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journal homepage: www.elsevier.com/locate/ssaho

PROJECT MANAGEMENT PRACTICES ON PERFORMANCE OF ROAD CONSTRUCTION PROJECTS IN NAKURU CITY COUNTY, KENYA

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ARTICLE INFO
Received 11 April 2023
Accepted 12 April 2023
Published 27 April 2023

Keywords:
Project Management Practices
Stakeholder's Involvement
Project Planning
Performance of Road Construction Projects

Cite:

Wangai, S. N., & Musembi, N., (2023). Project Management Practices On Performance Of Road Construction Projects In Nakuru City County, Kenya. *International Journal of Social Science Management and Entrepreneurship*, 7(2023), 333-342

ABSTRACT

This study therefore sought to establish the effect of Project Management Practices on performance of road construction projects in Nakuru County, Kenya. Specifically, the study sought to determine the effect of stakeholder's involvement on performance of road construction projects in Nakuru County, Kenya and to establish the effect of project planning on performance of road construction projects in Nakuru County, Kenya. This study adopted a descriptive research design. The target population of this study was 107 construction projects implemented in Nakuru by KeRRA. Therefore, the unit of observation was the 107 projects while the unit of analysis was the project managers of these projects. Therefore, the target population for the study was 107 respondents. Census sampling was used whereby all the 107 project managers of each construction project were administered with a questionnaire as the target respondents. Primary data was collected by use of a questionnaire. This study adopted the self-administered questionnaire approach. This study used both inferential and descriptive statistics to analyze the data with the help of SPSS software. Inferential statistics were also used to test the relationship between the study variables. The study used correlation and regression analysis. Pearson R correlation was used to measure strength and the direction of linear relationship between variables. The study results were presented through use of tables and figures. The study concludes that stakeholder's involvement influences the performance of road construction projects in Nakuru City County, Kenya. In addition, the study concludes that project planning influences the performance of road construction projects in Nakuru City County, Kenya. The study recommends that the management of road construction authorities in Nakuru County should ensure project stakeholders are constantly involved in implementation of the road projects. In addition, the management of road construction authorities in Nakuru County should ensure proper planning of the road implementation to enhance performance.

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Background of the Study

Project management practices involve making sure that the project incorporates everything required and omits any task that is not needed to complete a project. Some projects are started without suitable planning and preparation which always results to issues such as additional expenses and deferrals (Antvik and Sjöholm, 2017). The scope of the project must be understood by the project managers as well as all parties involved despite the procedures used to achieve the goal of project completion. Project scope refers to the part of project planning that involves determining and documenting a list of specific project goals and objectives, deliverables, tasks, costs, and deadlines (Atkinson, 2018). The documentation of a project scope can likewise be alluded to as a scope statement, terms of reference, or statement of work (SOW) which explains the limits of the projects and defines the role of every team member and sets up procedures on how to verify and approve the completed project. The documentation enables the project stakeholders and team members to stay focused on the project.

The main goal of project management implantation practices is to realize consistency in project success. A project is said to be successful when all objectives are achieved. Project management success is evaluated during the project life cycle through classic performance measures (Liu, 2019). Kam and Müller (2017) contended that if the final result of the project fails to meet customer expectations, even though the project is delivered within set timeline and budget, the project is only successful according to the contractor but it eventually fails. Scope describes the boundaries of the project in terms of what it will or will not deliver. It defines all project work thus ensuring thus help project team set up control systems that could bring a better project outcome (PM4DEV, 2018). Further scope management are processes required to ensure the project includes all the work and only the work that is required to complete the project successfully, deliverables include: scope statement; work breakdown structure and formal acceptance (Horine, 2018). Al Humaidan, (2016) attributed project failure to inadequate pre–project planning and poor project definition of project elements. 70% of poor time performance of Saudi Arabia construction projects is due to changes in project scope (Assaf & Al–Hejji, 2016). Further lengthy project delays Saudi Arabia are caused by a number of issues such as unqualified contractors, changes in scope of work, rework in inappropriate parties involved in procurement methods.

In Europe, Jha, and Iyer, (2016) demonstrated that innovative road construction methods can help implement projects effectively and within the stipulated time. Lu Shan (2018) expressed that Chinese construction companies utilize appropriate planning and control strategies, an appropriate collaboration between the technical designing team and contractors, and hire professionals who enable them to undertake the projects within scheduled timeline and planned expense. KPMG-PMI (2018) report showed that 25% of progressing projects in India were deferred because of poor scope management deficient utilization of present-day innovation. Moreover, the unskilled labor force and insufficiency of construction materials and equipment resulted in road project deferments.

Like elsewhere in the world, Africa projects are often not completed in time & experience inadequate scope definition & cost overruns, their failure late is in excess of 50%; World Bank private firm IFC (International Finance Corporation) has half of its projects succeed while half fail (Associated Press, 2017). Rwelamila and Puurushottam, (2018) claimed that project management competency may be improved for better project outcome; they also attributed lack of quality training in project management as a major drawback to Africa development.

A study by Abdi (2018) established that in Kenya, over 50% of the projects have been pronounced non-performing or unsatisfactory. This figure happens to be even larger when the NGOs projects are added. All the different geographical approach affirms that road construction projects have their challenges that affect them in every region of the world. Omwaka and Wanyoike (2016) argued that executive project support, sufficient resources for some execution is of immense significance in showing characteristics between their final successes and failures.

Mkutano (2017) indicates that the high failure rate of road construction projects in Kenya is as a result of poor scope management practices. Aira (2016) argues that a thriving project ought to bargain between the company's advantages and the end users satisfaction. Success approached in

project performance is considered as a foundation of concern equally to public and private sector clients. Chan and Chan, (2014) asserted that project performance measurements included and 5 not limited to time, budget, safety, quality and overall client satisfaction.

A study by Njogu, Namusonge, and Oluoch (2018) on project management influence on project performance in community based HIV projects in Kenya established that top management support for the project helps to align the project objectives to the organizational goals and also provide the required resources. In a study on determinants of project performance in non-governmental organizations in Kenya Njeri and Were (2017) established that top management support, organization culture, project scheduling and project team commitment have significant influence on project performance in non-governmental organizations in Kenya.

Omolo (2015) in a study on factors influencing project management in public funded projects in Kenya established that inadequate resource allocations can lead to failure in the implementation of project management to a very large extent. The study further revealed that poor leadership can lead to stalling of project management to a very large extent. The study established that stakeholders' participation influences the implementation of project management (7). Another study by Ochenge (2018) on Project Management Practices and performance of road infrastructure projects in the lake region of Kenya indicated that resource mobilization, project monitoring and evaluation, group dynamics management and project risks management had significant effects on the performance of road infrastructure projects. This study therefore seeks to establish the influence of project management practices on the performance of road construction projects in Nakuru County.

Statement of the Problem

Successful road projects consider the project scope management and usually the rigorous project scope control is essential for project completion. Gathoni and Karanja (2016) lamented that only 20% of rural road construction projects in Nakuru are completed successfully which is a hindrance to smooth transportation of farm produce and movement of people from one area to another. Acquah (2018) investigated the various factors causing project failure in Finland and found that project managers do not prioritize project management.

Kisavi (2019) study on determinants of road construction projects found that project success was affected by financial resources, contractor ability, project monitoring and assessment. Matu, Kyalo, Mbugua and Mulwa (2020) study on the impact of stakeholder involvement in project planning on successful completion of road projects found that stakeholder involvement positively determines successful completion of road projects. Otieno (2017) study on the nexus between project scope management challenges and successful implementation of projects in secondary schools showed a significant correlation between scope definition, authentication, project changes and project implementation. However, there exists no study focusing on the effect of project management practices on performance of road construction projects in Nakuru County, Kenya. To fill the highlighted gaps, the current study sought to establish the influence of project management practices on performance of road construction projects in Nakuru County, Kenya

General Objective

The main focus of this study was to establish the effect of Project Management Practices on performance of road construction projects in Nakuru County, Kenya.

Specific Objectives

The study was guided by the following specific Objectives;

i. To determine the effect of stakeholder's involvement on performance of road construction projects in Nakuru City County, Kenya
ii. To establish the effect of project planning on performance of road construction projects in Nakuru City County, Kenya

LITERATURE REVIEW

Theoretical Review

Stakeholders Theory

Stakeholders Theory was developed by Friedman (2006) and states that the organization in itself is thought of as a group of stakeholders and the purpose of the organization should be to manage

their interests, needs and viewpoints. The idea applies to incorporated frameworks including nature and people. The stakeholder theory contends that project supervisors should settle on choices in order to assess the interests of all stakeholders in a project including money related petitioners, yet in addition representatives, clients, networks and administrative authorities (Gareis et al., 2009)

Stakeholders' theory questions the power supposition of interests of investors and advocates that a programme ought to be overseen in light of a legitimate concern for every one of its stakeholders. The theory accepts that values are fundamentally and expressly a part of a project and that project directors need to explain the common feeling of significant worth they make to unite its key stakeholders. At the point when stakeholders get what they need from a project, a feeling of possession and having a place is determined (Tembo, 2003)

This research was guided by the stakeholder theory that predicts that to improve project performance; an association must think about the desires for its compelling stakeholders and endeavor to meet those desires. Stakeholders remain the fundamental drivers of an association; however, a balance should be made to guarantee that stakeholders' desires are in accordance with the firm's goals, mission, and vision. This theory shows how an organization is comprised of social attributes by stakeholder interaction. The stakeholder theory therefore is relevant in showing the effects the various stakeholders have in successful implementation of land restoration projects. Therefore, this theory is essential in forming a basis on determining the stakeholder's involvement influence on performance of road construction projects in Nakuru County, Kenya.

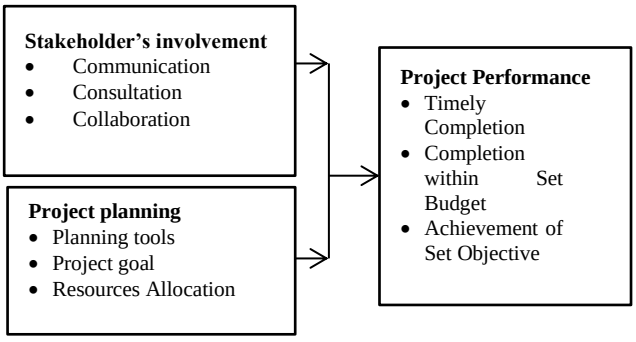
The Contingency Theory

The theory of constraints is a set of management tools created by Eliyahu Goldratt in 1984. The theory is applicable in many areas including project management and performance measurement among many others (Blackstone, 2010). The theory helps organizations to identify the most important constraints or bottlenecks in their processes and systems, and dealing with them in order to improve performance. According to Goldratt (2004), organizational performance is dictated by constraints present in processes and systems. Constraints are restrictions that hinder an organization from maximizing its performance and achieving its goals and objectives (Goldratt, 2004). He states that constraints can involve policies, equipment, information, supplies or even people, and can be either internal or external to an organization.

Theory of constraints can be applied in conjunction with other management techniques such as total quality management and risk management to ensure a comprehensive set of techniques that ensure continuous improvement in all areas of operation in an organization (IMA, 1999). Organizations use this for control and assessment based on their configuration. Managers can track and respond using both feedback mechanisms that is the bottomup and top-down in many ways. In some organizations, monitoring and evaluation may be automated. In the various stages of the project life cycle, companies also use various tracking and assessment methods (Otley, 2016)

Programs depend on the settings of the stakeholders and their actions. The key to the success of a program creativities is depended on how well it manages relationships with key stakeholders, which includes clients, staff, vendors, families, contributors and others, who which influence the goals achievement (Joslin, 2019) This theory therefore forms a basis on the influence of project planning on performance of road construction projects in Nakuru County, Kenya.

Conceptual Framework



Stakeholder's Involvement

According to the Project Management Institute (PMI) Standards Committee (2014), project stakeholders are individuals or organizations who are actively involved in the project or whose interests may be affected by the execution of the project or by successful project completion. Stakeholders can affect an organization's goals,

functioning, development, performance and even survival (Chinyio & Olomolaiye, 2019). According to their research, stakeholders are beneficial to an organization when they are involved and assist to achieve its objectives, and they are antagonistic when they work against its objectives. Successful participation of stakeholders involves actively engaging them, getting their support and working together to plan, device and develop new ways of managing projects to improve their performance (Infragate, 2018).

Fageha and Aibinu (2016) carried out a study on identification of stakeholders' involvement that improves project scope definition comprehensiveness in Saudi Arabian public building projects. The results revealed that the stakeholder involvement in all the whole project lifecycle had a significant influence on the success of public building projects. According to Beringer, Jonas, and Kock (2017), stakeholder conduct and management of such conduct is critical to project portfolio success. From the project owners' point of view, Eskerod and Jepsen (2019) confirmed stakeholders play a critical role in a project and hence a project's success can only be guaranteed if stakeholders are first inspired and in return have been part of the project.

Project Planning

Planning and determination of the ideal project lifecycle for the project being embraced can significantly affect the success of that project (Naeem, Khanzada, Mubashir & Sohail, 2018). According to Naeem et al., (2018) project planning is the process of deciding ideal strategies, arrangement and timing of project exercises, and obliged assets to boost the possibility for a Successful Projects. Extend planning viability can be conceptualized as the degree to which a project accomplishes its arranged targets. Planning process group consists of those processes performed to establish the total scope of the effort, define and refine the objectives, and develop the course of action required to attain those objectives (Project Management Institute, 2018).

Project planning is widely thought to be an important contributor to project success (Khang, & Moe, 2018). If done effectively, project planning has been known to lead to success of projects using all the parameters of time, cost and quality (James, 2018). Their review provided planning as plausible explanation for the success of development projects – that they are able to meet set targets due to effective planning (Agheneza, 2017).

In Project management, planning is setting up actions to be taken throughout the project life cycle to guarantee the success of the project. We plan for projects so as to reduce project uncertainty, increase efficiency in our processes, monitor and control work and to have clearer understanding of what the project is about. Failure to plan for a project can lead to the initiating of a project without well-defined requirements which eventually would lead to the project not attaining its intended objectives (Kerzner, 2019). Although planning in itself does not guarantee project success, failure to plan in itself almost always guarantees project failure. Project planning is therefore a key component to increase the potential success rate of a project (Carmichael, 2016).

Empirical Review

Stakeholder's Involvement and Project Performance

Berglund, Hallgren, and Aradóttir, (2017) researched on stakeholder interaction in participatory and restoration in Iceland: environmental officers' challenges and strategies. This study explored how district officers at the Soil Conservation Service of Iceland (SCSI) experienced and dealt with stakeholder interaction in participatory land restoration. We made semi-structured interviews with all district officers with at least 1-year experience; seven in total. A thematic content analysis revealed five challenges facing the officers in their interaction activities and seven strategies that they used to deal with these challenges. The core challenge was to establish and maintain contacts with farmers and other stakeholders as it enabled the SCSI to support and influence their land restoration practices. Other challenges were to: accomplish SCSI's objectives; represent the SCSI and the government; have adequate skills, knowledge, and background; and deal with one's own emotions. Four of the strategies seemed to promote collaboration: create win-win scenarios; "go local"; direct and positive communication; and motivation and knowledge sharing. Factors undermining their collaboration efforts included insufficient time and other resources, an

unsupportive organizational culture and a legal duty to assess the condition of vegetation cover on farmland. Increased resource allocation to the SCSI's local operations, more attention to emotional issues, and efforts to develop a more flexible and learning organizational culture that supports collaboration could counteract these factors.

Wang and Aenis, (2019) researched on stakeholder analysis in support of sustainable land management: Experiences from southwest China. This article provides a practical example and discusses experiences from a sustainable rubber management project in Southwest China. This case study shows how, to a certain extent, "usage-oriented" SA can support joint decision making in SLM. With a more general aim, we reflect on the process and its management. As a result, we identify some core management issues: the heterogeneity of stakeholder groups with their multiple interests, stakeholders' involvement in decision making, the necessity of iteration, and adjustments with respect to cultural context. Stakeholder identification was a continuous process adjusted over time, as well as a means of participation itself.

Lazos-Chavero, *et, al.,* (2016) researched on stakeholders and tropical reforestation: challenges, trade-offs, and strategies in dynamic environments. In this manuscript, we aim to show that successful long-term reforestation requires stakeholder engagement beyond planning stages and a recognition of the dynamism of stakeholder outlooks as stakeholders' opportunities, relationships, interests, and roles change over time. We first summarize lessons from recent literature on stakeholder involvement within reforestation efforts. We then present findings from a multiple-stakeholder workshop organized in west-central Mexico, in which we illustrate their choices on how to navigate trade-offs among different reforestation intervention strategies (agroforestry/silvopastoral, natural regeneration, native species reforestation, commercial plantations). The pathway comprises four phases: (1) collaborate to devise a reforestation strategy through dialogue about dynamic trade-offs; (2) pledge robust stakeholder commitments to mutual arrangements for implementing reforestation; (3) implement reforestation interventions; and (4) adjust strategy through continuous evaluation of outcomes.

Project Planning and Project Performance

Novo, Landis and Haley (2017) study investigated on project planning and its role in the success of project management. The study was carried out to discover project manager skills together with its competency in leadership and how they can lead to project success. The study results revealed that planning process are directly related with the project manager competency. Similarly, the project managers leadership skills and project success is strongly correlated

Buba and Tanko (2017) study examined the influence of project planning on quality performance of construction projects. A total of 43 questionnaires were distributed to 3 key groups of respondents who included Quantity Surveyors, Builders, and Architects who were project managers in Nigeria. It was established that the ability of a project manager in giving direction is the best leadership style and contributes to the 20 best artistic quality of the project and also leads to better inter-functional relationships.

Yang, Huang and Wu (2017) carried out a study on the association among project planning and project success. The study used questionnaires to measure the leadership style of the project manager, the success of the project in regard to scope, budget, quality and client satisfaction. The study findings shows that better project management leadership leads to better project team members relationships. The study also revealed that teamwork spirit has a statistical significance influence on project performance.

Nzioka (2017) carried out a study in Nairobi on project management planning on project success in Kenya. The research was based on the case of Kenya Power Infrastructure Development Projects. This research carried out a Census Survey for all project managers to collect data. The study established project-planning roles and looked into the types of planning. The current study sought to establish the influence of project planning on land restoration and socioeconomic development in Migori County, Kenya.

RESEARCH METHODOLOGY

Research Design

This study adopted a descriptive research design. According to Mangal & Mangal (2017), a descriptive research refers to a research design used in accurately describing the research

population characteristics and the study variables.

Target Population

The target population of this study was 107 construction projects implemented in Nakuru by KeRRA. Therefore, the unit of observation was the 107 projects while the unit of analysis was the project managers of these projects. Therefore, the target population for the study was 107 respondents.

Sampling Frame

The sampling frame analyzes the list of population entities being sampled for the research (Cooper & Schindler, 2018). A sample frame is a list containing all the sampling units (Tracy, 2019). In this study, the sampling frame was a list of all the 107 projects in Nakuru by KeRRA.

Sample Size and Sampling Technique

Due to the small size of the population, the census method was used were the study population constitutes the sample size. Therefore the study carried out a census of all 107 projects in Nakuru by KeRRA. Amariati (2017) recommends for census study for the entire population in circumstances where the population is fairly small. Census studies are the most trusted and reliable route as all the population elements are part of the study (Mwandia, 2018). Census sampling was used whereby all the 107 project managers of each construction project was administered with a questionnaire as the target respondents. Since all the targeted respondents formed the sample, no sampling was done.

Data Collection Instruments

The study collected primary data. Primary data was collected by use of a questionnaire. A questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents. The questionnaires consisted of two parts and six sections. Part I obtained the demographic information of respondents. On the other hand, part II was divided into five sections, 1-5 which sought to obtain responses to the Likert scale items on stakeholder's involvement, project planning, risk management, and monitoring and evaluation together with performance of road construction projects.

The data collection was done with the help of research assistants. The research assistants were trained on research ethics and on the research instrument and its administration, interview skills and data recording. An introductory letter for the research assistant to collect data on the researcher's behalf was given to the research assistants.

Data Processing and Analysis

This study used both inferential and descriptive statistics to analyze the data. Descriptive statistics enable the researcher to meaningfully describe a distribution of measurements and summarize data (Kothari, 2019;). The descriptive statistics include frequency, percentages and means, summary graphs, pie charts and frequency distribution tables were employed to portray the sets of categories formed from the data.

Inferential statistics was also used to test the relationship between the study variables. The study used correlation and regression analysis. Pearson R correlation was used to measure strength and the direction of linear relationship between variables. Multiple regression models were fitted to the data in order to determine how the independent variables affect the dependent variable.

Multiple regression Analysis was used in this study because it uses the independent variables in predicting the dependent variable. It is a statistical tool attempting to establish whether some variables can be used together in predicting a particular variable (Mugenda & Mugenda, 2018). Multiple regression models were used to measure the effect of project management practices on performance of road construction projects in Nakuru County.

DATA ANALYSIS

Descriptive statistics

Stakeholder's Involvement and Performance of Road Construction Projects

The first specific objective of the study was to determine the effect of stakeholder's involvement on performance of road construction projects in Nakuru City County, Kenya. The participants were requested to indicate their level of agreement on various statements relating to stakeholder's involvement and performance of road construction projects in Nakuru City County, Kenya. A five point Likert scale was used Whereby 1 represent strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree. The results were as shown Table 1.

From the results, the respondents agreed that stakeholder's involvement influences performance of road construction projects. This is shown by a mean of 3.985 (std. dv = 0.776). As shown by a mean of 3.958 (std. dv = 0.636), the respondents agreed that stakeholder communication plays a significant role on performance of road construction projects. Further, with a mean of 3.930 (std. dv = 0.972), the respondents agreed that stakeholder consultation influences performance of road construction projects. The participants agreed that stakeholder collaboration influences performance of road construction projects. This is shown by a mean of 3.812 (std. dv = 1.005). As shown in the results, the respondents agreed that they are satisfied with the level of stakeholder involvement in road construction projects. This is shown by a mean of 3.752 (std. dv = 0.608). The study is tandem with the study by Alexander, (2020) which suggest that giving attention to project stakeholders is important to ensure satisfaction of those involved or affected, which requires that procedural justice, legitimacy and rationality have been met

Table 1: Stakeholder's Involvement

	Mean	Std. Dev.
stakeholder's involvement influences performance of road construction projects	3.985	0.776
Stakeholder communication plays a significant role on performance of road construction projects	3.958	0.636
Stakeholder consultation influences performance of road construction projects	3.930	0.972
Stakeholder collaboration influences performance of road construction projects	3.812	1.005
Am satisfied with the level of stakeholder involvement in road construction projects	3.752	0.608
Aggregate	**3.814**	**0.819**

Project Planning and Performance of Road Construction Projects

The second specific objective of the study was to establish the effect of project planning on performance of road construction projects in Nakuru City County, Kenya. The participants were requested to indicate their level of agreement on various statements relating to project planning and performance of road construction projects in Nakuru City County, Kenya. A five point Likert scale was used Whereby 1 represent strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree. The results were as shown Table 2.

From the results, the respondents agreed that project planning influences performance of road construction projects. This is shown by a mean of 3.955 (std. dv = 0.872).As shown by a mean of 3.925 (std. dv = 0.839), the respondents agreed that planning tools play a significant role on performance of road construction projects. Further, with a mean of 3.842 (std. dv = 0.898), the respondents agreed that project goals influences performance of road construction projects.

The participants agreed that resource allocation influences performance of road construction projects. This is shown by a mean of 3.815 (std. dv = 0.712). As shown in the results, the respondents agreed that they are satisfied with the level of project planning in road construction projects. This is shown by a mean of 3.758 (std. dv = 0.969). Naeem et al., (2018) opined that project planning is continuous process throughout the delivery of a project and hence it can be reviewed and update to enhance the project performance and project success.

Table 2: Project Planning

	Mean	Std. Dev.
Project planning influences performance of road construction projects	3.955	0.872
Planning tools play a significant role on performance of road construction projects	3.925	0.839
Project goals influences performance of road construction projects	3.842	0.898
Resource allocation influences performance of road construction projects	3.815	0.712
Am satisfied with the level of project planning in road construction projects	3.758	0.969
Aggregate	3.827	0.863

Inferential Statistics

Inferential statistics focused on correlation and regression analysis. Correlation analysis was used to determine the strength of the relationship while regression analysis was used to determine the relationship between dependent (performance of road construction projects in Nakuru County, Kenya) and independent variables (stakeholder's involvement and project planning).

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (stakeholder's involvement and project planning) and (performance of road construction projects in Nakuru County, Kenya) dependent variable

Table 3: Correlation Coefficients

		Project Performance	Stakeholder's Involvement	Project Planning
Project Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	98		
Stakeholder's Involvement	Pearson Correlation	.898**	1	
	Sig. (2-tailed)	.000		
	N	98	98	
Project Planning	Pearson Correlation	.754**	.294	1
	Sig. (2-tailed)	.002	.089	
	N	98	98	98

From the results, there was a very strong relationship between stakeholder's involvement and performance of road construction projects in Nakuru County, Kenya (r = 0.898, p value =0.000). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the results of Berglund, Hallgren, and Aradóttir, (2017) that there is a very strong relationship between stakeholder's involvement and project performance.

Moreover, findings revealed that there was a very strong relationship between project planning and performance of road construction projects in Nakuru County, Kenya (r = 0.754, p value =0.002). The relationship was significant since the p value 0.002 was less than 0.05 (significant level). The findings are in line with the results of Novo, Landis and Haley (2017) that there is a very strong relationship between project planning and project performance.

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (stakeholder's involvement and project planning) and (performance of road construction projects in Nakuru County, Kenya) dependent variable.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.932	0.869	0.870	0.0619

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The r-squared for the relationship between the independent variables and the dependent variable was 0.869. This implied that 86.9% of the variation in the dependent variable (performance of road construction projects in Nakuru County, Kenya) could be explained by independent variables (stakeholder's involvement and project planning).

Table 5: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	119.294	4	29.82	542.18	.001
	Residual	4.943	96	.055		
	Total	124.237	98			

The ANOVA was used to determine whether the model was a good fit for the data. F calculated was 542.18 while the F critical was 2.469. The p value was 0.001. Since the F-calculated was greater than the F-critical and the p value 0.001 was less than 0.05, the model was considered as a good fit for the data. Henceforth, it can be used to predict the influence of stakeholder's involvement and project planning on performance of road construction projects in Nakuru County, Kenya.

Table 6: Regression Coefficients

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.249	0.088		2.830	0.001
	Stakeholder's Involvement	0.260	0.076	0.261	3.421	0.002
	Project Planning	0.379	0.09	0.381	4.211	0.001

The regression model was as follows:

$Y = 0.249 + 0.260X_1 + 0.379X_2 + \varepsilon$

According to the results, stakeholder's involvement has significant effect on performance of road construction projects in Nakuru County, Kenya β_1=0.260, p value= 0.002). The relationship was considered significant since the p value 0.002 was less than the significant level of 0.05. The findings are in line with the results of Berglund, Hallgren, and

Aradóttir, (2017) that there is a very strong relationship between stakeholder's involvement and project performance.

The results also revealed that project planning has significant effect on performance of road construction projects in Nakuru County, Kenya β1=0.379, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the results of Novo, Landis and Haley (2017) that there is a very strong relationship between project planning and project performance.

Conclusions

The study concludes that stakeholder's involvement influences the performance of road construction projects in Nakuru City County, Kenya. Findings revealed that stakeholder communication, consultation and collaboration influence the performance of road construction projects in Nakuru City County, Kenya.

In addition, the study concludes that project planning influences the performance of road construction projects in Nakuru City County, Kenya. Findings revealed that planning tools, project goal and resources Allocation influence the performance of road construction projects in Nakuru City County, Kenya.

Recommendations

The study found that stakeholder's involvement influences the performance of road construction projects in Nakuru City County, Kenya. The study therefore recommends that the management of road construction authorities in Nakuru County should ensure project stakeholders are constantly involved in implementation of the road projects.

In addition, the study found that project planning influences the performance of road construction projects in Nakuru City County, Kenya. The study therefore recommends that the management of road construction authorities in Nakuru County should ensure proper planning of the road implementation to enhance performance.

Area for Further Studies

This study focused on establishing the effect of Project Management Practices on performance of road construction projects in Nakuru County, Kenya. However, this study was limited to road construction projects in Nakuru County, Kenya; hence the study findings cannot be generalized to other projects in the county. Therefore, the study recommends that further studies should be conducted on the effect of Project Management Practices on performance other projects in Nakuru County government.

Further, the study found that the independent variables (stakeholder's involvement and project planning) could only explain 86.9% of performance of road construction projects in Nakuru County, Kenya. This study therefore suggests research on other factors affecting performance of road construction projects in Nakuru County, Kenya.

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