MAKERERE UNIVERSITY

MONITORING AND EVALUATION TEAM CAPABILITY, TOP MANAGEMENT SUPPORT AND PROJECT SUCCESS OF ROAD INFRASTRUCTURE PROJECTS.

A CASE OF ROADS UNDER THE KAMPALA INSTITUTIONAL AND INFRASTRUCTURE DEVELOPMENT PROGRAM.

By

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PLAN A

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DECLARATION

I Kirabo Moreen declare that this research proposal is my original work and that it has never been published, presented, and or submitted to any institution for any award.

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APPROVAL

This is to certify that this dissertation has been submitted with our approval as supervisors

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DEDICATION

This work is dedicated to my dearest father Mr. Tibanyendera Deo and my mother Mrs. Mugabe Margret for their unending love and financial support that extended me this far without whom this work wouldn't have been successful. Above all, I dedicate it to the Almighty God for seeing me through this journey.

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LIST OF ACRONYMS

KCCA	Kampala Capital City Authority
KIIDP	Kampala Institutional and Infrastructure Development Project
M&E	Monitoring and Evaluation
NGO	Non-Government Organization
PMCC	Pearson Moment Correlation Coefficient
SPSS	Statistical Package for Social Scientists
TMS	Top Management Support
UNDP	United Nations Development Program
URF	Uganda Road Fund
WB	World Bank

ABSTRACT

This study to examine the relationship between monitoring and evaluation team capability, top management support and success of road infrastructure projects in Kampala. Specifically, the study was to establish the; relationship between monitoring and evaluation team capability and top management support; relationship between monitoring and evaluation team capability and project success; relationship between top management support and road infrastructure project success and; the mediating effect of top management support in the relationship between monitoring and evaluation team capability and road infrastructure project success.

The study used a cross-sectional survey design. This involved a quantitative approach. Data was collected using questionnaires. The sample size of the study was 32 determined using Krejcie & Morgan, 1970 table. The study projects were selected using simple random sampling to come up with the selected sub-projects and purposive sampling was used for the project managers. Quantitative data was analyzed using descriptive statistics with the aid of SPSS software.

The study revealed that M&E team capability has a moderately weak correlation with top management, M&E team capability has a moderately strong correlation with project success and top management support has a strong correlation with road infrastructure project success. Particularly, the results indicated that for each unit increase in M&E team capability, project success is estimated to increase by 0.527 units. Additionally, for each unit increase in top management support, project success is estimated to increase by 0.862 units. In light of the mediation analysis, the results suggested that M&E team capability has a significant positive effect on project success, and this effect is partially mediated (46.6%) by top management support. The mediation effect was statistically significant and substantial, as indicated by the Sobel z-value(8.272), confidence interval(.276), and the indirect to total ratio(.466).

The study recommends that; that top management ensure that M&E teams are left to perform independently for the good of these projects; the management of this program should ensure that M&E teams are put under pressure to deliver the accurate data on time to ensure that modifications to the running of the projects are done and; management of this program should ensure that they do effective budgeting to ensure that the financial resources are provided in time to ensure that the projects are executed in the time limits and resources set.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study is an investigation, on the relationship between monitoring and evaluation team capability, top management support and success of road infrastructure projects in Kampala. Therefore, this chapter entails the background to the study, problem statement, the purpose of the study, the specific objectives, the research questions, the significance of the study and the conceptual framework as can be seen below;

1.2 Background to the study

Monitoring and evaluation team capability, top management support, and project success of road infrastructure projects are interconnected. The capability of the monitoring and evaluation team plays a significant role in project success, as it affects the performance of road infrastructure projects undertaken by local firms (Maendo, 2022). Top management support is crucial for the successful completion of road infrastructure projects, as it influences group dynamics management and the implementation of project-specific models (Claude & Didace, 2020; Oguzie et al., 2021). Therefore, a combination of monitoring and evaluation team capability and top management support is essential for achieving project success in road infrastructure projects.

Globally, monitoring and evaluation team capability has a significant effect on the project success of road infrastructure projects (Castro et al., 2023). Group dynamics management also plays a crucial role in determining the performance of road infrastructure projects (Maendo, 2022). Furthermore, the proper management of monitoring and evaluation data is essential for project performance assessment (Claude & Didace, 2020). Monitoring and evaluation team capability plays a substantial role on the successful completion of road infrastructure projects in the USA (Obondi, 2022; Okello, 2021). The improper M&E practices can lead to poor implementation and increased losses for construction companies (Arshad et al., 2021b). Additionally, the efficiency of road infrastructure projects is crucial for economic growth and development (Claude & Didace, 2020). It is important for project

managers to regularly consider the importance and usage of proper M&E practices to improve the success rate of projects (Castro et al., 2023).

Furthermore, the involvement of top management in monitoring and evaluation can help collect feedback and improve project completion on time. This influence is particularly evident in dimensions such as providing resources and power (R. Ahmed et al., 2016). Furthermore, project performance in the public sector has been proven to be significantly positively impacted by all facets of top management assistance. (Ahmed, 2016). While the abstracts provided do not specifically mention road infrastructure projects in the USA, the findings suggest that top management support is a critical factor in project success and performance. In addition, monitoring and evaluation team capability has been found to have a significant impact on the success of road infrastructure projects in China. The technical skills of the M&E staff are not found to be significant in meeting project costs or achieving project goals (Hu et al., 2022). Therefore, it is important for road infrastructure projects in China to have a capable monitoring and evaluation team that can effectively engage stakeholders, allocate budgets, and ensure timely completion of projects. In light of project success, top management support has been found to have a significant and positive relationship with project success in various studies (Ahmed, 2016; Ahmed & Azmi bin Mohamad, 2016; Oguzie et al., 2021). However, none of the abstracts provided specifically address the impact of top management support on the success of road infrastructure projects in China. Therefore, there is no direct evidence from the abstracts to support or refute the relationship between top management support and project success specifically in the context of road infrastructure projects in China.

In sub–Saharan Africa, Monitoring and evaluation team capability, along with top management support, have a significant impact on the success of road infrastructure projects (Okello, 2021). The study conducted in Nairobi County, Kenya, found that process monitoring moderates the relationship between contractors' capacity evaluation in tender award and the performance of road construction projects (Ahmed & Azmi bin Mohamad, 2016). Additionally, the research on project success and top management support suggests that multi-dimensional top management support is positively related to project success (Ahmed, 2016; Khan et al., 2014). They highlights the importance of top management support in providing resources and power, which significantly influence project success (Mushori et al., 2020). Therefore, it can be concluded that monitoring and evaluation team

capability, along with top management support, play a crucial role in the success of road infrastructure projects in developed countries. The paper by Okello proposes a nexus between M&E data management and project performance, highlighting the need for project-specific models to enhance operationalized project performance assessment (Freeman, 2014). Additionally, the study by Maendo et al. concludes that the effectiveness of road improvements is significantly impacted by project monitoring and evaluation, emphasizing the importance of M&E in achieving desired outcomes (Okello, 2021). The research by Ahmed and Mohamad investigated the connection between several aspects of top management support and project success, finding reflected a significant and positive relationship between the two (Ahmed & Azmi bin Mohamad, 2016). Therefore, the capability of the monitoring and evaluation team, along with top management support, are essential for the success of road infrastructure projects in Sub-Saharan Africa. In Kenya, Wanjira and Ngari's study revealed that project monitoring and management support significantly influence the performance of road-infrastructure projects at the Kenya National Highways Authority (KeNHA) (Ahmed, 2016).

In Uganda, Monitoring and evaluation team capability and top management support have a significant relationship with the success of road infrastructure projects in Uganda (Aloysius Byaruhanga & Benon C Basheka, 2017; Emejeit et al., 2021). The study by Byaruhanga and Basheka found that weak procurement rules and the lack of a strong internal project monitoring and evaluation mechanism at the Uganda National Roads Agency (UNRA) contribute to the poor performance of road projects (Okello, 2021). They recommend the implementation of mechanisms that evaluate both contractors and contract supervisors with defined disciplinary consequences for subpar performance by the UNRA, as well as the development by the government of an Independent Public Infrastructure Development and Monitoring Unit. (Wanjira & Ngari, 2018). They recommend hiring highly qualified and experienced management support to implement road projects and provide necessary provisions for the practical and operating workers to achieve project success. The lack of a strong internal project monitoring and evaluation mechanism at the Uganda National Roads Agency (UNRA) also affects performance (Maendo et al., 2018). To address these issues, the establishment of an Independent Public Infrastructure Development and Monitoring Unit is recommended, along with the adoption of systems that appraise both contractors and contract supervisors (Okello, 2021).

1.3 Statement of the Problem

Despite efforts by the Kampala capital city authority to improve the road infrastructure project success such as following the required laws, hiring the best evaluated construction firms, and prioritization of allocated government funds, the long-term project success of the road facilities has continued to be a challenge. Research shows that most of the projects undertaken often do not meet client satisfaction, are often time overrun, do not meet the expected quality and are also very costly (Directorate of physical planning report, 2020)

Many awarded road projects and those launched face customer dissatisfaction in terms of quality with cases of incomplete or collapsing road infrastructure after commissioning attributed to weak monitoring. (Uganda Road Fund, 2019). A number of defects were noted by the audit team on the works such as potholes, scouring of drainage channels for the drainage projects, cracks in stone pitching and damaged road signage (directorate of physical planning report, 2020). It was observed that none of the contracts audited were completed on time as stipulated in the contracts period for execution of works (AOG report 2019/2020)

This could be attributed to lack of an incapable monitoring and evaluation team (Kamau & Mohamed, 2015), Inadequate top management support (Belassi and Tukel 1996, Kuesten 2013)**.**

1.4 Purpose of the study

The study sought to examine the relationship between monitoring and evaluation team capability, top management support and success of road infrastructure projects in Kampala.

1.5 Specific Objectives

Specifically, the study attempts: -

i) To establish the relationship between monitoring and evaluation team capability and top management support.
ii) To examine the relationship between monitoring and evaluation team capability and project success.
iii) To determine the relationship between top management support and road infrastructure project success.

iv) To establish the mediating effect of top management support in the relationship between monitoring and evaluation team capability and road infrastructure project success.

1.6 Research Questions

The following research questions will guide the study: -

i) What is the relationship between monitoring and evaluation team capability and top management support?
ii) What is the relationship between monitoring and evaluation team capability and road infrastructure project success?
iii) What is the relationship between top management support and project success of road infrastructure project success?
iv) What is the mediating effect of top management support in the relationship between monitoring and evaluation team capability and road infrastructure projects?

1.7 Significance of the study

1. The study shall provide UNRA management with empirical insights into the impact of monitoring and evaluation (M&E) team capability on the performance of road infrastructure projects, facilitating the enhancement of project evaluation and performance policies within the authority.
2. The study will further assist Makerere University and government policymakers in developing more effective strategies for improving infrastructure project performance in Uganda by leveraging the capabilities of M&E teams, thus bridging the gap between M&E team capability theory and practical implementation in the construction sector.
3. In addition, the study will contribute to the academic body of knowledge by addressing gaps in the literature regarding the influence of M&E team capability on road infrastructure projects in developing countries like Uganda, providing empirical data to enrich this area of study.

1.8 Justification of the study

1. Firstly, it seeks to enhance project success, a vital imperative for the success of road infrastructure projects in Uganda. By delving into the relationship between monitoring and evaluation (M&E) team capability and project outcomes, it endeavors to empower project managers and authorities, such as UNRA, with the knowledge and insights necessary to improve project management practices. This not only promises reduced project delays but also holds the potential for significant cost savings, making it indispensable in a resource-limited environment. Secondly, the study contributes directly to the optimization of resource allocation.
2. In Uganda's context, where resource constraints are common, the ability to allocate resources efficiently is paramount. Understanding the role of M&E team capability in this context can serve as a compass, guiding decision-makers toward judicious resource allocation, thus unlocking potential cost-efficiencies. Moreover, this research carries the promise of fostering urban development in cities like Kampala, where road infrastructure projects are pivotal to mitigating traffic congestion and catalyzing economic growth.
3. Furthermore, the study can enhance policymaking by providing evidence-based insights for government authorities, supporting the refinement of policies and guidelines governing project management practices. Academically, it enriches the body of knowledge by addressing gaps in the literature and offers practical guidance for professionals in the field of project management. Ultimately, the synergy between government agencies and academic institutions exemplifies the potential for collaborative problem-solving, reflecting the importance of evidence-based policymaking and academic engagement in tackling real-world challenges.

1.9 Scope of the study

1.9.1 Content Scope

The study examined the realm of monitoring and evaluating team capability, encompassing factors such as skills, knowledge, and experience. Simultaneously, the study delved into the domain of top management support, which encompasses leadership style, resource management, commitment, and project success measured by timeliness, cost-effectiveness, quality, and customer satisfaction.

1.9.2 Geographical Scope

Conducted within the urban landscape of Kampala, the study zeroed in on road infrastructure projects overseen by the Kampala Capital City Authority (KCCA). This geographical focus was chosen due to the city's substantial portfolio of road infrastructure projects, all carried out under a unified leadership and similar monitoring and supervision mechanisms.

1.9.3 Time Scope

The study's temporal boundaries spanned from 2015 to 2022, a period coinciding with KCCA's assumption of the mandate to develop the road network in Kampala district. Within this time frame, the research comprehensively assessed road infrastructure subprojects, shedding light on their performance and dynamics.

1.10 Conceptual Framework



Source: Author's Own Construction, 2023

In this conceptual framework, M&E Team Capability (IV) directly influences Project Success (DV), encompassing aspects related to Time, Cost, Quality, and Customer Satisfaction. However, Top Management Support (MV) plays a mediating role, influencing the relationship between M&E Team Capability and Project Success. Leadership Style, Resource Management, and Commitment collectively mediate the impact of M&E Team Capability on Project Success, highlighting the importance of these mediating factors in the context of road infrastructure projects.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This study is aimed at examining the relationship between monitoring and evaluation team capability, top management support and success of road infrastructure projects in Kampala. This chapter, however, covers the theoretical, empirical and chapter summary for the study as follows;

2.2 Theoretical Literature Review

2.2.1 The resource-based view (RBV)

A managerial paradigm called the resource-based view (RBV) is used to identify the strategic resources a company might use to gain a long-term competitive advantage. The 1991 article by Barney "Firm Resources and Sustained Competitive Advantage" is frequently cited as a key document in the development of the resource-based perspective (Dennis & Vessey, 2005). However, some scholars (Peteraf, 1993; Wernerfelt, 1984) assert that a shaky resource-based theory from the 1930s had some supporting evidence. According to RBV, firms might have diverse strategies because they have varied resource mixes, which means that firms are heterogeneous because they have heterogeneous resources.

This RBV concentrates managerial attention on the company's internal assets, capabilities, and competencies in an effort to identify those with the potential to provide superior competitive advantages. With regards to this study, the RBV theory posits that a firm's competitive advantage is primarily derived from its unique resources and capabilities. In your study, M&E Team Capability reflects as a valuable resource, contributing to project success. Top Management Support acts as the catalyst that helps in aligning and leveraging these capabilities effectively. Scholars like Barney (1991) and Penrose (1959) have extensively explored the RBV theory.

2.2.2 The Agency Theory

The principal-agent problem pertains to the clash of interests and priorities that occurs when one individual or entity (referred to as the "agent") carries out actions on behalf of another individual or entity (known as the "principal"). This predicament becomes more challenging when there is a significant disparity in interests and information between the principal and the agent, and when the principal lacks the means to penalize the agent (Clarke, 2004; Davies, 2006). The agent's deviation from the principal's interests is labeled as "agency costs" (Davies, 2006). Common instances of this dynamic include corporate management (acting as the agent) and shareholders (serving as the principal), elected officials (acting as the agent) and citizens (the principal), or brokers (acting as the agent) and markets (comprising buyers and sellers who are the principals). In all of these scenarios, the principal must be concerned about whether the agent is acting in the principal's best interests.

This principal-agent model typically explores either moral hazard (concealed actions) or adverse selection. The principal-agent problem typically arises when the two parties possess differing interests and uneven access to information (with the agent typically having more information), making it difficult for the principal to ensure that the agent consistently acts in the principal's best interests, particularly when activities beneficial to the principal are costly for the agent, and when some aspects of the agent's actions are challenging for the principal to observe. To sum up, agency theory explores the principal-agent relationship, particularly how principals (top management) can ensure that agents (M&E teams) act in the best interest of the organization. In your study, top management support can be seen as a mechanism through which principals align the interests of the M&E teams with the organization's goals. Principal-agent theory has been discussed by scholars like Jensen and Meckling (1976).

2.2.3 Stakeholder theory

Stakeholder theory is a concept in organizational management and business ethics that takes into account various groups or individuals who are affected by a business entity. These stakeholders can include employees, suppliers, local communities, creditors, and others. This theory delves into the ethical considerations and values associated with managing an organization, including aspects like corporate social responsibility, the functioning of a market economy, and social contract theory. The stakeholder perspective on strategy combines elements from the resource-based view and market-based view of strategy and adds

a socio-political dimension. One common version of stakeholder theory aims to define the specific stakeholders of a company (known as the normative theory of stakeholder identification) and then examines the circumstances under which managers treat these parties as stakeholders (referred to as the descriptive theory of stakeholder salience). In various fields such as law, management, and human resources, stakeholder theory has challenged traditional analytical frameworks.

This theory suggests that the needs and interests of stakeholders should be prioritized at the outset of any action or decision-making process. Some authors, such as Geoffroy Murat, have even explored the application of stakeholder theory in unconventional contexts like irregular warfare, demonstrating its versatility and relevance beyond traditional business settings. (Bowie, 2011). The stakeholder theory examines the interests of various stakeholders in an organization. In this present study, it will look at how Customer Satisfaction (a component of Project Success) relates to the satisfaction of project stakeholders. Freeman's (1984) stakeholder theory provides a foundation for such exploration. These theoretical perspectives serve as a basis for framing this study, guiding the literature review, and providing a theoretical foundation for the research.

These theories were used to gain a more holistic understanding, enhance validity of the findings and stimulate deeper analysis of the topic.

2.3 Empirical Literature Review

2.3.1 Monitoring and evaluation team capability and top management support.

Monitoring and evaluation team capability and top management support are important factors for the success of management control systems (MCS) innovations (Lee et al., 2013; Wang et al., 2022). Prior studies have highlighted the significance of top management team (TMT) support for MCS innovations, but have not explored the factors that determine the existence and extent of such support (Al-Saigh & Othman, 2017; Weissman & Nocentino, 2022). This study conceptualizes TMT support for MCS innovations as consisting of two stages: TMT belief and participation in MCS innovations (Lee et al., 2013). The enablers of TMT support include TMT's strategic IT knowledge, TMT knowledge creation processes, CIO's strategic business and IT knowledge, and the interaction between TMT and the CIO . The results of the study confirm the hypothesized relationships among these enablers and TMT support for

MCS innovations. Therefore, monitoring and evaluation team capability and top management support play a crucial role in supporting new MCS innovations.

Ragu-Nathan et al. (2004) conducted a path analytic investigation into the impact of top management support on information systems performance. It is widely acknowledged that top management support (TMS) plays a pivotal role in shaping the effectiveness of the IS function within an organization. The study introduced a comprehensive two-tiered framework to explore the intricate relationships between top management support, the IS function, and IS performance. This conceptual model was empirically assessed using structural equation modeling, utilizing data obtained through a survey instrument. The findings corroborated the direct and indirect connections illustrated in the model between top management support and IS performance.

Over the past three decades, substantial research has centered on top management support as a unidimensional construct. While the literature recognizes the critical role of top management support as a key success factor, it has seldom been approached as a multidimensional construct for gauging project success. This investigation, however, scrutinized the impact of multifaceted top management support on project success, Additionally, regression analysis revealed that the dimensions of 'providing resources' and 'exerting influence' within top management significantly influence project success (R. U. Ahmed et al., 2016).

Jitpaiboon and Kalaian (2005) analyzed the effect of top management support on information system performance across organizations and industries using a hierarchical model. This study provided two contributions to the IS research. Initially, Hierarchical Linear Modeling (HLM) was employed to elucidate the interplay between the organizational level and the industry level, aiming to explain cross-level interactions. Secondly, in contrast to previous research that primarily concentrated on the organizational level, this investigation extends its scope by assessing top management support at the industry level and scrutinizing the mediating function of top management support between these two levels. The findings underscored that top management support emerges as a pivotal and affirmative factor that significantly impacts the success of numerous IS projects.

2.3.2 Monitoring and evaluation team capability and project success

Kamau and Mohamed (2015) performed a literature on the efficacy of monitoring and evaluation in achieving project success in Kenya. Numerous investigations have been conducted with the objective of identifying the crucial elements that contribute to the successful execution of projects. An examination of these studies reveals a recurring pattern. Certain critical success factors (CSFs) consistently emerge in multiple research endeavors. One such persistent factor is the function of monitoring and evaluation (M&E). To delve into the factors related to M&E that influence project success, the researcher employed a literature review methodology. The factors identified were subsequently categorized into four primary groupings: the competence of the M&E team, the chosen monitoring approach, the impact of political influences, and the stage within the project lifecycle. Furthermore, the study recognized the role of management support as a mediating factor between M&E and Project Success. It underscored that effective M&E, when not accompanied by adequate management support, is unlikely to yield favorable outcomes.

Raimondo (2016) studied the difference between good monitoring and evaluation make to World Bank project performance. This study was based on World Bank projects evaluated between 2008 and 2014 to investigate this suggested link between the quality of monitoring and evaluation and project performance. The results obtained from propensity scores matching indicate a significant and positive correlation between the quality of monitoring and evaluation and project outcomes, as assessed by the World Bank's institutional measurements. This positive association remains robust even after accounting for the identity of the project manager and considering various specification choices.

Additionally, the study conducted a systematic text analysis of the narratives provided by the Independent Evaluation Group, which were used to justify the quality rating of monitoring and evaluation. This analysis revealed common indicators of high-quality monitoring and evaluation practices. These indicators encompass aspects such as the establishment of a well-defined institutional structure and clear division of responsibilities for monitoring and evaluation activities, the implementation of a straightforward monitoring and evaluation framework that aligns effectively with clients' existing systems, seamless integration of monitoring and evaluation into operational tasks, and the establishment of a reporting system that is both regular and timely, utilized both during and after the lending process.

McComb et al. (2008) examined the implications of resource distribution, team leader authority, key project objectives, and top management involvement on project success. Additionally, the study investigated top management's involvement's moderating impact on the link between inputs and team performance. The study discovered that team leader authority and top management engagement were adversely correlated with a project team's capacity to work effectively and that resource allocation and important project objectives were positively correlated. Significant project objectives were positively correlated with a project team's capacity to meet its business objectives. Moreover, the relationship was stronger for significant project objectives and project efficiency when top management was involved. The moderator also improved the relationship between the team leader's authority and objective achievement, but had a negative effect on the team leader authority–project efficiency relationship.

2.2.3 Top management support and road infrastructure project success

Omayo et al. (2013) examined factors influencing successful completion of road projects in Kenya. The major findings were that there was significant relationship between all the independent variables and the dependent variable. According to the study's findings, the Ministry does not have the resources, both financial and human, to complete projects on schedule. However, statistical analysis revealed that the most significant correlation between the effective completion of road projects in Kenya and design specifications. Zwikael (2008) investigated the TMT involvement in project management. The findings confirmed that senior management backing is strongly associated with project success. The findings also indicated that various top management support procedures have to be adopted in every sector and society.

Ahmed and Azmi bin Mohamad (2016) explored the relationship between multi-dimensional TMT and project success. Different data analysis methods were employed to test the research hypotheses and to validate the multi-dimensionality of top management support. The success of projects was found to be significantly and favorably correlated with multi-dimensional top management assistance. Young and Jordan (2008) assessed the top management support on project success. The discovery is substantiated within the framework of project management literature and the research on Information Systems (IS) factors contributing to project success. This finding carries practical implications because it suggests that traditional technical and project management guidance may have a lesser impact on project success than

previously assumed. Consequently, it becomes evident that boards and top-level executives may need to acknowledge their personal roles and exert greater influence on determining whether a project ultimately succeeds or fails. This underscores the notion that, according to the 2008 Elsevier Ltd and IPMA findings, top management support emerges as the paramount critical success factor for achieving project success.

2.2.4 The effect of top management support in the relationship between monitoring and evaluation team capability and road infrastructure project success.

Numerous studies have highlighted the positive impact of top management support on M&E team capability and project success . the presence of supportive top management fosters an environment that encourages M&E team members to develop their skills, knowledge and expertise. This in turn, enhances their capability to effectively monitor and evaluate project progress, identify potential risks and implement corrective actions(Smith et al.,2015; Johnson and Brown, 2018). Furthermore, top management support plays a crucial role in providing necessary resources such as funding ,technology and training which are essential for M&E team capability development. This support also facilitates effective communication and collaboration between M&E team and other project stakeholders, leading to improved project outcomes(Gupta et al.,2017;Lee & Chen, 2020).

Omayo et al. (2013) studied the factors influencing successful completion of roads projects in Kenya. Findings indicated that there was significant relationship between the explanatory variables and the dependent variable. However, statistical analysis revealed that the most significant correlation between the effective completion of road projects in Kenya and design specifications. Mushori et al. (2020) examined how process monitoring influences the connection between the assessment of contractors' capabilities during tender award processes and the subsequent performance of road construction infrastructure projects. The study's key conclusion is that process monitoring plays a significant moderating role in shaping contractors' capacity to carry out construction work, thereby influencing road performance. In other words, the effectiveness of monitoring processes has a direct impact on the capabilities of contractors and, consequently, the overall performance of road construction projects.

Byaruhanga & Benon C. Basheka(2017) conducted an assessment of the correlation between the monitoring of contractors and the performance of national road infrastructure projects in Uganda. They also investigated the relationship between different components of contractor

monitoring and the outcomes of these national road infrastructure projects. The findings revealed several key issues, a weak procurement system that led to the selection of incompetent contractors for road projects, the assignment of contractor monitoring responsibilities to unqualified and inexperienced professionals, the absence of an appraisal system for contractors and contract supervisors, delays in contractor payments that adversely affected project timelines, and the lack of a robust internal monitoring and evaluation mechanism within the Uganda National Roads Agency (Aloysius Byaruhanga & Benon C Basheka, 2017).

In 2018, Maendo et al. conducted an investigation into the impact of project monitoring and evaluation on the performance of road infrastructure projects executed by local companies in Kenya. The primary objective of the study was to determine how project monitoring and evaluation influenced the outcomes of road projects. The research was conducted within the Lake Basin Region of Kenya and the study's key finding was that project monitoring and evaluation had a notable and positive impact on the performance of these road projects (Maendo, 2022).

2.3 Conclusion

With regards the role of M&E team capability, Gamariel and David (2021) asserted that the end-of-term evaluation might need to be undertaken well before the end if it is intended to inform a decision about whether or not to continue the funding or scale up an intervention. On the other hand, the contractors' financial ability explains 44.7% total variation in the performance of road construction infrastructural projects in Nairobi County, Kenya (Mushori et al., 2020). Before the emergence of the M&E systems and good leadership, the road agencies were usually public monopolies and had too many responsibilities (Victor, 2017). Studies hail the significance of M&E team capabilities effect on performance of road infrastructure projects undertaken by local firms (Maendo, 2022). However, most of the studies overlook the importance of having a mediation factor in explaining the effect of M&E team capabilities on project success. This study therefore seeks to fill this gap by utilizing top management support as key mediating factor in this study. Additionally, the study seeks to employ a multiple linear regression model to explain the variations in the project success factor accounted for by changes in the M&E team capabilities and top management support.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the research design, population of the study, sample size, data collection methods and instruments, collection procedure and analysis, and the measurement of variables as follows;

3.2 Research Design

The researcher employed a cross sectional research design using a quantitative approach. Cross sectional design is where a study is carried out at one point in time (Gay, 1996). This design was adopted because it studies the relationship between different variables at a given time (Ezeani, 2002). The quantitative technique enabled the researcher to solicit information expressed in numerical format (Mugenda and Mugenda, 1999).

3.3 Study Population

The population of this study comprised of 35 road infrastructure sub-projects completed by Kampala Capital City Authority under the Kampala Institutional and Infrastructure development program. The information about these projects was captured from the road construction review report 2020. The unit of analysis was a road infrastructure sub-project implemented under the Kampala Institutional and Infrastructure Development project and the unit of inquiry was project managers.

3.4 Sample Size

The sample size was 32 road infrastructure sub-projects based on the Krejci and Morgan (1970) table of determining the samples from a given population**.** From each project one respondent that is a project manager was selected**.** The sample size was selected from the above population because the roads infrastructure projects are implemented under the same leadership and they have similar monitoring and supervision.

3.5 Sampling Procedure

The researcher used simple random sampling technique to select a sample for the study for each road sub-project category. The 35 road sub-projects were written down on small papers and shuffled in the box, then 32 of them were randomly picked to come up with the sub-projects that were used for the study. Respondents were the project managers of the road sub-projects who were purposively selected because of their knowledge about the sub-projects. According to Mugenda and Mugenda (1999), purposive sampling enables a researcher to choose participants of their own interest based on knowledge and expertise. With regards the response rate, out of 32 road sub-projects that were targeted, only 28 project managers successfully returned giving a response rate of (28/32*100) = 87.5%, which was considered adequate.

3.6 Sources of data

Primary data was collected from the project managers of the project as the primary source of data using questionnaires. According to Creswell (2014), primary data is helpful as it is collected for a specific purpose it was specifically meant for. Primary data also gives current information concerning the subject matter to draw reliable conclusions and recommendations.

3.7 Data collection instrument

The study adopted a self-administered questionnaire (SAQ). SAQ is a data collection tool by which the participants are directly questioned about their feelings on the study problem (Zohrabi, 2013). SAQ was selected because it has the ability to collect data from a large pool of participants relatively easily compared to other methods such as observation or content analysis.

3.8 Measurement of Variables

For all variables, a five-point Likert scale was used to measure the level of agreement / disagreements of the respondents' views as it is easy and quick to construct, reliable and can also be treated as an interval scale.

Monitoring and evaluation team capability was measured in terms of knowledge, skills, and experience as emphasized by Kamau and Mohamed, (2015).

Top management support was measured in terms of power as emphasized by Boonstra (2013) and provision of resources by Belassi & Tukel (1996).

Project success was measured in terms of time, cost quality and customer satisfaction Ika, (2011).

Table 1: Summary of Operationalization and measurement of Study Variables

Variable	Nature	Indicator	Authority	Data source	Rating scale
M&E team capability	Independent variable	• Knowledge • Skills • Experience	Kamau & Bin Mohamed, 2015)	Primary	5-point Likert scale
Top Management support	Mediating variable	• Leadership style • Resource mgt • Commitment	(Ambe, 2012) (Sumner, 2018)	Primary	5-point Likert scale
Project Success	Dependent variable	• Time • Cost • Quality • Customer satisfaction	(Mir & Pinnington, 2014), (Ika, 2011).	Primary	5-point Likert scale

3.9 Reliability and validity of the measurement instrument.

3.9.1 Reliability

Reliability of a measure is the indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of a measure (error free) Sekaran (2003). In this study, reliability of the instruments was assessed using Cronbach's Alpha coefficient. As many methodologists recommend, coefficients greater than 0.7 will be accepted while those less than 0.7 will not be accepted. This ensured that the data collection instruments are in position to collect reliable data for the study. The results are shown in table 2.

3.9.2 Validity

Validity is defined as the extent to which a concept is accurately measured in a quantitative study. In order to ensure validity of the instrument, the drafted questionnaire was given to experts such as the supervisor for assessment of each item. The validity of the instrument was tested using the content validity index which involved scoring the relevance of the questions in the instruments in relation to the study variables. Validity was also ensured by carrying out pre-testing of the data using the data collecting instruments. The results are as shown in the table 2 below.

Table 2: Validity and Reliability

Variable	Reliability	Validity
Project success	0.825	0.80
Top management support	0.80	0.725
M&E team capability	0.894	0.75

Source: Pilot Study data

3.10 Data processing, Analysis and Presentation

Data collected from the field was analyzed using Statistical package for social sciences (SPSS version 23) a computer package used for analysis. The researcher analyzed the data using quantitative methods. Quantitative data from pre-coded questionnaire was checked for consistency, uniformity, accuracy and comprehensiveness. This was used to get descriptive statistics inform of, frequencies, mean and standard deviation. Correlation analysis was used to determine the relationship between the study variables while regression analysis was used to confirm the association and establish the power in predicting variables in the relationship between the study variables. In addition, Pearson's correlation coefficient was used to establish the relationship between the independent, mediating and dependent variables.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.0 Introduction

Numerous studies have indicated that monitoring and evaluation team capability, top management support and road infrastructure project success were related but in the case of Uganda, this has not been academically validated. This chapter presents an analysis of the data collected in line with the study objectives starting with the respondents' demographics, the descriptive analyses and the inferential analyses as in the preceding chapter.

The current study was out to establish the;

a) Relationship between monitoring and evaluation team capability and top management support.
b) Relationship between monitoring and evaluation team capability and project success.
c) Relationship between top management support and road infrastructure project success.
d) Mediating effect of top management support in the relationship between monitoring and evaluation team capability and road infrastructure project success.

4.1 Respondents' Demographic Characteristics

Demographic characteristics (age, gender, education level), according to a host of scholars, are vital in explaining why certain responses were provided about the study variables. The tables and figures below provide an analysis of the demographic characteristics as generated using MS Excel.

Table 3: Age of the respondents

Age group	Frequency	Percent
30-39 years	8	28.6
40-49 years	10	35.7
50 years and above	6	21.4
Less than 30 years	4	14.3
Total	28	100.0

Source: Primary data

Table 3 shows that the majority of the respondents were between 40 to 49 years(35.7.%). These were followed by the age group of 30 to 39 years (28.6%) . the next age group was 50 years and above which accounted for 21.4% and lastly less than 30 years which was the least with 14.3%.

Table 4: Respondents' Gender

Gender	Frequency	Percent
Female	10	35.7
Male	18	64.3
Total	28	100.0

Source: Primary data

The results in table 4 indicate that of the respondents, a majority 64.3% was male. The female respondents were at 35.7 %.

Table 5: Respondents' Education Level

Education Level	Frequency	Percent
Bachelor's Degree	10	35.7
Post graduate	13	46.5
Master's degree	5	17.9
Total	28	100.0

Source: Primary data

Table 5 indicated that a majority of the respondents, 46.5% were post graduate holders followed by bachelors' degree holders at 35.7% and those with master's degree qualifications at 17.9% .

Table 6: Demographic characteristic of the projects.

Nature of road sub project	**Frequency**	**Percent**
Dual carriage	5	17.9
Road reconstruction	11	39.3
Road upgrading	9	32.1
Drainage systems	3	10.7
Total	28	100.0

The results from the characteristics of the projects in the table above shows that road reconstruction was the highest with 39.3% second is road upgrading with 32.1% followed by dual carriages with 17.9% and lastly drainage systems with 10.7%

4.2 Descriptive statistics of the study variables

4.2.1 M&E Team capability

With components such as skills, knowledge and experience, the dynamic role of M&E in improving the efficiency of projects and hence project success cannot be underestimated. To this end, a host of scholars have indicated that this variable is of ultimate importance in as far as success of projects is concerned. The table below presents the description of the variable based on the responses obtained.

Table 7: Findings on M&E Team capability

M& E TEAM CAPABILITY	Strongly disagree		Disagree		Unsure		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
Skills										
I gather information and come up with solutions that work for the project team.	3	10.7	5	17.9	1	3.6	9	32.1	10	35.7
I create a timeline to make reports on time to identify the gaps.	2	7.1	3	10.7	0	0	16	57.1	7	25.0
I am aware of what is in the best interest of the team and the project	0	0	4	14.3	3	10.7	12	42.9	9	32.1
Knowledge										
I have the necessary qualifications to work on the project	4	14.3	2	7.1	2	7.1	8	28.6	12	42.9
I understand the key performance indicators of the project	1	3.6	2	7.1	3	10.7	11	39.3	11	39.3
I delegate tasks to competent and knowledgeable team members	2	7.1	4	14.3	1	3.6	7	25.0	14	39.3
I have implemented policies for project completion and project team responsibilities.	4	14.3	5	17.9	2	7.1	5	17.9	13	46.4
Experience										
The team has worked on similar projects over the years.	3	10.7	3	10.7	3	10.7	11	39.3	8	28.6
The team undergoes training of the various activities to be undertaken on the project	4	14.3	1	3.6	2	7.1	15	53.6	7	25.0
I can identify the potential risks associated with a project and come up with plans to address them.	0	0.0	5	17.9	1	3.6	7	25.0	15	53.6

Source: Primary data

The results in the table show that of the respondents, 35.7% strongly agreed that they gathered information and come up with solutions that work for the project team whereas 32.1% agreed with this assertion. This implies that 67.8% agreed that they gather information and come up with solutions that work for the project team. Further, 57.1% strongly agreed that they created a timeline to make reports on time to identify the gaps whereas 25% agreed with this assertion. This implies that 82.1% agreed that they create a timeline to make reports on time to identify the gaps. Lastly, 42.9% strongly agreed that they are aware of what is in the best interest of the team and the project whereas 32.1% agreed with this assertion. This implies that 75% agreed that they are aware of what is in the best interest of the team and the project. Regarding skills of the project managers, with the level of agreement about the elements therein >50% for all the three sub components, it is clear that there is an agreement from the results that this component of M&E team capability fared well. However, the

respondents' assertion points to the fact that their most reliable skill was that they gather information and come up with solutions that work for the project team.

Given the descriptive statistics above, it is evident that increasing skills enhances the capability of the M&E team in these infrastructure projects. This is so because Heckman & Corbin (2016) argued that increasing skills increases the task and concept performance of the M&E team in ensuring that timeliness and efficiency are achieved especially when executing activities related to the said projects. In addition, O'Connell et al. (2014) stated that the effect of skill on capability can be improved through training and education which would be similar to the demands of Human Capital Theory.

The results in the table show that of the respondents, 42.9% strongly agreed that they have the necessary qualifications to work on the project whereas 28.6% agreed with this assertion. This implies that 71.5% agreed that they have the necessary qualifications to work on the project. Further, 39.3% strongly agreed that they understand the key performance indicators of the project whereas 39.3% agreed with this assertion. This implies that 78.6% agreed that they understand the key performance indicators of the project. The results further show that 39.3% strongly agreed that they delegate tasks to competent and knowledgeable team members whereas 25% agreed with this assertion. This implies that 64.3% agreed that they delegate tasks to competent and knowledgeable team members. Lastly, 46.4% strongly agreed that they have implemented policies for project completion and project team responsibilities whereas 17.9% agreed with this assertion. This implies that 64.3% agreed that they have implemented policies for project completion and project team responsibilities. Regarding knowledge of the project managers, with the level of agreement >50% for all the sub components, it is clear that there is an agreement from the results that this component of M&E team capability also fared well. However, the respondents' assertion points to the fact that their knowledge was beefed by the fact that they understand the key performance indicators of the project.

Given the descriptive statistics above, it is evident that increasing knowledge could be a key sub variable enhancing the capability of the M&E team in these infrastructure projects. According to Khan (2019), knowledge of the managers would mean that all issues are handled mainly basing on theory and this could lead to disaster. This may be relied on to explain the persistent potholes on the streets of Kampala, though it is not yet statistically verified. In addition, O'Connell et al. (2014) stated that the effect of knowledge on capability

can as well be improved through training and education which would be similar to the demands of Human

The results in the table show that of the respondents, 28.6% strongly agreed that the team has worked on similar projects over the years whereas 39.3% agreed with this assertion. This implies that 67.9% agreed that the team has worked on similar projects over the years. Further, 25% strongly agreed that the team undergoes training of the various activities to be undertaken on the project whereas 53.6% agreed with this assertion. This implies that 78.6% agreed that the team undergoes training of the various activities to be undertaken on the project. Lastly, 53.6% strongly agreed that they can identify the potential risks associated with a project and come up with plans to address them whereas 25% agreed with this assertion. This implies that 78.3% agreed that they can identify the potential risks associated with a project and come up with plans to address them.

Regarding experience of the project managers, with the level of agreement >50% for all the three sub components, it is clear that there is an agreement from the results that this component of M&E team capability also fared well. However, the respondents' assertion points to the fact that their most reliable experience to identify risks associated with the project arises out of the constant training.

This is so because Kettle et al. (2017) argued that experience is the best teacher in that with it, we try so many ways that fail and when we get the right solution, it is the finest. This means that most of the managers are experienced to run these projects and many claim that the problem is borne outside the management of the said projects. From the descriptive analysis above, it is clear that the key capability of the M&E team was knowledge about the project and all its inner workings.

4.2.2 Top Management Support

With components such as leadership, resource management and commitment, the role of top management support is viable in as far as in improving success of road infrastructure projects. The table below presents the description of the variable based on the responses obtained.

Table 8: Findings on Top Management Support.

TOP MANAGEMENT SUPPORT	Strongly disagree		Disagree		Unsure		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
Leadership style										
Top management uses devotes time to the project activities.	1	3.6	1	3.6	2	7.1	13	46.4	11	39.3
Top management creates and implements project plans and goals.	5	17.9	3	10.7	2	7.1	7	25.0	11	39.3
Top management supports the budget for the project activities.	4	14.3	3	10.7	4	14.3	8	28.6	9	32.1
Top management is involved in the project meetings to assess the progress of the project.	5	17.9	3	10.7	4	14.3	8	28.6	8	28.6
Resource management										
Top management provides raw materials for the project activities	3	10.7	4	14.3	1	3.6	8	28.6	12	42.9
Top management provides information about the progress of the projects at each stage.	2	7.1	0	0.0	4	14.3	12	42.9	10	35.7
Top management provides project funds timely to ensure project goals are met.	4	14.3	0	0.0	5	17.9	9	32.1	10	35.7
Top management ensures the number of the M&E team is adequate to carry out the activities.	3	10.7	3	10.7	2	7.1	9	32.1	10	35.7
Commitment										
Top management prioritizes the project tasks and activities	2	7.1	6	21.4	0	0.0	12	42.9	8	28.6
Top management is quick to approve project resources	6	21.4	1	3.6	2	7.1	10	35.7	9	32.1
Top management gives the team clear feedback on their performance	2	7.1	0	0.0	7	25.0	11	39.3	8	28.6

Source: Primary data

The results in the table show that of the respondents, 39.3% strongly agreed that top management uses devotes time to the project activities whereas 46.4% agreed with this assertion. This implies that 85.9% agreed that top management uses devotes time to the project activities. Further, 39.3% strongly agreed that top management creates and

implements project plans and goals whereas 25.0% agreed with this assertion. This implies that 64.3% agreed that top management creates and implements project plans and goals. The results further show that 32.1% strongly agreed that top management supports the budget for the project activities whereas 28.6% agreed with this assertion. This implies that 60.7% agreed that Top management supports the budget for the project activities. Lastly, 28.6% strongly agreed that Top management is involved in the project meetings to assess the progress of the project whereas 28.8% agreed with this assertion. This implies that 57.6% agreed that Top management is involved in the project meetings to assess the progress of the project.

Regarding top management leadership, with the level of agreement >50% for all the sub components, it is clear that there is an agreement from this component of top management support fared well. However, the respondents' assertion points to the fact that top management uses devotes time to the project activities was the most they could realize of top management leadership for the various projects. This kind of transformational leadership has been documented by a number of scholars (Ali et al., 2021) as one so fundamental in improving the success of the projects. However, they added that a number of other factors play an important role in as far as improving the success of the project was concerned. In addition, Zhang et al. (2018) showed that leadership is a motivator factor in improving project success because with it, new and better course of action is usually taken.

The results in the table show that of the respondents, 42.9% strongly agreed that top management provides raw materials for the project activities whereas 28.6% agreed with this assertion. This implies that 70.5% agreed that top management provides raw materials for the project activities. Further, 35.7% strongly agreed that top management provides information about the progress of the projects at each stage whereas 42.9% agreed with this assertion. This implies that 78.5% agreed that top management provides information about the progress of the projects at each stage. The results further show that 35.7% strongly agreed that top management provides project funds timely to ensure project goals are met whereas 32.1% agreed with this assertion. This implies that 67.8% agreed that top management provides project funds timely to ensure project goals are met. Lastly, 35.7% strongly agreed that top management ensures the number of the M&E team is adequate to carry out the activities whereas 32.1% agreed with this assertion. This implies that 62.7% agreed that top management ensures the number of the M&E team is adequate to carry out the activities.

Regarding top management resource management, with the level of agreement >50% for all the sub components, it is clear that there is an agreement from the results that this component of top management support also fared well. However, the strongest of the respondents' assertion point to the fact that top management provides information about the progress of the projects at each stage as the key strength of their resource management. In line with this, Solli-Sther et al. (2015) argue that knowledge sharing is of ultimate importance in as far as improving the success of the project is concerned and labelled it as the unavoidable activity by top management. This, according to Ommen et al. (2015) arises from the fact that it is critical for obtaining the views of the stakeholders and working accordingly towards attaining the needs of the stakeholders.

The results in the table show that of the respondents, 28.6% strongly agreed that top management prioritizes the project tasks and activities whereas 42.9% agreed with this assertion. This implies that 71.5% agreed that top management prioritizes the project tasks and activities. Further, 32.1% strongly agreed that top management is quick to approve project resources whereas 35.7% agreed with this assertion. This implies that 67.8% agreed that top management is quick to approve project resources. Lastly, 28.6% strongly agreed that top management gives the team clear feedback on their performance whereas 39.3% agreed with this assertion. This implies that 67.9% of the respondents agreed that top management gives the team clear feedback on their performance.

Regarding top management commitment, with the level of agreement >50% for all the sub components, it is clear that there is an agreement from the results that this component of top management support also fared well. However, the strongest of the respondents' assertion point to the fact that top management prioritizes the project tasks and activities as the key strength of their top management commitment. Amoah et al. (2021) also believed that there is no better way to support a project than prioritizing the activities of the project. From the descriptive analysis about this variable above, it is clear that the key top management sub variable was resource management and according to Makori (2021), successful projects are both cost effective and timely and achieving these two requires the adoption of efficient resource management practices.

4.2.3 Project Success

With components such as time, quality and customer satisfaction, project success was the study's dependent variable. The table below presents the description of the variable based on the responses obtained.

Table 9: Findings on Project success

PROJECT SUCCESS	Strongly disagree		Disagree		Unsure		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
Time										
Activities of the projects are usually carried out within the agreed time	3	10.7	5	17.9	0	0	10	35.7	12	42.9
The time within which the projects are to be completed is regularly reviewed	5	17.9	2	7.1	1	3.6	6	21.4	14	50.0
Project executors normally follow the planned schedule for all activities	5	17.9	0	0.0	5	17.9	9	32.1	10	35.7
Quality										
Project quality is subdivided into components that can be assessed independently.	7	25.0	3	10.7	2	7.1	9	32.1	7	25.0
Quality assessments are regularly undertaken for the projects	2	7.1	6	21.4	0	0.0	12	42.9	8	28.6
The project team is professionally qualified and familiar with the quality standards	6	21.4	1	3.6	2	7.1	10	35.7	9	32.1
Customer satisfaction										
Our projects lead to improvement of people's lives	6	21.4	3	10.7	4	14.3	6	21.4	9	32.1
Our projects are admired by the users and they feel proud of them.	2	7.1	7	25.0	5	17.9	8	28.6	6	21.4
We always receive complaints from road users in regard to the quality of completed projects.	2	7.1	3	10.7	1	3.6	12	42.9	10	35.7

Source: Primary data

The results in the table show that of the respondents, 42.9% strongly agreed that the activities of the projects are usually carried out within the agreed time whereas 35.7% agreed with this assertion. This implies that 76.6% agreed that the activities of the projects are usually carried out within the agreed time. Further, 50% strongly agreed that the time within which the projects are to be completed is regularly reviewed whereas 21.4% agreed with this assertion. This implies that 71.4% agreed that the time within which the projects are to be completed is

regularly reviewed. Lastly, 35.7% strongly agreed that project executors normally follow the planned schedule for all activities whereas 32.1% agreed with this assertion. This implies that 67.8% of the respondents agreed that project executors normally follow the planned schedule for all activities.

Regarding project timeliness, with the level of agreement >50% for all the sub components, it is clear that there is an agreement from the results that this component of project success fared well. However, the strongest of the respondents' assertion point to the fact that the activities of the projects are usually carried out within the agreed time. This, according to Oburu (2020) means that the projects under this study are succeeding but there could be issues with the quality and the overall instability of the levels of satisfaction of the clients. In explaining this, Muhammed and Muhammet (2018) as well as Romel & Gilberto (2016) agreed that being timely in project execution may not lead to project success because of the fact that the quality of the work may be compromised which adversely affects the reputation of the implementing teams.

The results in the table show that of the respondents, 25% strongly agreed that project quality is subdivided into components that can be assessed independently whereas 32.1% agreed with this assertion. This implies that 57.1% agreed that the project quality is subdivided into components that can be assessed independently. Further, 28.6% strongly agreed that quality assessments are regularly undertaken for the projects whereas 42.9% agreed with this assertion. This implies that 71.5% agreed that quality assessments are regularly undertaken for the projects. Lastly, 32.1% strongly agreed that the project team is professionally qualified and familiar with the quality standards whereas 35.7% agreed with this assertion. This implies that 67.8% of the respondents agreed that the project team is professionally qualified and familiar with the quality standards.

Regarding project quality, with the level of agreement >50% for all the sub components, it is clear that there is an agreement from the results that this component of project success fared well. However, the strongest of the respondents' assertion point to the fact that quality assessments are regularly undertaken for the projects. From a quality assessment perspective, Sastoque-Pinilla et al. (2022) believed that successful projects are those whose management does routine and timely assessments in terms of evaluation. However, the scholars did not indicate the extent to which quality assessments would improve project success. Nonetheless,

Villazón et al. (2020) argued that quality assessments would assist project managers in ensuring that the project output aligns with the needs of the various stakeholders.

The results in the table show that of the respondents, 32.1% strongly agreed that their projects lead to improvement of people's lives whereas 21.4% agreed with this assertion. This implies that 53.5% agreed that their projects lead to improvement of people's lives. Further, 21.4% strongly agreed that their projects are admired by the users and they feel proud of them whereas 28.6% agreed with this assertion. This implies that 50% agreed that their projects are admired by the users and they feel proud of them. Lastly, 35.7% strongly agreed that they always receive complaints from road users in regard to the quality of completed projects whereas 42.9% agreed with this assertion. This implies that 78.6% agreed that they always receive complaints from road users in regard to the quality of completed projects.

Regarding customer satisfaction, with the level of agreement ≥50% for all the sub components, it is clear that there is an agreement from the results that this component of project success fared well. However, the strongest of the respondents' assertion point to the fact that they always receive complaints from road users in regard to the quality of completed projects. In explaining the study results, Davis (2014) noted that a reducing number of complaints signifies that the needs of the clients are met. However, Lamprou and Vagiona (2022) argue that different clients have different measures of satisfaction and hence advised for better measures of client satisfaction. From the descriptive analysis about this variable, it is clear that the key project success variable was timeliness.

4.3 Results of the study objectives

Correlation analysis was employed to establish the association between monitoring and evaluation team capability, top management support and project success. The analysis facilitated the objectives of the study and consequently provided answers to the research questions.

Table 10: Zero order Correlation of the study variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
Project Success (1)	1											
Timeliness(2)	**.728****	1										
Quality (3)	**.586****	.823**	1									
customer Satisfaction(4)	**.497****	.716**	.711**	1								
Top Management Support (5)	**.831****	.032	.759**	.069	**1**							
Leadership(6)	**.864****	.649**	.631**	.510**	.635**	1						
Resource Management(7)	**.608****	.548**	.842**	.246	.522**	.596**	1					
Commitment(8)	**.558****	.739**	.312	.622**	.705**	.750**	.477**	1				
M&E Team Capability (9)	**.591****	.378*	.043	.370	**.324****	.269	.000	.012	**1**			
Skills (10)	**.609****	.649**	.211	.671**	.063	.721**	.881**	.647**	.256	1		
Knowledge(11)	**.749****	.814**	.528**	.663**	.088	.712**	.694**	.628**	.796**	.489**	1	
Experience (12)	**.517****	.798**	.524**	.598**	.258	.566**	.719**	.749**	.814**	.419**	.716**	1

**. Correlation is significant at the 0.01 level (2-tailed).; *. Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data

4.3.1 . The relationship between monitoring and evaluation team capability and top management support.

The first objective of the study was concerned with the relationship between monitoring and evaluation team capability and top management support`. Results in table 10 show that there is a moderately weak correlation between monitoring and evaluation team capability and top management support ($r = 0.324$, $p<.01$). The implication of the findings is that when top management support improves, the capability of M&E teams will also improve. This significant relationship is explained that top management support is vital in improving team capability through effective and unbiased remuneration and rewards programs as well as improvements in the quality of training.

4.3.2 . The relationship between monitoring and evaluation team capability and road infrastructure project success.

Results in table 10 show that there exists a significant positive relationship that is a moderately strong correlation between monitoring and evaluation team capability and road infrastructure project success ($r = 0.591$, $p = .001$).

These results imply that when a monitoring and evaluation team is capable, the chances of project success are higher . Improving the skills of the monitoring and evaluation team , employing a team with the right skills and expertise will have a positive effect on success of the road infrastructure projects.

4.3.3 . The relationship between top management support and road infrastructure project success.

The third objective of the study was concerned with the relationship between top management support and road infrastructure project success under the Kampala institutional and infrastructure development program. Results in table 10 show that there exists a strong correlation between top management support and road infrastructure project success under the Kampala Institutional and Infrastructure Development Program($r = 0.831$, $p < .001$). Therefore, good resource management , commitment and the appropriate leadership style will have a positive impact the time in which a project is undertaken, the costs involved and the quality of the project.

4.6 Regression analysis

The study's fourth objective entailed establishing the mediating effect of top management support in the relationship between monitoring and evaluation team capability and road infrastructure project success. Whereas each of the variables, top management support and M&E team capability, are independently related with project success in the infrastructure projects, it was not known whether a combination of the two would alter the findings and this led us into formulating this objective. In attaining this objective, a linear regression model was run in SPSS Version 22 and the results are presented as in the table below.

Table 11: OLS Multiple Linear Regression Model

Dependent variable: Project Success

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.828	.372		2.226	.035
	M&E team capability	.527	.062	.504	3.212	.000
	Top management support	.862	.024	.851	15.122	.000

				Change Statistics				
R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
.831[a]	.691	.666	.51120	.691	27.909	2	25	.000

Predictors: (Constant), top management support, M&E team capability

Source: Primary data

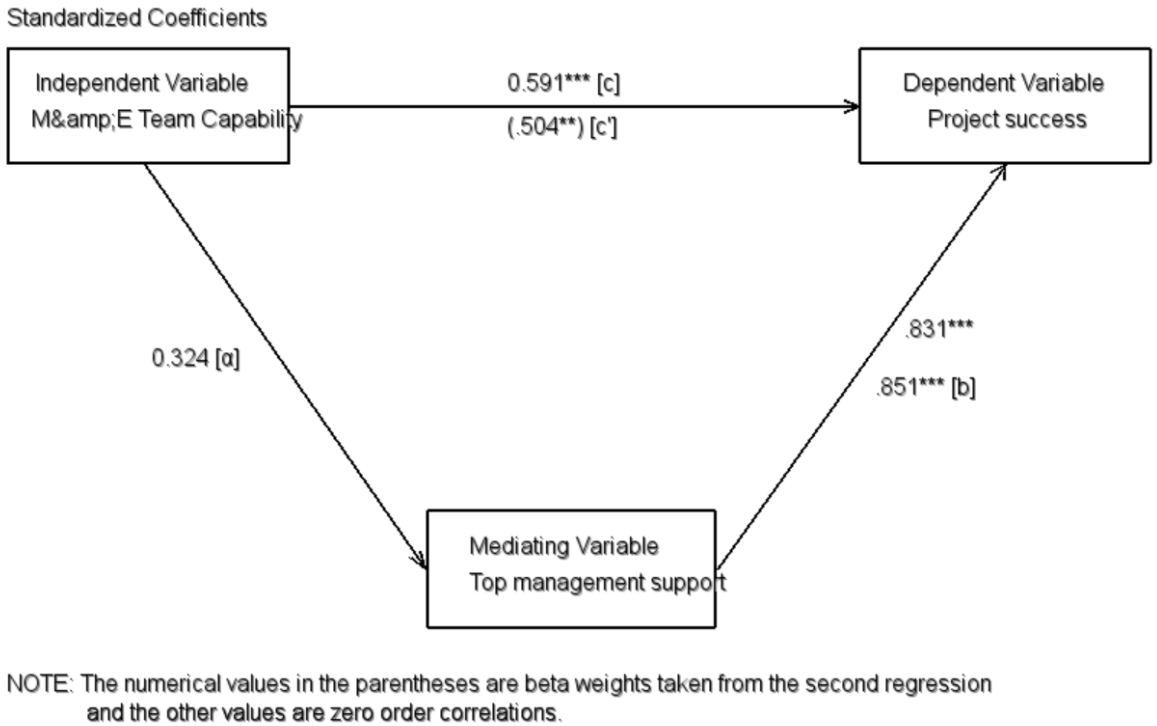
Table 11 indicates that a unit change in monitoring and evaluation team capability (M&E) leads to .504 changes in project success and these changes in project success are significant at a 5% significance level other factors constant((β = .504; Sig. = .000) .

Secondly, from table 11 the statistics indicate that a unit change in top management support leads to .851 changes in project success and these changes are significant at a 5% significance level other factors constant((β = .851; Sig. = .000).

In this multiple regression analysis, the study examined factors influencing project success. The results show that project success is significantly influenced by both M&E (Monitoring and Evaluation) team capability and top management support. M&E team capability has a moderate positive impact (Beta = 0.504), indicating that for each unit increase in M&E team capability, project success is estimated to increase by 0.527 units. On the other hand, top management support has a strong positive influence (Beta = 0.851), suggesting that for each unit increase in top management support, project success is estimated to increase by 0.862 units. The model as a whole is highly significant, explaining approximately 69.1% of the variance in project success (R-square = 0.691). These findings emphasize the importance of both M&E team capability and top management support in achieving project success.

4.7 Mediation Analysis

Objective four aimed at establishing the mediating effect of top management support in the relationship between monitoring and evaluation team capability and road infrastructure project success. In attaining this objective, a linear regression model was run in SPSS Version 22 and the results are presented as in the table below. The Med-Graph was used to test for mediating effect of top management support on the relationship between monitoring and evaluation team capability and road infrastructure project success. The most important parameter here is the p-value which in this case is less than 0.05 therefore we can conclude that the indirect effect between relationship and project success via top management support is statistically significant (p-value ≤ 0.05). To find out the point estimate of the indirect effect at which the p-value in the Sobel Test is statistically significant, simply calculate the Unstandardized Coefficient Beta for $\beta_1 * \beta_3$. This implies that the point estimate = 0.294 * 0.862 = 0.2536



Source: Outputs computed from the Victoria University of Wellington Med Graph online Tool

Additional results accompanying the mediation output above are;

Significance of Mediation			Significant
Sobel z-value		8.271522	$p = < 0.000001$
95% Symmetrical Confidence Interval			
	Lower	.34663	
	Upper	.56192	
Unstandardized indirect effect			
	a*b	.45427	
	se	.05492	
Effect size Measures			
	Standardized Coefficients		R^2 Measures
	Total:	.591	
	Direct:	.504	
	Indirect:	.276	
	Indirect to Total Ratio:	.466	

The outputs are the results from the mediation analysis, the project success is the outcome variable, M&E (Monitoring and Evaluation) team capability is the independent variable, and top management support is the mediating variable. The interpretation of these results is as follows:

Significance of Mediation**:** The first line indicates that the mediation effect is significant. In other words, there is evidence to suggest that top management support plays a mediating role in the relationship between M&E team capability and project success.

Sobel z-value**:** The Sobel z-value is a statistical test used to assess the significance of a mediation effect. In this case, the z-value is very high at 8.271522, with an extremely low p-value ($p < 0.000001$), indicating that the mediation effect is highly significant.

95% Symmetrical Confidence Interval: The confidence interval provides a range of values within which the true mediation effect is likely to lie. In this case, the confidence interval ranges from 0.34663 (lower) to 0.56192 (upper). Since this interval does not include zero, it further supports the conclusion that the mediation effect is significant.

Unstandardized Indirect Effect (ab): The unstandardized indirect effect is calculated as 0.45427. This represents the estimated change in the dependent variable (project success) for each unit change in the independent variable (M&E team capability) mediated through the mediator (top management support).

Coefficient of Determination Measures**:** These measures provide information about how well the model explains the variance in the dependent variable (project success).

Total R2: This is the total variance explained by the model, which is 0.591. It represents the proportion of variability in project success explained by all the variables in the model.

Direct R2: This represents the proportion of variability in project success explained by the independent variable (M&E team capability) alone, which is 0.504.

Indirect R2: This represents the proportion of variability in project success explained by the mediating variable (top management support) and the indirect path through it, which is 0.276.

Indirect to Total Ratio: This ratio is calculated as 0.466, indicating that the indirect effect (mediation effect) accounts for approximately 46.6% of the total effect. In other words, top management support explains a substantial portion of the relationship between M&E team capability and project success.

In summary, the results suggest that M&E team capability has a significant positive effect on project success, and this effect is partially mediated (46.6%) by top management support. Top management support plays an essential role in explaining why M&E team capability leads to improved project success. The mediation effect is statistically significant and substantial, as indicated by the Sobel z-value, confidence interval, and the indirect to total ratio.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses the findings of the study, conclusions and recommendations in relation to the study objectives. Areas for further research were also suggested and limitations to the study were also presented. The discussion explains the findings of the study in support or contrast to the literature review upon which conclusions and recommendations were drawn.

5.1 Discussion of findings

5.1.1 Relationship between M&E team capability and top management support

Based on correlation analysis, the study results indicated that there exists a moderately weak correlation between M&E team capability and Top management Support in road projects under the Kampala Institutional and Infrastructure Development Program. The results on this objective were explained by the fact that top management support helps provide an ambient environment for training the M&E team in a bid to improve their capabilities. Secondly, other scholars (Lee et al., 2018; Domínguez & Barroso-Castro, 2017) have indicated that the relationship between these two arises from the fact that top management support is through ensuring independence of the M&E team.

Further, a number of scholars (Khan, 2019; Kettle et al., 2017; O'Connell et al. (2014) have indicated that the positive and significant relationship between M&E team capability and Top management Support is supported by the fact that improvement in efficiency of the former comes forth from experience and this helps to build a bond between the team and top management support. In other cases, the relationship between these two is explained basing on the fact that improving the skillsets of the M&E teams often calls for management to increase its support to these teams.

5.1.2 Relationship between M&E team capability and road infrastructure project success

Based on correlation analysis, the study results indicated that there exists a moderately strong correlation relationship between M&E team capability and the success of road projects under the Kampala Institutional and Infrastructure Development Program. The results on this objective were explained by the fact that M&E team capability improves the creativity and innovativeness of the team which improves the quality of their reporting on the operation of the project for improved success. Secondly, other scholars (Oh & Choi, 2020; Awan et al., 2020) have indicated that the relationship between monitoring and evaluation team capability and project success arises from the fact that improvements in the capability of the M&E team is fundamental for ensuring efficiency for the minimization of resources of the projects.

Having a team beaming with sufficient knowledge, skills and experience is a precursor for improved task execution efficiency and performance, both of which are viable tools for improving the success of the projects. To this end, Kettle et al. (2017) showed that experience was a driver of project success because of the fact that the teams are able to get very creative in having sufficient data on the challenges and risks that are so hidden for matters of helping the project change course in the event that the risks are pervasive.

5.1.3 Relationship between top management support and road infrastructure project success

Based on correlation analysis, the study results indicated that there exists a strong relationship between Top management Support and the success of road projects under the Kampala Institutional and Infrastructure Development Program. The results on this objective were explained by the fact that top management support helps provide the required resources and guidance to have the project completed in a timely and cost-effective manner. Secondly, other scholars (Makori, 2021; Amoah et al., 2021) have indicated that the relationship between these two arises from the fact that top management support is vital as they are in position to get all information from the stakeholders and make decisions before anything goes wrong. The relationship between top management support and project success is further stated to be positive because of the fact that top management commitment and leadership direction is vital for the tasks put upon the project management teams.

5.1.4 The mediating effect of top management support in the relationship between monitoring and evaluation team capability and project success.

The study's fourth objective entailed investigating the mediating effect of top management support in the relationship between monitoring and evaluation team capability and road infrastructure project success. The study results indicated that the mediating effect of top management support on the relationship between M&E team capability and project success is significant at 69.1% of the changes in the success of roads projects under the Kampala Institutional and Infrastructure Development Program. This is based on the fact that top management support helps to improve the capability of the M&E team through training, independence and remuneration which makes them become innovative and creative in the execution of the various tasks assigned to them as Sastoque-Pinilla et al. (2022) commented. However, the extent to which the two affected success had only been left at qualitative level.

5.2 Conclusions

From the study findings, four main conclusions are drawn;

1. There is a positive relationship between M&E team capability and Top management Support. This means that when top management provides support, it helps the M&E team enhance their skills and expertise. This in turn leads to better project monitoring and evaluation, ultimately increasing the chances of project success. Therefore, a supportive top management can really make a difference in the capabilities of the M&E team.
2. There is a positive relationship between M&E team capability and project success . This means that when the M&E team has the necessary skills, knowledge and resources , they are better equipped to monitor and evaluate project progress, identify risks and implement corrective actions. This ultimately leads to improved project outcomes and increases the likelihood of project success. Therefore, investing in the capability of M&E team can have a significant impact on the overall success of a project.
3. The study accepts the hypothesis of a positive relationship between Top management Support and project success . This implies that when top management is actively involved and provides support throughout the project lifecycle, it helps in setting clear goals, allocating resources and making timely decisions. This positive support creates

a positive work environment, boosts team morale and enhances project coordination ultimately leading to higher project success rates. Therefore, having strong top management support is a key factor in achieving project success.

4. Top management support acts as a mediator between M&E team capability and project success and thus organizations that prioritize and provide adequate support to their teams are more likely to achieve successful project outcomes

5.3 Recommendations

1. Top management should support the M&E teams with the necessary training and provision of the necessary physical and financial resources for optimal performance of the project
2. Management of the Kampala Institutional and Infrastructure development program should ensure that monitoring and evaluation(M&E) teams are put under pressure to deliver the accurate data on time to ensure that modifications to the running of the projects are done.
3. Top management should be more involved in the budget process for effective project planning and execution . this helps them identify the gaps in the project and hence come up with solutions in order to come up with successful projects.
4. To this end, the study recommends that top management should double efforts to supporting these teams through training and provide the necessary financial and physical resources to ensure that the projects under this program succeed.

5.4 Limitations of the study and areas for further research.

i) The study was carried out in one entity that is Kampala Capital City Authority therefore, future researchers should carry out the study in a wider scope such as UNRA and road infrastructure projects outside Kampala city.

ii) The researcher found it difficult to have respondents that will take part in answering the questionnaire.

iii) The variables used by the researcher are not the only variables that can be used to measure project success.

iv) The study data are cross-sectional and correlational, limiting causal inferences to be made. Therefore, in studies that are cross-sectional in nature it is very difficult to monitor behavior over time limiting the researcher from examining behavioral change over time

The future researchers should investigate;

i) This study showed that road infrastructure project success is accounted by many factors and monitoring and evaluation team capability , top management support does not fully explain it. Therefore, future research should be undertaken to ascertain other factors that affect road infrastructure project success.
ii) Since the study was cross sectional carried out, there is need to look at the longitudinal study about variables under the study should be conducted.
iii) For future studies, future researchers should have depth interview of the project managers to get the more detailed information about the other factors affecting their project success. In this study, it would have been wise to gather huge amount of quantitative data to get the detailed overview

REFERENCES

Aboagye, J. N., Kissi, E., Acheampong, A., & Badu, E. (2022). Assessment of competencies to promote best project management practices for road infrastructure projects in Ghana. *Journal of Engineering, Design and Technology*.

Ahmed, R. (2016). Top management support and project performance: An empirical study of public sector projects. *Available at SSRN 3044377*.

Ahmed, R., & Azmi bin Mohamad, N. (2016). Exploring the relationship between multi-dimensional top management support and project success: An international study. *Engineering Management Journal*, *28*(1), 54-67.

Ahmed, R., Mohamad, N. A. B., & Ahmad, M. S. (2016). Effect of multidimensional top management support on project success: an empirical investigation. *Quality & Quantity*, *50*, 151-176.

Ahmed, R. U., Mohamad, N. A. b., & Ahmad, M. S. (2016). Effect of multidimensional top management support on project success: an empirical investigation. *Quality & Quantity*, *50*, 151-176.

Al-Saigh, H., & Othman, M. F. (2017). Top management support and project team for system.

Arshad, H., Thaheem, M. J., Bakhtawar, B., & Shrestha, A. (2021a). Evaluation of Road Infrastructure Projects: A Life Cycle Sustainability-Based Decision-Making Approach. *Sustainability*, *13*, 3743.

Arshad, H., Thaheem, M. J., Bakhtawar, B., & Shrestha, A. (2021b). Evaluation of road infrastructure projects: A life cycle sustainability-based decision-making approach. *Sustainability*, *13*(7), 3743.

Bowie, N. E. (2011). Stakeholder Theory: The State of the Art, R. Edward Freeman, Jeffrey S. Harrison, Andrew C. Wicks, Bidhan L. Parmar, and Simone de Colle (New York: Cambridge University Press, 2010). *Business Ethics Quarterly*, *22*, 179 - 185.

Byaruhanga, A., & Basheka, B. C. (2017). Contractor Monitoring and Performance of Road Infrastructure Projects in Uganda: A Management Model.

Byaruhanga, A., & Basheka, B. C. (2017). Contractor monitoring and performance of road infrastructure projects in Uganda: A management model.

Castro, M., Bahli, B., Figueiredo, R., & Barcaui, A. (2023). Forecasting Project Success through Project Team Trust: Brazilian Empirical Study. *Procedia Computer Science*, *219*, 1696-1704.

Claude, R., & Didace, T. (2020). Project Monitoring and Evaluation and Project Success in Local Government in Rwanda. *J Bus Fin Aff*, *9*.

Damoah, I. S., Ayakwah, A., & Twum, P. (2022). Assessing public sector road construction projects' critical success factors in a developing economy: Definitive stakeholders' perspective. *Journal of Project Management*.

Dennis, A. R., & Vessey, I. (2005). Three Knowledge Management Strategies: Knowledge Hierarchies, Knowledge Markets, and Knowledge Communities. *MIS Q. Executive*, *4*, 4.

Emejeit, A., Nagitta, O. P., Okoche, M., & Mkansi, M. (2021). Contractor commitment and the delivery of road infrastructure projects in Uganda: A practitioner perspective. *Africa Journal of Management*, *7*(sup1), 82-103.

Freeman, P. (2014). A diagnosis of road conditions and road safety in Sub-Saharan Africa. SARF/IRF Regional Conference, 5th, 2014, Pretoria, South Africa,

Gamariel, M., & David, I. (2021). Role of Monitoring and Evaluation and the Performance of Projects in Rwanda. A Case of Road Construction Project in Nyarugenge District.

Hassan, A. I. (2013). An Investigation of Structural Capacity as a Component of Monitoring and Evaluation in Project Success of Road Construction Projects in Kenya. *The International Journal of Academic Research in Business and Social Sciences*, *3*.

Hu, B., Jin, Y., & Wang, K. (2022). How free trade agreement affects the success of China's Belt and Road infrastructure projects. *International Studies of Economics*, *17*(4), 484-498.

Jitpaiboon, T., & Kalaian, S. A. (2005). Analyzing the effect of top management support on Information System (IS) performance across organizations and industries using hierarchical linear modeling. *Journal of International Information Management*, *14*(2), 5.

Kamau, C. G., & Mohamed, H. B. (2015). Efficacy of Monitoring and Evaluation Function in Achieving Project Success in Kenya: A Conceptual Framework. *Science journal of business management*, *3*, 82.

Khan, S. U. R., Long, C. S., & Iqbal, S. M. J. (2014). Top management support, a potential moderator between project leadership and project success: A theoretical framework. *Research Journal of Applied Sciences, Engineering and Technology*, *8*(11), 1373-1376.

Lee, J., Elbashir, M. Z., Mahama, H., & Sutton, S. G. (2013). Enablers of top management team support for integrated management control systems innovations. *Int. J. Account. Inf. Syst.*, *15*, 1-25.

Maendo, D. O., James, R., & Kamau, L. N. (2018). Effect of Project Monitoring and Evaluation on Performance of Road Infrastructure Projects Constructed By Local Firms in Kenya.

Maendo, O. D. (2022). GROUP DYNAMICS MANAGEMENT AND PERFORMANCE OF ROAD INFRASTRUCTURE PROJECTS. *British Journal of Management Research and Review*, *7*(3), 38-44.

McComb, S. A., Kennedy, D. M., Green, S. G., & Compton, W. D. (2008). Project team effectiveness: the case for sufficient setup and top management involvement. *Production Planning & Control*, *19*, 301 - 311.

Mushori, J., Rambo, C. M., & Wafula, C. M. (2020). Moderating Influence of Process Monitoring on the Relationship Between Contractors Capacity Evaluation in Tender Award and Performance of Road Construction Infrastructural Projects. *Journal of Civil and Environmental Engineering*, *10*.

Mwelu, N., Davis, P. R., Ke, Y., Watundu, S., & Jefferies, M. (2021). Success factors for implementing Uganda's public road construction projects. *International Journal of Construction Management*, *21*(6), 598-614.

Obondi, K. (2022). The utilization of project risk monitoring and control practices and their relationship with project success in construction projects. *Journal of Project Management*, *7*(1), 35-52.

Oguzie, J. O. C., Nwakanma, I. C., Ogbonna, A. C., & Udunwa, A. I. (2021). Road infrastructure project success: Understanding the role of stakeholder management in a rural setting. Collaboration and Integration in Construction, Engineering, Management and Technology: Proceedings of the 11th International Conference on Construction in the 21st Century, London 2019,

Okello, A. (2021). Monitoring and Evaluation Data Management and Project Performance: A Review on Infrastructure Projects. *Research & Development*, *2*(3), 43-49.

Omayo, O. P., Student, M., & Gekara, J. M. (2013). FACTORS INFLUENCING SUCCESSFUL COMPLETION OF ROADS PROJECTS IN KENYA.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Southern Medical Journal*, *14*, 179-191.

Ragu-Nathan, B. S., Apigian, C. H., Ragu-Nathan, T. S., & Tu, Q. (2004). A path analytic study of the effect of top management support for information systems performance. *Omega-international Journal of Management Science*, *32*, 459-471.

Raimondo, E. (2016). What difference does good monitoring & evaluation make to World Bank project performance ?

Victor, K. A. (2017). Factors influencing Monitoring and Evaluation Processes of County Road Projects in Turkana County Government , Kenya Ng ‟ etich.

Wang, Y., Yi, Y., & Wei, Z. (2022). Top management team internal social capital, market dynamics and business model design: a dynamic managerial capability perspective. *Management Decision*.

Wanjira, K., & Ngari, C. (2018). Determinants of successful project management practices on performance of roads projects at Kenya National Highways Authority. *Journal of Entrepreneurship and Project Management*, *3*(1), 1-25.

Weissman, B., & Nocentino, A. E. (2022). Monitoring and Management. *Azure Arc-enabled Data Services Revealed*.

Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Southern Medical Journal*, *5*, 171-180.

Young, R., & Jordan, E. (2008). Top management support: Mantra or necessity? *International journal of project management*, *26*(7), 713-725.

Zwikael, O. (2008). Top management involvement in project management: A cross country study of the software industry. *International Journal of Managing Projects in Business*, *1*(4), 498-511.

APPENDICIES

Appendix One - Research questionnaire

Dear Respondent

I am a student of Makerere university business school currently undertaking research on the topic "capability of monitoring and evaluation team management support and project success of road infrastructure projects in Kampala". The information is required for only academic purposes. Your participation in this study is voluntary but necessary for the success of this work. I kindly request you to answer the questions and all your responses will be used strictly for research purposes and treated with utmost confidentiality.

KIRABO MOREEN

STUDENT

SECTION A: Background characteristics of respondents

Kindly tick the appropriate answer option

Personal profile

1. **Gender**

Male	Female
1	2

2. **Age bracket of the respondent**

Less than 30 years	30-39 years	40-49 years	50 years and above
1	2	3	4

3. **Highest education status**

Certificate	diploma	Bachelor's degree	Master's degree	Others(specify)
1	2	3	4	5

	STATEMENTS	SD	D	NS	A	SA
B1	**Monitoring and evaluation team capability**					
	Skills					
B1.1	I gather information and come up with solutions that work for the project team.					
B1.2	I create a timeline to make reports on time to identify the gaps.					
B1.3	I am aware of what is in the best interest of the team and the project					
	Knowledge					
B1.5	I have the necessary qualifications to work on the project					
B1.6	I understand the key performance indicators of the project					
B1.7	I delegate tasks to competent and knowledgeable team members					
B1.8	I have implemented policies for project completion and project team responsibilities.					
	Experience					
B1.9	The team has worked on similar projects over the years.					
B1.10	The team undergoes training of the various activities to be undertaken on the project					
B1.11	I can identify the potential risks associated with a project and come up with plans to address them.					

SECTION C: TOP MANAGEMENT SUPPORT

In the next section, please indicate your level of agreement or disagreement by selecting the most suitable response to the following statements.

Key: 1-strongly Disagree (SD), 2-Disagree (D), 3-Not sure (NS), 4-Agree (A) and 5-strongly Agree (SA)

	STATEMENTS	**SD**	**D**	**NS**	**A**	**SA**
C1	**TOP MANAGEMENT SUPPORT**					
	Leadership style					
C1.1	Top management uses devotes time to the project activities.					
C1.2	Top management creates and implements project plans and goals.					
C1.3	Top management supports the budget for the project activities.					
C1.4	Top management is involved in the project meetings to assess the progress of the project.					
	Resource management					
C1.5	Top management provides raw materials for the project activities					
C1.6	Top management provides information about the progress of the projects at each stage.					
C1.7	Top management provides project funds timely to ensure project goals are met .					
C1.8	Top management ensures the number of the M&E team is adequate to carry out the activities.					
	Commitment					
C1.9	Top management prioritizes the project tasks and activities					
C1.10	Top management is quick to approve project resources					
C1.11	Top management gives the team clear feedback on their performance					

SECTION D; PROJECT SUCCESS

In the next section, please indicate your level of agreement or disagreement by selecting the most suitable response to the following statements.

Key: 1-strongly Disagree (SD), 2-Disagree (D), 3-Not sure (NS), 4-Agree (A) and 5-strongly Agree (SA)

	STATEMENTS	**SD**	**D**	**NS**	**A**	**SA**
D1	**PROJECT SUCCESS**					
	Time					
D1.1	Activities of the projects are usually carried out within the agreed time					
D1.2	The time within which the projects are to be completed is regularly reviewed					
D1.3	Project executors normally follow the planned schedule for all activities					
	Quality					
D1.4	Project quality is subdivided into components that can be assessed independently.					
D1.5	Quality assessments are regularly undertaken for the projects					
D1.6	The project team is professionally qualified and familiar with the quality standards					
	Customer satisfaction					
D1.7	Our projects lead to improvement of people's lives					
D1.8	Our projects are admired by the users and they feel proud of them.					
D1.9	We always receive complaints from road users in regard to the quality of completed projects.					

Appendix Two – Sample Frame

ROAD SUB -PROJECTS UNDER THE KAMPALA INFRASTRUCTURE AND INSTITUTIONAL DEVELOPMENT PROGRAM

DUAL CARRIAGEWAYS

No	Road Name	Division
1	Kasubi – KNBP	Kawempe
2	Nakawa Ntinda Road (Includes Ntinda Junction)	Nakawa
3	Kayemba Road	Makindye
4	Old Port bell Road/ Spring Road	Nakawa
5	Port bell Road	Nakawa
6	Kibuye-Busega	Rubaga
7	Kivebulaya Junction (Lubaga Road)	Rubaga

ROAD RECONSTRUCTION

No	Road Name	Division
1	Sir Apollo Kagwa	Kawempe
2	Muzito Road	Lubaga
3	Sentema Road	Lubaga
4	Ntinda-Kisasi	Nakawa
5	Mpabaana Road	Central
6	Kisaasi-Kyanja	Nakawa
7	Eight Street/ Namuwongo Road	Makindye
8	Lukuli Road	Makindye
9	Luwafu Road	Makindye
10	Ssuna Road-2	Beyond

ROAD UPGRADING

No	Road Name	Division
1	Kitebi Bunamwaya	Beyond
2	Waliggo	Kawempe
3	Kawala Road	Kawempe
4	Muteesa I Road	Lubaga
5	Kabega	Makindye
6	Kirombe Road	Makindye
7	Nakivubo Channel Road	Central
8	Mugema Road	Lubaga
9	Namungoona Road	Lubaga
10	Magambo/ Ntinda-Kigowa	Nakawa
11	Kafeero Road	Kawempe
12	Kulambiro Ring Road	Nakawa
13	Dembe –Kilowoza	Nakawa

DRAINAGES

No	Drainage System	Division
1	System 2 - Lubigi secondary drains	Kawempe
2	System3 - Nalukolongo secondary drains	Lubaga
3	System 3 - Nalukolongo primary drain (from Kibuye to Busega)	Lubaga
4	System 6 - Kinawataka primary drains	Nakawa
5	System 6 - Kinawataka secondary drains	Nakawa

Appendix three - Krejci & Morgan Table for sample size determination

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size.
S is sample size.