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**EFFECT OF EMPLOYEE INVOLVEMENT IN CHANGE MANAGEMENT ON  
PROJECT PERFORMANCE: A CASE OF THE ROAD CONSTRUCTION  
INDUSTRY IN NAIROBI COUNTY**

**CHANGWO RUTH JEBET**

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS  
ADMINISTRATION OF STRATHMORE UNIVERSITY**



**SEPTEMBER, 2022**

## Declaration

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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Approval

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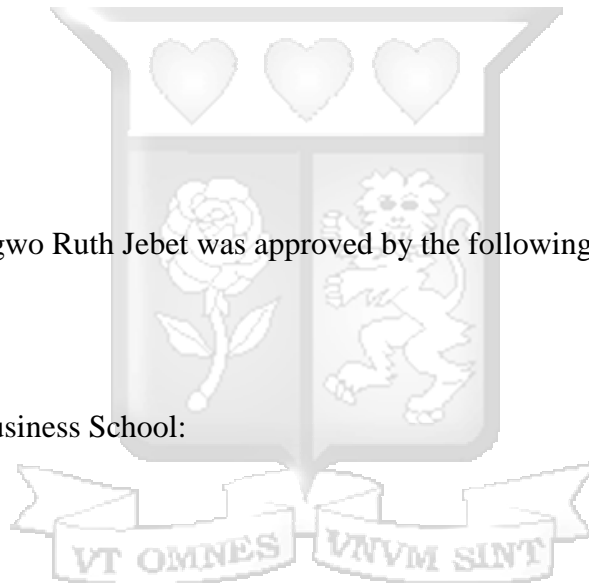
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## ABSTRACT

Employee involvement is among the important factors affecting successful implementation of organisational change, therefore their involvement in the planning, execution and evaluation of change is vital to the success of any business' performance. The general objective of the study was to determine the effect of employee involvement in change management on the project performance of the road construction industry in Nairobi County. Specific objectives in this study were to determine the effect of employee involvement in the planning of change management on project performance of the road construction industry in Kenya; to establish the influence of employee involvement in the execution of change management on project performance of the road construction industry in Kenya; to determine the effect of employee involvement in the evaluation of change management on project performance of the road construction industry in Kenya. This study was based on the project management competency theory as well as the ADKAR change management model. The research implemented a descriptive research design. Data was collected from 151 respondents in three road construction firms classified as NCA 1 in Nairobi County. The research used questionnaires to collect data. Data collected was processed using Statistical Package for the Social Sciences (SPSS). The analysed data was presented using charts, bar graphs, and tables. The research was able to obtain 66.5% response rate. The findings of the research indicate that 23.58% ( $R^2 = .2358$ ) project performance were determined by employee involvement in change management. The multiple regression model used deduced that employee involvement in planning, execution and evaluation of change contribute positively towards project performance with coefficients being 0.0953, 0.06576 and 0.2255 respectively. The study therefore concludes that there is a statistically significant positive association between project performance and employee involvement in planning, execution and evaluation of change with employee involvement in evaluation being the most impactful. The study recommends that road construction companies promote employee involvement in change management in order to positively impact their project performance as well as call on academics to further the research by examining intervening variables that may affect the relationship between the two.

**Keywords:** *Project performance, employee involvement in change, change management*

## DEDICATION

I dedicate this work to Ashley Boke, Ninah Mukami and Peninah Cherogony who are my source of inspiration. I also dedicate it to my family and friends who have been with me throughout the research process.



## ACKNOWLEDGEMENTS

I would like to thank God and all the people whose support was instrumental in this study. I am especially grateful to Alexander Kiarie and Dr. Everlyne Makhanu for their sincere support, encouragement and guidance. I am also extremely appreciative to my family, friends and colleagues for supporting me during the course of the MBA program.



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**LIST OF ABBREVIATIONS**

<b>GDP</b>	Gross Domestic Product
<b>KENHA</b>	Kenya National Highways Authority
<b>KURA</b>	Kenya Urban Roads Authority
<b>KSH/KES</b>	Kenyan Shilling
<b>NCA</b>	National Construction Authority



## DEFINITION OF TERMS

### **Change management**

Refers to a systematic and structured process of developing and implementing strategies and interventions for organisations transitioning from current state to a desired state (Wang & Sun, 2012).

### **Employee involvement**

Employee involvement refers to direct participation of employees to help an organisation in fulfilling its vision, mission and key deliverables to meet set objectives (Tefera & Mutambara, 2016).

### **Project performance**

Refers to the degree to which a project achieves its set milestones, performance goals and timeline metrics previously identified in the project plan (Stefanović, Damjanović, & Jaško, 2010).



# **CHAPTER ONE**

## **INTRODUCTION TO THE STUDY**

### **1.1 Introduction**

This chapter introduces the study: the effect of employee involvement in change management on project performance. It first presents the study's background before a statement of the problem that informs it. The general and specific objective of this study are also presented in this chapter which concludes with the significance of the study.

### **1.2 Background of the study**

Organizational change is about optimizing the operating standards of a firm hence requiring that those who trigger change have talent and qualities that deliver success and inspire employee confidence (Jalagat, 2016). Change management in an organization is therefore linked improving organisation's operations and performance (Rizescu & Tileaga, 2016). Change management can be defined as a systematic and structured process of developing and implementing strategies and interventions for organisations transitioning form current state to a desired state (Wang & Sun, 2012). According to Todnem (2014), there are key salient steps concerning successful organizational change management which include creating a sense of urgency for change, communicating the message while getting employees involved in the change process, and also providing a base for the achievement of the change. Creating a sense of urgency refers to the ability to plan for the change. Communicating the message while getting employee involved is about employee involvement in the execution of change while providing base for achievement refers to employee involvement in evaluation of the change. These three areas that were the focus for the study are key to successful organisational change.

There are key elements that inhibit to limit a successful change management process, one of such elements is resistance of employees (Khan, Raza, & Shaju, 2017). It is normal for employees to resist change management however, persistent resistance can threaten the success of any change initiative (Rizescu & Tileaga, 2016) and subsequent failure to realise change goals. Reduction of the persistence resistance through employee involvement is therefore a critical pillar is successful

change management. Employee involvement in change management refers to the change agent strategy of bringing employees on board when implementing change asking their opinions and incorporating them in change efforts when necessary (Tefera & Mutambara, 2016).

There are various approaches to change. In the engineering and construction industry at large, the dominant change approach used is that which aligns to project management. This is technical side of the change focused on designing, developing and delivering the solution that solves a problem or addresses an opportunity. The discipline of project management provides the structure, processes and tools to make this happen (Creasey, 2021). The approach rarely looks at the people side, effecting the change. However, employee participation is important in determining whether change initiatives will succeed in the organization or not (Kunisch, Bartunek, Mueller, & Huy, 2017). Therefore, employee involvement is a prerequisite for the successful implementation of change management within an organization (Dawson & Sykes, 2016).

Deloitte East Africa (2015) notes that Kenya maintains the leading in the scale of road construction projects sector in the East African region, with Ethiopia following closely. The report notes that 20% of all road construction projects in Africa are from the East African region. According to Ethiopian Roads Authority, Modernization and Transformation Initiative with economic growth in Ethiopia expected to accelerate over the last two decades, the need for modernization in the road sector is enormous. (Ethiopian Roads Authority Modernization and Transformation Initiative , 2019). In Kenya, the development of road infrastructure has played an instrumental role in economic development. Improved efficiency within the road construction industry has played a critical role in reduction in transportation costs, expansion, and liberalization of the local economy (Atibu, 2015). Road network development has experienced a steadfast growth, in line with the government agenda to expand connectivity across the country (Jedwab, Kerby, & Moradi, 2017). Notwithstanding recognized benefits of road network development in Kenya, the majority of road construction projects in Kenya are neither completed on time nor within the budgeted costs. Further, it has been noted that more than 70% of the undertaking within the construction industry have not been achieved (Dickson, Gerryshom, & Wanyona, 2015). This study therefore intended to explore how employee involvement in change management has impacted project performance within the road construction industry.

### **1.2.1 Employee Involvement**

Todnem (2014), refers to the steps for successful organizational change management as creating a sense of urgency for change (planning for change), communicating the message while getting employees involved in the change process(execution), and also providing a base for the achievement of the change(evaluation). Employee involvement in the change process of planning, execution and evaluation of change is critical to success of any change efforts as noted by various scholars. Trinidad (2016) noted that employee involvement was found to be among the important factors affecting the successful implementation of change. The study revealed that the involvement of employees in the planning and execution of change management is vital to the success of the change process. Buyaki (2012) revealed that creating an enabling environment and employee participation in the planning contributes to effective change implementation. Nielsen and Randall (2012) found out that employee involvement was important in the realization of important outcomes in the change management process. Tefera and Mutambara (2016) opined that lack of employee involvement in the change management processes leads to some level of resistance hence there is a need for the organization to ensure there is a guaranteed involvement in the process.

Employee involvement in planning for change is ideal as it increases the member's input in the decision-making. To overcome resistance in the organizational change it's ideal to involve the employees in formulating and planning for the implementation of change (Hussain, et al., 2018). This can be implemented through co-opting their ideas, information sharing, conducting routine discussions, and meeting on the change process. This will allow employees to air their opinions and achieve a better sense of control which is key to the adoption of the change (Predișcan & Roiban, 2015). Buyaki (2012) characterizes employee involvement in planning for change as activities centered on the design of activities, the type of support, resources needed for implementation, and knowledge sharing.

Secondly, employee involvement in change management can be portrayed in the execution and adoption of the change (Hussain, et al., 2018). This involves the various behaviors, activities, and processes undertaken to facilitate change management (Cameron & Green, 2019). Imran, Rehman, Aslam, and Bilal (2016) suggested that the execution of change management should be

accompanied by employee empowerment which will help eradicate roadblocks in the process. Further, the organization management should ensure there is effective communication and modeling of employee behaviors. Lines, Sullivan, Smithwick, and Mischung (2015) found out that reviewing structures, controls, and rewards systems can be key to motivating employees to be involved in the execution of change.

Employee involvement in the evaluation of change management is critical to providing structured reporting on the performance of the change activity and its effect on the operations of the firm (Rosenbaum, More, & Steane, 2018). The evaluation of the change process is focused on collecting feedback, assessing the attainment of stated objectives, and identifying any gaps in the change process (Bii, 2017). Fuchs and Prouska (2014) showed there is a direct relationship between perceived organization and supervisor support with change evaluation among employees. The study notes that an effective change evaluation should identify the output and outcomes, the baseline measures, and identify opportunities for improvement in the change process.

### **1.2.2 Project performance**

For road construction companies and purposes of this study, project performance was approached from a project management standpoint. The key performance criteria in project management include cost, quality management and time (Hope & Ebbesen, 2013) These performance criteria informs the various daily organization activities that are key to creating value for the firm and supporting the attainment of the core objectives of the firm (Stefanović, Damnjanović, & Jaško, 2010) which inform the organisation operations of road construction companies. These organizational operations are critical to the success of the organization and they vary from one business to another (Jones, Warnick, & Taylor, 2015).

Alonso, Moura, Ibeas, Olio (2020) found that in the present-day agile business environment it's vital for organizations to be focused on their competitiveness. The researcher contextualizes operational metrics as key parameters that allow for the road construction companies to manage people and processes effectively to achieve desired performance in its projects. Lewis and Slack (2014) noted that organizational operations are characterized by the decisions a firm makes to determine the long-term activities and abilities in the firm and their contribution to the corporate

strategy. Bell, Ndje, and Lele (2013) proposes five operational performance objectives, which include flexibility, dependability or trustworthiness, quality, speed, and cost. On the other hand, Stefanović, Damnjanović, and Jaško (2010) conceptualize organization performance in terms of the attainment of the firm mission, functions, image, and reputation within the market.

Williams (2017) opined that aggregating business metrics can be key to producing an efficient overview of the operational efficiency and performance of an organization. Further, it is noted that the operational excellence of a firm is built cumulatively by enhancing the firm's operational capabilities. It can be developed by building on quality, dependability, flexibility, and cost (Shehadeh, Al-Zu'bi, Abdallah, & Maqableh, 2016). Fok-Yew, Ahmad, and Baharin (2013) contend that performance can be addressed in a company against prescribed standards, such as productivity, cycle time, regulatory compliance, environmental responsibility, and waste reduction. Within the context of this study the project performance metrics within the road construction industry are those that are linked to the project management triangle (quality production, time and cost). The research therefore adopted the contextualization prescribed by Bell, Ndje, and Lele (2013) and Stefanović, Damnjanović, and Jaško (2010) that are linked to the project management triangle which are: Quality production, Cycle time and Cost management.

### **1.2.3 Road Construction Industry in Kenya**

Globally, the developing and middle-level developing countries, just like their developed counterparts, are doing their best to ensure they reach a superior degree in terms of economic and infrastructural advancement (Taofeeq, Adeleke, & Hassan, 2019). Central to the achievement of this degree of development is a vibrant road construction industry that aims to maintain competitiveness (Odumade, Urokor, & Onyekweredike, 2020). Schachtebeck and Mbuya, (2016) contend that particularly the development of road infrastructure has been critical to expanding and integrating the development of economies.

In Malaysia, the construction industry has become one of the main industries that have meaningfully contributed to the country with rapid growth (Rashidi & Ibrahim, 2017). Shibani (2016) reported that the road construction industry in the United Kingdom accounts for 6.5% of the overall job market with more than 103 billion pounds of annual economic output. Studies have

shown that in Nigeria, the road construction industry plays an essential role and cannot be overemphasized as it is apparent that the activities of the industry affect almost every part of the economy accounting for about 16.0% of (GDP) and employ about 25.0% of the labor force (Okoye, Okolie, & Ngwu, 2017).

In Kenya the construction industry is far reaching as it involves various aspects such as building, water and sanitation, roads, bridges amongst others. All contractors and companies undertaking the various construction works are registered and classified under the National construction Authority(NCA). This study focused on road construction aspect of the construction industry. Road transport has over the years remained a key mode of transport in the country accounting for over 80% movement of people, goods, and services (Jebitok & Nzulwa, 2019). Construction and maintenance of Kenyan roads have essentially been supported by the National Treasury through the annual budget allocations and also proceeds to come from Road Maintenance Levy Fund (Dickson, Gerryshom, & Wanyona, 2015). According to Kenya National Highways Authority - KeNHA (2019), the classified road network in Kenya is 63,575 km from a total of 177,800 km. The classified road network has increased from 41,800 km at the time Kenya achieved her independence to 63,575 km today, which implies that the development rate is gradual and less than 600 km per annum.

In the same period, the length of the paved road grew significantly from 1,811 km to 9,273 km. As per the current estimates about 70% (44,100 km) of the classified road network is in good condition and is maintainable whereas the rest 30% (18,900 km) needs rehabilitation or reconstruction (Kenya National Highways Authority, 2019). Locally the National Construction Authority, also known as NCA Kenya is a state agency under Act No. 41 of 2011 Laws of Kenya via which contractors in Kenya are enlisted. NCA is charged with the responsibility of clearing road contractors and builders in Kenya as an overall strategy to eliminate indiscipline contractors and to deal with misconduct in the road construction industry (National Construction Authority , 2021). This study focuses on the project performance of NCA 1 registered road works companies operating within Nairobi County. According to the National Construction Authority (2021), there are 242 firms classified under NCA 1 registered with the authority under road works in Nairobi county.

### 1.3 Statement of the Problem

Ideally, the adoption of change management in an organization is aimed at improving operations and performance (Rizescu & Tileaga, 2016). Successful change management in road construction companies would lead optimization of operations which are linked to superior degree in project performance. Lines, Sullivan, Smithwick, and Mischung (2015) argue that the establishment of change agents, organizational expectations, and involvement of change agents is key to the implementation of change activities especially in engineering and construction firms. In order for this change to occur in workplaces, employers must have significant buy-in and investment in the benefits of prioritizing and developing human resources. High levels of employer and employee engagement is required as workforce development must be a functional part of an enterprise's business model in order to ensure medium to long term sustainability (OECD & ILO, 2017).

However, although organizational change is a common phenomenon in the business environment, most firms lack the necessary knowledge and awareness needed for the effective management of such change (Khan, Raza, & Shaju, 2017). Further, it has been noted that organizations that fail to elicit employee involvement in change implementation fail to survive (Dawson & Sykes, 2016). Most change efforts fail, with literature establishing that 70 percent of change efforts normally fail (Jansson, 2013). Whenever a change is proposed in an organization, there will always be forces for and against those changes (Jalagat, 2016). However, when such changes receive mixed results due to lack of employee participation the entire process is doomed to fail (Tefera & Mutambara, 2016). Similarly, improved efficiency within the road construction is critical. In construction industry, employees are central to necessary change approaches for effective project outcomes (Shash Zaaza & Al Salti, 2020). This is the technical side of the change which focuses on designing, developing and delivering the solution that solves a problem or addresses an opportunity which sometimes fail to look at the people aspect (Creasey, 2021). In the face of evident value of road network development, the majority of road construction projects in Kenya are neither completed on time nor within the budgeted costs with more than 70% of the undertaking within the construction industry have not been achieved (Dickson, Gerryshom, & Wanyona, 2015).

Employees are key stakeholders and change agents in the business thus making employee involvement a prerequisite for the successful implementation of change management within the

organization (Dawson & Sykes, 2016). Employee involvement in change management according to Ongaga (2013), establishes that sense of belonging, ownership, and involvement which as a result leads to better implementation of change management. Successful change management results in improved operations and performance (Rizescu & Tileaga, 2016). Cheche, Muathe and Maina (2017) studied the investigate the mediating influence of organisational commitment on the relationship between employee engagement and performance of selected state corporations in Kenya. The study focused on influence of employee involvement and organisational commitment on organisational performance but did not investigate the antecedent of employee involvement. The present study includes the antecedents of employee involvement; planning; execution; and evaluation to give a better understanding of the construct. Karemu, Nyakora, Thoronjo, and Mandere (2021) assessed the extent of employees` involvement on performance of Mobile Telephone Network Operators in Kenya. Although the nexus between employee involvement and performance was examined; there was no consideration for the contextual role of change management. Wakonyo and Muchemi (2020) investigated how the practices used to manage change could impact the delivery of services of the National Police Service in the County of Uasin Gishu. Chepkwony and Omwenga (2020) investigated the influence that employee engagement has on the overall organizational performance particularly in Kenyan State Corporations. The study was limited to sugar; banking; and transport sector limiting the prospects to generalize the findings to other sub-sectors such as road construction.

The above studies differ from the present study in context and focus. There is a dearth of research into employee involvement with relation with road construction performance. The studies conducted previously have not specifically addressed the relationship between employee involvement and project performance in managing change in road construction works in Kenya therefore presenting a gap hence necessitating this research. The study sought to understand the link between involvement of employees in change process that involves: planning for the change, its execution and evaluation and its impact on project performance.

### **1.3.1 General Objective**

The main purpose of this study was to determine the effect of employee involvement in change management on project performance of the road construction industry in Nairobi County.

### **1.3.2 Specific Objectives**

- i. To determine the effect of employee involvement in the planning of change management on project performance of the road construction industry in Nairobi County.
- ii. To establish the influence of employee involvement in the execution of change management on project performance of the road construction industry in Nairobi County.
- iii. To determine the effect of employee involvement in the evaluation of change management on project performance of the road construction industry in Nairobi County.

### **1.3.3 Research Questions**

- i. What is the effect of employee involvement in the planning of change management on project performance of the road construction industry in Nairobi County?
- ii. What is the influence of employee involvement in the execution of change management on project performance of the road construction industry in Kenya?
- iii. What is the effect of employee involvement in the evaluation of change management on project performance of the road construction industry in Kenya?

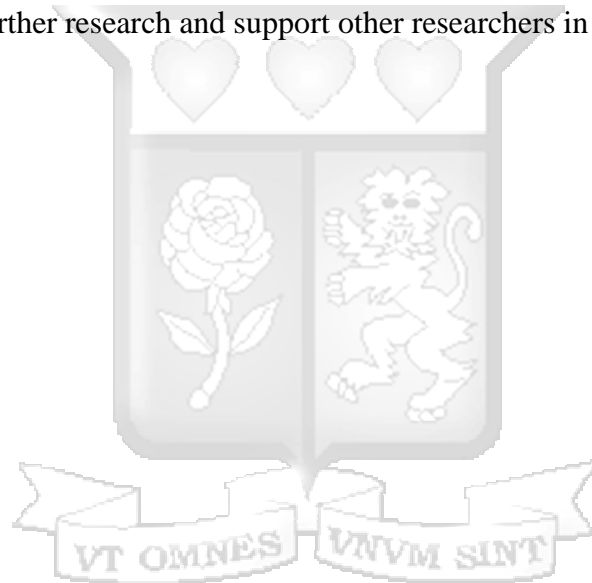
## **1.4 Scope of the Study**

The main focus of the study was to determine the effect of employee involvement in change management on project performance of the road construction industry in Kenya. The geographical scope of the study focused on three registered road construction companies under NCA 1 operating within the Nairobi county. The conceptual scope of the examination focused on the effect of employee involvement in the planning, execution, and evaluation of change. The time scope of the study was carried out in 2022.

## **1.5 Significance of the Study**

The findings arising from the research study are useful in providing additional knowledge for better understanding employee involvement in change management and project performance. This study benefits government practitioners and bodies mandated to oversee road construction projects (KENHA, KERRA, KURA) to better understand project performance linking to road construction company's performance. The findings arising from the research study are also useful in providing additional knowledge for better understanding employee involvement in change management and project performance.

To the road construction firms in Nairobi, this study is beneficial. It will ensure the quality of work and they will be able to meet set timelines which were, in turn, ensure that cost is controlled. Internally the road construction firms stand to benefit since, with the proper work process, they will be able to meet the set strategies and achieve their overall goals and targets giving them a competitive advantage over their competitors. Further, the results will assist the management come up with appropriate strategies to implement relevant elements of change management processes that have a positive effect on the operations of the firm. The findings are useful for academic purposes and for other researchers looking to fill in gaps in research addressing the impact of employee involvement in change management on project performance. The study intends to publish its findings in African Journal of Management or other suitable journals therefore acting as a stepping stone for further research and support other researchers in literary citations.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter details the study's theoretical and empirical reviews. It first presents the study's theoretical background before carrying out a critical review of previous researchers' findings on the relationship between the study variables. It then presents a short review of the identified gaps in the literature review then concludes with a conceptualization of the study variables in a visual conceptual framework.

#### **2.2 Theoretical Review**

This section presents the study's theoretical background. It details various theories that formed the foundation of the study of the effect of employee involvement in change management on project performance.

##### **2.2.1 Project Management Competency Framework**

This theory was established by McClelland and McBer in the 1980s (McClelland & McBer, 1980). The model is also credited to the Association for Project Management (APM) and the Project Management Institute (PMI) for significant improvement in the contemporary project managers' core competencies (De Rezende, & Balckwell, 2021). According to the proponents of this framework, superior performance levels and goal realization are products of the individual in-charge's competency and job situation. Competency in this case is defined as a cluster of related skills, knowledge, attitudes, and other personal traits that play a significant role in determining how individuals approach certain risks or tasks. The study attributes competency to an individual's training level and degree of autonomy afforded by their superiors (PMI, 2011). This framework is key in explaining the role played by different groups within an organization in monitoring and evaluation of development projects and how group dynamics impact project outcomes.

Gladder (2010) affirms that project managers have to possess the requisite knowledge, tools and skills, and apply them appropriately to deliver as expected and be able to achieve the project's

goals and optimize the integrated cost, schedule and efforts. Regarding infrastructure projects, Gasrishi and Huemann (2014) argue that project managers need to be able to select a wide range of management practices and tools that will improve project outcomes. Further, having adequate skills means managers have the ability to apply different strategies to different projects to optimize project performance. A structured approach has thus become the mainstream approach in most modern projects to promote the consistency of project outcomes and ensure that the workforce has the necessary skills and competencies for effective goal realization. The theory proposes that each team members' competency be assessed and recorded into a competency profile database which should be updated and reviewed frequently (Kometa & Jubb, 2013).

Project managers in today's road construction industry are aware of the significant shift in the roles and functions that they are required to perform. Adapting to these changes is key to maintaining the professional competency standards of projects. Further, Francis and Ronald (2010) affirm that managers are recognizing the role played by employees in determining the success of projects through being involved in various stages of the strategy execution process. The study affirms that the level of employee participation in the change process is dependent on their skills and competencies, arguing that competency building is key to promoting employee participation in strategy planning, evaluation, execution and implementation.

The framework asserts that traditional management approaches are ineffective in modern execution of road infrastructure projects. Ryssel (2013) argues that traditional management placed too much focus on precise work breakdown structure, control rules, long term planning and rigid structures which were the main causes of failure of road projects. Soderland (2012) emphasizes the role of employees in promoting successful strategy implementation through identification of critical project needs, risks and means of mitigating the identified risks to ensure that projects meet their scope, time, cost and quality, while managing risks and mitigating physical and human harm. The framework calls for the involvement of project teams in operations monitoring and risk evaluation as a means of improving project outcomes.

Ruth and David (2011) argued that managers should ensure that they recruit employees with the skills and competencies that will meet the project requirements, and ensure that the employees receive adequate training to develop these skills to ensure successful goal realization and desired

project outcomes. Simmons (2014) showed how the changing nature of operations in the road construction industry in terms of regulatory requirements and required standards has forced managers to seek highly qualified employees who can participate in more than just strategy execution. They have to possess technical competencies, behavioral competencies and contextual competencies (Triestch, 2015). They have to be able to recognize and understand organizational goals, requirements and conditions of the project, recognize and understand the risks of the project and managing them effectively, understand project structures, scope and deliverables and plan and organize resources required for the project.

This framework is significant to this study since it identified the technical, behavioral and contextual competencies that construction firms require to ensure successful goal realization and execution of change processes. It also challenges the top down nature of project management as was traditional approach in construction industry and instead promotes project supervision and enhancing team work at all levels. For this study, this theory infers involvement of employees during the change management process in the construction of infrastructure projects as key in achieving desired performance levels.

### **2.2.2 ADKAR model**

This study also found its theoretical foundation on the ADKAR change model. It was developed by PROSCI in 2004 and is a change management model that particularly complements project management. The ADKAR model is sequenced by how an individual experience the change focusing on people change adaptation, as opposed to the change itself (Galli, 2018). The model has been extended to businesses to increases likelihood of successful implementation of change. The acronym stands for five elements. These are: Awareness, Desire, Knowledge, Ability, Reinforcement

Awareness for the need for change is the first of the five. It refers to the persons understanding the nature of the change, why it's being made and risk of not changing. In relation to project management Galli (2018) underpins that awareness refers to when an organization or project team informs employees of a need for change. In order for employees to be truly aware of the necessity for change, they must not only understand the reasoning behind it but also come to agree with that

reasoning. According to Prosci (2019), resistance is a natural human reaction to change even in the best circumstance therefore awareness for the need to change therefore is a critical component to overcoming resistance.

Second is the desire and need to participate in change. In order to foster desire, change leaders need to get specific about the benefits of the change as they apply to particular individuals or teams. (Prosci, 2019). It is important to try elicit desire for change from the employees and project team requires the motivation to participate in the change along with the ability to perform necessary changes. (Galli, 2018). In order to foster desire, project management team leaders need to get specific about the benefits of the change as they apply to particular individuals or teams.

Knowledge refers to information on of how to change is another tenet of the ADKAR model. The knowledge milestone in the ADKAR Model is primarily about training and education. In order to begin the transition, individual or team will need to understand how their responsibilities, skills, tools, and processes will impact knowledge provided needs to each team's or individual's responsibilities (Prosci, 2019). Therefore, it is important for employees to gain knowledge and understanding on how to change and what necessarily the change entails. Also important is the ability to launch desired skills and behavior. This refers to the realization or ability of turning the knowledge into action. It which refers to the skills set required to implement change on a day-to-day basis. Key activities during these during implementation of change in project management where knowledge and ability tenets are implemented are coaching, mentoring and training (Karambelkar & Bhattacharya, 2017).

Lastly, reinforcement to sustain the change. This can be both internal and external factors Reinforcement is then needed to maintain and sustain change in the organization or project (Gailli,2018). Reinforcement is a goal or outcome of adoption measurement, corrective actions, and recognition of successful change. Positive recognition is a great way to reward employees for working hard to make changes and demonstrate to the organization that participating in the change is important. If some employees are reverting to workarounds or old processes, follow-up is needed to understand their barriers to changing (Prosci, 2019). This model has been used extensively in explaining and directing successful change management across various institutions.

The ADKAR change management model and project competency framework form a foundation to this study as they both converge in leveraging on the role an individual employee plays in the attainment of a desired organizational goal. In relation to this study, the employees would be playing a role therefore in terms of their involvement in change efforts and as a result they would impact project performance of road construction companies.

## **2.3 Empirical Review**

This section presents the study's empirical background. It details various studies that inform the study of the effect of employee involvement in change management on project performance.

### **2.3.1 Employee Involvement in the planning of change management and project performance**

In a study on the involvement of low-level employees in organization strategy planning and implementation, Hamdan (2020) adopted a mixed methods research collecting data from published literature, interviews and questionnaires. The study focussed on firms in the Turkish service industry. The study revealed that low-level employees were rarely consulted in the planning phase, and a high percentage of them were not entirely aware about the organization's long-term strategy, but they were involved in the implementation of formulated strategies since their roles were linked to the firm's strategic goals. The study noted that a lack of participation in the planning phase led to poor understanding and implementation of certain change processes, thereby impacting performance outcomes. The findings of this study are insufficient since they were sought from low-level employees while the current study explores all employees, low-level and those with significantly more power dynamics.

Zafar and Naveed (2014) sought after the steps taken by managers to deal with employee resistance to organizational change, noting that effective management requires that firms are able to manage employee resistance to organizational change. The study determined different stages of organizational change and associated them with their corresponding chances of inciting resistance; incremental change, and transformational/ radical change. Further, developments in technology, international economic integration, domestic market maturation and globalization were among the main drivers of organizational change. The study analysis showed that lack of employee

involvement in change planning, lack of communication, lack of adequate skills and competence of employees, unsupportive organization structures and limited resources were limiting employee's impact in change processes. The study noted that building change capacity, communicating change projects, training employees on emerging technologies and ensuring their representation in planning and monitoring committees is essential in reducing employee resistance to change. The study looked at factors contributing to change resistance; the current study has addressed how involvement in planning, evaluation, monitoring and implementation impacts project performance.

Jonja (2014) determined that lack of employee involvement in planning and evaluation was negatively impacting the performance outcomes of the Ethiopian Road Construction Corporation. The study involved data collected from employees stationed at three major road construction projects in the country. The study adopted a descriptive survey method since the researcher sought for the opinions of employees. The study determined that lack of transparency, lack of consistency, accuracy and objectivity was limiting the strategy evaluation process. The respondents showed that lack of competency-based considerations in role allocation and poor grievance handling was impacting employees' trust and confidence in set targets, thus decreasing employees' ownership of, and commitment to implementing strategic plans. The study recommended a different approach to performance evaluation and staff involvement in the strategic change management process. The study focussed on employee evaluation and challenges of road construction in Ethiopia, the current study has assessed road construction industry from a Kenyan context.

Mambula, Francis and Oaya (2021) investigated the impact of employee involvement in decision making on strategic goal realization. The study involved 50 employees randomly selected in a descriptive research design study. The study concluded that all three forms of employee involvement; participative management, representative management and quality circles were essential for organizations to meet their strategic goals. The study noted that joint decision making, representation by a group of employees in strategic planning and management decisions and having regular meetings to carry out internal assessment and address current problems improves operational efficiency and strategic goal realization. Further, the study concluded that employee involvement in strategic decision making improves manager-employee relationship, employee morale and productivity. This study investigated strategic goal realization while the current study

looked at determining the effect employee involvement in change management among firms associated with road construction projects.

Oyugah and Onyango (2019) studied the relationship between stakeholder involvement and operational performance of road construction projects that were being executed in Uasin Gishu County, Kenya. The study was grounded on the stakeholder theory and adopted a descriptive research design. The study involved KeNHA, KeRRA, KURA, NCA technical staff and members of the public transport sector. The study adopted census sampling and analysis involved descriptive and inferential statistics. The analysis of the data from firm and beneficiary representatives showed that although there was minimal involvement of stakeholders in planning, they were extremely involved in execution, evaluation and monitoring. The study noted that it is important for road construction firms to incorporate stakeholder opinions, but objectively due to the technicality of the construction process. Further, the companies were recommended to involve stakeholders in mapping and improve on the quality of information disseminated to stakeholders to increase project performance. Although establishing a positive relationship between stakeholder participation and project performance, the study findings are not representative of the current study since they report the opinions of all stakeholders; the current addressed only employees as internal stakeholders.

Osman and Kimutai (2019) sought after the main factors determining the success of road projects in Wajir County. Specifically, the study assessed the how contractor's competency, capacity in resource management, involvement of target beneficiaries and internal goodwill impacts firm's goal realization. The theory of project management, participatory development theory and the program theory were key in informing the researcher, while a descriptive research design was adopted. Analysis showed that the above factors all have a strong influence on project execution and continuity. The study noted that resources mobilization, competency of the contractors in managing internal resources competency and target beneficiary participation had the most impact in determining the outcomes of road construction projects. Although this study determined a strong relationship between internal staff involvement in project completion, its focussed on external participants while the current study sought to explore how internal employee factors impact the performance of road construction projects in Kenya.

### **2.3.2 Employee involvement in the execution of change management and project performance**

Jesus, Anny and Annabelle (2018) sought after the management's perspective to examine the role and effect of employees in project execution in Venezuela. The study which involved a single company adopted an exploratory and descriptive research design, carrying out in-depth interviews involving nine managers. The study found a positive and significant relationship between employee involvement risk management, risk planning and preparation of a safety design plan thus improving safety performance of public projects. The study also showed that involving employees in risk management improves the managements' quality performance metrics and aids in employees' competency development. The study focussed on the role of employees in designing, evaluating and monitoring of safety practices in industrial manufacturing plants, the current study assessed employee involvement in change implementation, not only on safety management changes.

Amarachi (2021) carried out a study investigating the impact of employee involvement in decision making on the organizational performance of manufacturing firms in Delta State Port, Nigeria. The study specifically examined how employee representation in the board and employee collective bargaining impact firm strategic goal realization. The study adopted a descriptive survey research design and sampled a total of 199 respondents out of a possible 390 employees. Data analysis involved mean score, standard deviation and regression analysis. The study reported that representation of employees on the board had a significant impact on management performance while employee collective bargaining was reported to have a positive but insignificant impact on growth performance. The study determined that employee collective bargaining had an insignificant impact since it could not impact employee satisfaction factors such as wages, working conditions, transport, leave among others. The study recommended organizations adopt systematic, strategic and structured decision making processes that are formulated over regular meetings where employees are involved, and suggestions evaluated and implemented based on their merit and applicability. The study evaluated employee involvement and performance among manufacturing firms while the current study sought to address the same in road construction firms.

Osei-Bonsu (2014) carried out a study on the impact of employee involvement in change management on job satisfaction. The study also sought to find out how employees felt after the implementation of organizational change. The study adopted a descriptive survey research design simple random sampling was used in selection of 140 respondents selected from 10 bank branches. The study findings showed that limited information sharing about new managerial initiatives was limiting employee participation in the entire change management process; this, coupled with limited employee representation in change management committees resulted in lack of complete trust in the change management process. However, respondents showed high satisfaction and a positive attitude after the implementation of change management processes. Explaining target goals and plans resulted in reduced absenteeism, reduced labour turnover and positive work attitudes which improved service delivery. This study investigated employee involvement in change management within a single firm in the financial sector; the current study addressed the same in the road construction industry.

Kochola (2020) sought after the influence of stakeholder involvement on performance and effectiveness of road construction projects in Kilifi County. Specifically, the study sought after how stakeholder participation in project identification, project planning, project implementation and project monitoring affects outcomes of road construction projects in the county. The study adopted a descriptive research design and was guided by the stakeholder theory, community development theory and the theory of reasoned action. The analysis determined that all the study variables have a significant relationship with project outcomes and that construction firms were involving multiple stakeholders in project assessment, analysis, and selection of viable, tenable and beneficial road construction projects. Stakeholder participation resulted in enhanced project efficiency, improved cooperation and effectiveness of the implementation process. The study noted that the management plays a key role in initiating the stakeholder involvement culture and that it was paramount that stakeholders be involved from the start to the completion of the projects. The study focused on all stakeholders within the context while the current study sought to address employee involvement in project execution as the main stakeholders.

In a descriptive-based study, Waweru (2018) investigated the relationship between teamwork approach on road project performance in Kenya's Kericho County. Teamwork was investigated in terms of team leadership, team spirit, team trust, recognition and reward influence the performance

of road construction projects. The study adopted stratified random sampling in selection of KeRRA project managers, contractors and consultants as the representatives. The study reported that all the elements of team involvement had a positive and significant impact on project performance. However, the study noted that it is still necessary for road construction firms to fully implement teamwork efforts to realize its full benefits. Recommendations were for the firms to have clearly defined and realistic goals, roles and responsibilities in all construction projects. While this study found a positive relationship between the study objectives, the current study expounds on this by focussing on how involvement of employees change management influences project performance, whether in teams or individually.

### **2.3.3 Employee involvement in the evaluation of change management and project performance**

In a study that was carried out on listed manufacturing firms in Macedonia, Sofijanova and Zabijakin-Chatleska (2013) sought after the relationship between employee involvement in decision making and problem solving and perceived organizational performance. The study sampled employees from all the 36 listed firms to specifically determine how employee participation and empowerment and the use of self-managed teams affects the operational outcomes of the firms. HR managers were consulted to address the question on extent of employee involvement while Chief Operations Officers provided information on perceived organizational performance. The study analysis showed a significant intercorrelation between the study variables, reporting that increasing employee participation in organizational planning and empowering them to make decisions significantly increases the effectiveness of self-managed teams. The study, however affirmed that institutions implement employee involvement programs with a systemic and integrated approach. Although study variables are similar, this study focused on manufacturing firms while this study addressed impact of employee involvement in change management on project performance of road construction firms.

Buniya, Othman, Durdyev, Sunindijo and Ismail (2021) investigated construction firms in Iraq with the aim of determining the main factors determining the implementation of safety programs and how this impacts the death rate of construction employees. The study adopted a mixed research methodology composed of interviews, literature review and questionnaire surveys.

Exploratory factor analysis was applied on the collected data and the results showed four main interrelated groups. The study affirmed that management support forms the foundation implementation of safety programs. However, this is only possible through employee involvement in the planning and execution process. Therefore, committed management facilitates an environment where employees can carry out and voice out safety concerns. The study determined that employees should be involved in setting safety objectives, safety policies, and evaluation of safety programs. Managers should, on their part provide visible leadership, accountability, institute safety reward programs, involve employees decision making initiatives related to their safety. The study sought after elements that promote safety program implementation in construction firms, while the current sought to address the impact of employee involvement in project performance.

Ejere and Jarbandhan (2019) carried out a literature review to examine the effect of employee participation in workplace decision making on organizational performance of Nigerian firms. The study adopted a qualitative research design. The literature analysis showed a substantial increase in employee performance levels with increased participation in the decision making process. The study determined that employee participation had different dimensions ranging from sharing views and opinions, being involved in consultations, participative management, collective bargaining, work councils, representation in management boards and workers' cooperatives and unions. The study noted that promoting employee participation through any of these mediums improves firm's decision making capacity hence improves performance. The study noted the influence of employees in generating alternative solutions, evaluating and selection of the best alternatives, implementing the chosen alternative and evaluating the long term impacts of alternatives. The study adopted a literature review design while the this study relied on primary sources of data.

In Zimbabwe, Thomas, Tendai, Zororo and Obert (2019) investigated the relationship between employee involvement in change management and operational performance of the Zimbabwe Electricity Transmission and Distribution Company (ZETDC). The study adopted a case study design and a mixed research method approach, employing both quantitative and qualitative analysis methods. Chi Square Tests were utilized in analysis of the levels of employee involvement and determining factors of employee involvement. The study noted that while the organization had undergone several significant changes, employee involvement in the change process was minimal. The study recorded the employee level of education, years of work, skills and experience as the

main determinants of employees' intention to get involved in the change management process. Recommendations were for the firm to create a shared vision since this has been linked to increased unity and understanding of the change process. Timely distribution of planned changes, engaging employees throughout the change process, promoting teamwork efforts amongst employees, regular communication and feedback on employee suggestions, continuous training and development of employees at all levels, use of incentives and ensuring adequate resource provision were among the recommended measures to increase employee participation in the change process. This was a case study investigating one company's change management process while the current study involved several road construction companies.

In a study on the perception of employees in target setting and its impact on organizational performance, Muchohi (2014) carried out a case study involving the Nairobi Metropolitan Development, Ministry of Lands, Housing and Urban development. The study involved all the departmental heads and adopted a descriptive research design. Analysis showed that employees perceive that they have adequate representation when performing target setting exercises. The outcome is that the firm has been able to develop a culture of continuous improvement. The study determined that employee involvement in target setting increases the management's ability to identify priority areas enabling them to dedicate resources more appropriately. It is also key in determination of appropriate rewards and recognition. The study recommended that firms increase the capacity of their employees in target setting and address performance acknowledgement and recognition issues since corruption and other unethical practices were negatively impacting employee efforts. This study focussed on operational performance of the capital city's metropolitan services' department, the current study addresses employee involvement in evaluation efforts within road construction firms in Nairobi.

In a similar study on stakeholder participation on performance of road construction projects, Nyandika and Karanja (2014) sought after how technology capability, user involvement, top management support and resources availability influence stakeholder participation. A descriptive research design was thus adopted. Stratified sampling was adopted in selection of the study respondents who comprised of contractors, managers and consultants. The study determined that stakeholder awareness, involvement in feasibility assessment, and the management role in organization of conferences and seminars where stakeholders can express their opinions improved

project execution. Additionally, IT components, the internet, IT policies and IT skills were essential elements promoting stakeholder involvement in the planning, implementation and monitoring of road construction projects. The management was noted to play a central role in overseeing funding approvals, commitment, participation and approval of road projects by KeNHA. The study investigated stakeholder involvement and completion of road projects only initiated by KeNHA while the current study focused employee involvement in road construction companies and its influence on project performance.

## **2.4 Summary of Gaps**

The section above carried out a review of previous researcher's findings on the relationship between employee involvement in strategy planning, strategy execution and strategic evaluation on strategic change management. From the review, various gaps were identified. Below is their summary. Although finding a positive correlation between involvement and strategy planning and execution, the study by Hamdan (2020) focused on involvement by low level employees, while the study by Zafar and Naveed (2014) sought after investigating elements that contribute to resistance to organizational change. Jonga's (2014) study did not assess how employee involvement in change execution impacts performance.

The study by Osman and Kimutai (2019) examined the factors that contribute to project success, including contractor competence; the current study solely focuses on employee drivers of organizational change planning, execution and evaluation. The study by Jesus, Anny and Annabelle (2018) carried out a case study which collected managers opinions on the importance of employee involvement while the current study sought after employees' opinions on the importance of their involvement in determining strategic change outcomes. The study by Amarachi (2021) involved strategic change measures in Port-based firms, while Osei-Bonsu (2014) looked at employee involvement in change management and how it influences employee job satisfaction. Further, the study involved financial institutions. The findings from Sofijanova and Zabijakin-Chatleska's (2013) study are also inadmissible in the current study since it investigated firms based in Macedonia whose national culture is significantly different from the Kenyan context. The current study seeks to address the above gaps by examining employee involvement in change

factors and how it influences project performance within the road construction companies in Kenya.

## 2.5 Conceptual Framework

The conceptual framework in Figure 2.1 identifies the diagrammatical representation of the relationship between the independent and dependent variable of the study. The aim of this research was to determine the effect of employee involvement in change management on the project performance of the road construction industry in Kenya.

### Independent Variables

#### Involvement in Planning:

- Formulating change
- Knowledge sharing
- Co-opting employee ideas
- Routine discussions

#### Involvement in Execution:

- Effective communication
- Control and review of structure
- Modelling employee behaviours
- Adoption of change

#### Involvement in Evaluation:

- Collecting feedback
- Assessment of change goals
- Identification of change gaps
- Identification of change initiatives

### Dependent Variable

#### Project Performance:

- Quality production
- Cycle time
- Cost management

**Figure 2.2: Conceptual Framework**

The conceptual framework above identifies how various aspects of employee involvement in change management within road firms can be conceptualized and the measures of project performance. The variables are operationalized as shown in Table 2.1.

**Table 2.1: Operationalization of Variables**

<b>Variable</b>	<b>Indicators</b>	<b>Measurement</b>	<b>Data analysis</b>	<b>Information source</b>
<b>Involvement in Planning</b>	Formulating change Knowledge sharing Co-opting employee ideas Routine discussions	Structured questionnaire; 5-point nominal type Likert scale	Descriptive analysis and inferential analysis	Buyaki (2012); Predišcan and Roiban (2015)
<b>Involvement in Execution</b>	Effective communication Control and review of structure Modelling employee behaviours Adoption of change	Structured questionnaire; 5-point nominal Likert scale	Descriptive analysis and inferential analysis	Imran, et.al. (2016); Lines, et.al. (2015)
<b>Involvement in Evaluation</b>	Collecting feedback Assessment of change goals Identification of change gaps Identification of change improvements	Structured questionnaire; 5-point nominal type Likert scale	Descriptive analysis and inferential analysis	Bii, (2017); Fuchs and Prouska (2014)
<b>Organization Operations</b>	Flexibility Quality Speed Costs	Structured questionnaire; 5-point nominal type of Likert scale	Descriptive analysis and inferential analysis	Bell, Ndje, and Lele (2013); Stefanović, Damjanović, and Jaško (2010)

## 2.6 Chapter Summary

This chapter has detailed the study's theoretical and empirical reviews. It has presented various theories that the study based its foundation on. It has also carried out a critical review of previous researchers' findings on the relationship between the study variables. It has also pointed out gaps in the literature review then concludes with a conceptualization of the study variables in a visual conceptual framework.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The third chapter focuses on the methodology that was applied in determining the effect of employee involvement in change management on the project performance of road construction firms in Nairobi County. The chapter comprises the research paradigm, the design, and the population of the study. Further, the study chapter identifies the sampling design, data collection instruments, research quality, and data analysis and presentation techniques.

#### **3.2 Research Philosophy**

Cazeaux (2017) contends that the research paradigm relates to the development of knowledge and the nature of that knowledge. The research philosophy assists researchers to adopt a relevant philosophical approach that can be meaningfully applied to research. It contains several assumptions which include; ontology, axiology, objectivism, epistemology, and positivism. Positivism research philosophy was used to guide this study. Žukauskas, Vveinhardt, and Andriukaitienė (2018) revealed that positivism research adopts the philosophical stance of the natural scientist and realism which relates to scientific inquiry. This study therefore applied this philosophy in order to evaluate the effect of employee involvement in change management antecedents of planning; execution; and evaluation on project performance of the road construction industry in relation to positivist research philosophy.

#### **3.3 Research Design**

The research design refers to the general plan whose aim is to address the specific objectives of the topic under review (Bellamy, 2011). This research implemented a descriptive research design. Blumberg, Cooper, and Schindler (2014) stated that a descriptive study is designed to research an occurrence to understand what, where, and how. With descriptive research design, a researcher has an opportunity to have a clear view of the problem from other related sources and narrows the research around these important items. This survey design was suitable since it was used to describe how the variables support the objectives under investigation and it was possible to

determine the relationship that exists between them (Tobi & Kampen, 2018). The research was able to generalize the findings to a large population.

### **3.4 Target Population**

The target population can be described as the complete group of objects or elements that are relevant to a proposed research project (Blumberg, Cooper, & Schindler, 2014). Elements of a population can be described as relevant if they possess relevant information the research project is designed to collect (Ragab & Arisha, 2018). The target population for the study comprised the employees of NCA 1 road construction companies. Companies within this classification (NCA 1) differ from the rest (NCA 2- NCA 8) in various aspects such as resources, operations, and how they implement change initiative. The NCA 1 road construction companies participate in unlimited contract value, they hire specialist contractors and they undertake large scale construction works, providing fair representation of the industry (NCA, 2021). The respondents were hence deemed proficient in providing information relevant to solve the research problem. As a result, employees from these companies inform the unit of analysis involving road construction firms within the county.

### **3.5 Sampling Design and Sample Size**

A sampling frame may be defined as the list of all elements in a population from which the sample is drawn (Bechhofer & Paterson, 2012). The sample frame comprises the precise list of members of a given population (Bellamy, 2011). The sample frame for this study consisted of employees of three registered NCA 1 road construction companies operating within Nairobi County. The selection of Nairobi County was informed by the large-scale road construction works in the city. Some of the major ongoing road construction projection in Nairobi County include: Nairobi Expressway (27km in length) at a cost of Sh62bn, James Gichuru-Rironi Road (25km) costing Sh16. 4bn, and Outering Road (13km) projected to cost Sh11. 7bn, all being implemented by NCA 1 companies (NCA, 2021). Sing and Masuku (2014) define the sampling technique as a process of selecting a representative sample size from the targeted population. The research employed purposive sampling in selecting three NCA 1 companies as they all had the companies had been in operation for over 10 years and also provided consent for data to be collected for purposes of

this study. In particular, H Young Company E.A Limited, Cale Infrastructure Construction Company, and Nyoro Construction Ltd have consistently been ranked among the industry leaders. This has been exhibited in the annual Construction Excellence Awards (CEAs), categories of optimal completion time; road surface durability; compliance with the workers’ safety standards; and optimal team performance and the ability to operate within the necessary budget limits (NCA 2021). The sample frame is shown in Table 3.1.

**Table 3.2: Sample Frame**

<b>Firm</b>	<b>No of employees</b>
H Young Company E.A Limited	320
Cale Infrastructure Construction Company	101
Nyoro Construction Ltd	107
<b>Total Population</b>	<b>528</b>

*Source: Researcher (2022)*

Sample size in statistics is important because it assists the researcher to determine the accuracy and reliability of the survey findings (Bellamy, 2011). Since the target population of the study is known as 528 employees, Yemen’s formula was adopted in the computation of the sample size (Ragab & Arisha, 2018). The sample size for the study was therefore calculated as shown below;

$n$  =sample size,

$N$  = population size (528 employees)

$e$  =level of precision (a p-value of 0.05)

$$n = \frac{N}{1 + N(e)^2}$$

$$\frac{528}{1 + 528(0.05)^2} = 227$$

The sample number of respondents for the study based on the application of this formula was 227.

Using simple random sampling the study intended to collect responses from 227 employees from three NCA 1 construction companies in Nairobi.

### **3.6 Data Collection Instruments**

This study relied on primary data because the researcher sought information from the respondents directly (Tobi & Kampen, 2018). The first section had three (3) questions focused on respondents' demographic information. The second section of the questionnaire contained eight (8) questions based on employee involvement in planning of road projects. The third section of the questionnaire had ten (10) questions related to the employee involvement in execution of road projects. The fourth section of the questionnaire contained nine (9) questions related to employee involvement in evaluation of road projects. Lastly, the fifth section of the instrument comprised of four (4) statements on the dependent variable, road project performance. A five Point Likert Scale was used to establish the degree to which different employee involvement aspects influenced project performance from: strongly disagree represented by 1, disagree is 2, neutral is 3, agree is 4 and strongly agree is 5. Mugenda and Mugenda (2019) endorse that Likert scale as the most preferred technique to adopt in quantitative studies to establish the respondents' level of attitudes in regard to definite statements in the questionnaire.

### **3.7 Research Quality**

The research procedure implies the specific activities and processes which the researcher performs when conducting a study and ranges from proposal development to data collection through to data analysis (Bechhofer & Paterson, 2012). The study adopted a participant informed consent form in order to ensure that all the respondents who participated in the study were aware of the objectives and aims of the research. The research made sure that necessary approvals were obtained from the school and other regulatory agencies before conducting the survey. The study employed a drop-and-pick method in the data collection. In incidences where, physical data collection was not permissible the study utilized Google forms to collect the responses of the participants. Lastly, the study conducted pre-tests of the study instrument to determine the quality of the research tool.

### 3.7.1 Reliability

Reliability is the ability of the test instrument to give the same results in repeated trials. To ensure the same questionnaire produces similar results in repeated trials (Taherdoost, 2016). The reliability of questionnaires was tested using Cronbach alpha. According to Cronbach (1951), a reliable coefficient ranges between 0.7 and 1.0 (Heale & Twycross, 2015). Any question or group falling into this range is deemed to be reliable according to Cronbach alpha scores. The reliability test was conducted from the responses obtained from the pilot test. The Cronbach's Alpha of both the independent and dependent variables demonstrated that the study questions were reliable with acceptable, Cronbach's Alpha ( $>.7$ ). The study had three independent variables based on employee involvement and a dependent variable. The three variables had acceptable Cronbach's Alpha with all the questions but few questions recommended for deletion or editing to improve on the reliability threshold as presented in Table 3.2. The only variable which had all the 10 questions retained was execution with Cronbach's Alpha of .922, planning had 8 questions and Cronbach's Alpha of .831 and evaluation with 9 questions and Cronbach's Alpha of .729. Lastly, project performance as the dependent variable had 5 questions with Cronbach's Alpha of .813. the overall score for each questionnaire was .824.

**Table 3.3: Reliability Analysis**

Items	Cronbach Alpha	No. of Items
Involvement in Planning	.831	8
Involvement in Execution	.922	10
Involvement in Evaluation	.729	9
Project Performance	.813	4
Overall score	.824	31

### 3.7.2 Validity

Validity is the ability of an instrument to measure what it is intended to measure (Heale & Twycross, 2015). In order to ensure the questionnaires were valid, the accuracy was tested during the pre-test among the respondents randomly. The study implemented construct validity in assessing whether the research tool is comprised of all the parameters of the research variables in

the conceptual framework. Further, content validity was conducted through a review of the research tool with the assistance of the research supervisor.

### 3.7.3 Pilot Test

The research quality is involved in the determination of the accuracy, completeness, and internal consistency of the instrument (Ragab & Arisha, 2018). In this case, 10% of the sample size translating to 15 respondents participated in the pre-testing of the questionnaire.

### 3.8 Data Analysis

The collected research data was edited and screened for any errors before the data analysis approach. The rationale of data screening is to get rid of outliers that are occasioned by non-responses and inappropriate responses (Mitchell & Jolley, 2012). The research adopted a quantitative analysis with both descriptive and inferential analysis being applied. The analysis was conducted with the aid of the Statistical Package for Social Sciences (SPSS) program. Descriptive statistics comprised of frequencies, means, and standard deviations. In the computation of the mean, for every question item, total number of responses for each sentiment level was established. Thereafter the sum was divided by the total response for the given question. On deriving the standard deviation; deviations from the mean for each data point was computed. The square of each deviation was arrived at and summed to establish the variance. The square root of the variance resulted to the standard deviation.

The inferential statistics included Spearman's correlation coefficient and multiple linear regression to examine the type and magnitude of effect between the variables, respectively. ANOVA tests were also conducted to examine the significance of the study model. The analysed data has been presented using charts, bar graphs, and tables. The following multiple linear regression has been applied;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where;

Y = Dependent variable (project performance road construction firms)

$\alpha$  = the model intercept

$\beta_{1,3}$  = Coefficient of independent variables

$X_1$  – employee involvement in the planning of change

$X_2$  – employee involvement in the execution of change

$X_3$  – employee involvement in the evaluation of change

$\varepsilon$  = Error Term

### **3.9 Ethical Considerations**

The survey adhered to the various research guidelines as stipulated by the ethical committee and the university. The research conducted a debrief of the research assistants on the various aims of the study and the approaches to be adopted in data collection. Secondly, the study sought ethical clearance from the university and apply for a research permit from the National Commission for Science Technology and Innovation. The survey also adhered to confidentiality guidelines and ensure that no identifiers are sought from the participants. The research ensured that the anonymity of the study participants was assured during the study. Lastly, the collected study data was only utilized for the stated academic purposes and cannot be shared with any third parties.



## CHAPTER FOUR DATA ANALYSIS AND INTERPRETATION

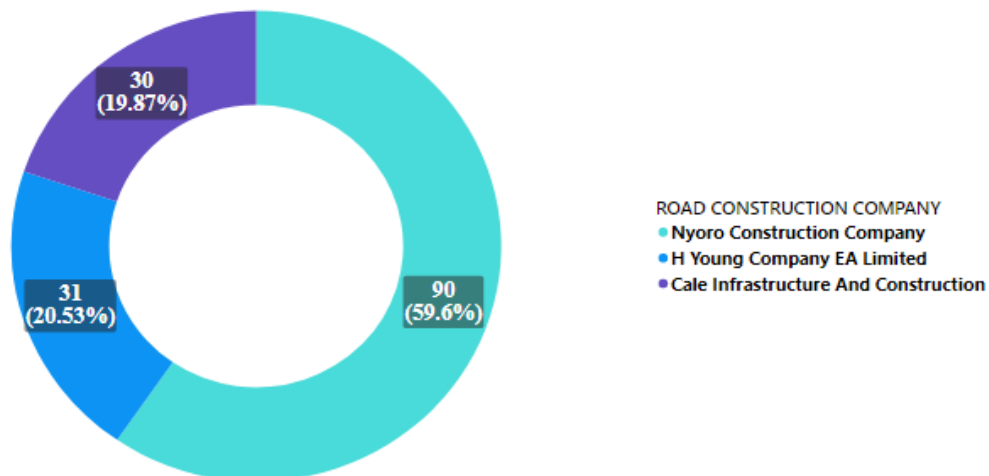
### 4.1 Introduction

This chapter entails the data analysis, the presentation and interpretation of the results. This study aimed to determine the effect of employee involvement in change management on organization operations of the road construction industry in Kenya. The present data were collected by means of questionnaires and examined to answer the question communicated in the problem statement. This chapter starts by giving the response rate and demographic profile of the subjects under study.

### 4.2 Response rate

The study targeted 227 respondents but managed to get the views of 151 respondents as shown in Figure 4.1. This translated to a study response rate of 66.5%. This was deemed adequate for statistical analysis based on the criteria advanced by Mugenda and Mugenda (2003) that a response of above 50% is adequate for statistical analysis.

SAMPLE SIZE PER COMPANY



**Figure 4.1:Sample size per company**

### 4.3 Demographic profile

In terms of duration of employment, as seen in Figure 4.4, 105 of the respondents which represents 69.5% have been working in their current construction firm for 0-5 years, 31 of the respondents had 5-10years while only 11 which is had worked in their current construction firm for over 10 years.

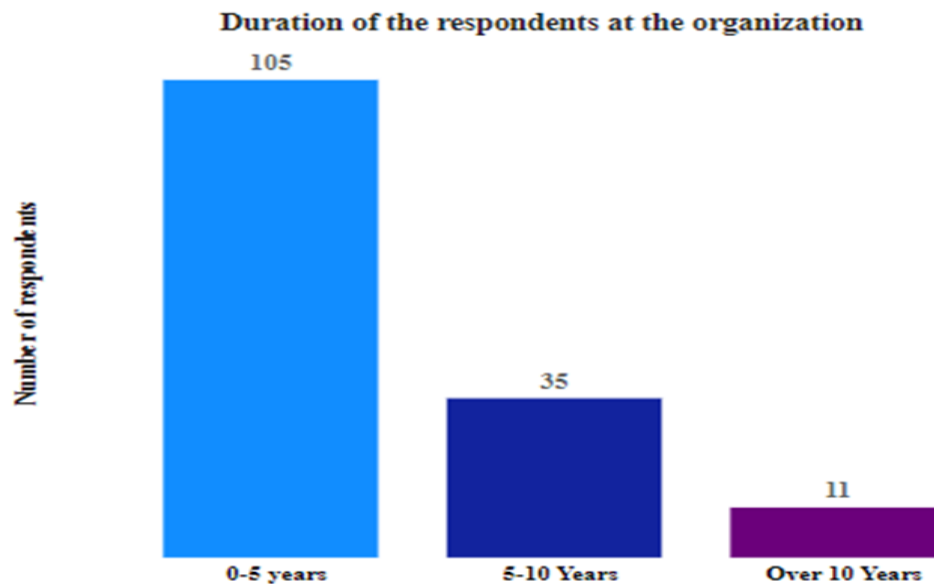


Figure 4.2: Duration of the respondents in the organization

### 4.4 Employee involvement in planning

The first objective of the study was to determine the influence of employee involvement in planning for change management on project performance.

#### 4.4.1 Employee involvement in planning for change descriptive

The study first sought to know from the respondents whether employees were involved in planning for change in their various construction companies. This was done on a Likert scale of 1-5, where 5= strongly agree, 4= Agree, 3= Moderately Agreed, 2= Disagree and 1= Strongly Disagree. The mean and standard deviations (std) are as illustrated in Table 4.1.

**Table 4.4: Frequencies and percentages of employee involvement in planning for change**

	<b>Statement</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Somewhat Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1	The organization asks for my input when formulating strategy or making key strategic decisions	2 (1%)	11(7%)	40 (26%)	91(60%)	7 (5%)
2	Junior staff have opportunities in my organization to speak up about strategy/change efforts	1 (1%)	13 (9%)	45 (30%)	65 (43%)	27 (18%)
3	My organization is a great place for me to make a contribution for my development	1 (1%)	7 (5%)	36 (24%)	67 (44%)	40 (26%)
4	My supervisor gets my input and buy-in when making key decisions that impact me at work	0 (0%)	8 (5%)	34 (23%)	73 (48%)	36 (26%)
5	I feel comfortable sharing ideas with management	1 (1%)	10 (7%)	36 (24%)	65 (43%)	39 (26%)
6	The organization values my input during implementation of new strategies/change	1 (1%)	11 (7%)	37 (25%)	70 (46%)	32 (21%)
7	The organization provides sessions for learning from each other that is representative of the whole company	0 (0%)	10 (7%)	36 (24%)	68 (45%)	37 (25%)
8	I am part of a continuous improvement team in my organization	8 (5%)	95 (63%)	14 (9%)	24 (16 %)	10 (7%)
9	I have been rewarded/recognized for sharing my ideas on an initiative	24 (16%)	78 (52%)	25 (17%)	18 (12%)	6 (4%)

*Source: Researcher (2022)*

Based on the results in Table 4.1, sixty percent (60%) of the respondents agreed that the organization asked for their input when formulating strategy. The findings imply that a good strategy is formulated with significant involvement of employees; limiting the chances for flaws and setbacks. When employees engage in the formulation of strategy; senior management gets the opportunity to tap into specialized knowledge of lower-level staff. Additionally, 43% agreed that their junior staff had opportunities in their organization to speak up about strategy change. The results imply that employee involvement in planning affect achievement of organizational objectives; which signals that planning for change translated in high job engagement and motivation. Forty-four (44%) percent agreed that their organization was a great place for them to make a contribution for personal development. The results hint that recognizing employee

development at planning phase of change enables the organization to mitigate challenges, eliminate employee frustration and employee involvement. In the same regard 48% agreed their supervisor received their input and buy-in when making key decisions that impacted them at work. The results infer that road construction supervisors must possess a wide range of skills to successfully execute their mandate in areas of leadership; problem-solving, communication, as well as organizational skills. In comparison, 26% strongly agreed that felt comfortable sharing ideas with the management. The implication of acquiring the knowledge created is a prerequisite for organizational learning and improved practice in construction projects. Additionally, 46% of the respondents indicated that the organization valued their input during implementation of new strategies. The results can be understood that when valuing employees in job construction assignments can drive impressive project outcomes. This is because by feeling motivated, commitment levels increased and greater levels of job performance are witnessed. Closely, 45% of the respondents agreed that the organization provided sessions for learning from each other that was representative of the entire company. Through learning employees in the construction sector are able to improve their skills and expertise. however; 63% of the respondents disagreed that they were part of continuous improvement team in their respective organizations. The findings imply that absence of integrated and collaborative approach reduces participation in driving change objectives. On the same regard, 52% of the respondents disagreed that they had been rewarded for sharing their ideas on an initiative. The results emphasize that employees can only appreciate the relevance of the project when they are compensated competitively.

Table 4.2 below shows the mean and standard deviation derived from responses from data collected from respondents on the influence of employee involvement on planning for change.

**Table 4.5: Influence of Employee involvement on planning for change**

	<b>Statement</b>	<b>Mean</b>	<b>Standard Deviation</b>
1	The organization asks for my input when formulating strategy or making key strategic decisions	3.596	0.7499
2	Junior staff have opportunities in my organization to speak up about strategy/change efforts	3.689	0.8883
3	My organization is a great place for me to make a contribution for my development	3.907	0.8591
4	My supervisor gets my input and buy-in when making key decisions that impact me at work	3.907	0.8194
5	I feel comfortable sharing ideas with management	3.861	0.8947
6	The organization values my input during implementation of new strategies/change	3.801	0.8795
7	The organization provides sessions for learning from each other that is representative of the whole company	3.868	0.8538
8	I am part of a continuous improvement team in my organization	2.543	1.0181
9	I have been rewarded/recognized for sharing my ideas on an initiative	2.364	1.0164

*Source: Researcher 2022*

From the study findings in Table 4.2, most of the respondents indicated that they are being involved in decision in planning. Most of the respondents agreed that; The organization asks for my input when formulating strategy or making key strategic decisions as shown by a mean of 3.596 and standard deviation of 0.7499. On whether the respondent's input is sought when key decisions are made, majority of the respondents agreed that their supervisor gets their input and buy-in when making key decisions that impact them at work. This can be seen in Table 4.2 which shows a mean of 3.907 and standard deviation of 0.8194 for this specific metric. Conversely, from the findings above majority of the respondents indicated that they were not rewarded or recognized for sharing their ideas on an initiative. The respondents disagreed that: I have been rewarded/recognized for sharing my ideas on an initiative as shown by a mean of 2.364 and standard deviation of 1.0164

#### **4.4.2 Relationship between employee involvement in the planning for change and project performance**

The study further sought to determine the relationship between employee involvement in the planning of change management on organization operations using regression analysis tests. The

results of the correlation between employee involvement in the planning of change management on project performance are presented in Table 4.3.

**Table 4.6: Relationship between employee involvement in the planning of change on project performance**

Intercept	Coefficient	R <sup>2</sup> - Value	Adjusted R <sup>2</sup> - Value	P - Value
2.2927	0.3384	0.0953	0.08925	0.0001147
a. Predictors(constant)	Employee involvement in planning			
b. Dependent variable	Project performance			

Source: Researcher (2022)

From the findings in Table 4.3, the analysis represents the simple regression between project performance (dependent variable) and employee involvement in planning for change (independent variable). It indicates that there exists a positive correlation between employee involvement in the planning for change management on the organization operations. The value of R square = 0.0953 indicates how much of the total variation in the project performance (dependent variable) are explained by employee involvement in planning for change (independent variable). In this case, 9.53% of the variation in the project performance (dependent variable) are accounted for by employee involvement in planning (independent variables). The value of adjusted R square =0.0895 (8.95%) represents the total variation in project performance (dependent variable) as explained by employee involvement in planning for change (independent variable) if population data were to be used.

Furthermore, the study findings indicate that the regression model predicts the dependent variable (project performance) significantly well given that p-value (sig) =0.000<0.05 (5% significance level). This indicates that the regression model is a good fit for the data, that is, it significantly predicts the outcome variable. The coefficients of the regression model provide the necessary information to predict organization operations from planning. Moreover, the results also provide information showing whether employee involvement in planning for change is statistically significantly to the model. It can be seen that employee involvement in planning contributes statistically significantly to the model given the p-values 0.000 less that 0.05 (95% significance level).

## 4.5 Employee Involvement in execution of change

The second objective of the study was to determine the influence of employee involvement in execution of change on organization operations.

### 4.5.1 Employee involvement in execution of change descriptive

In order determine the influence of employee involvement in execution of change on organization operations, responses from respondents were recorded on a Likert scale of 1-5, where 5= strongly agree, 4= Agree, 3= Moderately Agreed, 2= Disagree and 1= Strongly Disagree. The mean and standard deviations (std) are as illustrated in Table 4.4.

**Table 4.7: Employee involvement in execution of change on project performance**

	Statement	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
1.	Strategic change initiatives are shared with me	21 (14%)	54 (36%)	35 (23%)	34 (23%)	7 (5%)
2.	I have freedom to openly agree/disagree about a strategic change/issue with management	10 (7%)	58 (38%)	45 (30%)	33 (22%)	5 (3%)
3.	Staff meetings have open and honest communication from different levels of staff	16 (11%)	43 (28%)	45 (30%)	42 (28%)	5 (3%)
4.	Management ensure buy in and participation form staff when implementing change efforts in the organization	0 (0%)	14 (9%)	36 (24%)	81 (54%)	20 (13%)
5.	When change efforts are implemented junior staff loose some of their status in the organization	1 (1%)	26 (17%)	34 (23%)	51 (34%)	38 (25%)
6.	My colleagues and I are prepared for any change initiatives in the organization	1 (1%)	9 (6%)	30 (20%)	80 (53%)	31 (21%)
7.	I understand why my organization is implementing certain changes in the organization	1 (1%)	6 (4%)	28 (19%)	76 (50%)	40 (26%)
8.	There is a link between my job and the achievement of the company's strategic objectives	3 (2%)	6 (4%)	33 (22%)	77 (51%)	32 (21%)
9.	The organization adopts to change in change quickly	2 (1%)	8 (5%)	22 (15%)	80 (53%)	39 (26%)
10.	When change initiatives are implemented I don't believe there is anything for me to gain	18 (12%)	81 (54%)	21 (14%)	25 (17%)	6 (4%)

Source: Researcher (2022)

According to the results in Table 4.4, 36% of the respondents disagreed that strategic change initiatives were shared with them. These results suggest that more than a third of the workforce do not understand the changes being implemented. When employees have little understanding of the changes happening; it can be an obstacle to driving ownership and commitment and even attract resistance. Furthermore, 38% disagreed that they had freedom to openly agree or disagree about strategic changes with management. The findings demonstrate that among other tasks that organizational managers have is to initiate and lead change and facilitate the same across all the departments through effective and open communication. Only 3% strongly agreed that staff meetings had open and honest communication from different levels of staff. Equally; the findings manifest that poor communication is one of the main reasons why road construction projects fail. Fifty-four percent (54%) of the respondents agreed that the management ensured buy in and participation from staff when implementing change efforts in the organization. The findings are implicit that employee participation has a direct bearing on road construction projects performance and is considered a major performance determinant. Fifty-three percent (53%) agreed that their colleagues and them were prepared for any change initiatives in the organization. The results suggest that organizational learning and training can assist construction companies prepare for the industry disruptions such as influx of new tools. The study further demonstrated that 50% of the respondents understood why their organizations were implementing certain changes. Moreover, 51% of the respondents agreed that there was a link between their job and the achievement of the company's strategic objectives. Twenty-six (26%) percent of the respondents the organization adopted to change in change quickly. The findings hint that employees who are satisfied possess positive attitude to drive change execution. Lastly, 54% when change initiatives were implemented they did not believe there was anything for them to gain. Thus, the results imply that emotional attachment, a feeling of pride, and a personal sense of obligation help actualize the needed change in the construction companies.

Table 4.5 below shows the mean and standard deviation derived from responses from data collected from respondents on the influence of employee involvement on execution of change.

**Table 4.8: Influence of Employee involvement on execution of change**

	<b>Statement</b>	<b>Mean</b>	<b>Standard Deviation</b>
1	Change initiatives are shared with me	2.682	1.1097
2	I have freedom to openly agree/disagree about a strategic change/issue with management	2.768	0.9760
3	Staff meetings have open and honest communication from different levels of staff	2.848	1.0503
4	Management ensure buy in and participation form staff when implementing change efforts in the organization	3.722	0.813
5	When change efforts are implemented junior staff loose some of their status in the organization	3.642	1.0791
6	My colleagues and I are prepared for any change initiatives in the organization	3.868	0.8300
7	I understand why my organization is implementing certain changes in the organization	3.993	0.8029
8	There is a link between my job and the achievement of the company's strategic objectives	3.874	0.8351
9	The organization adopts to change in change quickly	3.967	0.8595
10	When change initiatives are implemented I don't believe there is anything for me to gain	2.47	1.0315

*Source: Researcher (2022)*

From the study findings in Table 4.5, most of the respondents indicated that they are being involved in implementation of change efforts in the organisation. The majority of the respondents agreed that; Management ensure buy in and participation form staff when implementing change efforts in the organization shown by a mean of 3.722 and standard deviation of 0.813. However, concerning whether staff meetings have open and honest communication from different levels of staff respondents there was a deviation of 1.0503 indicating high variations in the responses with a mean of 2.48.

#### **4.5.2 Relationship between employee involvement in the execution of change and project performance**

The study also determined the relationship between employee involvement in the execution of change management on organization operations using regression analysis tests. The results of the

correlation between employee involvement in the planning of change management on project performance are presented in table 4.6.

**Table 4.9: Relationship between employee involvement in the execution of change and the organization operations**

Intercept	Coefficient	R <sup>2</sup> - Value	Adjusted R <sup>2</sup> - Value	P - Value
2.63014	0.28315	0.06576	0.05949	0.00148 <sup>*</sup>
a. Predictors(constant)	Employee involvement in execution			
b. Dependent variable	Project performance			

Source: Researcher (2022)

As shown in Table 4.6, the analysis represents the simple correlation between Organization operation (dependent variable) and employee involvement in execution of change (independent variable). It indicates that there exists a low degree of correlation between employee involvement in the execution of change management on the project performance. The value of R square = 0.06576 indicates how much of the total variation in project performance (dependent variable) are explained by employee involvement in execution of change (independent variable). In this case, 6.576% of the variation in the organization operation (dependent variable) are accounted for by employee involvement in execution of change (independent variables). The value of adjusted R square = 0.05949 (5.95%) represents the total variation in project performance (dependent variable) as explained by employee involvement in execution of change (independent variable) if population data were to be used.

The study findings show that the regression model predicts the dependent variable (project performance) significantly well given that p-value (sig) = 0.001 < 0.05 (5% significance level). This indicates that the regression model is a good fit for the data, that is, it significantly predicts the outcome variable. The coefficients of the regression model provide the necessary information to predict organizational operation from employee involvement in execution of change. Moreover, the results also provide information showing whether employee involvement in execution of change is statistically significant to the model. It can be seen that employee involvement in execution of change contributes statistically significantly to the model given the p-values 0.001 less than 0.05 (95% significance level).

#### 4.6 Employee Involvement in Evaluation of change

The third objective of the study was to determine the influence of employee involvement in evaluation of change on project performance.

##### 4.6.1 Employee involvement in evaluation of change descriptive

The objective of the study was achieved by use of a Likert scale of 1-5, where 5= strongly agree, 4= Agree, 3= Moderately Agreed, 2= Disagree and 1= Strongly Disagree. The mean and standard deviations (std) are as illustrated in Table 4.7.

**Table 4.10: Descriptive statistics of employee involvement in evaluation of change on project performance**

Statement	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
The organization provides avenues for me to provide feedback	0 (0%)	11 (7%)	31 (21%)	88 (58%)	21 (14%)
The organization gives serious consideration to feedback it gets from junior staff	0 (0%)	10 (7%)	31 (21%)	74 (49%)	36 (24%)
I regularly give constructive feedback to management	1 (1%)	23 (15%)	24 (16%)	75 (50%)	28 (19%)
Junior staff know exactly what the goals for change initiatives in the organization are	1 (1%)	15 (10%)	30 (20%)	71 (47%)	34 (23%)
I am aware of what good looks like of the changes implemented in my organization.	1 (1%)	10 (7%)	27 (18%)	86 (57%)	27 (18%)
I am able to identify whether certain changes in the organization will have a positive impact or a negative one	0 (0%)	10 (7%)	25 (17%)	83 (55%)	33 (22%)
I look for ways to improve processes and productivity in the organization	1 (1%)	16 (11%)	26 (17%)	70 (46%)	38 (25%)
My organization takes time to regularly figure out ways to improve our work processes	21 (14%)	53 (35%)	27 (18%)	46 (30%)	4 (3%)
The organization is a catalyst for change initiatives	0 (0%)	13 (9%)	27 (18%)	96 (64%)	15 (10%)

Source: Researcher (2022)

According to the results in Table 4.7, Fifty-eight (58%) percent of the respondents agreed that the organizations provided avenues for to provide feedback. The results mean that giving timely and appropriate feedback is one of the project manager's roles in the road construction sector. It was also revealed by 49% of the respondents that the organizations gave serious consideration to feedback they received from junior staff. The results further elaborate that feedback remains an effective management tool in enhancing project performance. A half of the respondents agreed that they regularly gave constructive feedback to management. Moreover, 47% of the respondents agreed that junior staff knew exactly what the goals for change initiatives in the organization were. The findings imply that junior staff undergoing change should actively align and participate in the change. Similarly, 57% of the respondents indicated that they were aware of what good looked like of the changes implemented in their respective organization. The results mean that road construction companies had made efforts to synthesize employees on change management processes. Fifty-five percent (55%) agreed that they were able to identify whether certain changes in the organization would have a positive impact or a negative one. The results demonstrate the readiness of employees in the road construction sub-sector to undertake change whether; technological; social- economical; political; cultural or environmentally engineered. Only quarter (25%) of the respondents looked for ways to improve processes and productivity in the organization. The results imply that a small percentage of employees was productive and dedicated towards improving their current job outcomes. However, 35% of the respondents disagreed that their organizations took time to regularly figure out ways to improve work processes. The results imply that road construction companies are yet to fully embrace he attitude of incremental improvement over time. Lastly, 64% of the respondents agreed that the organizations were catalysts for change initiatives. These results hint that road construction companies have the obligation to develop employees' personal attributes needed to motivate and inspire change processes.

Table 4.8 below shows the mean and standard deviation derived from responses from data collected from respondents on the influence of employee involvement on evaluation.

**Table 4.11: Influence of Employee involvement on Evaluation of change**

<b>Statement</b>	<b>Mean</b>	<b>Standard Deviation</b>
The organization provides avenues for me to provide feedback	3.788	0.7712
The organization gives serious consideration to feedback it gets from junior staff	3.901	0.8368
I regularly give constructive feedback to management	3.702	0.9646
Junior staff know exactly what the goals for change initiatives in the organization are	3.808	0.9217
I am aware of what good looks like of the changes implemented in my organization.	3.48	0.8114
I am able to identify whether certain changes in the organization will have a positive impact or a negative one	3.921	0.8043
I look for ways to improve processes and productivity in the organization	3.86	0.8530
My organization takes time to regularly figure out ways to improve our work processes	2.728	0.9637
The organization is a catalyst for change initiatives	3.753	0.8021

*Source: Researcher (2022)*

As seen in Table 4.8, the results of the study showed agreement among respondents that they are able to identify whether certain changes in the organization will have a positive impact or a negative one with mean scores of 3.921 and a standard deviation of 0.8043. Furthermore, from the study findings in most of the respondents indicated that the organization gives serious consideration to feedback it gets from junior staff. This is shown by a mean of 3.901 and a standard deviation of 0.8368

#### **4.6.2 Relationship between employee involvement in the evaluation of change and project performance**

The study further sought to determine the relationship between employee involvement in the evaluation of change on project performance using regression analysis tests. The results of the

correlation between employee involvement in the planning of change management on organization operations are presented in Table 4.9.

**Table 4.12: Relationship between employee involvement in the evaluation of change and project performance**

Intercept	Coefficient	R <sup>2</sup> - Value	Adjusted R <sup>2</sup> - Value	P - Value
2.0006	0.4288	0.225	0.02198	0.0000
a. Predictors(constant)	Employee involvement in evaluation			
b. Dependent variable	Project performance			

*Source: Researcher (2022)*

From the findings of this study as shown in Table 4.9, the analysis represents the simple correlation between project performance (dependent variable) and employee involvement in evaluation of change (independent variable). It indicates that there exists a moderate degree of correlation between employee involvement in the evaluation of change on the project performance. The value of R square = 0.225 indicates how much of the total variation in the organization operation (dependent variable) are explained by employee involvement in evaluation of change (independent variable). In this case, 22.5% of the variation in project performance (dependent variable) are accounted for by employee involvement in evaluation (independent variables). The value of adjusted R square = 0.2198 (21.98%) represents the total variation in organization operations (dependent variable) as explained by employee involvement in evaluation of change (independent variable) if population data were to be used. Furthermore, the study findings indicate that the regression model predicts the dependent variable significantly well given that p-value (sig) = 0.000 < 0.05 (5% significance level). This indicates that the regression model is a good fit for the data, that is, it significantly predicts the outcome variable. The coefficients of the regression model provide the necessary information to predict project performance from employee involvement in evaluation. Moreover, the results also provide information showing whether employee involvement in evaluation of change is statistically significantly to the model.

It can be seen that employee involvement in execution of change contributes statistically significantly to the model given the p-values 0.000 less than 0.05 (95% significance level).

#### 4.7 Project performance

The research further sought to examine the tenets of organization operations within the firms. This was done on a Likert scale of 1-5, where 5= strongly agree, 4= Agree, 3= Moderately Agreed, 2= Disagree and 1= Strongly Disagree. The results are shown in Table 4.10.

**Table 4.13: Descriptive statistics of project performance**

Statement	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
Day to day decisions in my organization show that quality production is a priority for my company	1 (1%)	5 (3%)	25 (17%)	78 (52%)	42 (28%)
The quality of projects delivered SOLELY depends on program of works drawn up by senior staff (site agents)	10 (7%)	85 (56%)	25 (17%)	24 (16%)	7 (5%)
The amount of time taken to deliver a milestone/project greatly depends on junior staff	1 (1%)	7 (5%)	28 (19%)	87 (58%)	28 (19%)
Cost efficiencies are driven from all levels of staff	1 (1%)	6 (4%)	33 (22%)	81 (54%)	30 (20%)

Source: Researcher (2022)

From the findings of the study as seen in Table 4.10 majority of respondents (58%) indicated that the amount of time taken to deliver a milestone/project greatly depends on junior staff. In reference to day-to-day decisions, 52% of the respondents agreed that quality production is a priority for the company where they work with 54% indicating that cost efficiencies are driven from all levels of staff

#### 4.8 Overall Relationship between employee involvement in planning, execution and evaluation of change and project performance

The regression analysis sought to examine the magnitude of effect between the independent and dependent variables. The results of the test are shown in table 4.11.

**Table 4.14: Model summary showing the relationship between employee involvement in Planning (X<sub>1</sub>), Execution (X<sub>2</sub>), Evaluation (X<sub>3</sub>) and project performance (Y)**

Variable	Correlation Coefficient (R)	P-value
Involvement in Planning	0.3384	0.0001
Involvement in Execution	0.28315	0.0015
Involvement in Evaluation	0.4288	0.0000

Source: Researcher (2022)

From the findings, it was established that there is a significant positive association between the dependent variable (project performance) and the independent variables (Employee involvement in planning, employee involvement in execution and employee involvement in evaluation of change). The study findings show that there is a significant positive association between employee involvement in planning of change and project performance ( $r=0.3384$ ,  $p\text{-value}=0.0001147 < 0.05$ ), employee involvement in execution of change and project performance ( $r=0.28315$ ,  $p\text{-value}=0.001481 < 0.05$ ), employee involvement in evaluation of change and project performance ( $r=0.4288$ ,  $p\text{-value}= 0.000 < 0.05$ ).

In determination of the relationship between project performance and the independent variables A multiple regression model was used where X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> represents the independent variables and Y as the dependent variable. The results are presented in Table 4.12.

**Table 4.15: Multiple regression model**

Intercept	Coefficient		R <sup>2</sup> - Value	Adjusted R <sup>2</sup> - Value	P - Value
2.05174	X <sub>1</sub>	0.0953	0.2358	0.2202	0.0000
	X <sub>2</sub>	0.06576			
	X <sub>3</sub>	0.2255			
a. Predictors(constant)	Employee involvement in planning, execution and evaluation				
b. Dependent variable	Project performance				

Source: Researcher (2022)

The value of R square = 0.2358 indicates how much of the total variation in the organization operation (dependent variable) are explained by X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> (independent variables). In this case, 23.58% of the variation in the project performance (dependent variable) are accounted for by

X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> (independent variables). This is a moderate variation in organization operations. On the other hand, Adjusted R square =0.2202 represent the total variation in organization operation (dependent variable) as explained by X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> (independent variables) if population data were used. The study findings in Table 4.12 indicates that the regression model predicts the dependent variable (project performance) significantly well given that p-value (sig) =1.26e-08(0.000) < 0.05 (95% significance level). This indicates that the regression model is a good fit for the data, that is, it significantly predicts the outcome variable.

These results provide the necessary information to predict how project performance is affected by employee involvement in planning, execution and evaluation of change. Furthermore, the results also provide information showing whether X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> contribute statistically significantly to the model. Thus, the model can be precisely written as follows:

$$\text{Project performance} = 2.05174 + 0.0953 \text{ Planning} + 0.06576 \text{ Execution} + 0.225 \text{ Evaluation}$$

From this model, it can be seen that all the independent variables (employee involvement in planning, employee involvement in execution and employee involvement in evaluation) contribute positively towards project performance. The independent variables contribute statistically significantly to the model given the p-values 0.0001147, 0.001481 and 0.0000 which are respectively less than 0.05 (95% significance level).

#### **4.9 Chapter summary**

In this chapter, the influence of employee involvement in planning, employee involvement in execution and employee involvement in evaluation of change on project performance were assessed. The study findings from the simple linear regression models indicated that employee involvement in evaluation of change is the most impactful on project performance. From the multiple regression the study established that employee involvement in planning, employee involvement in execution and employee involvement in evaluation of change significantly contribute to project performance.

## **CHAPTER FIVE SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter of the research presents the summary, discussion of findings, conclusion and recommendations of the research study.

### **5.2 Summary**

The research sought to examine determine the effect of employee involvement in change management on project performance of the road construction industry in Kenya. The research was grounded on project management competency theory and ADKAR change model. The study relied on a descriptive research design with the target population 528 employees of NCA 1 classified construction companies in Nairobi county. The unit of observation was the 272 respondents from three of the construction companies. The research was able to obtain an 66.5% response rate. The results of the study indicated that employee involvement in evaluation of change is the most impactful on project performance while employee involvement in planning, employee involvement in execution of change significantly contribute to project performance.

### **5.3 Discussion of Findings**

#### **5.3.1 Employee involvement in planning**

The respondents were generally in agreement as they indicated that they are involved in decision making during planning with their supervisors seeking their input when key decisions are made. Majority of the respondents agreed that their supervisor gets their input and buy-in when making key decisions that impact them at work. This was evidenced by a mean of 3.907 and standard deviation of 0.8194 indicating minimal variation. These findings are consistent with Predišcan and Roiban (2015), who state that employee involvement in planning can be implemented through co-opting their ideas, information sharing, conducting routine discussions, and meeting on the change process. This in turn allows employees to air their opinions and achieve a better sense of control which is key to the adoption of the change in project performance.

To lesser extent, the results revealed that junior staff had opportunities in the organization to speak up about change initiatives. In most instances, as observed by Hamdan (2020), low-level employees are rarely consulted in the planning phase, and a high percentage of them were not entirely aware about the organization's long-term strategy, but they were involved in the implementation of formulated strategies since their roles were linked to the firm's strategic goals.

Oyugah and Onyango (2019) showed that although there was minimal involvement of stakeholders in planning, they were extremely involved in execution, evaluation and monitoring. Similarly; Mambula, Francis and Oaya (2021) contend that employee involvement in strategic decision making improves manager-employee relationship, employee morale and productivity. Zafar and Naveed (2014) reinforce that inadequate employee involvement in change planning limits employee's impact in change processes.

Regarding whether they were indicated that they were not rewarded or recognized for sharing their ideas on an initiative, respondents disagreed with the statement: I have been rewarded/recognized for sharing my ideas on an initiative as shown by a mean of 2.364 and standard deviation of 1.016. While no rewarding or recognition was done, Mambula, Francis and Oaya (2021) in their study indicate that by merely involving employee in strategic decision making, improves manager-employee relationship, employee morale and productivity that aid in improving operational efficiency and strategic goal realization. The findings digress from the observation by Azeez Gambatese and Hernandez (2019) who indicated that construction workers in general, are satisfied with the rewards that they are receiving, where job responsibility was found to be the reward that is received the most. In their conclusion however, workers' needs showed a commonality of financial importance. Overall, Salah (2016) acknowledges existence of a statistically significant relationship between rewards types and job outcomes. Nani and Apraku (2016) opine that non-financial rewards are as important as financial rewards to improve project outcomes.

Furthermore, respondents felt comfortable sharing ideas with management. The act of openly sharing ideas from the junior staff with the management minimizes the risks associated with lack of transparency. As demonstrated by Jonja (2014); lack of transparency, lack of consistency,

accuracy and objectivity was limiting the strategy evaluation process. In addition; the absence of competency-based considerations in role allocation and poor grievance handling was impacting employees' trust and confidence in set targets, thus decreasing employees' ownership of, and commitment to implementing strategic plans. Knowledge sharing cultivates collaboration among project stakeholders which enhances efficiency of the construction projects (Bellinia, Aarsetha &, Hosseinia 2016). Wasif and Styhre (2012) also agree that personal networks developed through employee collaboration are useful for individual learning in construction projects.

The results indicate that the organization valued their input during implementation of new strategies/change. The study agrees with Osman and Kimutai (2019) on the basis that contractor's competency, capacity in resource management, involvement of target beneficiaries and internal goodwill impacts firm's goal realization. Similarly, the findings echo the project management competency framework and the ADKAR model. Analysis showed that the above factors all have a strong influence on project execution and continuity. In the context of road construction projects; resources mobilization, competency of the contractors in managing internal resources competency and target beneficiary participation.

The study noted a positive effect between employee involvement in planning for change on project performance with  $r=0.0953$  and  $p\text{-value}=0.0001147<0.05$ . The above results are consistent with Mambula, Francis and Oaya (2021) who noted that joint decision making, representation by a group of employees in planning and management decisions and having regular meetings to carry out internal assessment and address current problems improves operational efficiency and goal realization. A unit change in employee involvement in planning will result in a .0953 unit change in the project performance. Moreover, Mambula, Francis and Oaya (2021) observed that all three forms of employee involvement; participative management, representative management and quality circles were essential for organizations to meet their strategic goals.

### **5.3.2 Employee involvement in execution**

There was agreement among the respondents regarding their involvement in implementation of change efforts in the organisation. The majority of the respondents agreed that management ensure buy in and participation from staff when executing change efforts in the organization shown by a

mean of 3.722 and standard deviation of 0.813. The findings are supported Kochola's (2020) study which determined that involvement of stakeholders in planning and execution of change as well as other variables in the study have a significant relationship with project outcomes in construction firm. Further to this, that stakeholder participation resulted in enhanced project efficiency, improved cooperation and effectiveness of the implementation process. The results further agree with Friis and Koch (2015) that when employees are involved in the strategic actions; they supplement overall strategic goals and when they directly shape several sub-strategies. The findings support observation by Ngowtanasuwan (2020) that six factors influence employee engagement in the construction projects; relationship and dedication, workplace, part of the company, expertise, pride in work, and relationship with supervisors. However, the findings sharply contrast Agumba, Pretorius, and Haupt (2020) who noted that that employee involvement and empowerment is not greatly practiced and does not influence project performance.

However, there was no consensus regarding open and honest communication from different levels of staff during company meetings. there was a deviation of 1.0503 indicating high variations in the responses with a mean of 2.48. This was supported Creasey, (2021) who indicated that the dominant change approach used in construction industry is that of project management. This is technical side of the change focuses on designing, developing and delivering the solution that solves a problem or addresses an opportunity which sometimes fail to look at the people aspect and therefore fails to involve them in getting feedback. The findings are further supported by sei-Bonsu (2014) that limited information sharing about new managerial initiatives was limiting employee participation in the entire change management process. In relation to this Kochola (2020) study notes that the management plays a key role in initiating the stakeholder involvement culture and that it was paramount that employees and other stakeholders be involved from the start to the completion of the construction projects.

Obonadhuze, Eze, Siunoje and Sofolahan (2021) agree with the present findings that construction organisations are still lagging behind in the practice of effective communication and that the major factors responsible for ineffective communication are management and leadership abilities, lack of training and undertrained workers, lack of support for advanced communication technologies, malfunction and/or use of out-dated technology, and poor communication skills. In addition, the findings rhyme with Olanrewaju and Kwan (2017) the major causes of poor communication are:

the absence of a shared language between superiors and workers, workplace stress, superiors, and colleagues' attitude towards site workers, misinterpreting of instructions, and poor communication skills among workers. Notably, Das and Mishra (2020) contends that effective communication ensures project success as well attainment of construction firms' goals and objectives.

Imran, Rehman, Aslam, and Bilal (2016) suggested that the execution of change should be accompanied by employee empowerment which will help eradicate roadblocks in the process. In contrast this study however noted that there exists a low degree of correlation between employee involvement in the execution of change management on the organizational operations. A positive influence is noted between employee involvement in execution and project performance  $r=0.06576$ ,  $p\text{-value}=0.001481<0.05$ ). A unit change in employee involvement in execution will result in a .0657 unit change in the project performance. The present study agrees with Tanjeen (2013) on the premise that Employee empowerment develops positive attitude among the employees towards the organization. In the road construction sector, empowerment fosters creativity, quality of work-life, team work spirit, and organizational effectiveness.

Amarachi (2021) reported that representation of employees on the board had a significant impact on management performance while employee collective bargaining was reported to have a positive but insignificant impact on growth performance. Kochola (2020) contends that stakeholder participation in project identification, project planning, project implementation and project monitoring affects outcomes of road construction projects in the county. Additionally, the results agree with Melendez, Malvacias, and Almeida (2018) that there is a direct relationship between the perception of managers and the participation of employees in all phases of project. Sharing similar perspective, Waweru (2018) elaborates that the elements if team involvement have a positive and significant impact on project performance.

### **5.3.3 Employee involvement in evaluation**

The study noted agreement among respondents that, they are able to identify whether certain changes in the organization will have a positive impact or a negative one with mean scores of 3.921 and a standard deviation of 0.8043. This is supported by Bii (2017) stating that the evaluation of the change process is focused on collecting feedback, assessing the attainment of stated

objectives, and identifying any gaps in the change process. Furthermore, from the study findings in most of the respondents indicated that the organization gives serious consideration to feedback it gets from junior staff. This is shown by a mean of 3.901 and a standard deviation of 0.8368. firm Rosenbaum, More, & Steane, (2018) acknowledged that employee involvement in the evaluation of change management is critical to providing structured reporting on the performance of the change activity and its effect on the project performance.

The study noted a significant positive effect for employee involvement in evaluation of change n and organization operations  $r=0.225$ ,  $p\text{-value}= 0.000 < 0.05$ . It can be seen that employee involvement in evaluation positive contribution that is statistically significant to the model given the  $p\text{-values}$  0.000 less than 0.05 (95% significance level. The findings further revealed a unit change in employee involvement in evaluation will result in a .225 unit change in project performance. Ejere and Jarbandhan (2019) posited that the influence of employees in generating alternative solutions, evaluating and selection of the best alternatives, implementing the chosen alternative and evaluating the long-term impacts of alternatives improves firm's decision-making capacity hence improving firm's performance.

The results demonstrated that some employees were aware of what good looked like of the changes implemented in their organizations. The results support the findings by Sofijanova and Zabijakin-Chatleska (2013) who showed a significant intercorrelation between the study variables, reporting that increasing employee participation in organizational planning and empowering them to make decisions significantly increases the effectiveness of self-managed teams. Furthermore, the findings agree with Ejere and Jarbandhan (2019) who established a substantial increase in employee performance levels with increased participation in the decision-making process.

The study noted that employees gave constructive feedback on less regular basis. According to Buniya, Othman, Durdyev, Sunindijo and Ismail (2021) the support of the management towards the foundation of project success is only possible through employee involvement in planning, execution, and evaluation processes. Pesämaa, Eriksson, and Larsson (2018) confirmed, with unprecedented clarity, that performance feedback has significant, direct positive effects on construction process performance, and that performance feedback mediates (i.e., strengthens) effects of learning and collaboration on process performance. However, the findings disagree with

Aiyewalehinm (2013) who established that the communication variables were considerably high within the construction sector.

The results also revealed that the construction organizations were catalysts for change initiatives. Kwoyigah, Alagidede, and Amidu (2016) contend that project managers must clearly explain the project goals to members, share their responsibility and expectations and get feedback. Hieu (2020) also supports the present findings that employee empowerment fosters employee performance, job satisfaction, organisational commitment, customer satisfaction, productivity and business growth. As was noted by Dickson, Gerryshom, & Wanyona, (2015), despite the recognized benefits of road network development, the majority of road construction projects in Kenya are neither completed on time nor within the budgeted costs with more than 70% of the undertaking within the construction industry have not been achieved. This therefore implies that road construction companies prioritize employee involvement in their change management approach.

## **5.5 Conclusions**

On employee involvement in planning, the study established that construction firms involve their employees and actively seek their input when it comes to decisions that impact their work. It was also noted however that despite airing their views, employees were not rewarded or recognized for providing input and information when planning organizational change. The research however concludes that there is a positive effect of employee involvement in planning for change on project performance. A unit change in employee involvement in planning will result in a .0953 unit change in the project performance.

The study further noted that construction firm's management sought to have buy in and involvement of employees when executing change efforts. The study noted that there exists a positive effect of employee involvement in the execution of change management on the organizational operations. A unit change in employee involvement in execution will result in a .0676 unit change in the project performance. Thus, the study concludes that employee involvement is an important determinant in the success of project performance in construction sector.

It can also be concluded that construction firms will greatly positively impact project performance by ensuring employee involvement in evaluation of change efforts. As the data shows a statistically significant correlation between the two. From the study, respondents, employees of these construction firms believe they are capable of identifying whether certain changes in the organization will have a positive impact or a negative one. Furthermore, from the study findings in most of the respondents indicated that the organization gives serious consideration to feedback it gets from junior staff. The research concludes by noting a significant positive effect of employee involvement in evaluation to project performance. This is contributing statistically significantly as the model given the p-values 0.000 less than 0.05 (95% significance level. A unit change in employee involvement in evaluation will result in a .225 unit change in project performance.

The overall regression results indicated that employee involvement in planning for change management, employee involvement in execution and employee involvement in evaluation positively influence on project performance in road construction firms in Kenya. The findings of the regression analysis however also indicate that employee involvement in evaluation in comparison with their involvement in planning and execution is the most impactful on project performance with a p-value of 0.000.

## **5.6 Recommendations**

Road construction companies in Kenya should enhance employee involvement in planning, execution and evaluation of change. This can be done through co-opting employee ideas, effective communication, collecting feedback just to name a few. As indicated from the data employee involvement in change efforts positively impacts project performance in road construction companies which are linked to: Quality management, cycle time and cost efficiency. It will positively impact the quality of work done, achievement of set timelines and also promote cost efficiencies. Also, the study recommends that employees should be recognized and reward for sharing valuable ideas that contribute towards project success. It is also necessary for the project managers to seek diverse input from the staff during project plan formulation. The culture of continuous improvement needs to be improved across the organization (in teams). Besides, the study recommends that change initiatives should be shared with the staff at all levels. The study recommends that employees should be involved from the onset of mapping construction projects,

objectively incorporate their opinions and improve quality of information disseminated. That is, employees should be granted freedom of choice to agree or disagree with strategic issues that directly affect execution of projects. Furthermore; staff meetings need to cultivate open and honest communication from different levels of staff. For the staff to own change initiatives, construction companies should regularly review feedback and communicate the same to employee in time. All the trainings and learning programs should begin with the identification and definition of needs in terms of skills and knowledge required. In terms of high employee commitment levels, construction companies need to foster regular cooperation and assistance between employees and their supervisors. Over and above that, supervisors should always advise and give necessary support to the subordinates.

### **5.7 Areas for Further Research**

Despite evidence that employee involvement in change efforts is key to ensuring optimization of project performance much has not been achieved in terms of research on skills and capabilities of the employees vis a vis their involvement and contribution as change agents and its impact to the organisation hence this study suggests that a comprehensive research should be undertaken to examine the various levels of competency of staff in relation to their involvement and its impact on organisation. The study relied on primary data which can be limited by subjective responses; hence the research suggests further research could be conducted on the effect of firm-specific approaches to employee involvement on organisation with emphasis on adoption of quantitative secondary data.

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## APPENDICES

### APPENDIX I: INTRODUCTION LETTER

Dear respondent,

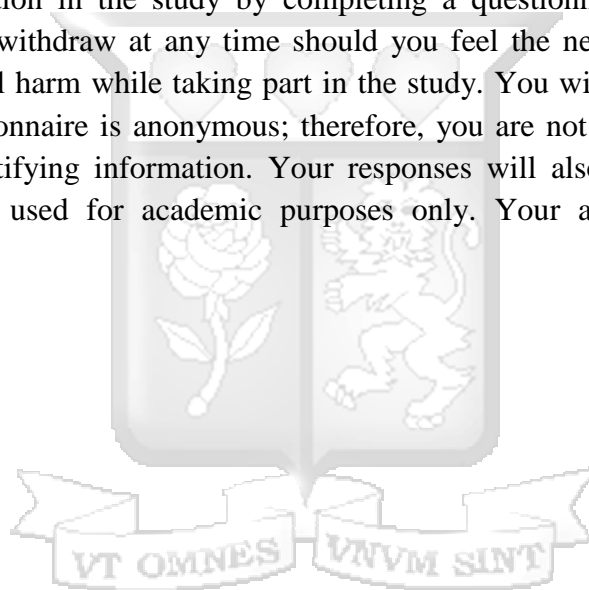
**RE: Request to Collect Research data From You**

My name is Ruth Jebet Changwo and I am a graduate student in the Masters of Business Administration program at Strathmore University Business School. I am conducting research on “The Effect of employee involvement in strategic change management on project performance; a case of the road construction industry in Kenya.”

I request your participation in the study by completing a questionnaire. All participation is voluntary and you may withdraw at any time should you feel the need to. You will incur no psychological or physical harm while taking part in the study. You will also not be charged for participating. The questionnaire is anonymous; therefore, you are not required to provide your name or any other identifying information. Your responses will also be treated with utmost confidentiality and will be used for academic purposes only. Your assistance will be highly appreciated.

With Regards,

Ruth Jebet Changwo







27<sup>th</sup> May 2022

Ms Changwo, Ruth  
changwo.ruth@strathmore.edu

Dear Ms Changwo,

**RE: Effect of employee involvement in change management in organization operations: A case of the road construction industry in Kenya.**

This is to inform you that SU-IERC has reviewed and **approved** your above **SU Masters'** research proposal. Your application reference number is **SU-IERC1328/22**. The approval period is **27<sup>th</sup> May 2022 to 26<sup>th</sup> May 2023**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-IERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-IERC within 48 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-IERC within 48 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

for: **Dr Ben Ngoye,**  
**Secretary; SU-IERC**

**Cc: Prof Fred Were,**  
**Chairperson; SU-IERC**



## **APPENDIX III: RESEARCH QUESTIONNAIRE FOR ROAD CONSTRUCTION COMPANY STAFF**

This questionnaire is anonymous; therefore, you are not required to provide your name or any other identifying information. Your responses will also be treated with utmost confidentiality and will be used for academic purposes only. Your assistance will be highly appreciated.

Kindly respond to the following questions to the best of your ability. Please **tick** the appropriate answer for each question and answer ALL the questions. I guarantee that all information will be handled with Strict Confidentiality. Thank you for your cooperation

### **PART A: DEMOGRAPHIC INFORMATION**

**1. What role do you play in your organization?**

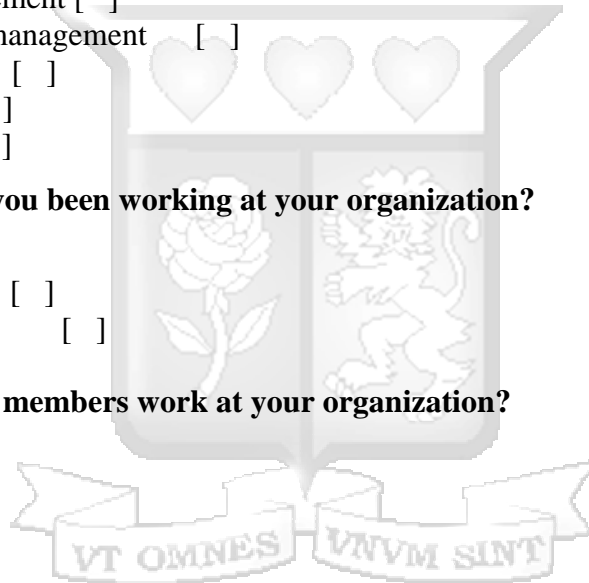
- a) Senior management [  ]
- b) Middle level management [  ]
- c) Junior staff [  ]
- d) Casuals [  ]
- e) Senior staff [  ]

**2. How long have you been working at your organization?**

- a) 0-5 years [  ]
- b) 5-10 Years [  ]
- c) Over 10 Years [  ]

**3. How many staff members work at your organization?**

- a) 0-50 [  ]
- b) 51-100 [  ]
- c) 101 - 200 [  ]
- d) 200-300 [  ]
- e) Above 300 [  ]



**PART B: INVOLVEMENT IN PLANNING**

Please indicate the extent to which you agree with each of the statements below. Use a scale of 1-5 where; 1= strongly Agree, 2= Agree, 3=somewhat agree, 4= disagree, 5= strongly disagree

	<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
4	The organization asks for my input when formulating strategy or making key strategic decisions					
5	Junior staff have opportunities in my organization to speak up about strategy/change efforts					
6	My organization is a great place for me to make a contribution for my development					
7	My supervisor gets my input and buy-in when making key decisions that impact me at work					
8	I feel comfortable sharing ideas with management					
9	The organization values my input during implementation of new strategies/change					
10	The organization provides sessions for learning from each other that is representative of the whole company					
11	I am part of a continuous improvement team in my organization					
12	I have been rewarded/recognized for sharing my ideas on an initiative					

**PART C: INVOLVEMENT IN EXECUTION**

Please indicate the extent to which you agree with each of the statements below. Use a scale of 1-5 where; 1= strongly Agree, 2= Agree, 3=somewhat agree, 4= disagree, 5= strongly disagree

	<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
13	Strategic change initiatives are shared with me					
14	I have freedom to openly agree/disagree about a strategic change/issue with management					
15	Staff meetings have open and honest communication from different levels of staff					
16	Management ensure buy in and participation form staff when implementing change efforts in the organization					

17	When change efforts are implemented junior staff loose some of their status in the organization					
18	My colleagues and I are prepared for any change initiatives in the organization					
19	I understand why my organization is implementing certain changes in the organization					
20	There is a link between my job and the achievement of the company's strategic objectives					
21	The organization adopts to change in change quickly					
22	When change initiatives are implemented I don't believe there is anything for me to gain					

**PART D: INVOLVEMENT IN EVALUATION**

Please indicate the extent to which you agree with each of the statements below. Use a scale of 1-5 where; 1= strongly Agree, 2= Agree, 3=somewhat agree, 4= disagree, 5= strongly disagree

	<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
23	The organization provides avenues for me to provide feedback					
24	The organization gives serious consideration to feedback it gets from junior staff					
25	I regularly give constructive feedback to management					
26	Junior staff know exactly what the goals for change initiatives in the organization are					
27	I am aware of what good looks like of the changes implemented in my organization.					
28	I am able to identify whether certain changes in the organization will have a positive impact or a negative one					
29	I look for ways to improve processes and productivity in the organization					
30	My organization takes time to regularly figure out ways to improve our work processes					
31	The organization is a catalyst for change initiatives					

**PART E: PROJECT PERFORMANCE**

Please indicate the extent to which you agree with each of the statements below. Use a scale of 1-5 where; 1= strongly Agree, 2= Agree, 3=somewhat agree, 4= disagree, 5= strongly disagree

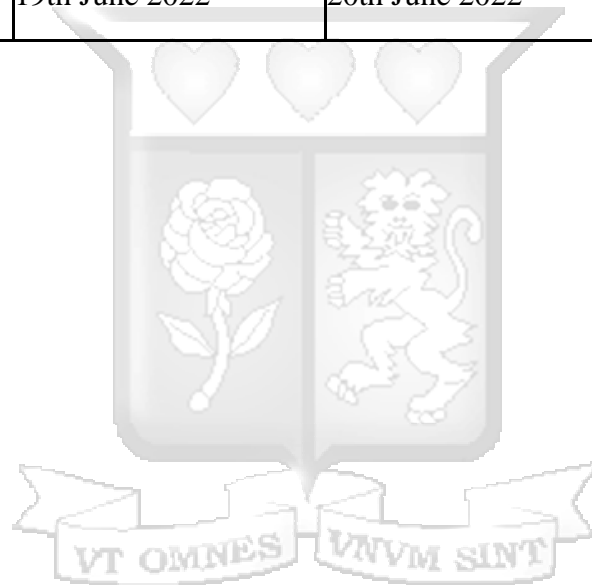
	<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
32	Day to day decisions in my organization show that quality production is a priority for my company	<b>1</b>	<b>5</b>	<b>25</b>	<b>78</b>	<b>42</b>
33	The quality of projects delivered SOLELY depends on program of works drawn up by senior staff(site agents)	<b>10</b>	<b>85</b>	<b>25</b>	<b>24</b>	<b>7</b>
34	The amount of time taken to deliver a milestone/project greatly depends on junior staff	<b>1</b>	<b>7</b>	<b>28</b>	<b>87</b>	<b>28</b>
35	Cost efficiencies are driven from all levels of staff	<b>1</b>	<b>6</b>	<b>33</b>	<b>81</b>	<b>30</b>

.....*Thank you*.....



## APPENDIX IV: WORK PLAN

<b>Research activities</b>	<b>Start</b>	<b>Finish</b>	<b>Duration</b>
Proposal development	5 th January 2022	4th April 2022	89days
Data collection (field work)	30th May 2022	6th June 2022	18 days
Data analysis and interpretation	6nd June 2022	10 <sup>th</sup> June 2022	5days
Report writing	11th June 2022	18 <sup>th</sup> June 2022	8days
Report Dissemination	19th June 2022	20th June 2022	2days



**APPENDIX V: LIST OF NCA-1 ROAD CONSTRUCTION COMPANIES IN NAIROBI**

	<b>Reg_no</b>	<b>Contractor</b>	<b>Town</b>	<b>Category</b>	<b>Class</b>
1.	59633/R/0820	Nairobi Enterprises Limited	47-NAIROBI	NCA-1	Road Works
2.	10041/R/1115	Debroso Construction Co. Limited	47-Nairobi	NCA-1	Road Works
3.	10152/R/0214	Powerful Construction Limited	47-Nairobi	NCA-1	Road Works
4.	10261/R/0314	Ray Engineering & Construction International Limited	47-Nairobi	NCA-1	Road Works
5.	10307/R/0514	Tisco Construction Limited	47-Nairobi	NCA-1	Road Works
6.	10415/R/0214	Halane Construction Co. Ltd 47	47-Nairobi	NCA-1	Road Works
7.	10748/R/0714	Anocma Enterprises Ltd	47-Nairobi	NCA-1	Road Works
8.	1057/R/0214	Brisma Africa Ltd	47-Nairobi	NCA-1	Road Works
9.	105/F/R/002/0621	Fujita Corporation Kenya Branch	47-Nairobi	NCA-1	Road Works
10.	10898/R/0714	Dayah Construction Co Limited	47-Nairobi	NCA-1	Road Works
11.	109/F/R/002/0122	China Aerospace Construction Group (Kenya) Corporation Limited	47-Nairobi	NCA-1	Road Works
12.	110/R/0314	Aegis Construction Ltd. 47-	47-Nairobi	NCA-1	Road Works
13.	11615/R/0814	Nilkanth Builders Limited	47-Nairobi	NCA-1	Road Works
14.	11619/R/0814	C.M. Construction (Ea) Limited	47-Nairobi	NCA-1	Road Works
15.	11753/R/0814	Electrogen Technologies (International) Limited	47-Nairobi	NCA-1	Road Works
16.	11842/R/0814	Iota Engineering And Construction Limited	47-Nairobi	NCA-1	Road Works
17.	11855/R/0814	Mahan Limited	47-Nairobi	NCA-1	Road Works
18.	11940/R/0121	Parklane Construction Ltd	47-Nairobi	NCA-1	Road Works
19.	1241/R/0314	Ceabud Eng. Services Ltd	47-Nairobi	NCA-1	Road Works
20.	1253/R/0314	Cementers Ltd	47-Nairobi	NCA-1	Road Works
21.	12696/R/1014	Shanga Engineering Works Limited	47-Nairobi	NCA-1	Road Works
22.	1268/R/0314	Central Electricals International Limited	47-Nairobi	NCA-1	Road Works
23.	12653/R/0914 A	Jiwa Shamji Limited	47-Nairobi	NCA-1	Road Works
24.	12983/R/1014	Victoria Engineering Company Limited	47-Nairobi	NCA-1	Road Works
25.	1329/R/0314	Charwins Ltd	47-Nairobi	NCA-1	Road Works
26.	13/F/R/001/0322	China Railway No5 Engineering Group Company Limited	47-Nairobi	NCA-1	Road Works

27.	1386/R/0314	China Fushun No. 1 Building Eng. Co. Ltd	47-Nairobi	NCA-1	Road Works
28.	14094/R/1114	Aswa Developers & Contractors	47-Nairobi	NCA-1	Road Works
29.	14547/R/1115	Fourway Construction Company Limited	47-Nairobi	NCA-1	Road Works
30.	14470/R/0116	Nightigale Enterprises Ltd	47-Nairobi	NCA-1	Road Works
31.	14240/R/1114	Associated Construction Company (Kenya) Limited	47-Nairobi	NCA-1	Road Works
32.	14580/R/1114	Soil And Water Masters Limited	47-Nairobi	NCA-1	Road Works
33.	14730/R/0115	Dickways Construction Company Limited	47-Nairobi	NCA-1	Road Works
34.	14732/R/0115	Northlink General Contractors & Suppliers Limited	47-Nairobi	NCA-1	Road Works
35.	14746/R/0115	Totemic Construction Co. Ltd	47-Nairobi	NCA-1	Road Works
36.	14823/R/0915	Translee Kenya Limited	47-Nairobi	NCA-1	Road Works
37.	14838/R/1116	Nitl Group Limited	47-Nairobi	NCA-1	Road Works
38.	14837/R/1116	Nyikaland International Technologies Group Limited	47-Nairobi	NCA-1	Road Works
39.	15085/R/0115	Elite Earthmovers Limited	47-Nairobi	NCA-1	Road Works
40.	15466/R/0516	Graynon Holdings Limited	47-Nairobi	NCA-1	Road Works
41.	15285/R/0316	Waki Clearing & Forwarding Agents	47-Nairobi	NCA-1	Road Works
42.	15603/R/0215	Shiffa Enterprises Limited	47-Nairobi	NCA-1	Road Works
43.	15625/R/1121	Kartar Singh Dhupar And Company Limited	47-Nairobi	NCA-1	Road Works
44.	15686/R/0215	Motorways Construction	47-Nairobi	NCA-1	Road Works
45.	15746/R/0716	Interways Works Limited	47-Nairobi	NCA-1	Road Works
46.	15750/R/0816	African Sawyers Limited	47-Nairobi	NCA-1	Road Works
47.	1602/R/0314	County Builders Ltd	47-Nairobi	NCA-1	Road Works
48.	15957/R/0215	Concordia Building & Civil Engineering Co Limited	47-Nairobi	NCA-1	Road Works
49.	16073/R/0215	Devshibhai & Sons Limited 47-Nairobi	47-Nairobi	NCA-1	Road Works
50.	16236/R/0315	Yuvi Construction Ltd	47-Nairobi	NCA-1	Road Works
51.	16787/R/0315	Space And Style Limited	47-Nairobi	NCA-1	Road Works
52.	16618/R/0314	White Space Technologies	47-Nairobi	NCA-1	Road Works
53.	1718/R/0314	Danaff Kenya Company Ltd	47-Nairobi	NCA-1	Road Works
54.	17528/B/0515	China Young Tai Engineering Company Limited	47-Nairobi	NCA-1	Road Works
55.	17254/R/0515	H Young Company E.A Limited	47-Nairobi	NCA-1	Road Works
56.	17637/R/0515	Aea Limited	47-Nairobi	NCA-1	Road Works

57.	18/F/R/002/0521	Zhongmei Engineering Group Ltd	47-Nairobi	NCA-1	Road Works
58.	18612/R/0516	Tunasco Insaat Anonim Sirketi	47-Nairobi	NCA-1	Road Works
59.	180/F/R/001/0421	The Third Engineering Bureau Of China City Construction Group Co.	47-Nairobi	NCA-1	Road Works
60.	18074/R/0416	Blue Valley Enterprises Limited	47-Nairobi	NCA-1	Road Works
61.	190/R/0814	Al-Imran Investment Limited	47-Nairobi	NCA-1	Road Works
62.	19186/R/0316	Ebenezer Commercial Works Limited	47-Nairobi	NCA-1	Road Works
63.	1930/R/0314	Dinesh Construction Co. Ltd	47-Nairobi	NCA-1	Road Works
64.	1946/R/0314	Diwafa Investment Ltd	47-Nairobi	NCA-1	Road Works
65.	20108/R/1018	Egypro East Africa Limited	47-Nairobi	NCA-1	Road Works
66.	20261/R/0915	Seokang Limited	47-Nairobi	NCA-1	Road Works
67.	20304/R/0915	Mizphah Contractor Agency Limited	47-Nairobi	NCA-1	Road Works
68.	20409/R/0915	Global Link East Africa Limited	47-Nairobi	NCA-1	Road Works
69.	21/F/R/001/0821	Cale Infrastructure Construction Company Limited	47-Nairobi	NCA-1	Road Works
70.	22134/R/0116	Tosha Holdings Limited	47-Nairobi	NCA-1	Road Works
71.	22681/R/0216	Himilo Construction And Supply Limited	47-Nairobi	NCA-1	Road Works
72.	23359/R/0616	Oasis Technical And Consulting Limited	47-Nairobi	NCA-1	Road Works
73.	2336/R/0314	Epc Builders Ltd	47-Nairobi	NCA-1	Road Works
74.	2350/R/0314	Erdemann Co. (K) Ltd	47-Nairobi	NCA-1	Road Works
75.	2381/R/0716	Etrade Company Limited	47-Nairobi	NCA-1	Road Works
76.	24439/R/0616	Sobetra Kenya Ltd	47-Nairobi	NCA-1	Road Works
77.	2437/R/0616	Ezeetec Limited	47-Nairobi	NCA-1	Road Works
78.	24512/R/0616	Leo Design Ltd	47-Nairobi	NCA-1	Road Works
79.	24511/R/0616	Linksoft Intergrated Services(E.A) Ltd	47-Nairobi	NCA-1	Road Works
80.	24496/R/0616	Infinity Development Limited	47-Nairobi	NCA-1	Road Works
81.	2539/R/0915	Fenke Agencies Limited	47-Nairobi	NCA-1	Road Works
82.	27194/R/0916	Pejom Contractors Ltd	47-Nairobi	NCA-1	Road Works
83.	27162/R/0916	Orion Nebula Ltd	47-Nairobi	NCA-1	Road Works
84.	2684/R/0314	Frontier Engineering Ltd	47-Nairobi	NCA-1	Road Works
85.	27570/R/1016	Wardy Communications Limited	47-Nairobi	NCA-1	Road Works
86.	27463/R/0916	Centura Limited	47-Nairobi	NCA-1	Road Works

87.	2741/R/0214	Gambella Investment Ltd	47-Nairobi	NCA-1	Road Works
88.	27762/R/1016	Kyanite Construction Company Limited	47-Nairobi	NCA-1	Road Works
89.	27741/R/0418	Meera Construction Ltd	47-Nairobi	NCA-1	Road Works
90.	27629/R/1116	Adwaa Alkhalil Construction Company Limited	47-Nairobi	NCA-1	Road Works
91.	28/F/B/001/0721	Superior Homes K Ltd	47-Nairobi	NCA-1	Road Works
92.	28/F/B/002/01021	Dongsheng Construction Engineering Limited	47-Nairobi	NCA-1	Road Works
93.	28547/R/1216	Belgravia Construction Limited	47-Nairobi	NCA-1	Road Works
94.	28603/R/1216	Wak Construction Limited	47-Nairobi	NCA-1	Road Works
95.	30/F/R/001/01120	China Railway No.10. Engineering Group Co. Ltd	47-Nairobi	NCA-1	Road Works
96.	30327/R/0414	Derow Construction Company Ltd	47-Nairobi	NCA-1	Road Works
97.	30180/R/0317	Royal Builders And Construction Limited	47-Nairobi	NCA-1	Road Works
98.	3026/R/0314	Gragab Agencies Limited	47-Nairobi	NCA-1	Road Works
99.	30687/R/0417	Mayleen (K) LIMITED	47-Nairobi	NCA-1	Road Works
100.	30948/R/0417	Kenric Investment Ltd	47-Nairobi	NCA-1	Road Works
101.	077/R/0914	Tareef Enterprises Limited	47-Nairobi	NCA-1	Road Works
102.	31210/R/0219	Lunao Enterprises Limited	47-Nairobi	NCA-1	Road Works
103.	3114/R/0314	H.K Builders & General Contractors Limited	47-Nairobi	NCA-1	Road Works
104.	31043/R/0517	Session Blue Contractors Limited	47-Nairobi	NCA-1	Road Works
105.	31903/R/0717	Mahathi Infra East Africa Limited	47-Nairobi	NCA-1	Road Works
106.	31949/R/0817	Robust Limited	47-Nairobi	NCA-1	Road Works
107.	33069/R/0221	Varomatech Limited	47-Nairobi	NCA-1	Road Works
108.	3535/R/0314	Intex Construction Ltd	47-Nairobi	NCA-1	Road Works
109.	33548/R/0917	Adawa Investments Company Limited	47-Nairobi	NCA-1	Road Works
110.	39/F/R/001/01120	Henan Highway Engineering Co., Ltd	47-Nairobi	NCA-1	Road Works
111.	38713/R/0318	Paschal Construction Limited	47-Nairobi	NCA-1	Road Works
112.	3821/R/1014	Jilk Construction Company Limited	47-Nairobi	NCA-1	Road Works
113.	37278/R/0118	Parbat Siyani Construction And Elite Earthmovers Jv Limited	47-Nairobi	NCA-1	Road Works
114.	40224/R/0418	Clime Builders (E.A) Limited	47-Nairobi	NCA-1	Road Works
115.	4/F/R/007/01220	China Wu Yi Company Limited	47-Nairobi	NCA-1	Road Works

116.	4164/R/0214	Kalexis Limited	47-Nairobi	NCA-1	Road Works
117.	41357/R/0618	Alfa Tech Contractors Limited	47-Nairobi	NCA-1	Road Works
118.	4104/R/0314	Kabuito Contractors	47-Nairobi	NCA-1	Road Works
119.	40999/R/0518	Miliki Development Company Limited	47-Nairobi	NCA-1	Road Works
120.	40359/R/0414	Irrico International Limited	47-Nairobi	NCA-1	Road Works
121.	42508/R/0718	Joleen Traders Limited	47-Nairobi	NCA-1	Road Works
122.	42464/R/0718	Mantab Limited	47-Nairobi	NCA-1	Road Works
123.	42036/R/0720	Megascope Healthcare (K) Limited	47-Nairobi	NCA-1	Road Works
124.	42/F/R/001/01221	Guangxi Hydroelectric Construction Bureaukenya Limited	47-Nairobi	NCA-1	Road Works
125.	45358/R/1118	Prime Auto General Trading Enterprises Limited	47-Nairobi	NCA-1	Road Works
126.	44996/R/1018	Towertech Africa Limited.	47-Nairobi	NCA-1	Road Works
127.	45333/R/1118	King Group Company Limited	47-Nairobi	NCA-1	Road Works
128.	45354/R/1118	King Realtors Limited	47-Nairobi	NCA-1	Road Works
129.	45356/R/1118	Quick Fix Auto Garage Limited	47-Nairobi	NCA-1	Road Works
130.	44969/R/0919	Alphamay Construction Company Limited	47-Nairobi	NCA-1	Road Works
131.	44637/R/1018	Autobacs Limited	47-Nairobi	NCA-1	Road Works
132.	44218/R/0918	Partex Investment Limited	47-Nairobi	NCA-1	Road Works
133.	43613/R/0818	King Construction Company Ltd	47-Nairobi	NCA-1	Road Works
134.	46618/R/1218	Pavicon (K) Limited	47-Nairobi	NCA-1	Road Works
135.	46499/R/1218	Oak Company Limited	47-Nairobi	NCA-1	Road Works
136.	4641/R/0314	Kiu Construction Ltd	47-Nairobi	NCA-1	Road Works
137.	4583/R/0214	Kingsley Construction Company Limited	47-Nairobi	NCA-1	Road Works
138.	454/R/0121	Arcon Works Ltd	47-Nairobi	NCA-1	Road Works
139.	4789/R/0314	Lafey Construction Co. Ltd	47-Nairobi	NCA-1	Road Works
140.	47497/R/0119	Grid Construction Limited	47-Nairobi	NCA-1	Road Works
141.	47191/R/0119	Uday Patel & Company Limited	47-Nairobi	NCA-1	Road Works
142.	47/F/R/001/0621	Mota Engil Engenharia E Construcão Sa Africa	47-Nairobi	NCA-1	Road Works
143.	49490/R/0419	Nova Schemes Limited	47-Nairobi	NCA-1	Road Works
144.	4915/R/0217	Lexis International Limited	47-Nairobi	NCA-1	Road Works
145.	4865/R/0314	Lee Construction Ltd	47-Nairobi	NCA-1	Road Works
146.	48623/R/0620	Dialescas Africa Limited.	47-Nairobi	NCA-1	Road Works
147.	4847/R/0514	Lawton Limited	47-Nairobi	NCA-1	Road Works
148.	48316/R/0319	Adco Group Of Companies Limited	47-Nairobi	NCA-1	Road Works

149.	48201/R/0219	Ozbro Construction Company Limited	47-Nairobi	NCA-1	Road Works
150.	4818/R/0514	Landmark Holding Ltd	47-Nairobi	NCA-1	Road Works
151.	50946/R/0719	Kal Binyan Kenya International Limited	47-Nairobi	NCA-1	Road Works
152.	50746/R/0719	Westline Construction Limited	47-Nairobi	NCA-1	Road Works
153.	50555/R/0220	Lake Star Agencies	47-Nairobi	NCA-1	Road Works
154.	50417/R/0719	Maa Contractors Limited	47-Nairobi	NCA-1	Road Works
155.	5/F/R/003/01121	Jiangxi Transportation Engineering Group Limited	47-Nairobi	NCA-1	Road Works
156.	49873/R/0519	Roji Construction Company Limited	47-Nairobi	NCA-1	Road Works
157.	51814/R/0819	Advent Infrastructure Limited	47-Nairobi	NCA-1	Road Works
158.	51559/R/0819	Epcm Holdings Kenya Limited	47-Nairobi	NCA-1	Road Works
159.	5153/R/0314	Magnate Ventures Ltd	47-Nairobi	NCA-1	Road Works
160.	51518/R/0819	Jtg Enterprises Limited	47-Nairobi	NCA-1	Road Works
161.	5123/R/0314	Machiri Limited	47-Nairobi	NCA-1	Road Works
162.	5107/R/0514	Asal Frontiers Limited	47-Nairobi	NCA-1	Road Works
163.	52609/R/0919	Metsec Cables Limited	47-Nairobi	NCA-1	Road Works
164.	5259/R/0415	Manyota Limited	47-Nairobi	NCA-1	Road Works
165.	52340/R/0919	Wazaco International Construction Ltd	47-Nairobi	NCA-1	Road Works
166.	5233/R/0314	Mandhir Construction Co. Ltd	47-Nairobi	NCA-1	Road Works
167.	51947/R/0819	Baoye Kenya Company Limited	47-Nairobi	NCA-1	Road Works
168.	5387/R/0316	Mashin Construction Company Limited	47-Nairobi	NCA-1	Road Works
169.	53566/R/1119	Jinsing Enterprises East Africa Limited	47-Nairobi	NCA-1	Road Works
170.	53487/R/1019	D. Manji Construction Limited	47-Nairobi	NCA-1	Road Works
171.	5348/R/0314	Marson Intergrated Ltd	47-Nairobi	NCA-1	Road Works
172.	54286/R/1219	Tag Construction Limited	47-Nairobi	NCA-1	Road Works
173.	5428/R/0314	Mattan Contractors Ltd	47-Nairobi	NCA-1	Road Works
174.	54242/R/1119	Marfa Construction Company Limited	47-Nairobi	NCA-1	Road Works
175.	54165/R/1119	Erdemann Property Limited	47-Nairobi	NCA-1	Road Works
176.	54123/R/1119	Wolf Paving Works Kenya Limited	47-Nairobi	NCA-1	Road Works
177.	53970/R/1119	Chaju Builders Limited	47-Nairobi	NCA-1	Road Works
178.	56344/R/0320	Justnice Ltd.	47-Nairobi	NCA-1	Road Works
179.	55656/R/0320	Yorkshire Company Limited	47-Nairobi	NCA-1	Road Works

180.	55643/R/0220	J And K Investment Kenya Limited.	47-Nairobi	NCA-1	Road Works
181.	57586/R/1021	Modern Precast (K) Limited	47-Nairobi	NCA-1	Road Works
182.	5748/R/0116	Yangguang Property Design And Manufacturing Limited	47-Nairobi	NCA-1	Road Works
183.	57/F/R/001/0721	Centunion East Africa Limited47-	47-Nairobi	NCA-1	Road Works
184.	5676/R/0314	Milicon's Limited	47-Nairobi	NCA-1	Road Works
185.	59653/R/0820	Derow Brothers Construction Ltd	47-Nairobi	NCA-1	Road Works
186.	58947/R/0720	Skysite Construction Group Ltd	47-Nairobi	NCA-1	Road Works
187.	58287/R/0620	Brimark And Company Limited	47-Nairobi	NCA-1	Road Works
188.	58005/R/0620	Baran International	47-Nairobi	NCA-1	Road Works
189.	60639/R/0820	Convex Heavy Commercial And Machinery Limited	47-Nairobi	NCA-1	Road Works
190.	60383/R/0820	R K Sanghani	47-Nairobi	NCA-1	Road Works
191.	61984/R/1020	Unibra Construction Company Limited	47-Nairobi	NCA-1	Road Works
192.	61853/R/1020	Wady El Nile For Contracting And Real Estate Investments	47-Nairobi	NCA-1	Road Works
193.	61341/R/0920	Black Cotton Construction Limited	47-Nairobi	NCA-1	Road Works
194.	6516/R/0314	Nyoro Construction	47-Nairobi	NCA-1	Road Works
195.	64226/R/0121	Jo Kirk Real Estate Developers Limited	47-Nairobi	NCA-1	Road Works
196.	64158/R/1220	Sobetra Uganda Limited	47-Nairobi	NCA-1	Road Works
197.	66212/R/1021	Broad Contractors Company Limited	47-Nairobi	NCA-1	Road Works
198.	66261/R/0321	Hm International Construction Company Limited	47-Nairobi	NCA-1	Road Works
199.	66002/R/0321	Noten Ventures Limited	47-Nairobi	NCA-1	Road Works
200.	66/F/R/002/0821	Shengli Engineering	47-Nairobi	NCA-1	Road Works
201.	67643/R/0621	Backmart Construction Company Ltd	47-Nairobi	NCA-1	Road Works
202.	6633/R/0314	Orbit Enterprises Ltd	47-Nairobi	NCA-1	Road Works
203.	68248/R/0721	Benavas Construction And Supplies Limited	47-Nairobi	NCA-1	Road Works
204.	68113/R/0621	Tuk Chilo Ltd	47-Nairobi	NCA-1	Road Works
205.	67911/R/0621	Bg Hill Limited	47-Nairobi	NCA-1	Road Works
206.	67889/R/0621	Aaa Real Estate Group Limited	47-Nairobi	NCA-1	Road Works
207.	67852/R/0621	Kadden Ltd	47-Nairobi	NCA-1	Road Works

208.	67798/R/0621	Waso Trading Company Limited	47-Nairobi	NCA-1	Road Works
209.	6921/R/0314	Pinnie Agency Ltd	47-Nairobi	NCA-1	Road Works
210.	69308/R/0821	Kenspace Construction Limited	47-Nairobi	NCA-1	Road Works
211.	69037/R/0821	Buildlink Development Limited.	47-Nairobi	NCA-1	Road Works
212.	68716/R/0721	Aztec Infrastructure Kenya	47-Nairobi	NCA-1	Road Works
213.	6883/R/0314	Petwa Construction Company Limited	47-Nairobi	NCA-1	Road Works
214.	68249/R/0721	Forty Rocks Enterprises Limited	47-Nairobi	NCA-1	Road Works
215.	70520/R/1021	Kantas Limited	47-Nairobi	NCA-1	Road Works
216.	7007/R/0314	Powergen Technologies Ltd	47-Nairobi	NCA-1	Road Works
217.	6962/R/0616	Polish Contractors Co.	47-Nairobi	NCA-1	Road Works
218.	7324/R/0214	Resjos Enterprises Limited	47-Nairobi	NCA-1	Road Works
219.	72629/R/0122	Gagnant Company Limited	47-Nairobi	NCA-1	Road Works
220.	7241/R/0216	Ravina Agencies Limited	47-Nairobi	NCA-1	Road Works
221.	71445/R/1121	XCL Roads And Construction Limited	47-Nairobi	NCA-1	Road Works
222.	7781/R/0314	Sava Builders	47-Nairobi	NCA-1	Road Works
223.	7787/R/0316	Saxon Investments Limited	47-Nairobi	NCA-1	Road Works
224.	7574/R/0314	Rural Distributors Enterprise	47-Nairobi	NCA-1	Road Works
225.	7597/R/0314	S. S. Mehta & Sons Ltd	47-Nairobi	NCA-1	Road Works
226.	73757/R/0322	Alemayehuketema Generalcontractor Limited	47-Nairobi	NCA-1	Road Works
227.	73740/R/0322	Baran Telecom Networkskenya Limited	47-Nairobi	NCA-1	Road Works
228.	8078/R/0314	Sinoe Construction Ltd	47-Nairobi	NCA-1	Road Works
229.	7859/R/0314	Seo & Sons Ltd	47-Nairobi	NCA-1	Road Works
230.	7862/R/0314	Septcom	47-Nairobi	NCA-1	Road Works
231.	8886/R/0314	Trapoz Contractors Limited	47-Nairobi	NCA-1	Road Works
232.	8738/R/0214	Three N International Ltd	47-Nairobi	NCA-1	Road Works
233.	8688/R/1215	Territorial Works (K) Limited	47-Nairobi	NCA-1	Road Works
234.	8419/R/0616	Sun - Jua Builders Ltd	47-Nairobi	NCA-1	Road Works
235.	84/F/R/001/0921	China Gansu International Corporation For Economic And Technical Cooperation (K) Co Ltd	47-Nairobi	NCA-1	Road Works
236.	9101/R/0214	Vee Vee Enterprises Ltd	47-Nairobi	NCA-1	Road Works
237.	8969/R/1114	Tulsi Construction Co	47-Nairobi	NCA-1	Road Works
238.	974/R/0316	Bonfide General Contractors Limited	47-Nairobi	NCA-1	Road Works
239.	9303/R/0314	Warren Enterprises Limited	47-Nairobi	NCA-1	Road Works

240.	9285/R/0214	Wankim Investment Ltd	47-Nairobi	NCA-1	Road Works
241.	9184/R/0116	Vishak Builders Ltd	47-Nairobi	NCA-1	Road Works
242.	99/R/0214	Admo Construction Ltd	47-Nairobi	NCA-1	Road Works

Source: National Construction Authority, 2021

