 315. Stratified and random sampling were used to identify contractors.Purposive sampling was used to identify officials from the regulatory agency. Data collection was done by administering questionnaires to contractors in building public projectswhile officials from regulatory agencies responded to interviews. Quantitative data from questionnaires was analyzed using SPSS software version 22 to determine frequencies and percentages. Qualitative data from interviews was analyzed using thematic analysis where responses were organized in themes and sub-themes as they relate to objectives and indicators respectively. From the study, 89.7%, 85.0%, 84.7% and 83.0% of the respondents stated that communication systems, financial services, staff competence and procurement procedures respectively influenced performance of building contractors. Further, 90.0% respondents stated that effective communication from clients influenced performance of building contractors. In another case, 87.0% and 74.8% respondents asserted that good credit worthiness and asset net worth respectively influenced their ability to acquire financial credit enhance their performance as building contractors. Regarding experience, 91.3% respondents asserted that the level of experience of building contractors influenced performance more than knowledge acquired. In another case, 56.6% of the respondents stated that the main reason why they placed bids or applied for projects was project monetary value. I recommend that the County Government should work closely with the National Government to build network masts and transmitters to enhance communication. NCA, NEMA, Ministry of Public Works & Housing and Public Health should frequently evaluate projects and share findings. The legislature should repeal the law on capping interest rates.

CHAPTER ONE

INTRODUCTION

1.1. Background to the Study

Performance of building and construction contractors determines Infrastructural development in any given institution, region or country. However, performance of many contractors in building public projectssuffers a myriad of challenges that compromise the practice. There are many factors influencing performance, but this study seeks to focus on organizational factors, which include, but are not limited to communication systems, control mechanisms, construction techniques, level of skills, and procurement procedures.

According to Project Management Institute (2013), Communication refers to the movement of information from one point of an organization to the other. The author goes ahead stating that, communication systems includes the use of mobile phones, circulars, emails, letters, and memos among others. Project management, which involves small contractors in building public projectsin Hong Kong is usually full of disputes and claims, however, effective communication systems have helped in reducing the number of litigations, mediations, arbitrations, and negotiations.

In Saudi Arabia, Saud (2015) observed that the sectors (building and constructions especially in information technology) have been marred with challenges related to communication whereby contractors have been exposed to different site conditions other than previous agreed, extra works and delays all of which led to claims and disputes hence compromising the performance contractors.

In the United Kingdom, the relationship between the supply chain (procurement), main contractors and the subcontractors have always influenced the quality of performance of building contracts (Obafemi and Morledge, 2013). According to the authors, long and bureaucratic procurement procedures restrict sharing of responsibilities, creates rivalry, compromises project coordination and it inhibits contribution of value ideas. In order to improve the situation, the author suggested that there was the need to streamline the procurement process, involve every participant of the project for proper coordination, planning and execution of projects.

According to Vilasini, Rotimi and Neitzert (2014),partnership arrangements in Auckland, New Zealand between contractors and supply chain managers influenced the quality of construction in any given sector. Such arrangements ensured that lean principles regulating the construction sector were adhered to thereby ensuring minimal dispute and claims emanating from contractors, clients and supply chain managers. In Sweden, Westerberg and Ericksson (2015) observed that the majority of construction criticisms regarding delays in completion of projects, customer satisfaction, cost and schedule overruns were linked to poor procurement procedures. According to the author, supply chain managers need to understand how different procurement procedures affect performance of various projects and hence make informed decisions on which one to adopt for a given project.However, in a separate literal work, Erickson & Westerberg (2018) added that procurement procedures in Sweden adopted a more inclusive approach towards procurement where, first, it starts with designing, then bid invitation, bid evaluation, sub-contractors' selection, compensation and then project evaluation.

In Nigeria, Olaniran (2015) observed that the majority of contractors in building public projectscompromised the performance of their practice by failing to conduct site meetings, which were essential in addressing day-to-day issues affecting their work. The idea of passing

information from one person to the other distorted messages sent, hence influencing the quality of work done. Asamu(2014) added that setting up communication standards and procedures among Nigerian contractors in building public projectsand other entities was essential in enhancing communication systems not only in the construction sector but also in the entire Nigerian work force. According to Oladinrin, Olatunji & Hamza (2013), the procurement procedure adopted in Nigeria is one that focuses more on lowering the cost and not improving the quality of work done. The procurement procedure adopts the design-bid-build model, which encourage contractors to do a shoddy work as minimalmonitoring and supervisory visits are done by the regulating authorities.

As Tengan, Appiah-Kubi, Anzagira, and Balaara(2014) observed in Ghana, the majority of contracts are executed by small-scale contractors who are usually sub-contracted by big contracting firms, which have the capacity and qualification to secure tenders. Small-scale contractors in Ghana are associated with producing poor quality work because of lack of skills, low funding, and poor coordination, which influence their work. Further, the authors add that almost 60% of the small-scale contractors in building public projectsin Ghana neither use site registers, site regulations nor adhere to fundamental tenets guiding the practice of building and construction. Amoah, Ahadzieand Ayirebi(2017) adds that lack of standardization on materials used, flexibility in the scale of production and low capital requirement for entry are among the control mechanisms influencing the practice of contractors in building public projectsin Ghana.

In Malaysia, despite the bottle-necks faced by contractors in building public projectsin their bid to enhance the quality of work, the government and relevant authorities have set operating standards and procedures, which regulate the practice of any given construction (Ali and Rahmat, 2010). In the first place, all contractors in building public projectshave to be qualified

for International Organization Standards certification in order to operate. Admissibly, errors in the building sector are managed by Quality Management Systems, QMS, which ensures a procedural way of attending to a given activity.

Mgawe and Masanja (2018) cites that Construction and Infrastructural development accounts for over 70% of a County's GDP and hence and efforts to influence the construction sector negatively affects growth in that country. The authors asserted that constructions challenges that involve inadequate controls related to procurement largely influence the performance of contractors' practice. Poor selection of procurement methods usually leads to disputes between the management of contracts and supply chain managers hence lowering the performance and the quality of work done.

In Kenya, Procurement procedures are based on Public Procurement and Disposal Act, PPDA of 2005, which has evolved since pre-independence period. Until then, the system of procurement was determined by issuance circulars from the Ministry of Treasury. The introduction of the Public Procurement and Disposal Act 2005 and Procurement Regulations of 2006 sets the standard procedures of Procurement, which in summary is guided by the deign-bid invitation-bid evaluation-compensation-project evaluation models.

According to Akali (2018), most contractors lacked management skills and therefore thecapacity to evaluate projects with an aim of ensuring quality work. The rationale behind it was that the construction technique adopted were archaic and most lacked modern tools and equipment needed to complete tasks. Challenges continue to face building contractors of Public Projects and it for this reason that this study seeks to determine organizational factors influencing performance of BCs of Public Projects in Pokot Central Sub-County.

1.2. Statement of the Problem

Contractors in building public projects performance according to Westerberg and Erickson (2015) faces criticisms that range from delays in completion of projects, customer satisfaction, cost and schedule overruns.For example, the KNBS report of 2017 in West Pokot County indicated that most infrastructural development projects in the areas suffered from contractors' related problems, which included lack of skills, poor coordination, poor communication, lack of enough funds, increased overrun costs, complicated and bureaucratic procurement proceduresand lack of necessary equipment meant to complete their projects.

Only Chelimo (2018) conducted a study in West Pokot, which was related to this study; nevertheless, Chelimo's (2018) study focused on factors influencing completion of water projects and did not consider factors influencing performance of Building Contractors, BCs. Based on that, this study seeks to investigate organizational factors influencing performance of contractors in building public projects in Pokot Central Sub-County of West Pokot County, Kenya.

1.3. Purpose of the Study

The purpose of the study was to investigate Organizational Factors InfluenceInfluencingPerformance of Contractors in building public projects in Pokot Central Sub-County

1.4. Objectives of the Study

i. To establish influence of communication systems on performance of contractors in building public projects in Pokot Central Sub-County West Pokot County

ii. To determine influence of financial resources on influence performance of contractors in building public projects in Pokot Central Sub-County West Pokot County

iii. To ascertain influence ofstaff competence on performance of contractors in building public projects in Pokot Central Sub-County West Pokot County

iv. To evaluate the influence of procurement procedures on performance of contractors in building public projects in Pokot Central Sub-County West Pokot County

1.5. Research Questions

i. What extent does communication systems influence performance of contractors in building public projects in Pokot Central Sub-County West Pokot County?

ii. How does financial resources influence performance of contractors in building public projects in Pokot Central Sub-County West Pokot County?

iii. To what extent does staff competence influence performance of contractors in building public projects in Pokot Central Sub-County West Pokot County?

iv. How does procurement procedures influence performance of contractors in building public projects in Pokot Central Sub-County West Pokot County?

1.6. Significance of the Study

Completion of this study will beneficial to contractors in building public projects who will identify some of the challenges or problems that negatively influence the performance of their practice. For instance, some who are not skilled or lack experience will realize that it contributes largely to the performance of their profession. Supply chain managers or those in the procurement line will realize how important their decisions influence performance of contractors in building public projects and hence the quality of work these entities do. The government or any regulating authority might use the findings of this study to formulating rules, regulations,

policies and laws that will seek to improve the performance of contractors in building public projects and hence the quality of work in their practice.

1.7. Assumptions of the Study

Respondents were available and will give accurate and honest information

Moderating variables had a minimal influence on outcome of the dependent variable

Weather conditions wasfavorable to enable completion of this study

1.8. Limitations of the Study

Considering that the study is descriptive in nature, considered the use of questionnaires and interview schedules as research instruments whose reliability and validity depend on the honest nature of respondents in terms of giving information. Some of the respondents interviewed developed fear because of giving information, which they considered incriminating therefore compromising the study's validity and reliability. The researcher cleared suspicion among the respondents by assuring them of the confidentiality and purpose of the study.

1.9. Delimitations of the Study

This study was delimited by poor roads, which might affect the research process, the researcher might take too researcher too long to collect data from sampled respondents. Bad weather might be a delimitation that might interfere with the smooth flow of the research process because the situation might force the researcher to conduct the research process at specific times of the day only.

1.10. Definition of Significant Terms

Organizational factors: This refer to the administrative or institutional aspects such as communication systems, procurement procedures, financial services and staff competence of a public entity, which this study seeks to focus on.

Building Contractors: These are entities tasked with the responsibility of erecting structures or working on any related works in the field of construction.

Communication systems: This include various categories and arrangement put in place for passing information from one point of the organization to the other.

Procurement Procedures: These are approaches adopted by the supply chain management of institutions offering the contract to other institutions or the public.

Financial services: These include loan accessibility, time taken to receive payment from clients or banks, asset net worth, ownership of movable or immovable assets, and financial capacity.

Performance of Contractors: According to this study, performance of Building Contractors, BCs refers to the practice where building contractors execute building public projects and deliver them within the expected timeline, the budgeted cost, and are of good quality.

1.11. Organization of the Study

This Project is organized into three chapters. Chapter one deals with the introduction of the research and presents the background of the study, statement of the problem, research objectives, research questions, significance of the study, assumptions of the study, limitations and delimitations of the study, definition of significant terms used in the study. Chapter two presents the literature review both theoretical and empirical. It also presents the conceptual framework of

the study. Chapter three describes the methodology that will be applied in the whole process of data collection and its analysis. They include the research design, a brief description of the study area, the study population, sampling techniques to be used, methods of data collection and data analysis. Chapter Four features response rate, findings related to the research questions, findings related to interviewed and discussion of both quantitative and qualitative findings. Chapter Five highlights a summary of main findings, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This section features the concept of performance of building contractors, empirical review that relates to reviewed literature of how various scholars, institutions contributed towards enhancing the concept of the independent variable, in this case, communication systems, financial services, procurement procedures, staff competence and architectural designs.

2.2. The concept of Performance of Building Contractors

Conventionally, the concept of performance of contractors in building public projects revolves around three aspects that include time, quality and cost; however, the evolution of building of construction industry and the change of regulating policies has introduced the innovation aspect, environmental aspect, health and safety aspects, which were not initially considered. According to Erickson& Westerberg (2018), individual performance of contractors in building public projects relates to the evaluation of their work based on the aforementioned aspects. Lee, Ismail & Hussaini (2014) posits that the most common poor performance of contractors in building public projects is cost overruns, time delays and low-quality work. Conversely, a BC who can execute the project within the required budgetary cost, time expected, is innovative enough satisfies clients and produces high quality work, which is environmentally friendly and ensures health and safety measure translates to a high performance.

2.3. Communication systems and Performance of Building Contractors

According to Al-Reshaid & Kartam (2017), the success of any building and construction practice depends on how well the suppliers communicate with the contractor, sub-contractors, and other entities that support any activities in the line of construction. Huma & Malik (2018)conducted in

Nepal with an aim of determining the impact of organization communication on performance. In their findings, the authors noted with concern that contractors in building public projects that adopted the system of using written communication such as memos, circulars, letters, daily reports, variations order, final completion, submittals and transmittals among others written communication enhanced their performance compared to contractors in building public projects that adopted verbal communication.Different from literal work of Huma & Malik (2018), and Al-Reshaid&Kartan (2017), Affare (2016) indicated that in Nigeria, conflicts and claims are common in building and construction and as such, effective communication have been used by contractors to alleviate the situation. Contractors in building public projects with poor listening skills, poor leadership, stereotyping, unclear objectives and language difficulties lack clear and effective communication, which causes delays in project completion, increases overrun costs, and above all it leads to customer dissatisfaction. The study by Al-Reshaid & Kartam (2017), Affare (2016), and Huma & Malik (2018) failed to consider other factors influencing performance of BCs. This study will move a notch higher and consider other factors such as procurement procedures, financial services, and staff competence, all of which determine performance ofBCs.

2.4. Financial Services and Performance of Contractors in building public projects

Building and construction is an expensive undertaking which according to the findings presented in Akali, & Sakaja(2018) literal work, contractors ought to build or establish enough a strong capital base before the commencement of the project. The findings by Akali, & Sakaja (2018) were also supported by Wambui, Ndiang‘ui, and Kagiri(2015) who sought to determine factors influencing completion of road construction in Nairobi affirmed that overrun costs and financial constraints were an impediment towards the performance of BCs.Comparing the performance of

contractors in building public projects in other places, Pourrostam& Ismail(2012) indicated that contractors in building public projects in Iran suffered a lot of overrun costs, which were caused by the failure and delay in accessing funds on time hence increasing the cost of executing the project.Busolo & Ombuki's (2014) study conducted in Mavoko Municipality, Kenya observed that contractors in building public projects with a high financial capacity have enough assets that can help them secure credit from financial institutions, which they could use to finance the projects hence improve on their work performance. Busolo & Ombuki's (2014) adds on what Pourrostam & Ismail (2012) and Wambui, Ndiang'ui, and Kagiri (2015) stated by saying that contractors in building public projects with strong financial capacity will rarely incur overrun costs hence execute the project within the budgetary allocation and within the expected time.

According to the findings presented by Asinza, Kanda, Muchelule & Mbithi (2016), project cost forecasting should be done on long-term and not short-term basis because on the latter, the cost of building materials might increase and compromise smooth flow of the work process. In Pakistan, Khan, Gazder & Ali (2015) indicates that the management of project finances should be with skilled and experienced person who understands the tenets, policies, and everything about the project to avoid financial mismanagement. Relative to Asinza, Kanda, Muchelule & Mbithi (2016) study, the study by Khan, Gazder & Ali (2015) project cost forecasting should be done for a longer duration and not a short duration to help plan and control the flow of finances.

2.5. Staff CompetencePerformance of Contractors in building public projects

In their study conducted in Ghana, which sought to determine factors influencing quality performance of contractors in building public projects. Tengan, Anzagira, Kissi, Balaara, & Anzangira(2014)stated that lack of knowledge and skills on building and construction, lack of previous experience in construction, lack of training and lack of technical expertise largely

influenced the quality of work done by BCs. In the first place, the authors observed that lack of training, experience, knowledge and skills of a BC always led to wrong planning and therefore decision making hence compromising the quality of work done by the BC. Compared to Tengan, Anzagira, Kissi, Balaara, & Anzangira (2014), the study by Busolo & Ombuki (2014) indicated that inexperienced and unskilled contractors in building public projectswill rarely consult with the client, will rarely be committed to work and above all identify with others of the same caliber whose work productivity will be low and the quality of work done is poor.

In Colorado, Wanberg, Harper, Mathew & Rajendran (2013) conducted that study that sought to establish the relationship between safety and quality performance in construction; in their findings, the authors noted that project directors who allow workers to enjoy division of labor and specialization, helped by ensuring that everyone thrived best in what he/she did best hence lowering chances of underperformance as well as improving safety at the work place.

Contrary to the expectations, Kolibacova (2014) considered that knowledge and skills alone are not determinants of quality, the author keenly states that experience and commitment to work determine the quality of work done and hence the performance of an employee in any given organization. Lee, Ismail & Hussaini (2014) notes that in most countries, the regulating authorities usually standardize the knowledge and skills of contractors in building public projects by registering them and promoting the class or raising the class of those who were experienced, had a good track record in terms of performance and had furthered their studies. Relative to the aforementioned scholars, this study will not only consider influence staff competency have on performance ofBCs, but will also consider other factors such as communication systems, procurement procedures, and financial services in order to have a clear understanding of some of the elements that measure and constitute performance of BCs.

2.6. Procurement procedures and Performance of Building Contractors

Kabirifar & Mojtahedi (2019) acknowledges that Australia has performed better that other countries in the building and construction industry because of a well-established and strict guideline on procurement.The author relative to others indicates that much emphasis in the procurement process should be put in supplier's selection because competence can be determined at that level, financial capacity, and even the level of experience, which are key towards measuring the performance of BCs.

In Tanzania, Mgawe& Masanja's (2018) study sought to determine the influence procurement practices had on performance of contractors in building public projects and noted that the selection of contracting/procurement procedures should be based on legal policies and guidelines; however, rogue officers and persons usually flout the guideline and adopt procedures that are convenient to them. these are almost the same ideas presented in the literal work of Oladinrin, Olatunji & Hamza, (2013) who asserted that some of the contractors liaise with procurement officers to conveniently award themselves building contracts that adopts the model, design-bid-built, which has no element of evaluation. The adoption of such a model lowers the quality of work done by the BC and hence his individual performance.

In the works of Oloo (2013) who narrowed down on influence of procurement procedures on the procurement practiced in the building and construction industry noted that the system used by the majority of those in the procurement department showed that they preferred multiple bids for the same project, a move that wastes time, it is costly and to a great extent, has ripple negative effects on job satisfaction of the client. Erickson, & Westerberg(2018) concurs with the sentiments of Oloo by stating that awarding building and construction tenders and contracts is

not done based on merit, but on favor, illegal and unprofessional basis, which ultimately lowers the performance of BCs.

2.7. Theoretical Framework

This Study will be anchored on Goldratt's Theory of Constraints, 1984, which posits that a certain limiting factor stands on the way of achieving systematic goals and that identifying the bottleneck and gradually improving it until it is no longer a challenge (Mabin & Davies, 2010).In this theory, there are a set of tools that helps in attaining the goals include identifying and eliminating the limiting factor, having tools for analyzing and resolving problems and measuring performance and making informed decisions.A successfully implemented theory is usually associated with increased profitability, performance, enhanced customer satisfaction, reduced inventory and time leads (Dettmer, 1997).Relative to this study, this theory is applicable in such a way that the key focus is determining the performance of BCs; however, there are challenges, limiting factors or bottlenecks, which hinder. The process of identifying the bottlenecks (conducting this research) and eliminating them (making recommendation) are the basis that forms the foundation of the Theory of Constraints.

2.8. Conceptual Framework

This study will be based on the following conceptual framework.

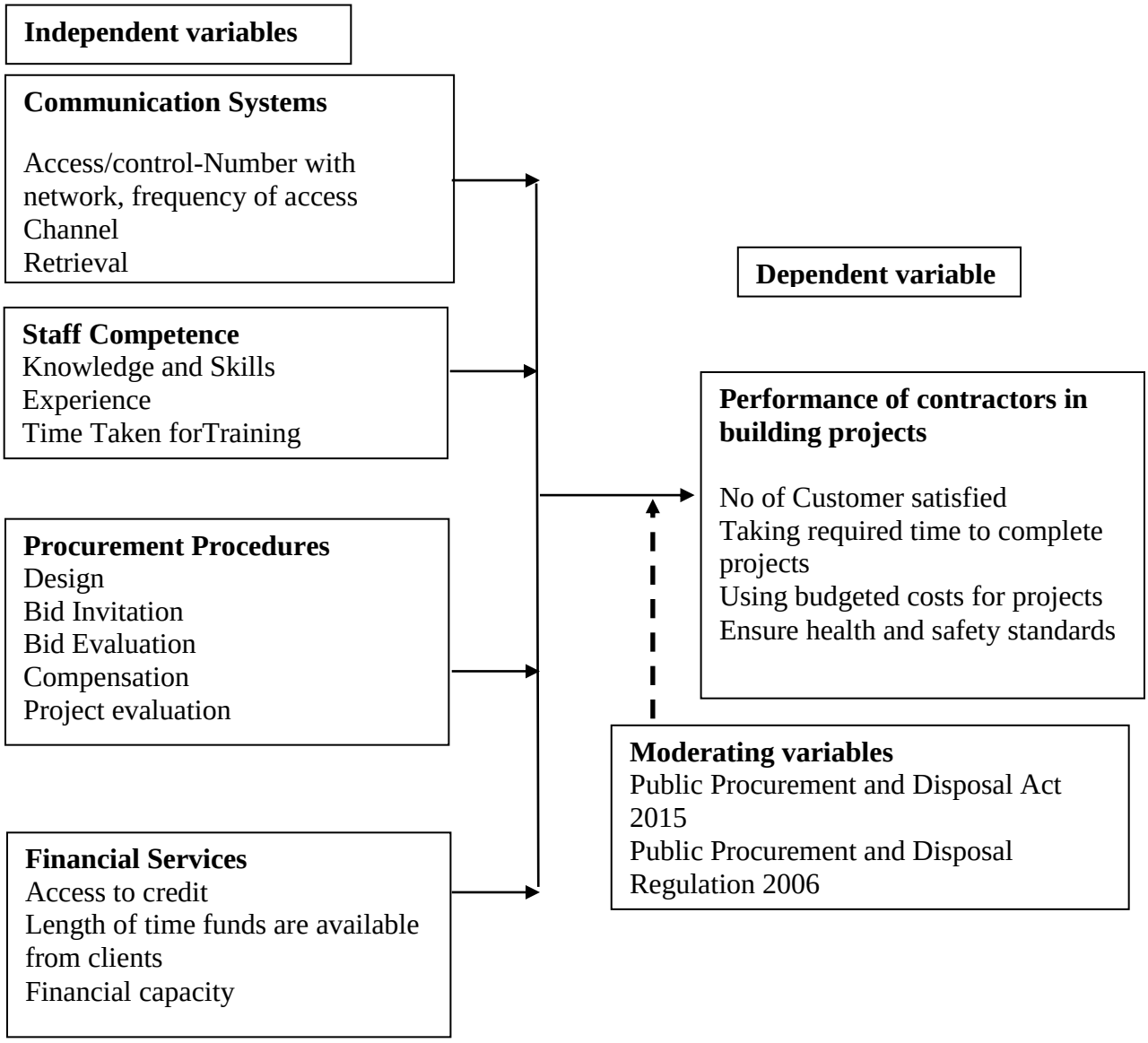

Figure 2.1: A conceptual framework showing how organizational factors influencing performance of building contractors.

Source: Author's Conceptualization (2019)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter deals with research design, target population, sample size and sampling method. Further, Research instruments, pilot study, instrument validity and instrument reliability features in this chapter. This chapter also highlights data collection procedures and data analysis technique.

3.2. Research Design

The study employed a descriptive survey research design because of the descriptive nature of the study. Descriptive survey research design was used to gather, summarize, present and interpret information for the purpose of clarification (Orodho, 2008). The rationale behind the adoption of this research design was attributed to the fact that this method was convenient because a small geographical area could be study and findings could be inferred for a larger population. Further, this method is less costly and does not need expertise of any scientific nature. This research design was particularly appropriate since the study aimedat collecting original information from a population that is too large to be observed directly.

3.3. Target Population

Pokot Central is one of the four administrative sub-counties of West Pokot County. Pokot Central has an area of 1072KM^2 and lies on Latitude 1.494218, and Longitude 35.047215 with the highest elevation being 32000 metres above the sea level**.**Pokot Central has a total population of 55,000 (Kenya National Bureau of Statistics, 2009). However, the target population of contractors in building public projects and officials from government especially from the

National Construction Authority and a few from the County Government of West Pokot County who were estimated to be 1500.

3.4. Sampling Frame

The sampling frame was contractors in building public projects and the regulating authority in Pokot Central Sub-County.

Table 1: Sampling Frame

Respondents	Target population	Sample
Building contractors	1469	300
Officials from NCA	8	8
Officials from Ministry of Public Works, and Housing	13	13
Officials from NEMA, and Public Health	10	10
TOTAL	**1500**	**351**

3.5. Sample Size and Sampling Technique

In order to sample the required number of units from the target population, the researcher used stratified sampling, which consideredcontractors in building public projects based on their "classes," length of experience, locational distribution and even level of training and knowledge to ensure representation. This was followed by simple random sampling that was used to refine the search in order to give an equal opportunity to all sampling units to take part in the study.

Sampling of the officials from the County Government, Ministry of Public Works and National Construction Authority was done using purposive sampling because the researcher only considered those officials who have information relevant to this study

The sample size considered the major part of all statistical analysis. The computation of the appropriate sample size generally considered the most important and the most difficult step in statistical study. The sample size plays a crucial role in those cases of statistical studies where the statistical studies like sample survey, experiments, observational studies, and others were involved (Kothari and Gaurav, 2014).The sample size for this study were obtained using Mora& Kloet (2010) formula for finite population as follows;

$$n = \frac{N}{\left(1 + Ne^2\right)}$$

Where,

n = the sample size

N = the size of population=1500

e= the error of 5 percentage= 0.05

substitution of the value of N and e brings the sample size to be 315

3.6. Research Instruments

According to Mugenda and Mugenda (2003), Data collection instrument are tools was used to collect data from respondents. Questionnaires, and interview schedules are examples of research instruments that was used collect information in this study.

3.6.1. Questionnaires

Questionnaires were administered to contractors in building public projects. The questionnaire was categorized in sections. Section Acomprised of the demographic characteristics of the respondents, Section B,C,D, E and F featured questions on independent and dependent variables.

Such that Sections B,C,D and E comprised questions on independent variables while section F featured questions on dependent variables.

3.6.2. Interview schedule

County Government Officials from the Ministry of Public Works, and others from the National Construction Authority, NEMA, and Public Health responded to interview schedules. The interview questions are related to research questions, which probe more regarding the specific objectives.

3.7. Pilot Test

A pilot study is conducted before the main study in order to test instrument validity and reliability. According to Murray (2003), piloting is important because it helps to identify ambiguities of the items and vague questions for improvement. Through a pilot study, the researcher was able to establish the content, construct and face validity of the instruments. Further, the researcher used it as an opportunity to familiarize with the research area, estimate the time he will take during the study and make logistical arrangements.

3.7.1. Validity of Research Instrument

Kraska-Miller (2013) defines validity as the ability of a research instrument to give results that reflect what it purports to measure, results that reflect or are related to the topic. Establishing the content, construct and face validity is meant to assess the accuracy, meaningfulness, appeal, and appearance of the instruments for data collection. Thus, the researcher's supervisors assisted in ensuring that the instruments are in relation to the set objectives and content area under study. Their suggestions and comments were used as a basis to modify the research items and make

them adaptable to the study. Basing on the feedback from the experts, the wording of the instruments will be modified appropriately.

3.7.2. Reliability of Research instrument

According to Kraska-Miller (2013) reliability is the ability of a research instrument to give consistent results even if the process is repeated. Data collected from the pilot study was used to compute the reliability of the instruments' items. The reliability of questionnaire was done using the SPSS software where Cronbach's Alpha was established. Data collected using questionnaires in the pilot study was entered in the SPSS software and thereafter a scale test referred to as reliability test be done and was then give values that was used to establish instrument reliability. According to Mugenda, and Mugenda (2003), a Cronbach's Alpha value of more than 0.7 mean that the reliability of the research instrument is high and that the research instrument can give consistent results upon been repeated to the same population.

Reliability Test Statistics

Table 2: Reliability Test Statistics

Reliability Statistics

Cronbach's Alpha	N of Items
.768	32

Cronbach's Alpha from SPSS was computed as shown in table 2 and the value0.768 was realized. This meant that the research instrument would be 76.8 % reliable, and would give 76.8% accurate findings upon repeating data collection on the same population.

3.8. Data collection procedure

Quantitative data was collected by administering questionnaires to sampled contractors in building public projects in Pokot Central Sub-County. The researcher organized with the respondents and collected the questionnaires after the respondents responded to the questions. After that, the researcher held a face-to-face interview with officials from NCA, NEMA, Public Health and those from the Ministry of Public Works and Housing.

3.9. Data Processing and analysis

After obtaining research permit from the National Council for Science and Technology the researcher will proceed to collect data. The analysis of data went through a number of closely related operations namely establishment of categories, application of these categories to raw data through coding, tabulation and drawing of statistical inferences. Editing was done to detect errors and omissions thus ensuring that the data was accurate, consistent with other facts gathered, uniformly entered, as complete as possible and arranged. After entry data entry in SPSS version 20 software, descriptive statistics was determined where responses were presented in frequencies and percentages and in tables because they were easy to read and understand. Findings from the interviews were analyzed using thematic analysis and responses were presented in themes and sub-themes as they related to research objectives and indicators respectively.

3.10. Ethical considerations

Before the commencement of data collection, the researcher obtained a research authorization letter from the Head of Department, University of Nairobi and thereafter use it to apply for a permit from the National Council of Research, Science, Technology and Innovation. The permit from NACOSTI helped the researcher to obtain authorization letters from the County Director of Education, and County Commissioner. These letters helped in instilling confidence and trust to

respondents who were assured that the purpose of conducting research was academic based and that they should give accurate and honest information.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1.Introduction

This chapter presents findings relative to demographic characteristics of respondents, descriptive findings relative to research objectives, inferential statistics that seeks to test hypotheses and thematic analysis from qualitative data. Further, the study features discussion of descriptive, inferential and qualitative analysis.

4.2.Response Rate

The study considered 300 hundred BCs, 8 officials from NCA, 13 officials from the Ministry of Public Works and Housing, and 10 officials from Nema and Public Health. The Response rate was as follows

Table 3: Response Rate

Respondents	Sample Size	Response	Response rate
Building Contractor	300	300	100%
Officials from NCA	8	8	100%
Officials from Ministry of Public Works, and Housing	13	13	100%
Officials from Nema, and Public Health	10	10	100%
Total	**351**	**351**	

From table 3, it is evident that the response rate from respondents BCs, officials from NCA, Officials from the Ministry of Public Works & Housing, and Officials from Nema and Public Health.

4.3.Findings Related to Demographic Information of Respondents

This section presents findings related to the biographical information of respondents that took part in responding to questionnaires.

Table 4: Demographic characteristics of Respondents who responded to questionnaires

	Frequency	Percent
Gender		
Male	194	64.7
Female	106	35.3
Total	**300**	**100.0**
Age bracket		
Below 25years	19	6.3
25-35 years	92	30.7
36-45 years	124	41.3
Above 45 years	65	21.7
Total	**300**	**100.0**
Classification of building contractor		
NCA1	4	1.3
NCA2	6	2.0
NCA3	16	5.3
NCA4	25	8.3
NCA5	44	14.7
NCA6	66	22.0
NCA7	54	18.0
NCA8	85	28.3
Total	**300**	**100.0**
Last time Secured a building contract		
On-Going	43	14.3
Less than 6 months	54	18.0
6-12 months	102	34.0
Over 1 year	101	33.7
Total	**300**	**100.0**
Experience as a contractor		
Less than 1 year	53	17.7
1-3 years	105	35.0
4-7 years	81	27.0
Over 8 years	61	20.3
Total	**300**	**100.0**
Level of Academic qualification		
Certificate	90	30.0
Diploma	142	47.3
Bachelor's Degree	60	20.0
Master Degree	8	2.7
Total	**300**	**100.0**

In the findings presented in table 4, it is evident that 194 (64.7%) respondents were male while 106 (35.3%) were female. Out of 300 respondents who took part in responding to questionnaires, 124 (41.3%) respondents were aged 36-45 years while 92 (30.7%), 65 (21.7%) and 19 (6.3%)

were aged 25-35, above 45, and below 25 years respectively. Regarding classification, 85 (28.3%) respondents were classified as NCA 8 while 66 (22.0%), 54 (18.0%) and 44 (14.7%) respondents were classified as NCA 6, NCA 7, and NCA 5 respectively, these respondents were the majority, but whose classification was not high to work on high valued or complicated infrastructural projects.

In the category of high valued contractors, 16 (5.3%), 6 (2.0%) and 4 (1.3%) respondents indicated that they were in the category of NCA 3, NCA 2 and NCA 1 respectively. In terms of last time the worked, over two thirds of the BCs indicated that the last time they worked was over 6 months. Notably, 102 (34.0%) and 101 (33.7) respondents that they last worked between 6-12 months and over one year respectively, that is considerably a long period, which might influence the performance of a BC for the next project secured. Different from that was a group of 54 (18.0%) and 43 (14.3%) respondents who indicated that they last worked in a period of less than 6 months and who had on-going projects being worked on.

Regarding the level of experience of BCs, 105 (35.0%) who formed the majority of BCs indicated that they had worked for a period of between 1-3 years. This was followed by a group of 81 (27.0%) respondents who noted that they had worked for a period of between 4-7 years. Another group of 61 (20.3%) and 53 (17.7%) respondents stated that they had worked for a period of over 8 years and less than 1year respectively. In terms of academic qualification, 142 (47.3%) and 90 (30.0%) respondents indicated that they attained Diplomas and Certificate qualifications, such qualifications are low for contractors who consider working on high valued and complicated building projects. In another case, 60 (20.0%) and 8 (2.7%) respondents stated that they attained Bachelor and Master Degree qualification respectively.

Table 5: Level of Training

Ever been trained on safety and health measures		
Yes	216	72.0
No	84	28.0
Total	**300**	**100.0**
Undergone training by any regulating authority		
Yes	224	74.7
No	76	25.3
Total	**300**	**100.0**

In table 5, the majority of BCs indicated that they had undergone a training on safety measures and other organized by regulating authorities. Notably, 216 (72.0%) respondents stated that they had been trained on safety and health measures. Contrary, 84 (28.0%) respondents indicated that they were not trained in safety and health measures. In another case, 224 (74.7) respondents observed that they had undergone training organized by regulating authorities. Different from that was a group of 76 (25.3%) who stated that they had not undergone any training organized by regulating authorities.

4.4.Descriptive Findings Related to Research Questions

This section features descriptive findings relative to communication systems, financial resources, staff competence, and procurement procedures and its influence on performance of BCs of public projects.

4.4.1. Communication Systems and Performance of Building Contractors

Table 6: communication systems influences performance?

Responses	Frequency	Percent
Yes	269	89.7
No	31	10.3
Total	300	100.0

In table 6, out of 300 respondents 269 (89.7%) indicated that communication systems influenced performance of BCs while 31 respondents representing 10.3% indicated that communication systems did not influence performance of BCs. This implied that the majority of BCs emphasized on the need to enhance communication with clients and/or suppliers.

Table 7: Extent of agreeing or disagreeing with statements that relate to communication systems and performance or building contractors

Statements	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	F	%	F	%	F	%	F	%	F	%
Access to information from client helps contractors to plan and work diligently	13	4.3	12	4.0	7	2.3	142	47.3	126	42.0
Effective communication from suppliers and clients determines performance	7	2.3	7	2.3	16	5.3	125	41.7	145	48.3
Clients take long before giving feedback on an issue of urgency	6	2.0	14	4.7	11	3.7	140	46.7	129	43.0
Whoever controls the flow of information determines the performance of building contractors	6	2.0	2	0.7	38	12.7	128	42.7	126	42.0

In table 7, the majority of respondents observed that access to information helped BCs to plan and work diligently. Notably, 142 (47.3%) and 126 (42.0%) agreed and strongly agreed respectively that access to information helped BCs to plan and work diligently. Contrary to that, 13 (4.3%) and 12 (4.0%) respondents strongly disagreed and disagreed respectively that access to information helped BCs to plan and work diligently. Giving unbiased responses were 7 (2.3%) respondents did not state whether they agreed or disagreed with the statement that access to information helped BCs to plan and work diligently.

In another case, 145 (48.3%) and 125 (41.7%) respondents strongly agreed and agreed respectively that effective communication from clients and/or suppliers largely influenced performance of BCs. Contrary to that, in each case, 7 (2.3%) respondents strongly agreed and

agreed respectively that effective communication from clients and/or suppliers largely influenced performance of BCs. Giving impartial responses were 16 (5.3%) respondents who were unbiased, they might have given such responses for lack of information regarding communication and its influence on performance of BCs.

Regarding feedback in communication, 140 (46.7%) and 129 (43.0%) BCs agreed and strongly agreed respectively that clients and/or suppliers took long before giving feedback on an issue of urgency. Different from that 14 (4.7%) and 6 (2.0%) respondents disagreed and strongly disagreed that clients and/or suppliers took long before giving feedback on an issue of urgency. Different from other respondents, 11 (3.7%) respondents gave neutral responses on the statement that clients and/or suppliers took long before giving feedback on an issue of urgency. The rationale behind their responses might be that they lacked information regarding communication feedback and its influence on performance of BCs.

In terms of controlling the flow of information, 128 (42.7%) and 126 (46.0%) agreed that whoever controlled the flow of information determined the performance of BCs. Contrary to that, was a group of 6 (2.0%) and 2 (0.7%) strongly disagreed and disagreed respectively that whoever controlled the flow of information determined the performance of BCs. In another case, 38 (12.8%) of the respondents gave unbiased responses on the statement that whoever controlled the flow of information determined the performance of BCs. The rationale behind it was that this group might not have known who controlled the flow of information between the BC, clients and suppliers.

4.4.2. Financial Resources and Performance of Building Contractors

Table 8: Does Financial Services influence performance of building contractors

Responses	Frequency	Percent
yes	255	85.0
no	45	15.0
Total	300	100.0

In table 8, the majority of respondents, 255 (85%) asserted that financial services largely influenced the performance of BCs. On the other hand, 45 (15.0%) respondents stated that financial services did not influence performance of BCs.

Table 9: Extent of agreeing or disagreeing with statements that relate to financial services and performance of building contractors

Statements	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	F	%	F	%	F	%	F	%	F	%
Credit worthiness of a building contractor influence performance of a building contractor	13	4.3	18	6.0	8	2.7	133	44.3	128	42.7
Asset net worth of a contractor influences his/her performance of a building contractor	13	4.3	18	6.0	45	15.0	109	36.3	115	38.3
Bank lending practices and policies influence performance of a building contractor	6	2.0	8	2.7	36	12.0	124	41.3	126	42.0
Time taken to receive payment determines performance of a building contractor	25	8.3	13	4.3	12	4.0	138	46.0	112	37.3

From the findings presented in table 9, 133 (44.3%) and 128 (42.7%) respondents agreed and strongly agreed respectively that credit worthiness of a BC influenced the performance of a BC. Different from that was a group of 18 (6.0%) and 13 (4.3%) respondents strongly disagreed and disagreed respectively that credit worthiness of a BC influenced the performance of a BC. Giving impartial responses were 8 (2.7%) respondents who did not agree or disagree on the statement that credit worthiness of a BC influenced the performance of a BC. The rationale

behind such neutral responses could be attributed to the fact that they were not sure whether financial institutions measures and uses their credit worthiness to influence their financial capacity and hence performance.

Regarding asset net worth, 115 (38.3%) and 109 (36.3%) strongly agreed and agreed respectively that asset net worth of a BC influence his/her performance on building and construction of projects. On the other hand, 18 (6.0%) and 13 (4.3%) disagreed and strongly disagreed that asset net worth of a BC influences his/her performance on building and construction of projects. Surprisingly, 45 (15.0%) respondents gave impartial responses on the statement that asset net worth of a BC influences his/her performance on building and construction of projects. This was a relatively higher number of respondents giving neutral responses, but the responses could be attributed to fact that some of the respondents were not sure the relationship between asset net worth and its influence on performance of BCs.

In terms of bank lending practices, 126 (42.0%) and 124 (41.3%) respondents strongly agreed and agreed respectively that bank lending practices and policies influenced performance of BCs. Different from that was a group of 8 (2.7%) and 6 (2.0%) respondents disagreed and strongly disagreed that bank lending practices and policies influenced performance of BCs. Out of 300 respondents, 36 (12.0%) of the respondents gave neutral responses on the statement that bank lending practices and policies influenced performance of BCs. This could be attributed to the fact that this group of the BCs were not aware of bank lending practices and policies, which influence performance of BCs.

In another case, 138 (46.0%) and 112 (37.3%) strongly agreed and agreed respectively that time taken to receive payment determined performance of a BC. Different from that was a group of 25

(8.3%) and 13 (4.3%) who strongly disagreed and disagreed respectively that time taken to receive payment determined performance of a BC. On the other hand, 12 (4.0%) responded from a neutral view on the statement that time taken to receive payment determined performance of a BC. Such respondents did not know how to relate time taken a contractor takes to receive payment and its relationship to a BC's performance.

4.4.3. Staff Competence and Performance of Building Contractors

Table 10: Does Staff Competence influence performance of building contractors

Responses	Frequency	Percent
Yes	254	84.7
No	46	15.3
Total	300	100.0

From the findings presented in table 10, 254 respondents representing 84.7% asserted that staff competence influenced performance of BCs. On the other hand, 46 (15.3%) stated that staff competence did not influence the performance of BCs.

Table 11: Extent that staff competence influence performance of building contractors

Statements	No extent at all		Low extent		Moderate extent		Great extent		Very great extent	
Level of experience influence performance of a building contractors more than knowledge acquired	6	2.0	0	0.0	20	6.7	136	45.3	138	46.0
Performance of a contractor is described by how diligent he works	33	11.0	0	0.0	13	4.3	156	52.0	98	32.7
Academic qualifications of a building contractor influence ability of a contractor to perform	14	4.7	3	1.0	41	13.7	143	47.7	99	33.0

According to the findings presented in table 11, it is clear from the majority, 138 (46.0%) and 136 (45.3%) of respondents that there was a very great extent and great extent respectively to how the level of experience of a BC influenced performance of a BC. On the other hand, 20

(6.7%) and 6 (2.0%) of the respondents stated that there was a moderate and no extent at all to how the level of experience of a BC influenced performance of a BC. This implied that highly experienced BCs posted high performance compared to BCs whose level of education was low.

In another case, 156 (52.0%) and 98 (32.7%) who were the majority of respondents stated that there was a great extent and very great extent respectively that the performance of a BC was influenced by how diligent he worked. Different from that was a group of 33 (11.0%) indicated there was no extent at which performance of a BC was influenced by how diligent he worked. Implicitly, this meant that the performance of a BC was largely influenced by how well BC executes his work.

Regarding academic qualification, 143 (47.7%) and 99 (30.0%) respondents stated that there was a great extent and very great extent to which academic qualification of a BC influenced ability of a BC to perform. Out of 300 respondents who took part in the study 41 (13.7%), 14 (4.7%), and 3 (1.0%) stated that there was a moderate extent, no extent at all and low extent respectively to which academic qualification of a BC influenced ability of a BC to perform.

4.4.4. Procurement Procedures and Performance of Building Contractors

Table 12: Do you think procurement procedures influence performance of a building contractor?

	Frequency	Percent
Yes	249	83.0
No	51	17.0
Total	300	100.0

In table 12, 249 (83.0%) indicated that procurement procedures influenced performance of a BC while 51 (17.0%) asserted that procurement procedures did not influence of BCs.

Table 13: What informs you to bid or apply for a bid?

Responses	Frequency	Percent
payable amount for the contract/tender	170	56.7
nature of the contract in term of class	58	19.3
your level of knowledge, skills and experience	37	12.3
other specified	35	11.7
Total	300	100.0

Out of 300 respondents, 170 (56.7%) indicated that what informed them to place bids or tender was the payable amount valued for the tender or contract. In another case, 58 (19.3%) of respondents stated that the nature of the contract in terms of class influenced them to place bids or tenders for the contract. Different from that was a group of 37 (12.3%) of respondents who stated that 37 (12.3%) the level of knowledge, skills and experience influenced BCs to place bids or tender. Other respondents, 35 (11.7%) stated that other reasons apart from the value of contracts, the nature of contracts in terms of class and level knowledge, skills and experience influenced their ability to place bids.

Table 14: Extent of agreeing or disagreeing with statement of how procurement procedures influence performance of building contractors

Responses	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	F	%	F	%	F	%	F	%	F	%

Criteria used to award contracts has never been understood	25	8.3	34	11.3	40	13.3	106	35.3	95	31.7
Project evaluation is rarely done, or if done, it does not meet the standards	53	17.7	38	12.7	52	17.3	121	40.3	36	12.0
Sometimes clients change architectural design, working environment, which affect the flow and hence performance	18	6.0	23	7.7	39	13.0	150	50.0	70	23.3

In table 14, out of 106 (35.3%) and 95 (31.5%) respondents agreed and strongly that the criteria used to award contracts had never been understood. On the other hand, 34 (11.3%) and 25 (8.3%) disagreed and strongly disagreed that the criteria used to award contracts had been understood. Another group of 40 (13.3%) respondents gave neutral respondents as to whether they agreed or disagreed with the statement that the criteria used to award contracts had never been understood. This could be attributed to the fact that 40 (13.3%) respondents were not privy to procurement procedures or policies.

In the same table 14, 121 (40.3%) respondents agreed that project evaluation was rarely done and if it did, it did not meet the standards. This response was disagreed by 53 (17.7%) and 38 (12.7%) respondents that project evaluation is rarely done and if it did, it did not meet the standards. Different from other respondents, 52 (17.3%) respondents gave impartial responses as to whether they agreed or disagreed with the statement that project evaluation was rarely done and if it did, it did not meet the standards.

In a different case, 150 (50.0%) respondents agreed while 70 (23.3%) agreed and strongly agreed respectively that sometimes, clients changed architectural design, working environment, which affected the flow of work and hence performance of BCs. Contrary to that, 23 (7.7%) and 18 (6.0%) disagreed and strongly disagreed that sometimes, clients changed architectural design, working environment, which affected the flow of work and hence performance of BCs. Relative

to other respondents, 39 (13.0%) respondents gave neutral responses on the statement that sometimes, clients changed architectural design, working environment, which affected the flow of work and hence performance of BCs. This could be explained by the fact that they were unaware about the influence of changing architectural designs and working environment on performance of BCs.

4.5.Qualitative Findings from Interviews: Thematic Analysis

Table 15: Thematic Analysis from Interview Responses

Theme	Sub-themes
Communication systems	Access to information is problematic because of poor network, remoteness and topographical situation of the study area It takes long before written circulars and memos regarding projects reach the contractor Travelling to meet the client and/or supplier takes long, is costly though is the only reliable way of communication when phone communication fails.
Financial services	It takes long before the client and/or supplier to release payment for on-going work or work done Most of the contractors have not established their credit worthiness with banks making it difficult to access credit when needed hence affecting their ability to perform using their financial capacity
Staff competence	Most contractors get skilled human resource from neighbouring counties such as Trans-Nzoia because most locals are illiterate and unskilled. Majority of contractors have only attained certificate and diploma qualification with low level of experience influencing their performance
Procurement procedures	Contractual projects take long before they are approved Long bureaucratic procurement procedures make it difficult for contractors to follow up, and adjust based on the situation Application or placing bid via the online IFMIS system is complex and sometimes suffers system failures which hinders some contractors from securing tenders
Challenges faced by contractors	Communication challenges caused by poor networks, poor roads and other infrastructure influence largely performance of building contractors Funds take long before they are released by the clients Low level of education among locals increases the cost of operation because of "importing" labour from neighbouring counties
Mitigation strategies	Government should support the installation of network masts and related infrastructure to boost network communication National and County government should improve the level of education of locals either through adult education, basic education or otherwise County Assembly and/or the National Assembly should formulate laws and policies that ensures clients pay building contractors on time

4.6.Discussion of findings

This section presents an analytical discussion of descriptive, and qualitative findings related to the study. These findings will be related to scholarly findings that were in line with the objectives of this study.

4.6.1. Communication Systems and Performance of Building Contractors

From the findings presented, the majority of respondents overwhelmingly asserted that communication systems influenced performance of BCs. Notably, in table 6, 269 (89.7%) of the respondents stated that communication systems influenced performance of BCs. Regarding to access to information, in table 7, 188 (89.3%) respondents indicated that access to information helped BCs to plan and execute their work diligently. Further, 270 (90.0%) respondents stated that effective communication from clients influenced performance of BCs. In the same table 7, 169 (89.7%) asserted that clients took long before giving feedback on issues of emergency. In terms of control of the flow of information, 254 (84.7%) respondents stated that whoever controlled the flow of information influenced performance of BCs. Effective communication, and immediate feedback determined the performance of BCs largely because through communication, BCs are able to get clear instructions, respond to changes from clients regarding work schedules, project designs and working environment. Maintaining a constant link with clients help BCs to enhance customer satisfaction, complete their projects timely and reduce overhead costs associated with poor communication systems.

Descriptive findings presented were in line with qualitative findings from interview responses regarding communication systems and its influence on performance of BCs. In the interviews, the officials from Officials the Ministry of Public Works and Housing stated

> *"……. Access to information is problematic because of poor network, remoteness and topographical situation of the study area. It takes long before written circulars and memos regarding projects reach the contractor…."*

Officials from NCA echoed the sentiments by the Officials from the Ministry of Public Works and Housing who stated,

> *"……Travelling to meet the client and/or supplier takes long, is costly though is the only reliable way of communication when phone communication fails….."*

From the interviews, it was evident that poor communication network encouraged BCs to travel long distances at the headquarters or to the client in order to get updated information, receive changes in project plans or any related information, which was costly, time consuming and therefore influence performance of BCs negatively.

According to Saud (2015) building construction in Saudi Arabia has been marred with challenges related to communication whereby contractors have been exposed to different site conditions other than previous agreed, extra works and delays in feedbacks all of which led to claims and disputes hence compromising the performance contractors. In Nigeria, Affare (2016) asserted that, conflicts and claims is common in building and construction and as such, effective communication have been used by contractors to alleviate the situation. Contractors in building public projects with poor listening skills, poor leadership, stereotyping, unclear objectives and language difficulties lack clear and effective communication, which causes delays in project completion, increases overrun costs, and above all it leads to customer dissatisfaction.

4.6.2. Financial Resources and Performance of Building Contractors

From the findings, 255 (85.0%) respondents confirmed that financial services largely influenced performance of BCs, see table 8. In another case, 261 (87.0%) respondents asserted that credit worthiness influenced their ability to acquire financial credit enhance their performance as BCs, see table 9. In the same table, 224 (74.8%) respondents asset net worth of BCs influenced their

performance. In supporting the influence of financial services on performance, 250 (83.3%) respondents stated that bank lending practices such as interest rates, selective lending, and others largely influenced performance of BCs. Out of 300 respondents, 250 (83.3%) asserted that the time taken to receive payment determined performance of BCs.

From these findings its was evident that financial resources and services largely influenced performance of BCs. Notably, most contractors rely on the bank for financing their Local Purchase Orders, securing initial financial credit in order to start off their projects and failure to access such services, either because of bank policies, or their financial capacity compromise their ability to execute their projects on time, increases their cost of operation because of halting their projects, or seeking alternative funding from sherlocks, which is associated with exorbitant interest rates.

From the interview with officials from the Ministry of Public Works and Housing, who supervised most of the building construction of the public sector, they elucidated

> *"…. It takes long before the client and/or supplier to release payment for on-going work or work done. Even so, most of the contractors have not yet built or established good credit worthiness with banks, a move that makes it difficult to access credit when needed hence affecting their ability to perform using their financial capacity……"*

Findings from interviews were in line with findings with from questionnaires and it explained the dwindling performance of BCs in Pokot Central Sub-County. Scholarly findings supported findings observed from this study in such a way that financial capacity of BCs, timely payment, good credit worthiness and asset net worth all influenced performance of BCs.

According to Akali, & Sakaja (2018) contractors ought to build or establish enough a strong capital base before the commencement of the project. Comparing the performance of contractors

in building public projects in other places, Pourrostam & Ismail (2012) indicated that contractors in building public projects in Iran suffered a lot of overrun costs, which were caused by the failure and delay in accessing funds on time hence increasing the cost of executing the project. Busolo & Ombuki's (2014) indicated that contractors in building public projects with a high financial capacity have enough assets that can help them secure credit from financial institutions, which they could use to finance the projects hence improve on their work performance.

4.6.3. Staff Competence and Performance of Building Contractors

Out of 300 respondents that took part in responding to questionnaires, 254 (84.7%) stated that staff competence largely influenced performance of BCs, see table 10. In table 11, 274 (91.3%) respondents asserted that the level of experience of BCs influenced performance more than knowledge acquired. In the same table, 254 (84.7%) respondents observed that the performance of a BC was described by how diligent the contractor worked. Regarding academic qualification, 242 (80.7%) of the respondents in table 9 stated that academic qualifications of a BC influenced performance.

The ability and capacity of a BC to perform largely depend on the level of experience as highlighted in the findings. Although, academic qualification influences performance of a BC, the length of time a contractor has taken working on several projects determined performance. In table 4, it is evident that 142 respondents who represented 47.3% worked for a period of over 4 years; however, in the same table, 232 (77.3%) respondents attained only diploma and less as academic qualification. Relatively, over three quarters of the BCs had low academic qualification that could not allow them to work on high valued construction projects, but their level of experience somehow indicate that they could perform once given a chance.

In the interviews with the officials from the Ministry of Public Works & Housing, Public Health, NEMA, and NCA, they stated

> *"……Most contractors get skilled human resource from neighbouring counties such as Trans-Nzoia because most locals are illiterate and unskilled. Majority of contractors have only attained certificate and diploma qualification but with relatively high experience influencing their performance…."*

Findings from interviews explain the rationale behind the declining performance of BCs, which shows that most of them rely on human labour from neighbouring counties hence increasing the overhead costs and extending the completion time of projects. Further, most of the BCs attained low level of education hindering them to place bids and work on high valued and complex projects. These findings coincided with findings from questionnaires, which was in line with scholarly findings.

Tengan, Anzagira, Kissi, Balaara, & Anzangira (2014) stated that lack of knowledge and skills on building and construction, lack of previous experience in construction, lack of training and lack of technical expertise largely influenced the quality of work done by BCs. Busolo & Ombuki (2014) indicated that inexperienced and unskilled contractors in building public projects will rarely consult with the client, will rarely be committed to work and above all identify with others of the same caliber whose work productivity will be low and the quality of work done is poor. Contrary to the expectations, Kolibacova (2014) considered that knowledge and skills alone are not determinants of quality, the author keenly states that experience and commitment to work determine the quality of work done and hence the performance of an employee in any given organization.

4.6.4. Procurement Procedures and Performance of Building Contractors

In the findings presented in table 12, 249 (83.0%) of the respondents stated that procurement procedures influenced largely influenced performance of BCs. In another case, 170 (56.6%) of the respondents stated that the main reason why they placed bids or applied for projects was project monetary value, see table 13. Other respondents 58 (19.3%), 37 (12.3%) and 30 (11.7%) respondents stated that the nature of contracts in terms of value, the level of educations, skills and experience, and other reasons respectively prompted them to place bids or apply for projects. In table 14, 201 (67.0%) respondents stated that they did not understand the criteria used in awarding contracts.

Regarding evaluation of projects, which was key in determining the level of performance in terms of work done, 157 (52.3%) of the respondents observed that project evaluation was rarely done or if done, it did not meet the set standards. Contrary to that, 91 (30.4%) disagreed with the statement that project evaluation was rarely done or if done, it did not meet the set standards. In terms of procurement changes that affect performance of BCs, 220 (73.3%) respondents asserted that sometimes clients changed architectural designs, working environment, which affected flow of work and hence performance of BCs.

It is factual that procurement procedures influence largely performance of BCs, but some of the reasons why some BCs apply for tenders or building contracts explain why they end up performing dismally. For instance, in table 13, 170 (56.7%) respondents indicated that they applied for building and construction contracts because of their project value. Ideally, level of experience, qualification and time allocated should prompt BCs to tender their applications for contracts. Procurement procedures such as using unknown criterion to award contracts, conducting sub-standard project evaluation and changing working environment/architectural

design for on-going projects influence largely the ability of BCs to perform diligently and competently. From the Public Procurement Act (2015), women, youths and persons with disability should be awarded 30% of public, which is not the case based on the findings presented. In table 4, female accounted for 106 (35.3%) while youths (between 18-35 years) accounted for 121 (37.0%). This population should be awarded contracts based on respective categories to ensure procurement procedures influence performance of BCs.

From the interviews, Officials from the NCA, Public Health and NEMA, the officers stated,

> *"……Contractual projects take long before they are approved, long bureaucratic procurement procedures make it difficult for contractors to follow up, and adjust based on the situation and application or placing bid via the online IFMIS system is complex and sometimes suffers system failures which hinders some contractors from securing tenders……"*

According to the findings from the interviews, complex and bureaucratic procurement procedures, and online bid and tender application are the reasons that hindered BCs from realizing their performance in terms of delivering quality products, timely, and at the planned and budgeted cost. These findings coincided with findings from questionnaires and from other scholars.

Kabirifar & Mojtahedi (2019) acknowledges that Australia has performed better that other countries in the building and construction industry because of a well-established and strict guideline on procurement. In Tanzania, Mgawe & Masanja's (2018) noted that the selection of contracting/procurement procedures should be based on legal policies and guidelines; however, rogue officers and persons usually flout the guideline and adopt procedures that are convenient to them. These are almost the same ideas presented in the literal work of Oladinrin, Olatunji & Hamza, (2013) who asserted that some of the contractors liaise with procurement officers to conveniently award themselves building contracts that adopts the model, design-bid-built, which

has no element of evaluation. The adoption of such a model lowers the quality of work done by the BC and hence his individual performance. Erickson, & Westerberg (2018) concurs with the sentiments of Oloo by stating that awarding building and construction tenders and contracts is not done based on merit, but on favor, illegal and unprofessional basis, which ultimately lowers the performance of BCs.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS, RECOMMENDATION AND SUGGESTIONS FOR FURTHER RESEARCH

5.1.Introduction

This chapter features summary of findings related to research questions, conclusion and recommendations. Recommendations were categorized into two, policy and practice recommendations and contribution to the body of knowledge.

5.2.Summary of Findings

This section presents a summary of quantitative and qualitative findings from questionnaires and interviews respectively.

5.2.1. Communication Systems and Performance of Building Contractors

From the study, 89.7% of the respondents stated that communication systems influenced performance of BCs. Regarding to access to information, 89.3% respondents indicated that access to information helped BCs to plan and execute their work diligently. Further, 90.0% respondents stated that effective communication from clients influenced performance of BCs. In the findings, 89.7% confirmed that clients took long before giving feedback on issues of emergency. In terms of control of the flow of information, 84.7% respondents asserted that

whoever controlled the flow of information influenced performance of BCs. Respondents in the interview stated that access to information was a challenge because of poor network, and poor infrastructure. Taking too long before accessing written information from clients encouraged contractors to travel to locate clients and acquire information needed for project development

5.2.2. Financial Resources and Performance of Building Contractors

From the findings, 85.0% respondents confirmed that financial services largely influenced performance of BCs. In another case, 87.0% respondents asserted that credit worthiness influenced their ability to acquire financial credit enhance their performance as BCs. Further, 74.8% respondent's asset net worth of BCs influenced their performance. In the same line, 83.3% respondents stated that bank lending practices such as interest rates, selective lending, and others largely influenced performance of BCs. Regarding payment, 83.3% asserted that the time taken to receive payment determined performance of BCs. In the interviews, respondents stated that it took long before payment was released, poor credit worthiness and weak asset net worth influenced performance of BCs negatively.

5.2.3. Staff Competence and Performance of Building Contractors

In the study, 84.7% stated that staff competence largely influenced performance of BCs. Regarding experience, 91.3% respondents asserted that the level of experience of BCs influenced performance more than knowledge acquired. In the findings, 47.3% worked for a period of over 4 years; however, 77.3% respondents attained only diploma and less as academic qualification. Further, 84.7% respondents observed that the performance of a BC was described by how diligent the contractor worked. Regarding academic qualification, 80.7% of the respondents stated that academic qualifications of a BC influenced performance. In the interviews respondents observed that most contractors got skilled labor from neighboring counties such as

Trans-Nzoia because locals are unskilled and cannot work on complex activities or procedures in building and construction industry.

5.2.4. Procurement Procedures and Performance of Building Contractors

In the findings presented, 83.0% of the respondents stated that procurement procedures influenced largely influenced performance of BCs. In another case, 56.6% of the respondents stated that the main reason why they placed bids or applied for projects was project monetary value. Other respondents 58 (19.3%), 37 (12.3%) and 30 (11.7%) respondents stated that the nature of contracts in terms of value, the level of educations, skills and experience, and other reasons respectively prompted them to place bids or apply for projects. Further, 67.0% respondents stated that they did not understand the criteria used in awarding contracts. Regarding evaluation of projects, 52.3% of the respondents observed that project evaluation was rarely done or if done, it did not meet the set standards. In terms of procurement changes, 73.3% respondents asserted that sometimes clients changed architectural designs, working environment, which affected flow of work and hence performance of BCs. From the interviews, respondents stated that long bureaucratic procurement procedures made follow up difficult, placing bids via online IFMIS systems proved complex and subject to failure making it hard to apply for construction of tenders for qualified and skilled contractors.

5.3.Conclusion

BCs from Pokot Central and its environs suffers the challenge of poor communication network and infrastructural challenges, which have negatively influenced their performance. Contract suppliers might be failing to enhance communication with contractors because of waiting for approval from authorities to dispatch information to contractors, which largely influence

performance. Performance of BCs rely on the cooperation between all stakeholders in the building and construction industry.

Most building and construction contractors require huge financial capital to initiate awarded projects, but they lack good credit records and asset net worth to facilitate the same, a move that influenced their performance negatively. Financial institutions avoid lending BCs especially those working with County Governments because such clients fail on loan or credit repayment. County Government and related Public institutions suffer challenges of bureaucracy especially on matters relating fund approval and release, making it difficult to facilitate projects.

Most BCs are not qualified, but are somehow experienced to work on relatively small construction projects. They apply for construction projects not because they qualify, but because the value or project class is high, making it difficult to deliver based on the expectations of awarded projects. Although most of the contractors have basic construction training, they work with human labour that is not qualified and experienced, such labourers lack basic construction knowledge and competence, encouraging contractors to get skilled labour from neighbouring Counties, which is expensive, time consuming and not reliable.

Procurement practices in most public institutions do not comply with enacted laws, rules and regulations, invitation of bids, awarding and evaluation are done in favour or some contractors. Further, the procurement process is not open, clear and transparent, procurement officers undergo the formality of the process, but end up awarding contracts to close friends, relatively and others who paid them ransoms for favours extended.

5.4.Recommendations

5.4.1. Recommendations for Policy and Practice

The County Government in partnership with the National Government should work on modalities of installing network boosters and transmitters in Pokot Central and its environs to ensure that communication is enhanced. The County Government should prioritize improvement of the status of infrastructure to ensure that movement from one point to the other within the area is efficient and does not suffer any inconveniences.

The national Assembly should repeal the law on capping interest rates because it is through that legislation that financial institutions selectively lend and tighten their lending practices to lock out most of the debtors including BCs.

NCA, which is in-charge of registration and promotion of BCs should ensure that contractors are placed in the class that fits their qualification and experience. Further, they should be given legal powers to demote or reduce classes of BCs who fail to perform based on their expectations. Ministry of Public Works and Housing in conjunction with NEMA and Public Health should conduct frequent project evaluations and share findings with clients and NCA for the purpose of improving standards of building construction.

Investigation agencies should move with speed to investigate cases of corruption and adoption of illegal procurement practices adopted by public officers in order to instil sanity in the public sector hence ensure that those awarded contracts are those that qualify and that applied through a competitive process.

5.4.2. Contribution to the body of knowledge

This study considered organizational factors influencing the performance of BCs in Pokot Central Sub-County. Notably, the study focussed on communication systems, financial resources, staff competence and procurement practices as they influence performance of BCs. These are not the only factors influencing performance of BCs, scholars should consider

Socio-economic factors influencing performance of building contractors

Influence of politics on the performance of building contractors

REFERENCES

Affare, M. (2016). An Assessment of Project Communication Management on Construction Projects in Ghana. *Master Thesis*, Kwame Nkrumah University of Science and Technology

Akali, T. (2018). Influence of Contractors' capacity on Performance of Roads Construction Projects in Kakamega County Kenya. *Master Research Project*, University of Nairobi

Ali, A., and Rahmat, I. (2010). The performance Measurement of construction projects managed by ISO-Certified Contractors in Malaysia. *Journal of Retail, Leisure and property*, DOI: 10.1057/rlp.2009.20

Al-Reshaid, K., Kartam, N. (2017). *Improving Construction Communication: The Impact of the Online Technology*. Ottawa: Institute of for Research in Communication

Amoah, P., Ahadzie, D. and Ayirebi, D. (2017). The factors affecting construction performance in Ghana: The Perspective of Small-Scale Building Contractors. *The Ghana Surveyor*, 1(1), 41-48

Asamu, F. (2014). Impact of communication on Workers' Performance in Selected Organizations in Lagos State, Nigeria. *IOSR Journal of Humanities and Social Sciences*, 19(8), 75-82

Asinza, K., Kanda, E., Muchelule, Y., & Mbithi, S. (2016). Influence of Financial Capacity and Monitoring on Project Quality of Housing Construction in Nakuru County, Kenya.

Barnes, M. (2012). Causes of Delay and Cost Overruns in construction of Groundwater projects in a developing Countries: Ghana, as a case study. *International Journal of Projects Management*, 21(5),321-326

Busolo, V., & Ombuki, C. (2014). Determinants of The Quality of Buildings By Contractors Within Mavoko Municipality. *European Journal of Business Management*, 1(11), 407-416.

Chelimo, J. P. (2018). Factors Influencing the Completion of Water Projects: A Case of West Pokot County. *Master Thesis*, University of Nairobi

Dettmer, W. (1997). *Goldratt's Theory of Constraints: A systems Approach to Continuous Improvement*. New York: ASQ Quality Press

Erickson, P. E., & Westerberg, M. (2018). Effects of Procurement on Construction Project Performance. *Master Thesis*, Lulea University of Technology

Huma, H., Malik. H. (2018). The Impact of Organizational Communication on Organization Performance. *Journal of Research in Social Sciences*, 6 (2), 140-154

Kabirifar, K. & Mojtahedi, M. (2019). The Impact of Engineering, Procurement and Construction (EPC) Phases on Project Performance: A Case of Large-Scale Residential Construction Project. *Buildings*, 9(15), 1-17

Khan, R. Gazder, U., & Ali, A. (2015). Review of Financial Practices in Construction Industry of Pakistan. *Sustainable Development through Advancements in Civil Engineering*, 1(1), 1-12

Kolibacova, G. (2014). *The Relationship between competency and performance. Acta University Business and Technology Publication*, 6(1), 1315-1326

Lee, M R., Ismail, S. & Hussaini, M. (2014). Contractor's Performance for Construction Project: A Review. *International Journal of Engineering Research and Applications*, 4(4), 131-137

Lekan, A., Opeyemi, J., & Olayinka, O. C. (2013). Performance of Build-Operate-Transfer Projects: Risks' Cost Implication from professional and concessionaire's perspective. *European International Journal of Science and Technology*, 2(3), 239-250

Mabin, V., & Davies, J. (2010). *23-Theory of Constraints Thinking Process*. London: McGraw Hill Professional

Mgawe, W., and Masanja, D. (2018). Influence of Procurement Practices on Performance of projects in Tanzania: A Case Study of National Housing Corporation. *Saudi Journal of Humanities and Social Sciences*, DOI: 10.21276/sjhss.2018.3.9.12

Obafemi, A., and Morledge, R. (2013). Improving the collaboration between Main Contractors and Subcontractors within Traditional Construction Procurement. *Journal of Construction Engineering*, Article ID 281236, http://dx.doi.org/10.1155/2013/281236

Office of the Auditor General. (2017). *Report of Auditor General in The Financial Statement of County Assembly of West Pokot for the year ended 30th June 2017*. Nairobi: Auditor General Publication

Oladinrin, O., Olatunji, S., & Hamza, B. (2013). Effects of Selected Procurement systems on building project performance in Nigeria. *International Journal of Sustainable Construction and Technology*, 4(1), 48-62

Olaniran, H. F. (2015). On the role of communication in construction projects in Nigeria. *International Journal of Scientific & Technology Research*, 4(7), 129-131

Oloo, O. (2013). Influence of Procurement Procedures on Construction Project Performance: A Case of Power Plant Construction at Kenya Petroleum Refineries Limited, Mombasa. *Master Thesis*, University of Nairobi

Ondari, P.O. & Gekara, J. M. (2013). Factors influencing successful completion of roads project in Kenya. *International Journal of Social Sciences and Entrepreneurship*, 1(6), 26-48

Oyugi, T. (2007). Factors influencing construction time and cost overruns on high-rise projects in Indonesia. *Construction Management and Economics*, 15(1) 83-94

Pourrostam, T., & Ismail, A. (2012). Causes and effects of delay in Iranian construction projects. *International Journal of Engineering and Technology*, 4(5), 598.

Pourrostam, T., & Ismail, A. (2012). Causes and effects of delay in Iranian construction projects. *International Journal of Engineering and Technology*, 4(5), 598.

Public Procurement Act (2015). *Public Procurement Act.* Nairobi: Government Printers

Ramanathan, C., Marayanan, S. P. & Idrus, A. B. (2012). Construction Delays Causing risks on time and cost: A Critical Review. *Australian Journal of Construction Economics and Building*, 12 (1), 37-57

Sambrook, U. (2010). Constructability Implementation: A Survey in the Malaysian Construction Industry. *Construction Management and Economics*, 19 (1), 819-829

Saud, A. (2015). Causes of Litigation in the Saudi Arabian Construction Industry. *Ph.D. Thesis*. Arizona State University.

Tengan, C., Anzagira, L. Kissi, E., Balaara, S., & Anzangira, A. (2014). Factors affecting quality performance of construction firms in Ghana: Evidence from Small-Scale Contractors. *Civil and Environmental Research*, 6(5), 18-23

Timothy Akali, & Sakaja, Y. (2018). Influence of Contractor's Financial Capacity on Performance of Road Construction in Kakamega.*American Scientific Research Journal for Engineering, Technology and sciences*, 0(1), 1-15

Vilasini, N., Rotimi, J., and Neitzert, T. (2014). Correlation between construction, procurement methods and Lean Principles. *International Journal of Construction Management*, DOI: 10.1080/15623599.2011.10773179

Wambui, D., Ndiang'ui, O. K., and Kagiri, A. (2015). Factors Affecting Completion of Road Construction Projects in Nairobi City County: Case Study of Kenya Urban Roads Authority (KURA); *International Journal of Scientific and Research Publications*, 5, (11), 1-15

Wanberg, J., Harper, C., Mathew, H., & Rajendran, S. (2013). Relationship between Construction Safety and Quality Performance. Journal of Construction Engineering and Management, 139(0), DOI: 10.1061/(ASCE)CO.1943-7862.0000732

Wanberg, J., Harper, C., Mathew, H., & Rajendran, S. (2013). Relationship between Construction Safety and Quality Performance. Journal of Construction Engineering and Management, 139(0), DOI: 10.1061/(ASCE)CO.1943-7862.0000732

Westerberg, M., and Ericksson, P. (2015). Effects of Procurement on Construction Project Performance. *Journal of Construction Engineering and Management*, 1(1), 1-19

APPENDICES

APPENDIX I: RESEARCH INTRODUCTION LETTER

Bramwel Mang'eni

P.O Box

Kitale.

Dear Respondent,

RE: REQUEST FOR CONSENT TO TAKE PART IN DATA COLLECTION.

I am a student at University of Nairobi (Kitale Campus) pursuing a master Degree in Project Planning and Management. Part of the course requirement is that the researcher does a research project in partial fulfillment of the award of the master's degree. The research topic is "**Organizational Factors Influencing the Performance of Contractors in building public projectsin Pokot Central Sub-County**" I would be most grateful if spare sometime to take part in this research process. The information given will be handled with utmost confidentiality and it is meant for academic purposes. Your participation and honest response will be acknowledged.

Yours faithfully,

Bramwel Mang'eni

APPENDIX II: QUESTIONNAIRE

Instructions:
You are kindly requested to respond to the items in the questionnaire as honestly as possible. Please do not write your name anywhere on this questionnaire. Respond by ticking (√) where appropriate or fill in the required information in the spaces provided.

SECTION A: DEMOGRAPHIC INFORMATION

1. Indicate your gender

   Male ( ) Female ( )

2. Indicate your age bracket

   Below 25 years [ ] 25-35 years [ ] 36-45 years [ ] Above 45 years [ ]

3. What is your classification as a building contractor?

   NCA1 [ ] NCA2 [ ] NCA3 [ ] NCA4 [ ] NCA5 [ ] NCA6 [ ]

   NCA7 [ ] NCA8 [ ]

4. When was the last time you secured a building contract?

   On-Going [ ] less than 6 months [ ] 6-12months [ ] over 1 yr [ ]

5. For how long have you been a building contractor?

   Less than 1 year [ ] 1-3 yrs [ ] 4-7 yrs [ ] over 8 yrs [ ]

6. What is your academic qualification level?

   Certificate [ ] Diploma [ ] Bachelor degree [ ] Master degree [ ] Doctorate degree [ ]

7. Have you ever been trained on safety and health measures as they relate to construction?

   Yes [ ] No [ ]

8. Have you ever undergone in-service training either organized by NCA, County Government, Ministry of Public Works or any other regulating institution on matters relating construction? Yes No

SECTION B: COMMUNICATION SYSTEMS ON PERFORMANCE OF BUILDING CONTRACTORS

This section seeks to find out how communication systems influence performance of building contractors

9. Do you think communication systems influences performance of building contractors?

   Yes [ ] No [ ]

10. In your own opinion, to which extent to you agree or disagree with the following communication activities asthey influence performance of building contractors on a scale of 1-5 where 5=strongly agree,4=Agree, 3=Neutral, 2=Disagree and 1=Strongly Disagree

Statement	1	2	3	4	5
Access to information from clients, suppliers and colleagues helps the contractor to plan and execute his work diligently					
Communication from suppliers and contractors determines performance of building contractors					
Sometimes clients take long before giving feedback on an issue of importance or emergency.					
In building and construction, whoever controls the flow of information determines performance of a building contractor					

SECTION C: STAFF COMPETENCE IN PERFORMANCE OF BUILDING CONTRACTORS

This section seeks to find out how staff competence influence performance of building contractors

11. Do you think staff competence influences performance of building contractors?

    Yes [ ] No [ ]

12. To what extent do you think the following statements apply as they relate to staff competence on a scale of 1-5 where 5= Very Great extent, 4 Great Extent, 3= Moderate Extent, 2=Low Extent and 1= No Extent at all

Statement	1	2	3	4	5
The level of experience influence performance more than the knowledge a contractor has acquired					
Performance of a building contractor is described by how diligent he works and satisfies his clients					
Academic qualifications of a building contractor influence the ability of a contractor to perform diligently					

SECTION D: FINANCIAL SERVICES ON PERFORMANCE OF BUILDING CONTRACTORS

This section seeks to find out how various financial services influence performance of building contractors

13. Do you think financial services influence performance of building contractors?

    Yes [ ] No [ ]

14. To what extent do you agree or disagree with the following statements apply as they relate to financial services on a scale of 1-5 where 5=strongly agree,4=Agree, 3=Neutral, 2=Disagree and 1=Strongly Disagree

Statement	1	2	3	4	5
Credit worthiness of a building contractor influence his/her performance on projects					
Asset net worth of a building contactor influence his or her performance on projects					
Bank lending practices and policies largely influence performance of building contractors					
The length of time taken to receive payment from suppliers determines performance of building contractors					

SECTION E: PROCUREMENT PROCEDURES

This section seeks to find out how various Procurement procedures influence performance of building contractors

15. Do you think procurement procedures influence performance of building contractors?

    Yes [ ] No [ ]

16. What informs you to bid or submit your application for a given advertised tender/contract?

Payable amount for the contract/tender[ ] Nature of the contract in terms of class [ ]

Your level of knowledge, skills and experience[ ]

Other, specify……

20. How do you rate the complexity of project designs that you have ever worked on, applied for or had experience with from clients? 1 being least complex and 5 being too complex

1[ ] 2[ ] 3[ ] 4[ ] 5[ ]

21. To what extent do you agree or disagree with the following statements as they relate with procurement procedures on a scale of 1-5 where 5=strongly agree,4=Agree, 3=Neutral, 2=Disagree and 1=Strongly Disagree

Statement	1	2	3	4	5
The criteria used to award contract has never been understood; it is unfair					

Project evaluation rarely happens or if it does, it does not meet the set standards					
Sometimes clients keep changing architectural designs, and working environments hence affecting the flow of work					
The nature of contracts in terms of complexity determines the performance of building contractors					
Monitoring and evaluation of projects is usually done by suppliers and determines performance of building contractors.					

SECTION F: PERFORMANCE OF BUILDING CONTRACTORS

This Section seeks to describe performance of building contractors in public projects

22. To what extent do you think the following indicators influence performance of contractors in building public projectson a scale of 1-5 where 5= Very Great extent, 4 Great Extent, 3= Moderate Extent, 2=Low Extent and 1= No Extent at all

Indicator	1	2	3	4	5
Customer satisfaction					
Taking the required time to complete projects					
Using the budgeted cost in executing projects					
Ensuring health and safety during working					

23. In your own view, what extent do you agree with the following statements, "organizational factors such as procurement procedures, financial services, communication systems and staff compensation largely influence performance of building contractors." On a scale of 1-5 where 5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree and 1=Strongly Disagree

1[ ] 2[ ] 3[ ] 4[ ] 5[ ]

Thanks for your time

APPENDIX III: INTERVIEW SCHEDULE

Instructions:*For the Researcher Only*- *After brief introduction with the respondent, ask one question at a time as you note some of the responses. Inform the respondents the importance of the study and how vital you need the responses to enhance your research.*

1. What is your take towards the influence of communication systems on performance of contractors in building public projectsin Pokot Central Sub-County West Pokot County?
2. How do financial services affect performance of contractors in building public projectsin Pokot Central Sub-County West Pokot County?
3. What is the relationship between staff Competence and performance of contractors in building public projectsin Pokot Central Sub-County West Pokot County?
4. How does Procurement procedures influence performance of contractors in building public projectsin Pokot Central Sub-County West Pokot County?
5. What are some of the challenges faced in you line of duty as a building contractor? What do you think ought to be done?

APPENDIX IV: RESEARCH APPROVAL-NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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Ref: No. **NACOSTI/P/19/92509/30421**

Date: **30th May, 2019.**

Bramwel Kunyu Mangeni
University of Nairobi
P.O Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Organizational factors influencing performance of contractors in public building projects in Pokot Central Sub-County, Kenya."*** I am pleased to inform you that you have been authorized to undertake research in **West Pokot County** for the period ending **23rd May, 2020.**

You are advised to report to **the County Commissioner, and the County Director of Education, West Pokot County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:
The County Commissioner
West Pokot County.

The County Director of Education
West Pokot County.

APPENDIX V: RESEARCH PERMIT-NACOSTI

THIS IS TO CERTIFY THAT:
MR. BRAMWEL KUNYU MANGENI
of UNIVERSITY OF NAIROBI , 4380-30200
KITALE,has been permitted to conduct
research in *Westpokot County*

Permit No : NACOSTI/P/19/92509/30421
Date Of Issue : 30th May,2019
Fee Recieved :Ksh 1000

on the topic: *ORGANIZATIONAL FACTORS INFLUENCING PERFORMANCE OF CONTRACTORS IN PUBLIC BUILDING PROJECTS IN POKOT CENTRAL SUB-COUNTY, KENYA*

for the period ending:
23rd May,2020

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

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