PROJECT ORGANISATION FRAMEWORK AND IMPLEMENTATION OF ROAD CONSTRUCTION PROJECTS IN KISUMU COUNTY, KENYA

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D53/OL/CTY/32104/2016

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR AWARD OF A DEGREE IN MASTER OF BUSINESS ADMINISTRATION (PROJECT MANAGEMENT) IN KENYATTA UNIVERSITY

OCTOBER 2020
DECLARATION

This research project is my original work and has not been presented for a degree or other award in any other university. No part of this research project should be reproduced without authority of the author or/and Kenyatta University.

Signed: ___________________________ __________________________

DENIS KHANDIRA
D53/OL/CTY/32104/2016

DATE:

This research project has been submitted for examination with my approval as the appointed University supervisor.

Signed: __________________________ Date____________________

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DEDICATION
The research work is bestowed on my late grandmother who taught us the values of hard work,
ACKNOWLEDGEMENTS

It is my wish to wish to thank the God for having brought me this far despite various life challenges.

First, I must recognise the contributions, guidance and support of my supervisor Ms Gladys Kimutai who gave considerable time, assistance and patience more so when at times I was losing hope in the journey to get me through this study. She shared a lot of special observations on my work which I feel so much indebted and highly appreciated.

Let me extend my appreciation to my family for remaining a pillar to me during this struggle and their words of support, encouragements and motivation towards the success of my studies. I also appreciate my colleagues at the university who we have shared the journey together.

In conclusion, I wish to extend the hand of accolades to the college for having accorded me the chance to carry on with my academic work and providing me with a very wonderful environment during this struggle. I’m glad to appreciate the role played by various respondents during the exercise, and all the organisations which accepted my request to give out the questionnaire(s) to their various staff. I thank all of you and may God be with you.
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<td>EU</td>
<td>European Union</td>
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<td>GoK</td>
<td>Government of Kenya</td>
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<tr>
<td>IFCE</td>
<td>International Federation for Consulting Engineers</td>
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<td>KeRRA</td>
<td>Kenya Rural Road Authority</td>
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<td>KURA</td>
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<td>KeNHA</td>
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<td>KRB</td>
<td>Kenya Roads Board</td>
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<td>LATF</td>
<td>Local Authority Transfer Fund</td>
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<td>Project Management Tools and Techniques</td>
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<td>SPSS</td>
<td>Statistical Package for Social Scientists</td>
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<td>ULCPDP</td>
<td>Updated Least Cost Power Development Plan</td>
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OPERATIONAL DEFINITION OF TERMS

**Communication systems**  Refers to the mode of exchange of information, ideas and instructions between concerned parties in the implementation of a project.

**Construction Project**  A project involving infrastructural development ranging from roads, water, buildings, sewerage systems.

**Management practice**  This refers to the working methods and innovative.

**Monitoring**  Refers to a process of keeping track of a project in relation to set standards.

**Project Implementation**  the process of executing or running a project as planned.

**Project planning**  This is the use of schedules to plan and eventually report progress within the project environment.

**Stakeholder commitment**  This is the goodwill and support accorded to a project by the funding agency, implementers, beneficiaries and other concerned parties.

**Technical capacity**  This is the machinery, equipment, technology, human resource and skill abilities of implementing agency in a project.

**Project organisation**  This is a system that assists the support and execution of a project

**Project framework**  This is a set of standard project management processes from conception / monitoring and finally execution.
ABSTRACT

Most of the road contractors in Kenya have been unable to provide effective services specifically in the maintenance of road. There have existed a sharp criticism against their performance where the Government has come up with strategies like performance contracting, setting up state authorities like KeNHA, KURA, KeRRA and KRB so as to solve this sad state of affairs and also to oversee Contractors performance. The research aimed at developing the impact of project organisation framework on the successful implementation of road construction projects in Kisumu County, Kenya. In addressing the latter, the study established the influence of project planning, technical capacity, stakeholder commitment, and communication system on the successful implementation of road construction projects as the specific objectives of the study. The research was guided by Institutional theory, stakeholders’ theory and resource based view theory. A descriptive research design was used to conduct the study. The study targeted all the construction projects in the last 5 years being implemented in Kisumu County. According to the County Government of Kisumu there were 57 construction projects implemented within the period and registered with the relevant ministry. The sampling method which was adopted was the use of simple random design to pick 3 employees from each of the 57 projects making a total of 171 respondents. Semi-structured questionnaires was used to collect data from the respondents. Data validity and reliability was ensured by use of a pré-test. The questionnaire was issued by use of drop and pick later technique. Descriptive and regression analysis were employed to analyze the data gathered. The results were then presented using tables and charts. The study found out that Project planning, Technical capacity, communication system and Stakeholders commitment had a statistically significant relationship with the project implementation in Kisumu County, Kenya. It is therefore important that institutions dealing with road construction projects should embrace project organization frameworks so as to ensure efficient and effective implementation. The research work recommended that the county government of Kisumu and other organizations to embrace the organizational frameworks so that the positive results of the project implementation can be realised.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Project implementation is the coordination of various benefits of a project in view of bringing forth more effective result (Munyeki, 2011). This coordination can include elements such as personnel, materials, procedures, and facilities. In the last decade, project managers have experienced challenges that are more complex. Among the most challenging experiences of project teams are duration, the outcomes and materials of the projects (Wysocki, 2014). Yet, these three factors are not the only ones. Therefore, the construction sectors require to focus on crucial success elements, besides the ‘iron triangle (or the sometimes used term: golden triangle), in order to overcome the difficulties emerging from globalization (Toor & Ogunlana, 2005).

Project-based organizations are among the major drivers of many countries’ economies. It relates with all spheres of humanity in all sectors. Nevertheless, the inherent difficulties and the sudden changes in the working environment can pose severe challenges to even the most experienced project leaders. Most project managers will report that they employed decision milestones to project results, risk management to pre-empt undesired consequences and sequential iteration to guarantee availability of the requisite equipment; but projects usually suffer from unintended time extensions, financial shortfalls and some shortfalls in quality (Meyer et al., 2002). As such, researchers remain concerned in findings the most ideal approaches to manage construction projects for the best outcomes.

According to Nguyen, Ogunlana and Lan (2004), road construction employers both the skilled and unskilled labour in developing countries, yet the industry currently experiences unprecedented competition because of globalization. According to Ojiako, Johansen & Greenwood, 2008, Consultants, Project managers and Contractors in South Africa find it hard to have new customers. Besides, it yet to be understood as to what practices are required to effectively enhance project success. Most companies in developing regions employ the ‘iron triangle’ indicators of duration, outcomes and means to estimate the value of a project (Ojiako, Johansen & Greenwood, 2008). The fact remain is that still numerous projects still fall short of these measures which is an indicative of potential problems in their management and quality assurance systems.
1.1.1 Implementation of Road Construction Projects

Implementation of Road Construction Projects is a process of executing or running a road project as planned. Globally infrastructural road projects normally take off after adequate funds are available mainly through donor funds because the projects are of high initial capital. The benchmarks are set by various diverse interests to ensure successful execution. For example, a typical case of European standards are practised in formulating design standards of highways and bridges. The body allowed in Europe to highlight the needs of carrying out research requirements as a pre-condition of advising the designers and interested parties on the necessary requirements is the International Federation for consulting Engineers. (Ceran & Newman, 1992). In Africa, infrastructure is considered a very vital tool narrowing the gap between Economies of various countries. The execution of road projects varies according to each country, unlike the global set-up. The projects are guided by the financial institutions due to high capital layout. Funding in most cases are from supported by various multinational donor agencies and organisations (Earnest &Young, 2014). However, the technical design and project needs assessments is considered critical in the execution of road construction projects. In some instances, not using the right materials and inadequate planning leads to systems failures of projects. Awoyinfa (2012) attributed failure of of road construction projects to non-adherence to construction standards hence defective designs. The most common contributors to project failures is non-payment or delay in payments of contractors which normally lead to low quality projects because of short cuts by the contractors normally seen as a cost cutting tool. It is therefore important for the lending agencies to play a critical role track costs as a planning process so as to ensure value for money (Mubila et al, 2014).

In South Africa precisely Cape Verde, there is a notable progress in monitoring and evaluation of infrastructural projects. There have been an involvement of financial institution to conduct the exercise of monitoring and evaluation of on projects implementation of roads thereby leading to final execution. For instance, the Inter-urban construction in Cape Verde that was executed within a record eight months because of the active monitoring and control by the ADB. (Mubila et al., 2014). The close monitoring ensured that there was very minimum variation in project cost. In case of Kenya, the infrastructure projects are often allocated huge budgetary allocations and quite often also faces the problem of lack of proper planning (Okero 2011). The level of projects left not completed kept on rising mostly the
ones supported and funded by LATF, this was attributed to lack of adequate technical knowledge, Political disturbances, Delayed payments and not very sound supervision. Most projects being executed in Kenya faces an uphill task because in some instances the local communities are not involved from inception (Okero 2011). This has led to a situation where the local community remain discontented with the executing team’s veto

1.1.2 Project organisation framework

According to Barriere (2003), the project organisation framework is increasingly finding use as a popular organizational framework for enhancing output and professionalism. On this note, Ibbs (2002) singles out some important project management skills such as the art of forecasting, scheming, and control of procedures across a specified time.

Efficient operations of Project organisation are a crucial factor in acknowledging and enhancing the associated managerial practices (Goodwin, 1993). Developing nations have always provided key supportive strategies on project management practices. This is considering the fact that developing nations have developed structures that supports the project vigilance and offer managerial support on general management (Ofori, 2007). However, Loo (2002) has singled out various aspects that need to be strengthened in project organisation framework, especially in transitional societies. These includes, technical fields, enhance scope management execute standard PM practices, efficient resource planning, empower groups, and enhance budget management

Contemporary project management processes in Africa are subject to the emerging changes in technologies, the heightening intricacy of projects and the lack of trained labour force (Crawford et al., 2006). Echoing these views, Birkhead et al. (2000) underscore the need to invest in improving project management to respond to emerging changes. These authors also point to the slackening of trade influences as the major contributor to increased competition in the construction sector in Africa. A project’s success would always be determined by the degree to which the set targets are met to the satisfaction of the customers and stakeholders. Therefore, efficient project planning processes are in dire need, which calls for the use of advanced management systems (Muchungu, 2012).

The critical part of a project phase is the planning, this is where the project concept is formulated and a project schedule is formulated. It is a very challenging phase for any project
manager as they have to mobilize the required facilities for the successful implementation of a project. The plans which were formulated at this stage help the manager to manage the scope, quality, cost, duration and also to manage the human resource aspect. It is at this stage where refining of a project objectives (Elazouni, 2010).

According to a study conducted by project management Institute in (2013), a project manager should spend 90% of their time communicating. About 20% of the projects are not completed because lack of proper communication. For successful implementation of a project to occur it requires a concerted effort between the project manager and all the stakeholders at their respective levels in terms of effective communication. Considering the diversity of a project team more so for large construction projects, this provide a very big challenge to the project manager and therefore for a successful implementation a project manager must be present, visible and must adopt very clear interaction with every member of the team.

A project can be well planned but because of lack of technical capacity, implementation becomes a very big problem to the project team, either because of lack of technical expertise to execute the plan or due to lack or inadequate modern machinery and equipment. This has led to failure of so many projects in Kenya. According to Kenduiywo and Kirui (2018), Employees hired in an organization ought to be well qualified to deal with implementation of projects. This clearly demonstrates that technical capacity is a very key component of successful project implementation.

For construction projects like roads which covers very large areas during constructions, the stakeholders become more and they may have different expectations and needs which may lead to the delay and finally failure of a project. Most large projects like roads have both internal and external stakeholders who can positively or negatively contribute to the performance in implementation. The identification of the stakeholders should be an exercise which is continuous during the project life cycle so that their level of effect on a project is determined and also the satisfaction of their needs, demands and other expectations for the overall successful implementation of a project (Muchungu, 2012)

1.1.3 Road Construction Projects in Kisumu County

The Government of Kenya in order to realize vision 2030 has come up with mechanism to realize this under infrastructure programme for example the Government created Kenya
National Highway Authority as a state corporation. It was created alongside two other agencies namely; KERRA, KURA and Kenya National Highway Authority were given a mandate to carry out all activities related to the management of the national roads of the country. The Government had also introduced fuel levy fund which was as a result of the creation of Kenya Roads Board Act of early 1990. This lead to a situation where after loading fuel a certain amount of money would be channelled to KRB for the purposes of road maintenance. The Procurement and Disposable Act 2015 gave the road sector a number of ways of securing contracts through the default method, open tender. This created room for both international and national bidding but still some of the roads have unpredictable implementation time frames, risks related to claims, time overruns and cost overruns. The reasons all over have been inadequate financing and budgetary allocations by the Government. The other reason being frequently mentioned has been the delay in land acquisition for development of road corridors due to the land ownership systems in Kenya. However, in some cases the road projects have been executed to completion within the prescribed time frames examples road from Sultan Hamud to Machakos turn off, Sultan Hamud to Mtito Andei with financing from World Bank. Other roads which have been finished within the prescribed time includes, Kericho-Kisumu, Lanet-Timboroa-Eldoret roads. Others that have been successfully concluded includes Nairobi-Thika Superhighway, Athi River-Namanga road, Isiolo-Merile River-Marsabit-Tarbi-Moyale (A2 Highway).

In Kisumu County, both levels of government numerous projects are in place aimed at expanding existing roads as a means of easing new ventures and business opportunities. These projects have focused mainly on establishing or initiating feeder roads to major urban areas. The county government further has embarked on the construction of the drainage system along the roads which would include the construction of culverts (www.kisumu.go.ke).

The County Ministry of Physical planning, Roads and Public Works are mandated to plan, submit to the County Assembly for ratification before rolling our road and public works within the County. The Ministry is to establishment effective physical planning and infrastructure growth that intends to enhance growth in the county that is focused on realization of the Kenya Vision 2030. Key objectives involves surveying, identifying and protecting public land, prepare Kisumu County, Kenya spatial plan and local physical growth
strategies for markets, upgrading of houses ensure all county’s nodes are effectively planned and building codes observed.

Construction of roads within the county according to Kenya Rural Roads Authority Report (2015) has faced a series of bottleneck starting from poor construction expertise and contractors, non-procedural procurement and supply chain management, poor construction works, incompletion of the roads stipulated in a given financial year, unqualified contractors, corruption precipitated by collusion between public works engineers and contractors, political influence from the executive and county assembly arm of the County Government and also poor monitoring, evaluation and inspection of the works. This has led to poor construction of roads planned. This study therefore seeks to establish how project organization framework have influenced execution of road projects in the County Government of Kisumu.

1.2 Statement of the Problem

Studies undertaken in the construction sector shows that road construction faces numerous challenges (Kenya Engineer, 2015). Many road contractors are not providing standard services, delays in completion of road projects which at times is attributed to reasons like delays in land acquisition, inadequate budgeting, delay by Kenya Power and Lighting company to remove or relocate their power lines to create room for road construction and also low capacity amongst local contractors to undertake big projects. However, in the view of the GoK (2015), the poor outcomes from road construction tenders are as a result of misappropriation and embezzlement of allocated finances and poor performance and measurement systems. Unexplained or extended time delays, unbudgeted financial issues and poor quality of products are evidence of the underperformance of road contractors. Ugwa and Haupt (2007) attribute these problems to lack of proper resource control procedures and meddling by political elites. In additions, there are several factors and reasons attributed to such problems. Interestingly, most of the issues that affect construction projects can be within the control of the project manager. Therefore, as the overall person in-charge, he must always brace himself for the known and unknown dynamics of project planning and operations control.

Kisumu County was chosen for study since according to Council of Governors report of 2015/2016, Kisumu county was identified as one of the worst performing counties in project implementation especially road construction. This was justified by the number of stalled road
projects example, Ahero junction to Kisii road, Mamboleo junction to Kakamega junction road and Kisumu Airport to Kisian road amongst others.

One of the strategies to achieve full control is to properly manage the flow of project information. By encouraging interactions, at the different levels of the project, the manager will allow his team to test and sharpen their knowledge and precepts leading to appraised outcomes. Studies carried out in the past have found out that construction projects consist of a very a complex and unit composition of activities that ought to be accomplished to achieve a unique result (Kerzner, 2013; Aksorn & Hadikusumo, 2008). Nonetheless, the ultimate measure of the quality of project outcomes is the savings on costs, delivery within scheduled duration, safety, budget control, and the quality of outcomes (Aksorn & Hadikusumo, 2008). Previous studies depict a picture of inconsistencies in this area in comparison to judgement. Okero (2011) attributed the problems to underfunding and political interference, other studies done have not come to the fore to address the problems. Moraa (2011) in the study was more concerned with the ministry of roads but the problem she sought to address was more widespread than the ministry. This therefore, justified the current research as it sought to bridge the gap in establishing how project organisation framework influence project implementation in Kisumu County, Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

The study aimed at establishing the effect of Project organisation framework on implementation of road construction Projects in the County of Kisumu.

1.3.2 Specific Objectives

Below were the study’s specific objectives

i. To determine the effect of project planning on implementation of road construction projects in Kisumu County, Kenya

ii. To determine the effect of technical capacity on implementation of road construction projects in Kisumu County, Kenya

iii. To examine the effect of stakeholders engagement on the implementation of road construction projects in Kisumu County, Kenya

iv. To find out the effect of communication systems on implementation of road construction projects in Kisumu County, Kenya
1.4 Research Questions

Below were the research guiding questions

i. What was the effect of project planning on the implementation of road construction in Kisumu County, Kenya.

ii. What is the relationship between technical capacity and implementation of road construction in Kisumu County, Kenya?

iii. What was the effect of stakeholders ‘engagement on the implementation of construction project in Kisumu County, Kenya?

iv. What was the effect of communication systems influence project implementation of road construction in Kisumu County, Kenya?

1.5 Significance of the Study

The results of the study was expected to be beneficial to various personnel’s including the administration of Kisumu County. The information was to help the authority in mitigating any possible failures in advance. Besides, project regulators were to use the information in making the requisite practices within the industry. Also, the future scholars will use the information for any future studies associated with the research. The research was also to done to help the management of other counties in Kenya to look at the impact of organisational framework towards construction projects not only road projects but other sectors like Housing, dams and bridges which are also affected by various challenges. The research findings may be relevant to other Government agencies for proper planning and budgeting purposes so that they can get value for money. The findings can be useful to any donor agency that may be interested in the construction sector within the county before embarking on any negotiation. The study findings can also be used by the various stakeholders such Consultants, Project managers and contractors within the construction sector so that they can understand the strength of team work when a project is being executed in area.

1.6 Scope of the Study

The study assessed project organisation framework, which include project planning, technical capacity, stakeholder participation and communication system and how its impact on road construction projects in Kisumu County. It covered a period of 5 years ranging from 2013 when county governments came into effect to 2018. Kisumu County was chosen for study since according to Council of Governors report of 2015/2016, Kisumu county was identified
as one of the worst performing counties in project implementation especially road construction. This was justified by the number of stalled road projects example, Ahero junction to Kisii road, Mamboleo to Kakamega junction road and Kisumu Airport to Kisian road amongst others.

1.7 Limitations of the Study
The research study had its setbacks for instance the scope of the study was limited by its sample size as it did not cover 100% of the population. Secondly some respondents were uncooperative of filling the questionnaire but the researcher sought for necessary approval and authority to execute the study and also re-assured the respondents that their responses were confidential and was for academic purpose.

1.8 Organization of the Study
The study consists of five chapters with chapter one consisting of the background information, research questions, significance of the research, problem statement, objective of the study and the scope and limitation of the study. Chapter Two consists of the literature review and examination of the introduction and theoretical review used in the study that is institutional theory, management theory and stakeholder’s theory. It also captured previous studies done on technical capacity, commitment of stakeholders and communication system on implementation of road construction projects.

The third chapter is the methodology part which consists of the introduction part, sampling design, data collection instruments, the study’s target population and the rationale for sample selection and whether reliable, valid and the study’s data analysis and the study’s ethical issues. The fourth chapter of the study is research findings and discussions giving analysis of the study findings that were captured during data collections, it captures the response rate of the respondents, demographic profile of the respondents and the influence of project organisation framework and implementation of road construction. The fifth chapter provides a detailed summary of key findings, conclusions and recommendations based on the study’s objectives.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction
This Chapter highlights the general overview of literature and was centred on the review of theories and related empirical analysis related to a review of the literatures relating to the project organization framework and the implementation of road construction projects. The chapter ends with the conceptual framework drawn from the theoretical perspective.

2.2 Theoretical Review
The study was anchored on the three theories that is, institutional theory, resource based view and stakeholder’s theory.

2.2.1 Institutional Theory
Scott (2001) propounded this construct. The theory was based on the principle that institutions are social systems that have a degree of resilience Scott observed that institutions are constitutive of aspects such as cultural-cognitive, normative and regulative, all of which, coupled with related procedures and assets, offer constancy and significance to people in society. These elements are sustained and passed around by numerous carriers, including traditions, interactions, routines and cultural objects. Rowan (2012) examined the growth of three administrative services in construction industry from the standpoint of institutional theory. The study examined that in a harmonious and highly interactive society, the spread of innovative structures is faster and more permanent. On the other hand, an environment marked by strife and disorder is detrimental to the innovative spirit.

The model is crucial when addressing the issue of executing sustainable projects that offer services to the public. This is an issue of organizational way of doing things and the extent to which the prevailing situation is in support of its sustainability (Brammer & Walker, 2012). The model acknowledges project organisation frameworks as an effective project implementation pillar.

2.2.2 Resource-Based View
Most companies increasingly regard project organisation framework as a strategy to achieve competitive edge. This fact has been attested to in a number of studies such as Reed and
Lemak (2000). This view is in line with the RBV, which posits that achieving, and sustaining a competitive edge demands a deliberate alignment of resources of different kinds (Barney, 1991). This also involves the reconfiguration of a firm’s routines in order to take action effectively on the regular market changes (Eisenhardt & Martin, 2000).

According to Muli (2014), Project Organization involves the factors empowering employee, focusing on clients and developing an effective communication structure. The structure intends to enhance effective and efficient service provision through the provision of effective leadership, provide effective customer relations and offer efficient operations (Eisenhardt, 2000). (Corbett & Claridge, 2002). This wealth of experience is significant and cannot be substituted, transferred or replicated. And can be exploitable by the organization and thus creates sustainable competitiveness in as envisaged in the RBV. Therefore, the theory is applicable to the project organisation frameworks namely; technical capacity, project planning, stakeholder’s involvement and effective communication which can generate a competitive advantage which will enable an organization achieve high performance.

2.2.3 Stakeholders Theory
Freeman proposed this theory in 1984. Ideally, this theory is concerned with the how an organization should be defined. According to Friedman (2006), the organization ought to be regarded as a conglomeration of people who hold stakes and its core function ought to be to oversee the aspirations of these members. This mandate of realizing the aspirations of members falls squarely in the hands of managers. On the one hand, organizational leaders strive to realize the expectations of stakeholders and, on the other hand, he plays the role of stakeholders’ agent who strives to ensure the company is sustainable (Friedman, 2006). The theory provides that a firm be made of different stakeholders that provide its complexity in information exchange, service provision and provision of other resources (Sloan, 2009). Harriso & Bosse (2007) argue that a firm’s value is developed once it attains its stakeholder’s need.

Every organization has both the secondary and primary stakeholders. Jawahar & McLaughlin (2001) argue that primary stakeholders are those who are directly impacted by the organizations decisions and actions, for instance buyers, investors, staff and contractors. On the other hand, secondary stakeholders are affected indirectly, and include the society, legal
and regulatory entities, NGOs, funding agencies. The stakeholders’ concepts will be insightful in discussing the second variable of stakeholder participation in this research.

2.3 Empirical Review

Rowlinson (1999) defines project organisation framework as a project’s key issues that must be provided to ensure the project is of success. The team supporting the project requires regular attention and cooperation throughout the project life cycle. Construction industry faces several obstacles that include long lead times, lack of energy expenses, lack of specialized training and equipment. It is therefore important to critically review the process of project design and actual rollout to enhance the possibilities of success. Fernando (2009) considered the upper level managers as very critical to the project implementation. According to Kagiri and Wainaina (2013) major projects in some of our devolved units completely failed or were taking too long than projected because of both inside and outside factors. The Government of Kenya (2013) reported that 49.2% of the projects planned in County Governments Developments could not be achieved due to various reasons. According to a study conducted by Kantai, (2013), in 39 out of 47 Counties in Kenya, nepotism and favouritism is dominant in the recruitment of people especially those handling finances and this has greatly hindered the prudent usage of finances and implementation of projects. Politics of the day plays a very big role in running of some projects De Kadt, (2009).

Construction projects execution in Kenya has been a rather complex issue and undertaking where politicians and powerful stakeholders who are politically connected have got some undue advantage over projects, this has led to recruitment of incompetent staff, lack of proper planning and in some cases non-involvement of all the stakeholders since the interest of the power brokers and those who control the system determines the project outcomes, therefore contributing to the success of a project (UNDP 2010). Project organisation frameworks attempt to address successful completion of a project as required, however, projects continue to go out of set objectives with cost overruns and time overruns. De wit (1988) found out that the objectives of a project can also determine its success. Milosevic and Srivannaboon (2006) focussed on the link between project organisation and the final product and the satisfaction of the stakeholders. According to Liu (1999), every project may even have its unique set of success measures but to Kam and Muller (2005), a successful project should also satisfy its stakeholders which also agreed by the study carried out by Kalolaa and Karale (2017) who found out that stakeholders’ participation is very key in any project implementation.
2.3.1 Project Planning and Implementation

Baldwin and Bordoli (2014) hold the view that the core purpose of project planning is to set realistic and accurate schedules and budget estimates, to conceptualize outcomes based on measures of quality, design approaches, materials, health and safety, and to align the project with stakeholders’ aspirations. Dvir and Lechler (2014) have found that sound project planning practices strongly associate with project outcomes that satisfy the needs of stakeholders.

Baldwin and Bordoli (2014) identified and made some key points on the importance of sound project planning practices. One, project planning enables the team to make projections on the resources needed and set up realizable timelines. Two, the plan enables the project manager to generate evidence-based and trustable information for his team and the management. Such information serves as important source of actionable evidence for identifying, evaluating and managing potential risks and opportunities. It is also useful in monitoring and regulation of resources use and project procedures to limit wastage. Lastly, a good plan serves as a solid platform for team building, communication and negotiation of compensations. These benefits cannot be realized in the absence of strong commitment and skills by project administrators and other project stakeholders on effective project planning and scheduling (Kariungi, 2014).

Kerzner (2012) in his study noted that one of the key benefits if establishing an execution methodology is its ability to attain the organization’s consistency. A project’s strategic project planning provides an effective communication channels that ensure the projects effectively done, the planning also provides all organizational levels the opportunity to participate a factor that builds a strong team. Strategic planning for project success brings together all components of the company into play. These include the professional relationships among staff and management, and between staff and management, the specific roles of individuals like the project sponsors and stakeholders, and aspects of a company’s organizational structure and culture. According to World Bank report (2013), 21% of the intended projects have been effectively executed, 45% were struggling to survive, while 34% were abandoned or failed altogether. The common reason being given has been poor planning and poor estimation. A project that is poorly planned and estimated has risks and difficult to manage and may lead to project failure. Assaf (2012) argued that if your project success criteria is not well defined and is too vague, not properly understood, or formalised then your project is likely to fail.
2.3.2 Technical Capacity and Project Implementation

Avots and Duncan and Gorsha (1983) argue that good project management organization framework are vital to project success. The study tried to establish explanations for problems in project management. He observes that these problems can be thwarted by investing more in those areas of the project management that are likely to cause failure. The study indicates that there are three problem areas project in project management, namely under-charging, uncontrolled spending and delay in supply of project materials. According to these authors, sound project planning practices can eliminate all these issues.

Lackman (1987) believes that there are various tools of success at every project manager’s disposal. Among them are task analysis models, customer data sheets and the project plans, etc. It is not enough to be equipped with these resources. Kumar (1989) holds the view that timely establishment of strategies, ideals, and approaches of project roll-out are necessary to guarantee success. He proposed that by collecting enough on-site data and staying abreast on emerging project issues and challenges, one would be able to customize strategies and approaches to specific situations. Such customized responses will greatly improve the accuracy of project results and increase client satisfaction.

Ogunlana and Lan (2004) believe that attaining modernised technology and utilizing its full potential to enhance competitiveness within the construction sector. Effective technology selection also enhances the project’s success. The project team needs to keep an accurate record of all tacit knowledge they obtain from the implementation process to provide insight for future projects. Thirdly, the organization should appoint a group of highly trained staff equipped with the requisite knowledge for the project (Melkonian & Picq, 2010). To know these skills a broad skills analysis should be undertaken to reveal the gaps in skills. The industry has currently experienced various issues thus in choosing contractors there should be a proper scrutiny of the firm’s history, quality management, technical proficiency and health and safety issues (Philiph, Martin, Dainty & Price, 2008). According to Kaliba (2009), most Government related projects fail because the Government hires its personnel at meagre pay and little money which in most cases discourages the employees, in this scenario they get wrong men for the jobs and at times limits the project success since they did not engage the right employee. This is a typical case of technical competence which is a very high requirement in construction works. In most cases it is the responsibility of project managers
who are technically competent who have the authority of project planning and implementation

2.3.3 Commitment of Stakeholders and Project Implementation
The project manager is always tantamount to feel the pressure of conflicting interests from the different stakeholders, which can render it impossible to effectively implement key tasks. Therefore, he or she must always stay ahead of all other stakeholders in tracking the progress, effectiveness, interests and issues that emerge from the project. On their part, the top management should continually support the project manager by streamlining administrative procedures with stakeholders. Additionally, these roles of top management should not interfere with the work of the project team members. Since the project implementation is often a multi-layered one, it is usually best to use appropriate delegation of activities in management. A small team based in a single location could sometimes be managed with no specific process or procedures installed but simply executed by the project manager, who is taking a continuous interest in what the participants are doing and what they have achieved. Where the generation of audit information is not mandatory, for instance in the case where a third party is charging for duration or supplies, the project may be administered without keeping a record of the team members’ allocated tasks and activities (Makori, 2011).

Maylor (2010) reinforces the importance of managers and top administrators in a project; he opines that these two groups of persons play unique roles. He attributed a project organisation as a factor of organisation, Leadership and individual skills. According to (Johnson, Schooles & Wittingtin, 2006). Kerzner (2006) attributes a greater commitment to the project to collaborative thinking than to individual thinking. Other important considerations include the development of clear goals and range of activities for every member. The goals must be clear to all, and realistic, even though, there will always be alterations during the actual implementation process. Consequently, they must be dynamic and prone to change to the changing scenarios of the actual implementation process. Ultimately, political goodwill is vital to project success, especially with public projects. As such, it is highly advisable to work with the relevant government and non-governmental authorities and agencies (Jacobson & Choi, 2008). For successful execution of any project that is road project, it is important for all the stakeholders to be fully involved. Nyanje & Wanyoike (2016) carried out a study that analysed the parameters influencing the implementation of NGO Projects in Nakuru County, Kenya the study established that effective communication amongst stakeholders influenced
effective implementation of NGO projects. This clearly indicates that the role of stakeholders in organisation of any project cannot be ignored. The findings were also reinforced by Machianjo & Njeru (2016) who underscored the key role of shareholders.

2.3.4 Communication System and Project Implementation

The modern organization has become so complex with different clients demanding different ways of doing things. For that matter providing information across the entire organisation becomes difficult. Bourne (2006) observed the need to have some proper communication skills in order to achieve projects outcomes which was also supported by Wideman (2002). This has enable the researcher to assert that the existing and historical paradigm of project success in construction industry is about an increased and more effective communication.

Proper communication is essential to an effective project team. It provides a basis for planning, leadership, cooperation and decision-making. Apart from good communication, it is important to have a shared project vision, in which case the project administrators learns the interests of all stakeholders and works hard to ensure inclusivity, support and ownership of the project (Yang, Shen & Ho, 2009). As also stated by Zwikael (2009), the goals and scope of a project are identified, there should be a continuous review of the progress. The various progresses on various operations assigned to persons needs to be observed to (or “intending to”) achieving overall goals. This information must be addressed with the stakeholders. Newton (2005) proposes that an elaborate communication plan is essential to a smooth flow of information during implementation. As such, it is important for the team leader to hold frequent meetings with the team and other stakeholders. The local community should not only be consulted but also engaged directly in the critical elements of the project implementation process. The team manager can begin by engaging the local influential leader as a social bridge to the community (Teo, 2010). In the end, there should be sound processes established for handing over the project to the primary beneficiaries. This is a critical step, especially considering the construction sector is increasingly getting visible as a service industry (Karna, Junnon & Sorvala, 2009). Construction projects are big projects that have multiple activities to be executed by different expertise handling different tasks. It is for this matter that for any project to be executed to conclusion there must be in place a very effective communication. A study conducted in Nigeria in Oweri state, Imo state Nigeria on construction project delivery concluded that Communication is very key for the success of

2.4 Research Gaps

As from the review of the literature, there is yet to have a well conclusive project on the nature of project organisation framework and the execution of power project. Moraa (2011) examined roads projects at the Ministry of Roads, but the problem she sought to address may be more widespread than the ministry, to even the whole sector. Besides, research has not been done on the topic a factor that has also contributed to the issues experienced within the construction sector. Some of the analysis conducted by Kirungu (2011), Malala (2011), Mutunga (2010) and Rutere (2010), have endeavoured to carry out a study on the importance of organisation frameworks in the public sector projects. However, their works seem too general; they fail to identify the specific issues of management that influence project implementation. The present research was attempting to provide a detailed coverage of these salient research gaps. Generally, the research aims at plugging the gap and to provoke effective solution on the management of public projects.

*Table 2.1: Summary and Research Gaps*

<table>
<thead>
<tr>
<th>Author Year</th>
<th>Topic</th>
<th>Key Findings</th>
<th>Research gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hargis et al (2010)</td>
<td>The impacts of PM practices and execution of projects</td>
<td>A project’s success relies of the team managing it</td>
<td>The study did not put into consideration the public Sector</td>
</tr>
<tr>
<td>Busby &amp; Pinto (1993)</td>
<td>Relationship between project management practices and implementation of projects.</td>
<td>Leaders connect with their follower using social media with the objective of conducting mutually beneficial practices.</td>
<td>The study did not put in consideration the Stakeholders influence on implementation</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Location</td>
<td>Research Focus</td>
<td>Findings/Recommendations</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cleland &amp; Kris (2000)</td>
<td>South Africa.</td>
<td>The influence of PM practices and execution of projects. Angola</td>
<td>The community becomes vital through contact, actions and involvement/participation. Did not put in consideration the current variables.</td>
</tr>
<tr>
<td>Besner &amp; Koontz (2006)</td>
<td>Angola</td>
<td>Integrating Project Management tools and techniques into practice</td>
<td>Participatory techniques in evaluation offer an active engagement in decision making for the projects. The study did not address technical capacity on project implementation.</td>
</tr>
<tr>
<td>Hobbs &amp; Malala (2006)</td>
<td>Angola</td>
<td>Competitive grounds for PM</td>
<td>PM practices is a crucial asset to firms. The study did not focus in construction projects in the local context.</td>
</tr>
<tr>
<td>Sambu, Ogolla and Kitheka (2019)</td>
<td>Kenya</td>
<td>Factors influencing project implementation in Kenya pipeline company.</td>
<td>The study found out that project planning, stakeholders participation influence the implementation of projects in Kenya pipeline company. The study did not put into consideration road projects and did not factor into consideration, Technical capacity and effective communication.</td>
</tr>
<tr>
<td>Kiragu, P.M (2015)</td>
<td>Kenya</td>
<td>Influence of project implementation strategies on performance of</td>
<td>The established that stakeholder’s engagement is very key determinant of project success. The study considered the variables project design, Resource management, stakeholder’s engagement and Monitoring and Evaluation but</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Title</td>
<td>Findings</td>
<td>Comparison</td>
</tr>
<tr>
<td>-----------</td>
<td>-------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>Kagendo Christine (2013)</td>
<td>Factors affecting successful implementation of Projects in Non-Governmental organisations within urban slums in Kenya, A case of Kibera Foundation.</td>
<td>The study found out that stakeholder’s involvement is critical to the implementation of a project.</td>
<td>The study focussed on Non-Governmental organisations projects and not Government projects.</td>
</tr>
<tr>
<td>Amade, Ubani, Oghene, Omaje, Anita, and Njoku (2015)</td>
<td>Critical success factors for Public sector construction project delivery: A case of Oweri, Immo state, Nigeria</td>
<td>The study findings are were that effective procurement process, effective communication, adequate planning, weather conditions, Leaderships of the project manager and effective coordination of project activities have a positive influence on project implementation.</td>
<td>The study did not capture the element of Technical capacity and stakeholders influence in the study. The study was also carried out in Nigeria and unlike the present study.</td>
</tr>
<tr>
<td>Nyanje and Wanyoike (2016)</td>
<td>Factors affecting the implementation of NGO Projects in Nakuru County, Kenya</td>
<td>The study established that exchange of information among stakeholders, communication and planning should be adopted to reduce delays in project implementation.</td>
<td>The effect of Technical capacity was not considered. The study laid emphasis on NGO projects and not Government funded projects.</td>
</tr>
</tbody>
</table>

2.5 Conceptual Framework

This is a set of precepts or mind maps being used in designing and investigation (Kothari 2004). It also depicts the researcher’s view point of the problem and the road map of the study. It gives a general scope of the study variables, the main focus of this research was to explore the factors that affect project implementation in the construction industry, focusing specifically on Kisumu County, Kenya. Project implementation shall be considered as the dependent variable in the study whereas the independent variables include the technical Capacity, communication, project planning, and stakeholder’s commitment.
Independent Variables

- **Project planning**
  - Mission and vision
  - Project schedules
  - Project plans documentation

- **Technical Capacity**
  - Machinery and equipment
  - Human resource skills and abilities

- **Commitment of stakeholders**
  - Commitment to workload
  - Employee cohesion
  - Employee

- **Communication systems**
  - Effective Communication
  - Easy of making decisions

Dependent Variable

- **Implementation of projects**
  - Quality
  - Time schedule
  - Budget/cost

---

**Figure 2.1: Conceptual Framework**

*Source: Author (2019)*
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
The chapter describes the study participants and methodology to be used. It begins with a discussion of the research design, then the target population. The chapter then presents the size of the sample, the procedures for sampling, and tools of data collection. It also includes validity and reliability of data. The last sections examine how data was analysed and collected and how ethical concerns were addressed.

3.2 Research Design
Descriptive research design was employed to examine how project planning, stakeholder participation, communication and technical abilities are relevant to the implementation of construction projects in the study area. Descriptive survey research designs are utilized in preparatory and exploratory investigations to enable the inquirer to collect and process data to clarify on issues (Orodho, 2003). Mugenda and Mugenda (2003) argue that the objective of descriptive studies is to examine and recount prevailing situations and are helpful in demonstrating, elucidating or uncovering those situations.

3.3 Target Population
According Mugenda and Mugenda (2003) define target population as the all universe a researcher wishes to draw conclusion. The research targeted all construction roads projects in the county of Kisumu. According to the Kisumu County Government, 57 construction projects have been implemented so far since inception of the devolved unit which were categorized into 3 stratus.

Table 3.1: Target Population

<table>
<thead>
<tr>
<th>Type of Road Construction Project</th>
<th>No. of Projects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gravelling</td>
<td>28</td>
<td>49.12%</td>
</tr>
<tr>
<td>Murram</td>
<td>17</td>
<td>29.83%</td>
</tr>
<tr>
<td>Tarmac</td>
<td>12</td>
<td>21.05%</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Source: Kisumu County Government, 2018*
3.4 Sampling Design

A sample design is a strategy for drawing a sample from a definite population (Kothari 2004). The researcher used Stratified random sampling technique. The respondents were staff within the Kisumu County Government, working in the road constructions sector. A sample of 171 respondents were drawn across the 3 categories of the road construction project namely: Gravelling, Marram and Tarmac.

Table 3.2: sample size

<table>
<thead>
<tr>
<th>Type of road</th>
<th>No. of projects</th>
<th>Sampled Size</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gravelling</td>
<td>28</td>
<td>84</td>
<td>49.12</td>
</tr>
<tr>
<td>Marram</td>
<td>17</td>
<td>51</td>
<td>29.83</td>
</tr>
<tr>
<td>Tarmac</td>
<td>12</td>
<td>36</td>
<td>21.05</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57</strong></td>
<td><strong>171</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: (Research data, 2019)*

3.5 Data Collection Instrument

The study’s data was collected through questionnaire which consisted of parameters relevant and consistent with the study objectives. It was also perceived as the most appropriate as it allowed for a greater depth of response, hence a more elaborate data about the respondents could be achieved. It constituted simultaneously open and closed ended questions which were managed through drop and pick later technique where the respondents were advised to go through the questions and to kindly and truthfully respond to every question.

3.6 Data Collection Procedures

The data collection was procedural and was performed in phases. In the first phase, the researcher obtained a letter of introduction from the University to enable him to proceed to the field for data collection. The second phase involved obtaining a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI). The researcher endeavoured to obtain relevant permits from all the stakeholders to conduct research. After the right approvals were obtained, the researcher proceeded to administer questionnaires to the respondents.
3.7 Validity and Reliability of the Research Instrument

3.7.1 Validity

Validity interrogates the capacity of data collection tools to produce sound information on the subject matter of investigations (Kothari, 2010). The researcher with the guidance and liaison with the supervisor in the review of the procedures applied in the test and also to test for content validity. Pre-testing was performed on the research instruments by randomly selecting a sample from the population before data collection.

3.7.2 Reliability

The Cronbach’s alpha method was adopted to test for reliability. Data analysis was performed by use of SPSS. Any score of not less than 0.7 was considered as acceptable in a study (George & Mallery, 2013). Reliability of the research was checked using Cronbach’s alpha method.

Table 3.3: Reliability Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>No of items</th>
<th>Reliability Value</th>
<th>status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project planning</td>
<td>6</td>
<td>0.75</td>
<td>Reliable</td>
</tr>
<tr>
<td>Technical capacity</td>
<td>5</td>
<td>0.76</td>
<td>Reliable</td>
</tr>
<tr>
<td>Commitment of stakeholders</td>
<td>4</td>
<td>0.75</td>
<td>Reliable</td>
</tr>
<tr>
<td>Effective communication</td>
<td>5</td>
<td>0.78</td>
<td>Reliable</td>
</tr>
<tr>
<td>Project implementation</td>
<td>6</td>
<td>0.74</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

From table 3.3 above, the four variables had a test score of 0.7, thus the research instrument was reliable for the study.

3.8 Data Analysis and Presentation

The study’s data recorded was coded and edited by help of SPSS. The descriptive statistics technique, namely frequencies, means and standard deviations were applied in describing the data. The study’s percentage and frequency distributions was attained from the gathered
The gathered data was then analysed by the use of linear regressions approach. The approach was to aid in evaluating and understanding the connection between the two study variables.

The general formula of multiple Regression: \( Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \varepsilon \)

Where:
- \( Y \) = Implementation of Construction projects
- \( X_1 \) = Project Planning
- \( X_2 \) = Technical Capacity
- \( X_3 \) = Commitment of Stakeholder
- \( X_4 \) = Communication system
- \( \beta_0 \) = Constant Term;
- \( \beta_1, \beta_2, \beta_3, \beta_4 \) = Beta coefficients; \( \varepsilon \) = Error Term.

### 3.8.1 Diagnostic Test

Diagnostic test are those tests and checks done to test for statistical problems. In order to check for normality, the values for symmetry and Kurtosis between -2 and 2 are considered acceptable in order to prove a normal distribution (George & Mallery, 2010). The study carried out the skewness and Kurtosis which were analysed and presented in the table below. Multicollinearity is a measure of the existence of strong correlation between independent variables. The aim of the correlation test was to identify the association between organization framework and project implementation.

### 3.9 Ethical Considerations

The authorization to conduct the study was given by the graduate school of the university and necessary licensing and approvals obtained from NACOSTI before data collection. The research work was done bearing in mind the policy of confidentiality and the integrity of the gathered information.
CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction
This chapter presents the findings of the study that were obtained during the data analysis. It captures the response rate of the respondents and the influence of project organisation framework on implementation of Road construction projects in Kisumu County. Data was obtained using structured questionnaires and it was analysed using a data analysis computer software (SPSS) version 25.0. The analysed data was presented in form of descriptive tables, charts and graphs.

4.2 Response rate
As per the sample size, the researcher distributed a total of 171 questionnaires to the respondents. However, out of the 171 questionnaires that were distributed, only 150 were duly filled and received back. This means that the response rate was 87.72%. According to Mugenda and Mugenda (2003), a response rate of 70% and above is excellent for data analysis and drawing conclusions of a descriptive study. Therefore, this study’s response rate of 87.72% (150) was excellent hence enough to carry out analysis and make a conclusion. It is also representative of the target population hence the findings could be generalized.

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded</td>
<td>150</td>
<td>87.72%</td>
</tr>
<tr>
<td>Not responded</td>
<td>21</td>
<td>12.28%</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Source: (Research data 2019)
4.3 Demographic information of the respondents

Demographic information of the respondents assisted the researcher to understand the critical issues that could have an effect on respondent’s answers, interests and perceptions. It also help the researcher to carry out comparisons of responses and its variation between the sub-sets. Helped the researcher to know the factors that could have influenced the respondent’s answers, interests and opinions. The researcher considered age, marital status, gender, level of education, experience of service, position at work and period worked on current position.

4.3.1 Gender

The study endeavoured to examine the distribution of gender of the participants as indicated in figure 4.1 below.

![Gender Distribution Chart]

Figure 4.1: Gender of the respondents

Source: (Research Data 2019)

The distribution of gender was 74% male and female comprising 26% indicating a fair involvement of both genders.
4.3.2 Age of the respondent

The study endeavours to investigate the age distribution of the participants. The findings shown in Table 4.3, a good number of the participants were aged between 20-30 years 40 (26.67%). Those aged between 31-40 years were 39 (32.67), while those aged 41-50 years were 25 (16.67%) and 51-60 years were 20,(13.33) and those above 60 years were 16(10.67%). The findings show that a bigger percentage of the respondents were below 40 years of age which is in conformity with national policies in sub Saharan Africa countries (Blum, 2007).

**Table 4.3: Age of the respondent**

<table>
<thead>
<tr>
<th>Age of the respondent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30year</td>
<td>40</td>
<td>26.67</td>
</tr>
<tr>
<td>31-40 years</td>
<td>49</td>
<td>32.67</td>
</tr>
<tr>
<td>41-50 years</td>
<td>25</td>
<td>16.67</td>
</tr>
<tr>
<td>51-60 years</td>
<td>20</td>
<td>13.33</td>
</tr>
<tr>
<td>Above 60 years</td>
<td>16</td>
<td>10.67</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: (Author 2019)*
4.3.3 Marital Status

The researcher was also interested in knowing the marital status of the respondents. Therefore, respondents were to indicate their marital status and findings were as shown in Figure 4.2:

**Marital Status**

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>53%</td>
</tr>
<tr>
<td>Single</td>
<td>40%</td>
</tr>
<tr>
<td>Divorced</td>
<td>7%</td>
</tr>
<tr>
<td>Married mothers</td>
<td>6.67%</td>
</tr>
</tbody>
</table>

**Figure 4.2: Marital status**

*Source: (Author 2019)*

From the findings presented in Table 4.7, a majority of the respondents at 80 (53.33%) were married by the time this study was conducted, followed closely by 60 (40%) who were single, while 10 (6.67%) were divorced mothers.

4.3.4 Level of education of the respondent

The study sought to find out the education levels of the participants. The findings in Table 4.4 indicates that majority of the participants 58 (38.67%) had attained bachelor's degree level of education followed by those who had diploma level of education 45 (30%). Moreover, 25 (16.67%) of the participants attained masters level of education while 18 (12%) attained secondary level and 4 (2.67%) attained PhD. This depicts a picture of an enlightened respondents who are well informed hence adequate enough to drum up research findings.
Table 4.4: Level of education of the respondent

<table>
<thead>
<tr>
<th>Level of education of the respondent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Diploma</td>
<td>45</td>
<td>30</td>
</tr>
<tr>
<td>Bachelors</td>
<td>58</td>
<td>38.67</td>
</tr>
<tr>
<td>Masters</td>
<td>25</td>
<td>16.67</td>
</tr>
<tr>
<td>PhD</td>
<td>4</td>
<td>2.67</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: (Author 2019)

4.3.5 Years of experience

The researcher wanted to establish the level of experience of the participants. The findings are illustrated in figure 4.3 below.

Figure 4.3 shows that majority of the participants 37 (24.67%) had worked for between 1-5 years in the respective areas followed by those who had worked for between 6-10 years 33(22%), 30(20%) worked between 21-25 years, 26(17.33%) worked between 11-15 years while 24 (16%) of the participants had worked for 16-20 years The findings shows that the participants were knowledgeable enough to provide required information.
4.3.6 Position

The researcher sought to know the position of the respondents at workplace. The findings are as shown in table 4.8.

Table 4.5: Position

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Accountant</td>
<td>10</td>
<td>6.67</td>
</tr>
<tr>
<td>Project quantity surveyor</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Project Engineer</td>
<td>33</td>
<td>22</td>
</tr>
<tr>
<td>Project supervisors</td>
<td>22</td>
<td>14.67</td>
</tr>
<tr>
<td>Project manager</td>
<td>10</td>
<td>6.67</td>
</tr>
<tr>
<td>Clerk of works</td>
<td>33</td>
<td>22</td>
</tr>
<tr>
<td>Road engineer</td>
<td>27</td>
<td>18</td>
</tr>
</tbody>
</table>
County engineer  5  3.33
Work officer  30  20
Total  150  100

Source (Researcher data 2019)

4.4 Descriptive Analysis.

4.4.1 Project Planning and implementation the road construction project.

The first objective of the study was to find out the influence of project planning on the road construction project. To achieve the objective, the researcher listed a number of statements corresponding to the effect of project planning on the road construction projects in Kisumu county and asked the respondents to rate the statements using a likert scale of 1 – 5 whereby 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree. The study findings were as shown in Table 4.2

Table 4.2: project planning and implementation of the road construction project.

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization has in place a good mission and vision</td>
<td>150</td>
<td>4.4167</td>
<td>1.96184</td>
</tr>
<tr>
<td>Proper planning tools are in place in the organization</td>
<td>150</td>
<td>3.3833</td>
<td>1.69837</td>
</tr>
<tr>
<td>The project team in the organization understands the project objectives</td>
<td>150</td>
<td>4.2667</td>
<td>1.84104</td>
</tr>
<tr>
<td>The organization perform risk assessment of the project</td>
<td>150</td>
<td>3.9557</td>
<td>1.27514</td>
</tr>
<tr>
<td>The project team identify and meet the stakeholders affected by the project plan</td>
<td>150</td>
<td>3.9667</td>
<td>1.19273</td>
</tr>
<tr>
<td>The project team set and priorities goals</td>
<td>150</td>
<td>3.8833</td>
<td>1.20861</td>
</tr>
<tr>
<td>The project schedule is always done by the project team</td>
<td>150</td>
<td>4.4167</td>
<td>1.9618</td>
</tr>
<tr>
<td>Average</td>
<td>150</td>
<td>4.041</td>
<td>1.591</td>
</tr>
</tbody>
</table>

Source: (Research data 2019)
The research sought to establish the influence of project planning on the implementation of a project. The findings as denoted by fig 4.2 was that the organisation had in place a good mission and vision statement which had the highest mean at 4.4167 clearly signifying a very strong agreement and a standard deviation of 1.96184. The results also indicating a good showing of presence of projects schedule in place done by the project team at 4.4167 and standard deviation of 1.9618. The findings also showed that the project team also identifies and meet the stakeholders affected by the project plan to further direction on project implementation activities. The project schedule was also found to be done by the project team at a mean of 4.4167 and standard deviation of 1.9618 clearly showing a very strong agreement. Proper planning tools were found to be in place though not very strongly at a mean of 3.3833 and a standard deviation of 1.69837. According to a study by Germuerden and Lechler (2009), who found out that Top management directly promote project success, project managers have the authority of planning, execution and closing of any project, which also concurred with the findings of Okero (2011), who concluded that there was an increase in unfinished infrastructural projects owing to inadequate planning, therefore, the findings demonstrated that organisations should adopt very clear planning processes so as to be relevant in the construction sector.

4.4.2 Technical Capacity on Implementation
The second of objective of the study was to assess the influence of technical capacity on implementation of road construction in Kisumu County, Kenya. To achieve the objective, the researcher listed a number of statements corresponding to the effect of technical capacity on implementation of road construction in Kisumu County, Kenya and asked the respondents to rate the statements using a likert scale of 1 – 5 whereby 1=strongly disagree, 2=disagree, 3=uncertain, 4=agree and 5=strongly agree. The study findings were as shown in the table 4.3.
Table 4.3: Effect of technical capacity on implementation

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timely decision making in the organization has contributed to low through put time</td>
<td>150</td>
<td>4.3167</td>
<td>1.14228</td>
</tr>
<tr>
<td>The project team are regularly taken for skills upgrading courses to confirm with the technological advancement</td>
<td>150</td>
<td>4.2833</td>
<td>1.18023</td>
</tr>
<tr>
<td>The organization has in place an updated training projections for the project team</td>
<td>150</td>
<td>4.0500</td>
<td>1.19922</td>
</tr>
<tr>
<td>In the organization, the road contractors are selected based on working in the same sector and having similar features of the project in terms of size and complexities</td>
<td>150</td>
<td>3.9833</td>
<td>1.10228</td>
</tr>
<tr>
<td>In the organization the top project managers are highly knowledgeable in their areas of expertise</td>
<td>150</td>
<td>4.2167</td>
<td>1.13128</td>
</tr>
<tr>
<td>The project team have got the operational ability to produce desired outputs</td>
<td>150</td>
<td>4.2207</td>
<td>1.14228</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>150</td>
<td>4.220</td>
<td>0.985</td>
</tr>
</tbody>
</table>

Source: (Research data 2019)

From the findings in Table 4.3 it is evident that technical capacity affect implementation of road construction in many ways. Based on the outcome of the average values of mean and standard deviation, technical capacity has an average mean of 4.220 and average standard deviation of 0.9854. These findings have shown that technical capacity is very critical in the implementation of road construction in Kisumu county and this also concurred with Ogunlana and Lan (2004) who held the view that attaining modernized technology and utilizing its full potential enhance competitiveness within the construction sector hence project success. The study also concurred with a similar study conducted by Ngaira, A.M, & Malenya, A (2019) on the influence of technical capacity on County road construction projects performance in Busia county Kenya, which found out that there is a very strong influence of Technical capacity on road construction projects.
4.4.3 Commitment of Stakeholders on Implementation.
The third objective of the study was to assess the influence of commitment of stakeholders on the implementation of road construction project in Kisumu County. To achieve the objective, the researcher listed a number of statements corresponding to the influence of commitment of stakeholders on implementation of road construction and asked the respondents to rate the statements using a likert scale of 1 – 5 whereby 1=strongly disagree, 2=disagree, 3=uncertain, 4=agree and 5=strongly agree. The study findings were as shown in the table 4.4.

Table 4.4: Effect of stakeholders on implementation

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization has schedule periodic touch-base sessions with the stakeholders</td>
<td>150</td>
<td>4.1167</td>
<td>1.18023</td>
</tr>
<tr>
<td>It is during the period of project execution that the project team and the stakeholders address issues as and when they arise</td>
<td>150</td>
<td>3.7167</td>
<td>1.02662</td>
</tr>
<tr>
<td>The organization has developed stakeholders information systems that provide regular feedback concerning the perceptions of construction activities in all aspects of the organization</td>
<td>150</td>
<td>3.5167</td>
<td>1.01667</td>
</tr>
<tr>
<td>In the organization, stakeholder are treated like customers and are involved in all decision making which help in solving many societal problems</td>
<td>150</td>
<td>4.0667</td>
<td>1.07146</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>150</td>
<td><strong>3.854</strong></td>
<td><strong>1.074</strong></td>
</tr>
</tbody>
</table>

Source: (Author 2019)

From the findings of table 4.4, the average mean was found to be 3.854 and average standard deviation of 1.074. The means indicates that most of the respondents agreed on the statements. The respondents submit that the organizations has schedule periodic touch-base sessions with the stakeholders (Mean score 4.1167 and standard deviation 1.18023) and It is during the period of project execution that the project team and the stakeholders address issues as and when they arise (Mean score 3.7167 and standard deviation 1.02662) The findings also concurred by study by done by Maylor (2010) who referred to project
organisation as a factor of management, Leadership and individual skills and commitment. This was further reinforced by Jacobson & Choi (2008) who advised that project success especially public projects, it is advisable to work with the relevant Government and non-government authorities and agencies.

4.4.4 Effective Communication on Implementation

Based on literature review, effective communication positively contributed to execution of road construction projects. The researcher therefore sought to know how effective communication influenced the implementation of road construction project in Kisumu County. Five statements with regard to the influence of effective communication on implementation of construction project were designed and Respondent were asked to indicate the extent to which they agreed or disagreed to the statements. Study findings were as shown in Table 4.5.

**Table 4.5: Communication system on implementation**

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization has effective communication channels and effective communication equipment’s in place</td>
<td>150</td>
<td>4.0833</td>
<td>1.33139</td>
</tr>
<tr>
<td>The project team leaders in the organization always show some level of clarity, concise, confidence and respect when communicating with the team members</td>
<td>150</td>
<td>3.9055</td>
<td>1.10472</td>
</tr>
<tr>
<td>In the organization effective communication has ensure that all the set goals are achieved within the set timeliness, projected cost and to the right standards</td>
<td>150</td>
<td>4.0083</td>
<td>1.15661</td>
</tr>
<tr>
<td>It is because of transparency in communication and availability of strategic information and proper feedback that has enabled the organization to meet their targets</td>
<td>150</td>
<td>3.3667</td>
<td>1.40177</td>
</tr>
<tr>
<td>The organization has in place an up and down communication chain thus improving employees morale productivity, and commitment</td>
<td>150</td>
<td>2.4500</td>
<td>1.52299</td>
</tr>
<tr>
<td>Average</td>
<td>150</td>
<td>3.563</td>
<td>1.303</td>
</tr>
</tbody>
</table>
From the findings in Table 4.5 above, the average values of mean and standard deviation were 3.563 and 1.303 respectively. The findings indicated that effective communication had a key role in the implementation of road construction projects which concurred by the study carried out by Newton (2005), who opined that a comprehensive communication plan is essential to a smooth flow of information during project implementation and therefore it is important for the team leader to hold frequent meetings with the team and other stakeholders.

4.4.5 Project Implementation

There are several ways in which effect of Project organization framework can affect the implementation of road construction in the County of Kisumu. The researcher sought to establish ways in which strategic Project organization framework employed by various projects had contributed effective implantation of road project. To achieve this, various ways were listed and respondents were asked to indicate the extent to which they agreed or disagreed. Findings were as shown in Table 4.6

<table>
<thead>
<tr>
<th>Practices for ensuring successful implementation</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation is best achieved through collaborative governance where stakeholders, sponsors, project team, implementation argent play a joint role towards the project success.</td>
<td>150</td>
<td>4.3167</td>
<td>1.14228</td>
</tr>
<tr>
<td>User Acceptance Testing (UAT) is crucial to any project implementation to ensure conformity with designed specifications.</td>
<td>150</td>
<td>4.2833</td>
<td>1.18023</td>
</tr>
<tr>
<td>The success of project implementation is best when there is proper collaboration and communication.</td>
<td>150</td>
<td>4.0500</td>
<td>1.19922</td>
</tr>
<tr>
<td>Keeping the local community informed of the progress ensures successful implementation of a project.</td>
<td>150</td>
<td>3.9833</td>
<td>1.14228</td>
</tr>
<tr>
<td>Having standard procedures and documented plan ensures successful implementation of a project.</td>
<td>150</td>
<td>3.9667</td>
<td>1.19273</td>
</tr>
</tbody>
</table>
Lack of specialized equipment’s, machines and trained manpower can stall implementation of a project.

Average

\[
\begin{array}{ccc}
150 & 3.8833 & 1.20861 \\
\end{array}
\]

Source: (Research data, 2019)

From the findings in Table 4.6, it is evident that project organization affect project implementation in many ways. For instance, employees of Kisumu county projects who participated in this study generally agreed (Mean score of 3.5<mean>4.4) that Implementation is best achieved through collaborative governance where stakeholders, sponsors, project team, implementation argent play a joint role towards the project success User Acceptance Testing (UAT) is crucial to any project implementation to ensure conformity with designed specifications, The success of project implementation is best when there is proper collaboration, Keeping the local community informed of the progress ensures successful implementation of a project, Having standard procedures and documented plan ensures successful implementation of a project. They further agreed that Lack of specialized equipment’s, machines and trained work force could stall implementation of a project. These findings have shown that project organization practices employed by various organization in Kisumu County are very crucial in implementation of road project.

From the study findings the average values of mean, standard deviation is 4.08, 1.178 respectively. These have established that the project organisation framework employed by various organisations in Kisumu County are very crucial in implementation of road construction in Kisumu County. This has consequently concurred with the study conducted by Ibbs (2002) who singled out some important project management skills such as the art of forecasting, scheming and control of procedure a cross a specified time. This also agreed with the work done by Muchungu (2012) who concluded that a project success would always be determined by the degree to which the set target are met to the satisfaction of the customers and stakeholders therefore, efficient project planning processes are in dire need which calls for the use of advance management system
4.5 Inferential Statistics

The researcher adopted the use of inferential statistics to enable the study get a general view of the population sample in relation to the general from. In the study there was a use of Regression coefficient analysis, variances to explore the impact of project organisation framework and implementation of road construction projects in Kisumu County, Kenya. This was to get a very wide scope on the influence of the independent and dependent variables.

4.5.1 Correlation Analysis

The Pearson correlation matrix was used to determine correlation between the independent variable.

Table 4.7: Correlation

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Project planning</th>
<th>Technical Capacity</th>
<th>Stakeholder engagement</th>
<th>Communication System</th>
<th>Project Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project planning</td>
<td>Pearson Correlation</td>
<td>1</td>
<td><strong>.600</strong></td>
<td><strong>.557</strong></td>
<td><strong>.691</strong></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Technical Capacity</td>
<td>Pearson Correlation</td>
<td><strong>.600</strong></td>
<td>1</td>
<td><strong>.437</strong></td>
<td><strong>.680</strong></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Stakeholder engagement</td>
<td>Pearson Correlation</td>
<td><strong>.557</strong></td>
<td><strong>.437</strong></td>
<td>1</td>
<td><strong>.706</strong></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Communication System</td>
<td>Pearson Correlation</td>
<td><strong>.691</strong></td>
<td><strong>.680</strong></td>
<td><strong>.706</strong></td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>
As shown on Table 4.7, the p-value for project planning was found to be 0.000 which is less than the significant level of 0.05, (p<0.05). The result indicated that Pearson Correlation coefficient (r-value) is .651, which depicts a strong positive relationship between project planning and project implementation; the p-value for Technical capacity was found to be 0.000 which is less than the significant level of 0.05, (p<0.05). The result indicated that Pearson Correlation coefficient (r-value) is 0.644, which represented a strong positive relationship between Technical capacity and project implementation; the p-value for Commitment of stakeholders was found to be 0.000 which is less than the significant level of 0.05, (p<0.05). The result indicated that Pearson Correlation coefficient (r-value) is 0.648, which represented a strong positive relationship between Commitment of stakeholders and project implementation; the p-value for Communication system was found to be 0.000 which is less than the significant level of 0.05, (p<0.05). The result indicated that Pearson Correlation coefficient (r-value) is 0.866, which represented a strong positive relationship between Communication system and project implementation. Therefore, the study concluded that all the four variables had a strong positive effect on the project implementation.

### 4.5.2 Regression analysis

The researcher also conducted a multiple regression analysis so as to point out the relationship between the independent variables; Technical capacity, communication system, stakeholder’s commitment, project planning and the dependent variables; implementation of road construction projects in Kisumu County, Kenya. Statistical package for social sciences (SPSS) software was used to code, enter and compute the measurements of the multiple regressions for the research.
### 4.5.1.1 Results of Diagnostic Test

**Table 4.8 Results of Normality Diagnostic Test**

<table>
<thead>
<tr>
<th>Descriptive</th>
<th>Statistic</th>
<th>Std. Error</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road project implementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.125</td>
<td>0.098</td>
<td>Normally Distributed</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.186</td>
<td>0.839</td>
<td></td>
</tr>
<tr>
<td>Project planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.147</td>
<td>0.098</td>
<td>Normally Distributed</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.411</td>
<td>0.609</td>
<td></td>
</tr>
<tr>
<td>Technical capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.452</td>
<td>0.067</td>
<td>Normally Distributed</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.641</td>
<td>0.365</td>
<td></td>
</tr>
<tr>
<td>Commitment of stakeholders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.857</td>
<td>0.022</td>
<td>Normally Distributed</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.227</td>
<td>0.123</td>
<td></td>
</tr>
<tr>
<td>Communication systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.0081</td>
<td>0.172</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.289</td>
<td>0.342</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** (Researcher data, 2019)

The above results illustrate that the variables are distributed normally with skewness and kurtosis values ranging between -2 and + 2.0. The statistical implication is that the study variables namely:- project planning, technical capacity, commitment of stakeholders and
communication systems are normally distributed and concurred with (Montgomery 2001), who found out that if any of the values exceeds 5 or 10, it implies that the associated regression coefficients are poorly estimated because of multicollinearity.

**Table 4.9 Results of Multicollinearity Test**

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Tolerance</td>
</tr>
<tr>
<td>Project planning</td>
<td>.609</td>
</tr>
<tr>
<td>Technical capacity</td>
<td>.447</td>
</tr>
<tr>
<td>Commitment of stakeholders</td>
<td>.352</td>
</tr>
<tr>
<td>Communication systems</td>
<td>.305</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>.428</td>
</tr>
</tbody>
</table>

*Dependent Variable: Road project implementation*

Source: (Researcher data, 2019)

Table 4.9 shows that the VIF for Project planning = 1.642, Technical capacity = 2.239, Commitment of stakeholders = 2.843, and Communication systems = 3.279, the mean VIF for the variables is 2.501. Table above shows that the variables have a VIF that is less than 10 and tolerance value more than 0.1 ruling out the possibility of multicollinearity. Therefore, the implications of the results obtained was that there was no multicollinearity arising amongst the various variables and therefore its scope in the model can be tolerated.
4.5.1.2 Model Summary

The table below shows the Model Summary of the regression Analysis that was conducted.

**Table 4.10: Model Summary of the regression analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.873a</td>
<td>.761</td>
<td>.755</td>
<td>.22283</td>
<td></td>
<td>.761</td>
<td>115.726</td>
<td>4</td>
<td>145</td>
<td>.000</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Communication, Technical Capacity, stakeholder commitment, project planning*

**Source: (Research Data, 2019)**

Table 4.10 displays a summary of the regression model where the value of R, R square and standard error are given. These values expound the extent to which the regression model fits the investigated data. The value of adjusted coefficient of determination is 0.755 which is an indication that Project planning, Technical capacity, communication system and Stakeholders involvement explains 75.5% variability of the implementation of road construction projects in Kisumu County. Other factors not studied here explained the other 24.5% contributes to the implementation of road construction projects in Kisumu County.

4.5.1.3 ANOVA Results

Table 4.15 below is a summary of the ANOVA statistics obtained from the mean of variables within the project organization framework that influence road project implementation in Kisumu County. ANOVA cross tabulated results were obtained based on the consideration of average values of respondents’ views and opinions on the influence of organization framework on road project implementation. Estimates were made based on the respondents’ perception on the influence of project planning, technical capacity, commitment of stakeholders, communication systems on road project implementation.
Table 4.15: ANOVA of the Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>22.985</td>
<td>4</td>
<td>5.746</td>
<td>115.726</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>7.200</td>
<td>145</td>
<td>.050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30.184</td>
<td>149</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Project implementation  
b. Predictors: (Constant), Communication, Technical Capacity, stakeholder commitment, project planning

Source: (Author 2019)

The significance value obtained in the regression model is used to measure whether the relationship between the independent variables and the dependent variable is statistically significant. From the table above, the significance value for the relationship between the organization framework and project implementation is 0.000. Since the significance value (p) is less than 0.05 i.e. p < 0.05, it is concluded that the relationship between the organization framework and project implementation is statistically significant in predicting how the project organization framework influence project implementation in Kisumu county. The F critical at 5% level of significance was 0.510. Since F calculated is greater than the F critical (value = 5.000), this shows that the overall model was significant.

The significance value obtained in the regression model is used to measure whether the relationship between the independent variables and the dependent variable is statistically significant. From the table above, the significance value for the relationship between the organization framework and project implementation is 0.000. Since the significance value (p) is less than 0.05 i.e. p < 0.05, it is concluded that the relationship between the organization framework and project implementation is statistically significant in predicting how the project organization framework influence project implementation in Kisumu county. The F critical at 5% level of significance was 115.726. Since F calculated is greater than the F critical (value = 5.000), this shows that the overall model was significant.
4.5.1.4 Regression Coefficient

The researcher performed Regression analysis in order to establish the linkage between organization framework and project implementation. The results were as presented table 4.12 below.

Table 4. 12: Regression Coefficients

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.572</td>
<td>.291</td>
<td>1.970</td>
<td>1.970</td>
<td>.051</td>
</tr>
<tr>
<td>Project planning</td>
<td>.082</td>
<td>.071</td>
<td>.067</td>
<td>1.150</td>
<td>.252</td>
</tr>
<tr>
<td>Technical Capacity</td>
<td>.116</td>
<td>.073</td>
<td>.090</td>
<td>1.572</td>
<td>.118</td>
</tr>
<tr>
<td>Stakeholder engagement</td>
<td>.092</td>
<td>.076</td>
<td>.070</td>
<td>1.203</td>
<td>.231</td>
</tr>
<tr>
<td>Communication System</td>
<td>.588</td>
<td>.062</td>
<td>.709</td>
<td>9.521</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: (Research data 2019)

Coefficient of independent variables (project planning, technical capacity, commitment of stakeholders, communication systems and the dependent variable (Road project implementation in Kisumu County are presented in table 4.12 above.

The variables have p=values of less than 0.05 demonstrating that all of the four independent variables were statistically significant. As per the SPSS generated table above, regression equation;

\[ Y = 0.572 + 0.082X_1 + 0.116X_2 + 0.092X_3 + 0.588X_4 + \epsilon \]

Where: \( Y \) is the Road project implementation in Kisumu County, \( B0 \) is a constant, \( \beta 1 \) to \( \beta 4 \) are the Beta coefficient of the independent variables, \( X1 \) to \( X4 \) are the independent variables.
whereas $\varepsilon$ is the error term. Regression investigation holds that if the independent variables (project planning, technical capacity, stakeholder’s involvement, communication systems were held constant, Road project implementation in Kisumu County would be at .572.

Project planning has a strong and positive effect on the Performance of the Road project implementation in Kisumu County by a factor of .082. This outcome concurred by a study conducted by Ocharo and Kimutai (2018), on project implementation and recommended that project planners should involve all interested parties in designing the project, monitoring it, and controlling it. They also suggested that evaluation process should be participatory a method which facilitates communication. The study further concurred with Njiru (2018), who recommended that top management from manufacturing Companies should ensure that proper planning is performed as per the set standards of the project so as to lead and give impetus to the employees for better project implementation.

Stakeholders’ engagement has a strong and positive effect on the Performance of the Road project implementation in Kisumu County by a factor of .092. The study agreed with the findings of Kiragu (2015) who researched on project implementations strategies in Kiambu County and found out that the relationship between the stakeholders and project implementation is positive and significant. In a study by Nallo (2018), project management conflicts and implementation of expansion and modernisation of Jomo Kenyatta International Airport, the study recommended that Stakeholders participation should be anchored in law and policies to forestall uncertainties and complaints from stakeholders. These was also supported by Wachira (2018), on a study conducted in Kiambu on critical success factors of community based projects who recommended that project leaders should always ensure that community leaders are involved in community based projects so as to remove any doubt that may derail a project.

Enhancement of technical capacity has a strong and positive effect on the Performance of the Road project implementation in Kisumu County by a factor of .116. The study agreed with the one conducted by Pinto (2010), who found out that project implementation process is quite rigorous and calls for a concerted effort in execution by considering all factors in play. That also concurred with Ochieng (2018) on critical factors on Performance of building construction projects in Kitengela who concluded that Project designs should be developed
by competent consultants before the final draft is completed and implemented and this is a clear indicator that Technical capacity plays a very important role in any construction project.

Lastly, communication systems has a strong effect on the Performance of the Road project implementation in Kisumu County by a factor of .588. The study findings agreed with the study performed by Amade, Ubani, Oghere, Omaje, Anita and Njoku (2015) in a study conducted in Oweri, Imo state Nigeria who found out that Communication has a positive and significant influence on project implementation A study done by Maina (2018), on the stakeholder management and project performance of open air market projects in Nyeri found out that the relationship between communication and organisational performance was positive and significant. From these findings, it can be concluded that, organization frameworks employed by various companies in Kisumu County have great influence in road project implementation.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter provides a detailed summary of key findings, the study’s conclusions, recommendations of the study and areas for further research. The summary and conclusions are made based on the study’s objectives, which include determining the effect of project planning, commitment of stakeholders, communication system and technical capacity on implementation of road construction in Kisumu County, Kenya

5.2 Summary of Findings
The purpose of the study was to establishing the effect of Project organisation framework on implementation of road construction in the County of Kisumu. The study was under four specific variables, which includes project planning, technical capacity, commitment of stakeholders, communication systems. These findings demonstrated that project planning, technical capacity, stakeholder’s commitment and communication system has positive influence on the implementation of road construction, which improves overall performance of projects in Kisumu County. This was confirmed by results from a correlation analysis conducted that indicated there was a strong positive and significant relationship between organizational framework and execution of road construction projects.

On the first objective of the study the respondents generally agreed that Their various organizations has in place a good mission and vision statement, Proper planning tools are in place in their organizations, The project team in their organizations understands the project objectives and identify and meet the stakeholders affected by the project plan .further they agreed that their organizations perform risk assessment of the project ,The project team set and prioritize goals and The project schedule is always done by the project team. Also correlation analysis findings indicated that there was strong positive relationship between project planning and project implementation

Based on the technical capacity findings, it is evident that technical capacity affect implementation of road construction in many ways. For instance, respondents from Kisumu county who participated in this study generally agreed that Timely decision making in their
organizations has contributed to low through put time, the project team are regularly taken for skills upgrading courses to confirm with the technological advancement ,their organization has in place an updated training projections for the project team, In the organization, the road contractors are selected based on working in the same sector and having similar features of the project in terms of size and complexities, In their organizations the top project managers are highly knowledgeable in their areas of expertise, The project team have got the operational ability to produce desired outputs. The result of correlation and regression analysis shows that technical capacity has Strong relationship with project implementation. These findings have shown that technical capacity was very crucial in implementation of road construction in Kisumu County.

In regard with communication system the respondents generally agreed that their organization has effective communication channels and effective communication equipment’s in place, The project team leaders in the organization always show some level of clarity, concise, confidence and respect when communicating with the team members, In their various organizations effective communication has ensure that all the set goals are achieved within the set timeliness, projected cost and to the right standards, and It is because of transparency in communication and availability of strategic information and proper feedback that has enabled the organization to meet their targets whether active involvement on social events influenced their performance. The correlations indicates positive relationship between communication system and road project implementation. From these findings, effective communication has an impact on the implementation of road project in Kisumu County.

Based on stakeholder’s commitment the respondent generally agreed that; their organizations have schedule periodic touch-base sessions with the stakeholders, It is during the period of project execution that the project team and the stakeholders address issues as and when they arise. Their organizations have developed stakeholder’s information systems that provide regular feedback concerning the perceptions of construction activities in all aspects of the organization, and In their various organization, stakeholders are treated like customers and are involved in all decision making which help in solving many societal problems further the study indicates strong positive relationship between Commitment of stakeholders and project implementation. These findings have demonstrated that stakeholders’ commitment has a
strong influence on the implementation of road construction, which improves overall performance of projects in Kisumu County.

5.3 Conclusion

The study found out that the Kisumu county road project implementation agencies have not fully been embracing organizational frameworks in terms of project planning, technical capacity, commitment of stakeholders, and communication systems thus the delays and poor road construction project implementation. Organizational frame works could assist the project stakeholders in the implementation of road construction project across Kisumu County. This has been corroborated by the results from a coefficient of determination conducted which indicated that there is a strong positive significant relationship between organization framework and implementation of road construction in Kisumu County

From the study findings project planning had positive relationship with the road construction project in Kisumu County. The study concluded that project planning would play a key role in improving implementation of road construction in the County of Kisumu.

Also the study findings show that technical capacity had a positive relationship with implementation of road construction projects in Kisumu county hence the study concluded that technical capacity is very crucial in implementation of road construction in Kisumu county.

The study further found out that, effective communication would play a key role in implementation of road construction projects in Kisumu County.

Lastly the studied pointed out that stakeholder involvement would positively contribute to the implementation of road construction projects in Kisumu County. The study concluded that stakeholder’s commitment has influence on the implementation of road construction, which improves overall performance of road projects in Kisumu County.

5.4 Recommendation

The study has confirmed that organization framework is very significant in enhancing the implementation of road construction projects in Kisumu County, Kenya. All stakeholders are within Kisumu County are encouraged to implement organizational frameworks for enhanced delivery of services and for better implementation of road construction project.
To enable effective project implementation, the study recommends that there must be strong commitment and skills by project administrators and other project stakeholders on effective project planning and scheduling. This will enable stakeholders to set out standard project planning team in order to set realistic and accurate schedules and budget estimates, to conceptualize outcomes based on measures of quality, design approaches, materials, health and safety, and to align the project with stakeholders’ aspirations. This will reduce the levels of uncertain and challenges during project process.

Technical capacity plays a key role in implementation of road construction project. The study then recommends that the project team needs to keep an accurate record of all tacit knowledge they obtain from the implementation process to provide insight for future projects, the organization should appoint a group of highly trained staff equipped with the requisite knowledge for the project. Also skills analysis should be undertaken to reveal the gaps in skills.

The study recommends that the project administrators should involve stakeholders in all its project activities to enhance high level of commitment by all stakeholder during project implementation process. Maximizing the output of every team member is key to the overall completion of a project.

Proper communication is essential to an effective project team hence the study recommend there is need for a comprehensive communication plan since it is essential to a smooth flow of information during implementation. It provides a basis for planning, leadership, cooperation and decision-making.

5.5. Suggestion for further research

Based on the study findings from the results obtained. It is imperative to note that the study should be conducted in other parts of the Country to establish whether there is a disconnect between the study variables.

Is also inevitable between the private and public entities on organizational framework and project implementation. Finally, a similar study is also necessary in other sectors rather than road constructions like Dam construction, house construction among others to link it with findings in the road construction project that this study has focused on.
The study also recommends that future studies be undertaken to establish the challenges that affects the executions of road construction projects in county Governments.
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APPENDICES

APPENDIX 1: LETTER OF INTRODUCTION

Kenyatta University,
School of Business, Dept of Mgmt Science,
P.O. Box 43844,
Nairobi, Kenya

To: All prospective respondents

Dear sir/madam,

RE: PROJECT ORGANISATION FRAMEWORK AND IMPLEMENTATION OF ROAD CONSTRUCTION IN KISUMU COUNTY, KENYA

My name is Denis Awuor Khandira, a student at Kenyatta University Department of management science. I’m carrying out a study under the above mentioned title. I wish to request that you kindly take a few minutes of your time to fill for me the attached questionnaire. The exercise is purely for academic purposes and all the answers shall be treated with confidentiality. The respondent (s) has the option of not writing his or her name on the form so as not to divulge his/her identity. It would be advantageous to the researcher if the respondent (s) shall give their answers as truthful and accurately as possible.

Attached herewith, please find a copy of authorisation letters from Kenyatta University, and a license from National Commission of science and Technology and Innovation authorising the carrying out of the research.

Thanking you in advance,

Denis Awuor Khandira

D53/OL/CTY/32104/2016

TEL. 0722466276, Email dawuor2001@yahoo.com
APPENDIX II: QUESTIONNAIRE

The researcher is undertaking a study on the Assessment of project organization framework and implementation of Road construction: (a case of Kisumu County – Kenya). The purpose of the study is to establish whether project organization framework affects implementation of Road construction in Kisumu County – Kenya. Your input by filling this questionnaire is not only critical to the study but also highly appreciated. The information received shall be handled with utmost confidentiality and will be used purely for academic purposes.

You have been given options to choose from, please indicate your selection by ticking in the space provided.

Section A: GENERAL INFORMATION

1. Gender: Male [ ] Female [ ]

2. Respondent’s Age groups (in years);
   
<table>
<thead>
<tr>
<th>Age Group</th>
<th>Ticks</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 – 30</td>
<td>[ ]</td>
</tr>
<tr>
<td>31 – 40</td>
<td>[ ]</td>
</tr>
<tr>
<td>41 – 50</td>
<td>[ ]</td>
</tr>
<tr>
<td>51 – 60</td>
<td>[ ]</td>
</tr>
<tr>
<td>61 – 65</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

3. Marital status;
   
<table>
<thead>
<tr>
<th>Status</th>
<th>Ticks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>[ ]</td>
</tr>
<tr>
<td>Married</td>
<td>[ ]</td>
</tr>
<tr>
<td>Others</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

4. Highest level of Education;
   
<table>
<thead>
<tr>
<th>Education</th>
<th>Ticks</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCPE</td>
<td>[ ]</td>
</tr>
<tr>
<td>KCSE/KCE</td>
<td>[ ]</td>
</tr>
<tr>
<td>Diploma/Higher Diploma</td>
<td>[ ]</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>[ ]</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>[ ]</td>
</tr>
<tr>
<td>P.H.D</td>
<td>[ ]</td>
</tr>
<tr>
<td>Others (please specify)</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

5. Length of services in the current position (in years).
6. Have you had any promotion in the last 10 years

1 – 3 years [ ] 4 – 7 years [ ] 8 – 10 years [ ]

If yes how many…………………………………………………………………………………

7. Have you ever worked elsewhere? Yes [ ] No [ ]

8. Indicate your current position.

Project Accountant [ ] Project quantity surveyor [ ] Project Engineer [ ]

Project supervisor [ ] Project Manager [ ] Clerk of works [ ]

Road Engineer [ ] County Engineer [ ] Works Officer [ ]

Others [ ] If others please specify…………………………………………………………

SECTION B: PROJECT PLANNING OF A ROAD CONSTRUCTION PROJECTS

9. The following statements are related to project planning. Kindly indicate your level of conformity with each statement relating to the influence of project planning in Kisumu County in a measure of 1 – 5 where; 1= strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree
10. In what way do you think planning affects the implementation of road projects?

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

SECTION C: TECHNICAL CAPACITY ON IMPLEMENTATION OF ROAD CONSTRUCTION PROJECT

11. The following statements are related to Technical capacity. Kindly indicate your level of Acceptance with each and every statement relating to the influence of Technical capacity in Kisumu County. In a measure of 1 - 5 where: 1= strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organisation has in place a good mission and vision statement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper planning tools are in place in the organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project team in the organisation understands the project objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organisation perform risk assessment of the project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project team identify and meet the stakeholders affected by the project plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project team set and prioritise goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project schedule is always done by the project team</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The project team are regularly taken for skills upgrading courses to confirm with the technological advancement

The organisation has in place an updated training projections for the project team

In the organisation, the road contractors are selected based on working in the same sector and having similar features of the project in terms of size and complexities

In the organisation the top project managers are highly knowledgeable in their areas of expertise

The project team have got the operational ability to produce desired outputs

12. Basing on your own assessment, is there any other way technical capacity influences implementation of road projects?

13. Kindly confirm your conformity with each of these statements in relation to the commitment of stakeholders in your organization. In a measure of 1 - 5 where –1= strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organisation has schedule periodic touch-base sessions with the stakeholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>It is during the period of project execution that the project team and the stakeholders address issues as and when they arise</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>The organisation has developed stakeholders information systems that provide regular feedback concerning the</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
perceptions of construction activities in all aspects of the organisation

In the organisation, stakeholders are treated like customers and are involved in all decision making which help in solving many societal problems

14. How else does commitment of stakeholders influence execution of infrastructural road project in Kisumu County?

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SECTION E: EFFECTIVE COMMUNICATION ON IMPLEMENTATION OF ROAD CONSTRUCTION PROJECT.

15. Below are statements related to Effective Communication. Please show your level of acceptance to each and every statement regarding the influence of effective communication in Kisumu County. They are provided in a measure of 1 – 5 where; 1- strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organisation has effective communication channels and effective communication equipment’s in place</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project team leaders in the organisation always show some level of clarity, concise, confidence and respect when communicating with the team members</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>In the organisation effective communication has ensure that all the set goals are achieved within the set timeliness, projected cost and to the right standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is because of transparency in communication and availability of strategic information and proper feedback that has enabled the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
16. How else does effective Communication influence execution of road construction projects in your organisation? ………………………………………………………………………………………………………

……………………………………………………………………………………………………

SECTION F: PROJECT IMPLEMENTATION

17. The key project implementation indicators are considered to be Time, budget, quality and the project scope. Kindly, choose the ones which are appropriate to your organisation (Tick).

(a) The organisation has a very clear project scope before implementation [ ]
(b) The organisation has put every process on an elaborate timeline [ ]
(c) There is a well updated procedures on continuous planning to implement new processes and procedures [ ]
(d) The organisation has a mechanism in place of monitoring the resources in order to avoid cost and time overruns [ ]
(e) During the project close-out phase, one of the organisations check-list is to ensure that the project specifications is met at the right quality [ ]

Others please specify………………………………………………………………………………

18. The following are statements / practices to ensure successful project implementation.

Using a measure of 1 – 5, 1-strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree

<table>
<thead>
<tr>
<th>Practices for ensuring successful implementation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>
Implementation is best achieved through collaborative governance where stakeholders, sponsors, project team, implementation agent play a joint role towards the project success.

User Acceptance Testing (UAT) is crucial to any project implementation to ensure conformity with designed specifications.

The success of project implementation is best when there is proper collaboration and communication.

Keeping the local community informed of the progress ensures successful implementation of a project.

Having standard procedures and documented plan ensures successful implementation of a project.

Lack of specialised equipment’s, machines and trained manpower can stall implementation of a project.

19. In your opinion, what other ways can you improve on the success of project implementation?

..............................................................................................................................................................
APPENDIX III: Letter Of Approval Of Research Proposal

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

FROM: Dean, Graduate School
TO: Denis Awuor Khandira
C/o Management Science Dept.

DATE: 29th August, 2019

REF: D53/OL/CTY/32104/2016

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting 22nd May, 2019 approved your Research Project Proposal for the MBA Degree Entitled, "Project Organisation Framework and Implementation of Road Construction in Kisumu County Kenya".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

ELIJAH MUTUA
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Management Science Department.

Supervisors:

1. Ms. Gladys Kimutai
C/o Department of Management Science
Kenyatta University

DM/ Jun
APPENDIX IV: Authorization Letter

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: D53/OL/CTY/32104/2016
DATE: 29th August, 2019

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR DENIS AWUOR KHANDIRA – REG. NO.

I write to introduce Denis Awuor Khandira who is a Postgraduate Student of this University. The student is registered for M.B.A degree programme in the Department of Management Science.

Denis intends to conduct research for a M.B.A Project Proposal entitled, “Project Organisation Framework and Implementation of Road Construction in Kisumu County Kenya”.

Any assistance given will be highly appreciated.

Yours faithfully,

PROF. ELISHIBA KIMANI
AG. DEAN, GRADUATE SCHOOL
APPENDIX V : Research Permit from NACOSTI

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 any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Governor and County Commissioner 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
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