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PROJECT MONITORING AND IMPLEMENTATION OF COUNTY FUNDED ROAD PROJECTS IN UASIN GISHU COUNTY, KENYA

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ABSTRACT

Funded programs seek to address socio-economic development challenges facing the marginalized population. Therefore, such projects' failure brings with it a profound negative socio-economic impact on the project beneficiaries. Results show the current state of project outcomes as projects completed within the original budget constitute 55%, projects completed on time 51%, and failed projects comprise 32%. The study sought to establish the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County, Kenya and to determine the moderating effect of government regulation on the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County. The study was guided by Goal Setting Theory and Institutional Theory. The positivist philosophy was used to drive the study. The research used a descriptive survey to establish conclusions about how project management practices influence the delivery of county-funded road improvements in Uasin Gishu County. The study was conducted in Uasin Gishu County. According to the Uasin Gishu County report (2023), there is a total of 250 employees in the management levels under the Ministry of Roads and Public Works. The unit of analysis was therefore County Funded Road Projects in Uasin Gishu County while the unit of observation was 250 management employees. The research employed Taro Yamane's (1967) sample size calculation, assuming a 5% error term. The research picked 153 people from a target sample of 250 employees. Employees who work on road construction in Uasin-Gishu County make up the majority of this group. Thematic analysis was used to analyze qualitative data whereas descriptive and inferential statistics (Pearson correlation coefficient, multiple regression analysis, and stepwise regression analysis) were used in analyzing quantitative data with the help of the SPSS statistical software. The study used a 95% confidence level. Based on the findings, the study concluded that project monitoring positively and significantly influences successful implementation of county funded road projects in Uasin Gishu County, Kenya.

Key Words: Project Monitoring, Government Regulation, Successful Implementation of County Funded Road Projects

Background of the Study

Successful project implementation entails quickly switching over a key arrangement and doing what needs to be done to keep the emphasis on critical objectives and aims. According to Brown and Hyer (2010), compelling project execution may be handled depending on time planning, cost and financial plans, and the nature of the task performed. Project implementation's Key Performance Indicators (KPIs) comprise these three factors. It's crucial to consider that, regardless of the project's concept, implementation requires some investment, usually more than anticipated, and that a variety of external imperatives may arise, all of which should be addressed before beginning the implementation phase (Aarseth et al., 2017).

The work design must be developed before the implementation process can begin, and the arrangement must be understood by all project collaborators (Bond-Barnard et al., 2018). All of the specialized and non-specialized requirements should be clearly defined. The project's financial, specialized, and institutional frameworks should be prepared, taking into account both internal and external factors (Floricel et al., 2016). The working group should identify their strengths and weaknesses (inward powers), opportunities, and threats (outer powers). The traits and opportunities should be exploited and used to ensure the project's successful completion (Kamunya & Chege, 2021). The flaws and risks are project risks that might stymie project execution; as a result, all steps should be put in place to mitigate them (Köhler et al., 2012).

Ling et al. (2019) created a model for forecasting project success in China, based on project management methods used by Chinese construction businesses. According to the findings, certain scope management approaches may predict project effectiveness in terms of the "iron triangle," customer happiness, and profit margin. Improved road-building technology and methodology may help projects to be completed more effectively and in less time in Europe. Road projects may also be completed with fewer resources if construction technologies such as fabricated and modular construction and new building materials are used (Mabin & Baldrestone, 2015).

According to Yap, Chow, and Shavarebi (2019), the Malaysian construction industry is important to the country's economy, but it has a reputation for construction delays, unrestrained and unachievable timelines, accidents, poor workmanship and disagreement among members of the project team, and uninhabited and uncompleted private as well as community at large construction projects. Structures crumbling, roads cracking, bridges tumbling, and what may be next, indicate some down pit circumstances for the Malaysian construction sector, which has created a negative image in the eyes of the people. There is a pressing need and urgency to avoid project failure, which is mostly attributable to industry-wide inadequate project management practices (Mir & Pinnington, 2014).

According to a study conducted by Arnaboldi, Azzone, and Savoldelli (2014) in the Italian government, the use of management practices in the public sector has been proven to be a good way to aid in the advancement of management abilities while also allowing the public sector to effectively complete projects and achieve developmental goals. The employment of a project management approach in the public sector, according to Arnaboldi et al. (2014), is due to pressure on the government to abandon inflexible organization structures in favor of composite structures. One noteworthy conclusion was that the project strategic approach needed to be improved and suited to the needs of public institutions.

After the Indian government understood the situation of its development in terms of population growth, it called for large Public Private Partnerships (PPPs) between the government and the private sector on key infrastructure projects. However, this couldn't be done from the central government because of the geographical size and location of the projects, cultural differences between communities in the country and differing needs of development projects among the Indian people. As a result, the government was obliged to adopt decentralized operations in which the nation was divided into councils (equivalent to county administrations) that each handled a population of at least 1.5 million people (Al-Kharashi and Skitmore, 2009).

According to Ocharo and Kimutai (2018), public organizations usually lack clear rules to guide the system that promotes providers who could make contact with them. Due to the limited nature of most organizations, present standards, for example, hinder supplier growth and cooperation. Politics, corruption, financial theft, tribalism/nepotism, incorrect priorities, and low adoption of improvements are all variables that impact the execution of development programs (World Bank, 2012).

The United Nations Development Programme (UNDP) published a report from a study that sought to understand the nature of projects and the rate of polarization in Kenya and discovered that major projects in Kenya fail due to tribalism and nepotism, with major tribes with significant populations dominating public offices and projects. One of the main reasons Kenyans supported the new constitution was to remove impediments to development and, via devolution, bring such developments closer to all Kenyans. Devolution also involves providing appropriate development initiatives to worthy needy people in the country's countryside, slums, and neglected regions (Kamunya & Chege, 2021).
The County Government Act assigns important tasks to County Authorities and establishes decentralized legal, administrative, and regulatory authorities. Since Kenya's devolution, there has been a massive rise in building projects around the nation. Gwayo (2014) saw an increasing worry over why the required goals were not being met following the project's client's expectations. Many projects were not finished owing to customer difficulties, non-availability of supplies, bad infrastructure, lack of funding, and project management competence, according to Kenya Urban Road Authority (2013). Most of the projects carried out in most counties were not finished on schedule owing to contractors' poor pace. The contractors were accused by the majority of counties of breaking the tender's terms and conditions. The cost of the project rises as a result of the contractor's failure to fulfil the deadline.

Under the statute, Uasin Gishu County government authorities are responsible for land use planning, infrastructure delivery, and social services, among other things. The county is also in charge of monitoring urban development, which is controlled by a variety of laws. Uasin Gishu County, like every other county, has had difficulties finishing its projects. The county government's initiatives have been delayed or halted, harming development and the agricultural sector, which is the principal source of revenue. Infrastructure, according to the Government of Kenya (2014), is critical to the country's economic growth since it boosts productivity and competitiveness. Under the Kenya Vision 2030 development goal, the second Medium Term Plan (2013-2017) highlighted infrastructure as a crucial facilitator for sustainable growth and development.

Statement of the Problem

Government projects are vital to the citizens, who are the beneficiaries. Funded programs seek to address socio-economic development challenges facing the marginalized population. Therefore,

such projects' failure bring with it a profound negative socio-economic impact on the project beneficiaries (World Bank, 2021). Pretorius, Steyn, and Jordaan (2012) state that fewer projects globally are being completed within budget or meeting original goals and business. Results show the current state of project outcomes as projects completed within the original budget constitute 55%, projects completed on time 51%, and failed projects budget comprise 32% (PMI, 2019). According to a report by the Kenya Institute for Public Policy Research and Analysis (KIPPRA), approximately 60% of county-funded road projects in Kenya experience significant delays, with many extending beyond the projected completion timelines.

Through a five-year strategic plan cycle, the County Government of Uasin Gishu has been executing projects centered on capital project execution. According to the World Bank's (2020) research, Uasin Gishu County has failed to implement significant development projects in 47 percent of cases. Wrong project priority, a lack of financial resources, political influence, corruption, low levels of technology, inadequate infrastructure, a lack of community engagement, and insufficient managerial support were all mentioned. Furthermore, according to a report by the Auditor General (ROK, 2021), a considerable number of public projects funded at high prices by the county administration of Uasin Gishu County did not achieve the planned aims (Kebeya, 2019). A study by the National Construction Authority (NCA) indicates that around 45% of road projects in Uasin Gishu County exceed their initial budgets by at least 20%. This is attributed to poor planning, resource mismanagement, and unforeseen issues during project execution. The Kenya Roads Board (KRB) has highlighted that about 30% of the roads constructed under county-funded projects in Uasin Gishu County have quality concerns, including premature deterioration and structural failures. This is often due to inadequate supervision and substandard materials (Aduma, & Kimutai, 2019).

According to the Uasin Gishu County Road Office (2022), seventeen road improvements were conducted in the County between 2010 and 2018, although none of them met expectations. The significant frequency of failed road projects shows that there are unidentified underlying project management practices that are likely to impact project execution. It was discovered that many initiatives failed despite meeting the triple criterion, prompting scholars to delve further into the subject of success (Velayudhan & Thomas, 2016). This gap creates the need to undertake a study to examine the role of project monitoring in implementing county-funded road projects in Uasin Gishu County in Kenya.

Objectives of the Study

i. To determine the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County, Kenya.
ii. Determine the moderating effect of government regulation on the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County, Kenya.

Theoretical Framework

Goal Setting Theory

Edwin Locke created the goal-setting hypothesis in 1979. The theory argues that companies create objectives to guarantee that initiatives inside the organization function effectively and efficiently (Swann et al., 2021). The approach highlights the critical link between aims and outcomes (Fortes Tondello, Premsukh, & Nacke, 2018). All businesses that want to achieve effective results via efficient goal setting should use goal setting theory (Latham & Locke, 2013). Goal setting is commonly accepted by managers as a technique of improving and maintaining performance

(DuBrin, 2012). The fundamental finding of goal setting, based on hundreds of researches, is that persons who are given precise, demanding but reachable objectives do better than those who are given easy, vague, or no goals at all. Individuals must, however, have adequate ability, accept the objectives, and get performance feedback at the same time (Latham, 2003).

The goal-setting hypothesis has a significant relationship with project performance. A variety of ideas have been proposed to explain the link between goal setting and project success. There is evidence of a large beneficial link (Neubert & Dyck, 2016). This implies that businesses adapt their degree of commitment to a certain project objective that they want to attain (Tubbs & Ekeberg, 1991). The goal-setting theory argues that organizations have adequate commitment to fulfill project objectives and that such organizations are unwilling to decrease or abandon those goals (Jeong, Healy, & McEwan, 2021).

Goal setting theory, according to Koppes (2014), encompasses all elements of project performance in organizations. For every project to be successful, there are three basic concepts for creating objectives (Latham & Locke, 2018). The first principle is clarity, in which project objectives are defined in terms that are both explicit and quantifiable and are met within certain time frames. The second concept is challenge, in which the management sets objectives that are high and hard enough to allow the project to function well. The third concept is feedback, in which information about project progress is provided (Latham & Locke, 2018).

In terms of project success, the implementation of a sustainable infrastructure provides economic, social, environmental, and organizational advantages (Carvalho and Rabechini, 2017; Meng et al., 2015). In the context of infrastructure sustainability management, achieving such sustainable infrastructures via PMPs may therefore be regarded a goal setting and goal-achieving process (Swann et al., 2021). The key to accomplishing organizational objectives or commercial success is to design and modify PMPs using the plan-do-check-act (PDCA) philosophy (Srivannaboon, 2009).

Goal setting theory, on the other hand, is criticized for taking a long time and being costly to implement since it is necessary to address a variety of issues in order to fulfil the project's objectives, such as project stakeholder selection and capacity development (Sorrentino, 2006). The theory applies to this study since it emphasizes the need to set objectives to guarantee the County Government's effective execution of initiatives.

Institutional Theory

North (1990) and Williamson (1985), who looked at institutions via an economics lens, and DiMaggio and Powell (1993) and Scott (1995), who examined institutions in terms of social facilitators and constraints, are the forerunners of institutional theory. Institutions are defined in a variety of ways; Hoffman (1999) describes institution in the context of enterprises as social and cultural constraints that define and decide what is acceptable and what is not acceptable, what is implementable and what is not implementable. Institutions, according to Scott (2001), are factors that exert social pressure and impose limits on people and organizations. They decide what is and is not acceptable (Suddaby, 2015).

The influence of circumstances outside an organization's control on its behavior is the subject of institutional theory (Hoffman, 1999). It presents institutional factors as a tool for behavioural analysis, allowing one to look beyond market forces when examining the behavior of an

organization or people within it (Krell, Matook, & Rohde, 2016). The goal of institutional theory is to understand organizations and management behavior as a result of social and institutional constraints rather than economic and market factors (Qiu & Chen, 2022).

Institutions, according to Scott (2004), are made up of cultural-cognitive and regulative factors that, when combined with linked activities and resources, give life purpose. He goes on to say that institutions are made up of three pillars: regulatory, normative, and cultural cognition. The regulatory pillar stresses the use of rules, regulations, and punishments as enforcement tools, with expediency serving as the foundation for compliance (Badewi & Shehab, 2016). When it comes to implementing sustainable initiatives in public service organizations, this notion is crucial. This theory may be used to comprehend the rules and regulations that govern project management techniques in order to effectively execute projects, which is significant to this research.

Conceptual Framework

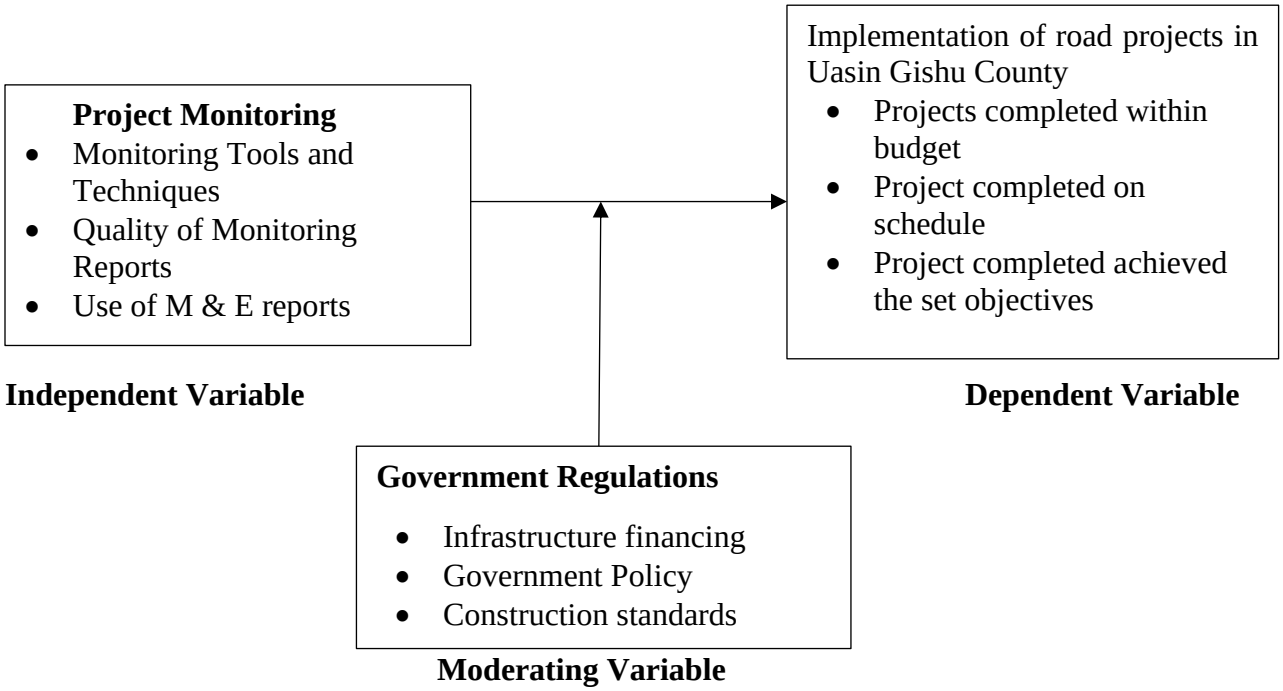

Figure 2. 1: Conceptual Framework

Project Monitoring

Project monitoring and evaluation (M&E) are integral components of effective project management, providing mechanisms to track progress, assess performance, and make informed decisions throughout the project lifecycle. Various tools and techniques are employed in M&E to gather data, analyze progress, and measure outcomes. Key Performance Indicators (KPIs) are quantitative and qualitative metrics that gauge project performance against predefined targets. They provide benchmarks for success and enable continuous monitoring of project activities. Data collection methods include surveys, interviews, observations, and document reviews, ensuring comprehensive data capture from stakeholders and project activities (Kerzner & Saladis, 2019).

Monitoring tools, such as progress reports, dashboards, and milestone trackers, facilitate real-time tracking of project activities, expenditures, and timelines. These tools highlight deviations from

planned schedules or budgets, enabling prompt corrective actions to keep the project on track. Evaluation techniques, such as cost-benefit analysis, impact assessments, and stakeholder analysis, assess the effectiveness, efficiency, relevance, and sustainability of project outcomes. These evaluations provide insights into the project's overall success and areas for improvement. The quality of monitoring reports is crucial for their utility in decision-making and project improvement. A well-structured M&E report includes clear objectives, methodologies used, findings, and actionable recommendations. It presents data in a logical format, making it accessible to stakeholders and facilitating informed decision-making. Accuracy and reliability of data ensure that conclusions drawn from the report are based on valid information, enhancing credibility and trust among stakeholders (Naidoo's, 2019).

Moreover, timeliness is critical in monitoring reporting, as timely information allows project managers and stakeholders to respond promptly to emerging issues or opportunities. Comparative analysis over time or across similar projects provides context and benchmarks for assessing performance trends and identifying best practices. The use of visual aids such as graphs, charts, and tables enhances data presentation, making complex information more understandable and compelling. Monitoring reports serve multiple purposes within project management, guiding decision-making, and enhancing project effectiveness. Performance monitoring reports track progress against KPIs, identifying areas where adjustments are needed to achieve project goals. Financial reports highlight expenditure trends, ensuring budget compliance and transparency in resource management. Risk assessment reports identify potential threats and propose mitigation strategies, preempting potential project disruptions (Ling et al., 2019).

Strategic planning benefits from monitoring reports by informing future project initiatives, resource allocation decisions, and organizational strategies. Learning and knowledge sharing occur through the dissemination of monitoring findings, enabling teams to learn from successes and failures and apply lessons learned to future projects. Accountability and transparency are reinforced as monitoring reports provide evidence of project impact and outcomes to stakeholders, donors, and regulatory bodies (Stem et al., 2021).

Government Regulations

Government regulations are legally binding rules and directives established by government authorities to control, manage, and guide various activities within a society. These regulations are designed to protect public health and safety, ensure fair practices, promote economic stability, and safeguard the environment. They cover a broad spectrum of areas, including business operations, environmental protection, healthcare, consumer rights, labor laws, and public infrastructure (Musomba, 2021).

Infrastructure financing is a critical aspect of government regulation, encompassing the funding mechanisms used to develop and maintain essential public services and facilities, such as transportation networks, water supply systems, and energy grids. Governments often utilize a combination of public funds, private investments, and public-private partnerships (PPPs) to finance these projects. Public funds can come from tax revenues, government bonds, and international loans or grants. PPPs allow for sharing risks and rewards between the public and private sectors, leveraging private capital and expertise while maintaining public control over essential services. Effective regulation in infrastructure financing ensures transparency, accountability, and efficient allocation of resources, ultimately contributing to sustainable development and economic growth (Ika, 2021).

Government policy plays a pivotal role in shaping the direction and effectiveness of infrastructure projects. Policies related to land use, environmental protection, economic development, and social equity directly influence how infrastructure projects are planned, executed, and managed. For instance, policies promoting sustainable development can lead to the adoption of green building practices and the integration of renewable energy sources into infrastructure projects. Furthermore, government policies can set priorities for infrastructure investments, such as focusing on underserved or economically disadvantaged areas to promote equitable growth. Regulatory frameworks established by government policies help standardize procedures, ensure compliance with legal requirements, and align infrastructure projects with broader national or regional goals (Pernille, Martin & Claudia, 2019).

Construction standards are a crucial component of government regulations, providing the technical specifications and guidelines necessary to ensure the safety, quality, and sustainability of infrastructure projects. These standards encompass a wide range of aspects, including materials, design, engineering practices, and safety protocols. Governments establish construction standards through building codes, zoning laws, and environmental regulations, which must be adhered to by all construction projects (Nyandika & Ngugi, 2019). Adherence to these standards helps prevent structural failures, protect public health and safety, and mitigate environmental impacts. Regular updates to construction standards reflect advancements in technology, changes in environmental conditions, and lessons learned from past projects. Effective enforcement of construction standards is essential for maintaining the integrity of infrastructure and fostering public trust in its reliability and safety (Nyandika & Ngugi, 2019).

Empirical Review

Project Monitoring

According to Naidoo's (2019) research, if the assessment and monitoring process is linked to major decision-making authority, it is regarded seriously. The research also concludes that monitoring units want to be seen as value adds and be able to explain their efforts; in this situation, success factors strengthen M&E managers' credibility. The monitoring team requires significant assistance and reinforcement in order to properly carry out its mission with power and authority. In addition, the teams need frequent scope monitoring to detect changes, large human capacity for project scheduling, and cost overrun monitoring (Ling et al., 2019).

The use of technology in monitoring adds significantly to the monitoring team's success and efforts, resulting in value contributed by the team. Some of the methods used to manage project work, according to Georgieva & Allan (2008), include managing stakeholders, monitoring processes, and collaboration among participants. A competent monitoring team has outstanding stakeholder representation, which is conclusive. Basic research, accounting and certification, status assessment, and effectiveness measurement are some of the monitoring methodologies that project managers and monitoring teams might use (Stem et al., 2021).

An M&E team that works well together is a strength and a key factor in project management success (Tinoco et al., 2016). The project control procedures, according to Pinto & Slevin (2007), are monitoring and feedback. A team should be present at each level of implementation to get input on how the project is progressing in relation to the original predictions. Feedback is also offered to the project's funders, sponsors, implementers, and beneficiaries, as part of the monitoring process (Jugdev, 2004). As a result, the input is utilized to make decisions on how to enhance the project's performance (Bartle, 2007).

Allowing for adequate monitoring and feedback channels allows the project manager to anticipate issues, supervise countermeasures, and guarantee that no flaws go unnoticed (Bond-Barnard et al., 2018). Harold (2019) demonstrated that understanding monitoring aids project contractors and managers in properly monitoring and evaluating infrastructure projects, resulting in improved project performance. The survey also discovered that road infrastructure project managers must understand how their initiatives fulfill the intended customer criteria.

RESEARCH METHODOLOGY

Research Philosophy

A research philosophy is a set of beliefs about how to collect, interpret, and apply evidence on a phenomenon. The positivist philosophy was used to drive the study. Positivism holds that only factual information gathered via observation, including measurement, is reliable. Positivism, the heart of social science doctrines, is characterized by a belief in theory prior to investigation and statistical support of results from experimentally tested hypotheses (Cooper & Schindler, 2011). As a result, the research is able to generate a variety of hypotheses.

Research Design

The research used a descriptive survey to establish conclusions about how project management practices influence the delivery of county-funded road improvements in Uasin Gishu County. The qualitative descriptive study attempted to address "what if" questions in project management techniques and government project execution in Uasin-Gishu County government.

Target Population

Target Population refers to the entire group of individuals or entities that a researcher is interested in studying and drawing conclusions from (Mugenda & Mugenda, 2019). The study was conducted in Uasin Gishu County. According to Uasin Gishu County report (2023) there is a total of 250 employees in the management levels under the ministry of roads and public works. The unit of analysis was therefore be County Funded Road Projects in Uasin Gishu County while the unit of observation was 250 management employees

Sample Size and Sampling Technique

To establish the representativeness of the sample for generalization, sampling methodologies and sample size are critical (Kombo & Tromp, 2019). The respondents were selected using a basic random sample approach and a stratified selection strategy to ensure that all situations are properly represented. The research employed Taro Yamane's (1967) sample size calculation, assuming a 5% error term.

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

$$n = \frac{250}{1 + 250(0.05)^2}$$

$$n = \frac{250}{1 + 0.625}$$

$$n = 153$$

The sample size is 153 respondents, representing 61.2% of the target population. The sample was chosen using stratified random sampling. Any features that a study wants to be evenly distributed throughout the sample are specified using stratified sampling (Greener, 2018).

Data Collection Instruments

Data was collected via questionnaires. It was created using pieces that are geared toward meeting the study's goals. The questionnaire included both closed and open-ended questions, making it appropriate for gathering responses in qualitative research. The closed questions were a series of preset questions that the respondents must answer in a certain order using a predetermined set of solutions.

Pilot Study

According to Tayie (2019), pretesting measuring devices is generally done with samples of 25-50. For this study, pilot study was done using 20% of the population, giving a total of 30 employees of Uasin Gishu County.

Data Analysis and Presentation

The information acquired was gathered and organized to make manipulation and analysis easier. With the help of the Statistical Package of Social Sciences version 21, the data was modified, tagged, and categorised (SPSS). A descriptive statistics approach was used to summarize the data, allowing the research to explain the distribution using index values. The data evaluated was presented using frequency distribution styles of presentation and percentages. To determine the influence of the independent factors on the dependent variable, data was evaluated using multiple linear regression models. The following is the general form of multiple regression:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where; Y = is the dependent variable which is the implementation of road projects in Uasin Gishu County

β_0 is the regression coefficient/constant/Y-intercept, $\beta_1, \beta_2, \beta_3 and \beta_4$ are the regression coefficients to be estimated,

X_1 is the project planning

X_2 is the project team competency

X_3 is the project monitoring

X_4 is the project stakeholder involvement

ε is an error term generally distributed about a mean of 0 and for purpose of computation, the α is assumed to be 0.

RESEARCH FINDINGS AND DISCUSSION

Descriptive Analysis

Project Monitoring and Implementation of Road Projects

The first objective of the study was to determine the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County. This section therefore presents descriptive findings on the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County. On Liker scale questions, respondents were asked to indicate how far they agree or disagree with the statement by ranking their answer in the scale of 1-5. Table 1 presents summary of the findings.

From the results, the respondents agreed that the project coordinators regularly report the progress of the project to senior management (M= 3.997, SD= 0.337). In addition, the respondents agreed

that the supervisors ensured that the planned County Road project activities are all done as per plan (M= 3.988, SD= 0.406). The respondents also agreed that the project managers ensured that the intended goals and objectives are being achieved and report any deviation (M= 3.975, SD= 0.311). The results are supported by the findings of Ling *et al*., (2019) who revealed that the monitoring team requires significant assistance and reinforcement in order to properly carry out its mission with power and authority. In addition, the teams need frequent scope monitoring to detect changes, large human capacity for project scheduling, and cost overrun monitoring

The respondents agreed that monitoring plans are well applicable in county road construction activities (M= 3.961, SD= 0.467). In addition, the respondents agreed that monitoring practices on scheduling the program are used (M= 3.902, SD= 0.332). Further, the respondents agreed that rapid assessment is conducted in monitoring plans used in projects (M= 3.902, SD= 0.332). The results are in line with those of Harold (2019) who demonstrated that understanding monitoring aids project contractors and managers in properly monitoring and evaluating infrastructure projects, resulting in improved project performance. The survey also discovered that road infrastructure project managers must understand how their initiatives fulfill the intended customer criteria.

Table 1: Descriptive Statistics on Project Monitoring

Statements	Mean	Std. Dev.
The project coordinators regularly report the progress of the project to senior management.	3.997	0.337
The supervisors ensured that the planned County Road project activities are all done as per plan	3.988	0.406
The project managers ensured that the intended goals and objectives are being achieved and report any deviation.	3.975	0.311
Monitoring plans are well applicable in county road construction activities	3.961	0.467
Monitoring practices on scheduling the program are used	3.902	0.332
Rapid assessment is conducted in monitoring plans used in projects	3.902	0.332
Aggregate Score	**3.921**	**0.350**

Government Regulation and Implementation of Road Projects

The second objective of the study was to determine the moderating effect of government regulation on successful implementation of county funded road projects in Uasin Gishu County. This section therefore presents descriptive findings on influence of government regulation and implementation of road projects. On Liker scale questions, respondents were asked to indicate how far they agree or disagree with the statement by ranking the answer in the scale of 1-5. Table 2 presents summary of the findings.

The respondents agreed that government policies and regulations play a pivotal role in facilitating the planning and execution of county-funded road projects (M= 3.921, SD= 0.342). In addition, the respondents agreed that timely completion of road projects significantly relies on the availability of sufficient funding (M= 3.919, SD= 0.303). Further, the respondents agreed that positive impacts on road project implementation can be attributed to well-aligned government policies (M= 3.902, SD= 0.332). The respondents agreed that bureaucratic hurdles and regulatory complexities can impede the smooth progress of road projects (M= 3.888, SD= 0.315).

From the results, the respondents agreed that quality assurance measures are in place to monitor materials and workmanship in road project (M= 3.868, SD= 0.316). In addition, the respondents agreed that addressing deviations from construction standards promptly ensures the quality and integrity of road projects (M= 3.802, SD= 0.332). The respondents also agreed that stricter adherence to construction standards positively impacts the longevity and performance of road infrastructure (M= 3.786, SD= 0.356). The respondents further agreed that contractors and project teams are expected to maintain a thorough understanding of relevant construction standards (M= 3.751, SD= 0.339).

Table 2: Descriptive Statistics on Government Regulation

Statements	Statements	Mean
Government policies and regulations play a pivotal role in facilitating the planning and execution of county-funded road projects	3.921	0.342
Timely completion of road projects significantly relies on the availability of sufficient funding.	3.919	0.303
Positive impacts on road project implementation can be attributed to well-aligned government policies.	3.902	0.332
Bureaucratic hurdles and regulatory complexities can impede the smooth progress of road projects.	3.888	0.315
Quality assurance measures are in place to monitor materials and workmanship in road project	3.868	0.316
Addressing deviations from construction standards promptly ensures the quality and integrity of road projects.	3.802	0.332
Stricter adherence to construction standards positively impacts the longevity and performance of road infrastructure	3.786	0.356
Contractors and project teams are expected to maintain a thorough understanding of relevant construction standards	3.751	0.339
Aggregate Score	**3.881**	**0.328**

Successful Implementation of County Funded Road Projects

This section presents descriptive findings on successful implementation of county funded road projects in Uasin Gishu County. On Liker scale questions, respondents were asked to indicate how far they agree or disagree with the statement by ranking the answer in the scale of 1-5. Table 3 presents summary of the findings.

The respondents agreed that project has achieved its purpose (M= 3.996, SD= 0.365). In addition, the respondents agreed that money set aside at the start of our project was used as proposed (M= 3.819, SD= 0.345). Further, the respondents agreed that there is improved economic status of the local community (M= 3.798, SD= 0.311). The respondents agreed that projects comply with safety and environmental regulations (M= 3.731, SD= 0.308).

From the results, the respondents agreed that projects focus on satisfaction of the general public (M= 3.711, SD= 0.376). In addition, the respondents agreed that projects are finished within time, cost and quality constraint (M= 3.675, SD= 0.397). The respondents also agreed that concluded projects meet the required scope and quality (M= 3.613, SD= 0.386). The respondents further agreed that seeking projects feedbacks from stakeholders improves performance (M= 3.556, SD= 0.365).

Table 3: Descriptive Statistics on Implementation of Road Projects

Statements	Statements	Mean
Our project has achieved its purpose	3.996	0.365
Money set aside at the start of our project was used as proposed	3.819	0.345
There is improved economic status of the local community	3.798	0.311
Projects comply with safety and environmental regulations	3.731	0.308
Projects focus on satisfaction of the general public	3.711	0.376
Projects are finished within time, cost and quality constraint	3.675	0.397
Concluded projects meet the required scope and quality	3.613	0.386
Seeking projects feedbacks from stakeholders improves performance	3.556	0.365
Aggregate Score	**3.711**	**0.328**

Correlation Analysis

The study computed Correlation analysis to determine the strength and the direction of the relationship between the variables being studied. If the correlation values are r = ±0.1 to ±0.29 then the relationship between the two variables is small, if it is r = ±0.3 to ±0.49 the relationship is medium, and when r= ±0.5 and above there is a strong relationship between the two variables under consideration. Table 4 presents the findings obtained.

Project monitoring is also seen to have a strong positive and significant relationship with successful implementation of county funded road projects in Uasin Gishu County (r= .884, p<0.05). Since the p-value (.000) was less than the selected level of significance (0.05), the relationship between the two variables was considered to be significant. The study results are supported by the findings of Harold (2019) who demonstrated that understanding monitoring aids project contractors and managers in properly monitoring and evaluating infrastructure projects, resulting in improved project performance. The survey also discovered that road infrastructure project managers must understand how their initiatives fulfill the intended customer criteria.

Table 4: Correlation Analysis

		Project Implementation	Project Monitoring
Project Implementation	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	146	
Project Monitoring	Pearson Correlation	.854**	1
	Sig. (2-tailed)	.000	
	N	146	146

Test for Hypothesis One

The second objective of the study was to determine the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County. The corresponding hypothesis was:

Ho_1 Project monitoring has no significant role on successful implementation of county funded road projects in Uasin Gishu County.

A univariate analysis was therefore conducted to test the null hypothesis. From the model summary findings in Table 5, the r-squared for the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County was 0.215; this is an

indication that at 95% confidence interval, 21.5% variation in successful implementation of county funded road projects in Uasin Gishu County can be attributed to changes in project monitoring. Therefore, project monitoring can be used to explain 21.5% change in successful implementation of county funded road projects in Uasin Gishu County. However, the remaining 78.5% variation in successful implementation of county funded road projects in Uasin Gishu County suggests that there are other factors other than project monitoring that explain successful implementation of county funded road projects in Uasin Gishu County

Table 5: Model Summary for Project Monitoring

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.464[a]	.215	.213	.70838

a. Predictors: (Constant), Project Monitoring

The analysis of variance was used to determine whether the regression model is a good fit for the data. From the analysis of variance (ANOVA) findings in Table 4.6, the study found out that that Prob>$F_{1,144}$= 0.000 was less than the selected 0.05 level of significance. This suggests that the model as constituted was fit to predict successful implementation of county funded road projects in Uasin Gishu County. Further, the F-calculated, from the table (229.96) was greater than the F-critical, from f-distribution tables (3.907) supporting the findings that project monitoring can be used to predict to predict successful implementation of county funded road projects in Uasin Gishu County.

Table 6: ANOVA for Project Monitoring

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.933	1	40.933	229.96	.000[b]
	Residual	25.602	144	0.178		
	Total	66.535	145			

a. Dependent Variable: Project Implementation
b. Predictors: (Constant), Project monitoring

From the results in table 7, the following regression model was fitted.

$$Y = 1.808 + 0.469\ X_3$$

(X_3 is Project monitoring)

The coefficient results showed that the constant had a coefficient of 1.808 suggesting that if project monitoring was held constant at zero, successful implementation of county funded road projects in Uasin Gishu County would be at 1.808 units. In addition, results showed that project monitoring coefficient was 0.469 indicating that a unit increase in project monitoring would result in a 0.469 unit improvement in successful implementation of county funded road projects in Uasin Gishu County. It was also noted that the P-value for project monitoring was 0.000 which is less than the set 0.05 significance level indicating that project monitoring was significant. Based on these results, the study rejected the null hypothesis and accepted the alternative that project monitoring has positive significant influence successful implementation of county funded road projects in Uasin Gishu County.

Table 7: Beta Coefficients for Project Monitoring

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.808	.215		8.398	.000
	project monitoring	.469	.052	.464	9.032	.000

a. Dependent Variable: Project Implementation

Test for Hypothesis Two

The second objective of the study was to determine the moderating effect of government regulation on the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County. Moderation happens when the relationship between the dependent variable and the independent variables is dependent on a third variable (moderating variable). The effect that this variable has is termed as interaction as it affects the direction or strength of the relationship between the dependent and independent variable. To achieve the fifth research objective, the study computed moderating effect regression analysis. This (moderating effect regression analysis) also guided the study in testing the second research hypothesis. government regulation (M) was introduced as the moderating variable.

Ho_2: Government regulation has no significant moderating effect on the relationship between project monitoring and successful implementation of county funded road projects in Uasin Gishu County, Kenya.

The study then used stepwise regression to establish the moderating effect of government regulation (M) on the relationship between independent variable (X) and successful implementation of county funded road projects in Uasin Gishu County (Y).

From the model summary findings in Table 8, the first model for which is the regression between successful implementation of county funded road projects in Uasin Gishu County (X) without moderator, government regulation (M) and interaction, the value of R-squared was 0.336 which suggests that 33.6% change in successful implementation of county funded road projects in Uasin Gishu County can be explained by changes in project team competency. The p-value for the first model (0.000) was less than the selected level of significance (0.05) suggesting that the model was significant. The findings in the second model which constituted project monitoring, government regulation and successful implementation of county funded road projects in Uasin Gishu County (X*M) as predictors, the r-squared was 0.568. This implies that the introduction of government regulation in the second model led to a 0.232 increase in r-squared, showing that government regulation positively moderates successful implementation of county funded road projects in Uasin Gishu County.

Table 8: Model Summary for Moderation Effect

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.580[a]	.336	.334	.65170	.336	150.295	1	144	.000
2	.754[b]	.568	.564	.52727	.232	79.360	3	142	.000

a. Predictors: (Constant), Project monitoring

b. Predictors: (Constant), Project monitoring, government regulation, Interaction (X*M)

From the model summary findings in Table 9, the F-calculated for the first model, was 422.73 and for the second model was 378.80. Since the F-calculated for the two models were more than the F-critical, 3.907 (first model) and 2.668 (second model), the two models were good fit for the data and hence they could be used in predicting the moderating effect of government regulation on the successful implementation of county funded road projects in Uasin Gishu County.

Table 9: ANOVA for Moderation Effect

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.832	1	63.832	422.73	.000[b]
	Residual	21.675	144	0.151		
	Total	85.507	145			
2	Regression	107.958	3	35.986	378.80	.000[c]
	Residual	13.622	142	0.095		
	Total	121.58	145			

a. Dependent Variable: Project Implementation
b. Predictors: (Constant), Project monitoring
c. Predictors: (Constant), Project monitoring, government regulation, Interaction

Further, by substituting the beta values as well as the constant term from the coefficient's findings for the first step regression modelling, the following regression model will be fitted:

$Y = 1.387 + 0.608 X$

Where X is Project monitoring

The findings show that when project team competency are held to a constant zero, successful implementation of county funded road projects in Uasin Gishu County will be at a constant value of 1.387. The findings also show that Project monitoring has a statistically significant effect on successful implementation of county funded road projects in Uasin Gishu County as shown by a regression coefficient of 0.608 (p-value= .000).

By substituting the beta values as well as the constant term from model 2 emanating from the second step in regression modeling the following regression model was fitted:

$Y= 3.876 + 0.220 X + 0.325 M + 0.283 X*M$

Where X is Project monitoring; M is government regulation and X*M is the interaction term between Project monitoring and government regulation.

The findings show that when Project monitoring, government regulation, interaction (X*M) are held to a constant zero, successful implementation of county funded road projects in Uasin Gishu County will be at a constant value of 3.876. The model also indicated that Project monitoring had a positive and statistically significant effect on successful implementation of county funded road projects in Uasin Gishu County as shown by a regression coefficient of 0.220 (p-value= 0.002). It is also seen that government regulation had a positive and significant effect on successful implementation of county funded road projects in Uasin Gishu County as shown by a regression coefficient 0.325. On the other hand, interaction of Project monitoring and government regulation (X*M) also had a positive and significant effect on successful implementation of county funded road projects in Uasin Gishu County as shown by a regression coefficient of 0.283 (p-value= 0.000).

It is therefore seen that Project monitoring on its own has 22% effect on successful implementation of county funded road projects in Uasin Gishu County. However, when interacted with government regulation, it has an effect of 28.3%. This is a clear indication that introduction of government regulation as moderating variable has positive influence on successful implementation of county funded road projects in Uasin Gishu County. The study therefore rejects the null hypothesis and accepts the alternative that government regulation has significant moderating effect on the relationship between Project monitoring and implementing county-funded road projects in Uasin Gishu County in Kenya.

Table 10: Beta Coefficients for Moderation Effect

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.387	.194		7.163	.000
	Project monitoring	.608	.050	.580	12.260	.000
2	(Constant)	3.876	1.009		3.841	.000
	Project monitoring	.220	.067	.782	3.284	.002
	government regulation	.325	.048	.310	6.748	.000
	Interaction (X*M)	.283	.065	1.661	4.357	.000

a. Dependent Variable: Project Implementation

CONCLUSION AND RECOMMENDATIONS

Conclusions

Project Monitoring

The first null hypothesis test was ‘project monitoring has no significant role on the successful implementation of county funded road projects in Uasin Gishu County.’ The study found that project monitoring is statistically significant in explaining the successful implementation of county funded road projects in Uasin Gishu County. The influence was found to be positive. This means that unit improvement in project monitoring would lead to an increase in successful implementation of county funded road projects in Uasin Gishu County. Based on the findings, the study concluded that project monitoring positively and significantly influences successful implementation of county funded road projects in Uasin Gishu County.

Government Regulation

The second research hypothesis tested was that ‘Government regulation has no significant moderating effect on the role of successful implementation of county funded road projects in Uasin Gishu County.’ The study revealed that government regulation is statistically significant in explaining the successful implementation of county funded road projects in Uasin Gishu County. It was also found that the interaction between Government regulation and project management practices had a positive, statistically significant effect on the successful implementation of county funded road projects in Uasin Gishu County. Based on the findings, the study concludes that Government regulation has a significant moderating effect on the role of successful implementation of county funded road projects in Uasin Gishu County.

Recommendations

Project Monitoring

Uasin Gishu County should prioritize the development and implementation of a standardized monitoring system that allows for regular assessment of project progress, identifies potential challenges, and provides timely insights for informed decision-making. This involves leveraging technology for real-time data collection, instituting periodic project reviews, and ensuring that performance metrics align with project objectives. Furthermore, incorporating community engagement and feedback mechanisms into the monitoring process can provide valuable insights from the ground level. By involving local communities and stakeholders in the assessment of project impacts, Uasin Gishu County can enhance the accuracy and comprehensiveness of the evaluation process.

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