Int Journal of Social Sciences Management and Entrepreneurship 8(3): 541-551 2024

ISSN 2411-7323

www.sagepublishers.com

MONITORING AND EVALUATION PRACTICES AND PERFORMANCE OF ROAD PROJECTS IN NAIROBI CITY COUNTY, KENYA

[1] Onyango A. Walter, [2] Dr. Pedo Maurice

[1]Masters Student (Monitoring and Evaluation), Jomo Kenyatta University of Agriculture and Technology
[2]Lecturer, Jomo Kenyatta University of Agriculture and Technology

ABSTRACT

Road projects have faced many challenges in Kenya. Currently 35% of road project have already set their monitoring and evaluation, while 65% there are still struggling in setting up their monitoring and evaluation systems. The general objective of this study was to investigate the influence of monitoring and evaluation practices on performance of road projects in Nairobi City County, Kenya. Specifically, the study sought to establish the influence of program assessments on performance of road projects in Nairobi City County, Kenya, to determine the influence of monitoring systems on performance of road projects in Nairobi City County, Kenya. This study was anchored on Control Theory, and Systems Theory. This study used descriptive research design. The unit of analysis in this case was the road construction projects in Nairobi City County while the unit of observation was project staff members working with KeNHA, KeRRA and KURA. The total target population was, therefore, 695 respondents. Yamane formula (1967) was used to determine the sample size. Thus, the study was administered with questionnaires of 254 respondents mention above. The sampling technique that was used in this study is simple random sampling. Data was collected by use of semi-structured questionnaires. Data was collected by use of the drop and pick-up later method and the questionnaires. The pilot group was 25 individuals which represent 10% of the total study sample size. The pilot group was excluded from the final study. Qualitative data collected was analyzed using content analysis and presented in prose form. Quantitative data collected was analyzed using descriptive statistics techniques such as frequency, percentages, and means and summary graphs, pie charts, and frequency distribution tables. Pearson R correlation was used to measure the strength and direction of linear relationship between variables. Multiple regression models were fitted to the data to determine how the independent variables influence the dependent variable. The findings were presented in tables and figures. The study concludes that program assessments have a positive and significant effect on performance of road projects in Nairobi City County, Kenya. In addition, the study concludes that monitoring systems has a positive and significant effect performance of road projects in Nairobi City County, Kenya. Based on the findings, the study recommends that project managers should implement rigorous and continuous program assessments throughout the project lifecycle. Program assessments should encompass comprehensive monitoring and evaluation frameworks that track key performance indicators (KPIs), project milestones, and budgetary adherence.

Key Words: Monitoring And Evaluation Practices, Program Assessments, Monitoring Systems, Performance, Road Projects

Background of the Study

Road projects are essential for economic growth. Improving roads will result in better access to social services, including health clinics, and increase non-agricultural, income generating activities and travel from peri-urban to urban locations for work in services and construction. For a country to be considered developed nation, infrastructure is an essential requirement (Emmir & Juwono, 2021). Economic actors' use of infrastructure can provide opportunities for them to reap huge profits, because production costs can be minimized by the availability of manufacturing facilities and distribution activities can be reduced through the use of connectivity infrastructure, such as roads, bridges, and so on (Emmir & Juwono, 2021).

Globally, governments are faced with challenges of supervising the implementation of numerous planned projects that are meant to create a foundation for future development of a country. These challenges may include inadequate funding, bureaucratic delays, and corruption. In Kenya, the M&E framework proposed by Ministry of Planning and National Development has been ineffective in monitoring government projects. This ineffectiveness has partly contributed to regional imbalances and delays in social-economic development. However, socio-economic development can be achieved by involving local communities in selection and implementation of projects, which helps control regional imbalances regarding development, expanding coverage and increasing pro-poor moves by eliciting local people's participation in decision making (Abdi & Kimutai, 2018).

Project monitoring as a continuous function involving the day-to-day operation during the implementation of a project or programme and is a routine measurement of programme inputs and outputs delivery, and implementation of projects, in compliance with the required procedures and achievement of planned targets, the main purpose being to indicate at the earliest instance any shortcomings with regards to achieving intended objectives so that ameliorative measures can be undertaken in good time (PMI, 2017). Stakeholder Monitoring is a related process that ensures follow-up of the relations within the project stakeholders and the adaptation of the plans and strategies of the stakeholders' involvement (Riahi, 2017). Individuals and institutions that have interest in the project, at all levels, should participate in monitoring (Association for Project Management, 2018).

As with community participation and participatory management, participation in monitoring does not happen spontaneously. Orre, Ramadhani, and Yusuf (2019) posit that advantages of participation in monitoring include a common undertaking, enhancing accountability, better decision-making, performance improvement, improved design, and more information. Participative monitoring helps stakeholders to get a shared understanding of the problems facing the community or project in term of causes, magnitude, effects, and implications (Orre, Ramadhani, & Yusuf, 2019). Effective M&E plays a critical role in construction project implementation given the needed attention by the project implementors/team by providing adequate resources, technical capacity building and providing a conducive project environment and the involvement and participation of stakeholder in M&E will see project performance improved (Tengan & Aigbavboa, 2018).

Statement of the Problem

Road infrastructure projects in Kenya have consistently faced challenges, many of which are attributed to inadequate Monitoring and Evaluation (M&E) systems. Despite receiving substantial funding, projects such as the Nairobi Mass Transport System, Nairobi Railway City, Lamu-Garissa Road, and the Mombasa-Malaba Standard Gauge Railway have experienced significant delays or stalling. These inefficiencies highlight the need for stronger M&E frameworks to ensure timely completion, efficient resource allocation, and adherence to project timelines and budgets. Currently, while 35% of infrastructure projects in Kenya have established M&E systems, 65% are still struggling, leading to poor project outcomes such as budget overruns, extended completion times, and failure to meet quality standards (Koffi-

Tessio, 2017; Shapiro, 2015). The absence of timely and reliable M&E practices leads to delayed financial monitoring, which in turn causes uncontrolled budget increases. Furthermore, without real-time assessments and feedback mechanisms, project timelines often extend well beyond their intended completion dates. Moreover, missing, or outdated baseline studies prevent project managers from accurately monitoring project adherence to quality standards, resulting in substandard infrastructure.

Although several studies, such as those by Onyango (2019), Mulyungi (2018), Tengan, Aigbavboa, and Thwala (2019), Mushori, Machira, and Matu (2020), and Wang'aya and Kagiri (2018), have explored the challenges of M&E practices and project performance, they tend to focus on specific projects or regions. As a result, their findings are difficult to generalize to road construction projects in Nairobi City County. Furthermore, none of these studies have specifically addressed the unique challenges faced by road projects in implementing effective M&E systems. Nairobi, as the economic hub of Kenya, plays a pivotal role in national infrastructure development, and its road projects are critical for improving transportation, trade, and overall economic growth. Yet, the lack of research focused on the M&E practices specific to road infrastructure in this region leaves a knowledge gap.

This study seeks to fill this gap by investigating the influence of M&E practices - including program assessments, monitoring systems, - on the performance of road projects in Nairobi City County, Kenya. By addressing these gaps, the study aims to provide actionable insights to improve the efficiency and effectiveness of M&E systems, thereby enhancing budget control, ensuring timely project completion, and meeting quality standards in the region's road infrastructure projects.

Research Objectives

The general objective of this study was to investigate the influence of monitoring and evaluation practices on performance of road projects in Nairobi City County, Kenya.

Specific Objectives

i. To establish the influence of program assessments on performance of road projects in Nairobi City County, Kenya.

ii. To determine the influence of monitoring systems on performance of road projects in Nairobi City County, Kenya.

LITERATURE REVIEW

Theoretical Review

Control Theory

Control model, invented by Ouchi (1979) uses the notion of modes of control to describe all attempts to ensure that individuals in organizations act in a way that is consistent with organizational goals and objectives (Ndunge, 2018). The concept of control is based on the premise that the controller and the controlee have different interests. These different interests will be overcome by the controlee's modes of control (Tiwana, 2019).

Modes of control may distinguish between formal and informal mechanisms. Formal modes of control are defined as Behaviour control and Outcome control. Behaviour control consists of articulated roles and procedures and rewards based upon those rules. Outcome control is mechanisms for assigning rewards based on articulated goals and outcomes (Tiwana, 2019). The informal modes of control are carried out by the control modes labelled as clan and self. Clan are the mechanisms of a group sharing common values, beliefs, problems, and these mechanisms work through activities as hiring & training of staff, socialization, among others. The control mode of the self is about individually defined goals and can be carried out through

the mechanisms of individual empowerment, self-management, self-set goals, etc. (Ndunge, 2019).

In the context of completion of project, the project manager and the project teams have different interests. For the project manager to control cost and schedules during the project execution stage, he or she has to come up with different modes that ensure that the teams are compliant. The control mechanisms and rules must be aligned with the overall project goals as well as the goals of individual teams. Based on this understanding, project managers use the control model to focus on modes of monitoring and evaluation to enhance completion of projects. This study used Control Theory to establish the influence of program assessments on performance of road projects in Nairobi City County, Kenya

Systems Theory

Systems Theory was developed by Austrian biologist Ludwig von Bertalanffy in the 1940s and further advanced through the 1950s and 1960s. The theory posits that complex systems share certain principles irrespective of their particular domain. At its core, Systems Theory emphasizes the interdependence and interconnectedness of various components within a system, suggesting that the behavior of the whole system cannot be fully understood solely by examining its individual parts. Instead, one must consider the relationships and interactions among these parts (Ragsdell et al., 2012).

Systems Theory is built on several key assumptions. Firstly, it assumes that systems are composed of multiple interconnected components, and the overall system's behavior emerges from the interactions among these components. Secondly, it posits that systems are open to and interact with their environments, constantly exchanging information, energy, and resources. Thirdly, it suggests that systems strive for equilibrium but are also capable of adapting to changes through feedback mechanisms. Lastly, it assumes that systems can be hierarchical, with smaller subsystems nested within larger ones, each influencing and being influenced by the broader system (Bertalanffy, 2003).

Despite its broad applicability and influence, Systems Theory has faced several critiques. One critique is that it can be overly abstract and generalized, making it difficult to apply concretely in specific contexts. Critics argue that the theory’s emphasis on interdependence and holism may overlook the significance of individual components and their unique contributions. Additionally, some scholars believe that Systems Theory can be too deterministic, underestimating the role of human agency and individual decision-making. Furthermore, the theory’s broad nature may lead to challenges in operationalizing and measuring the complex interactions it describes (Zhukovskya & Pivovarov, 2015).

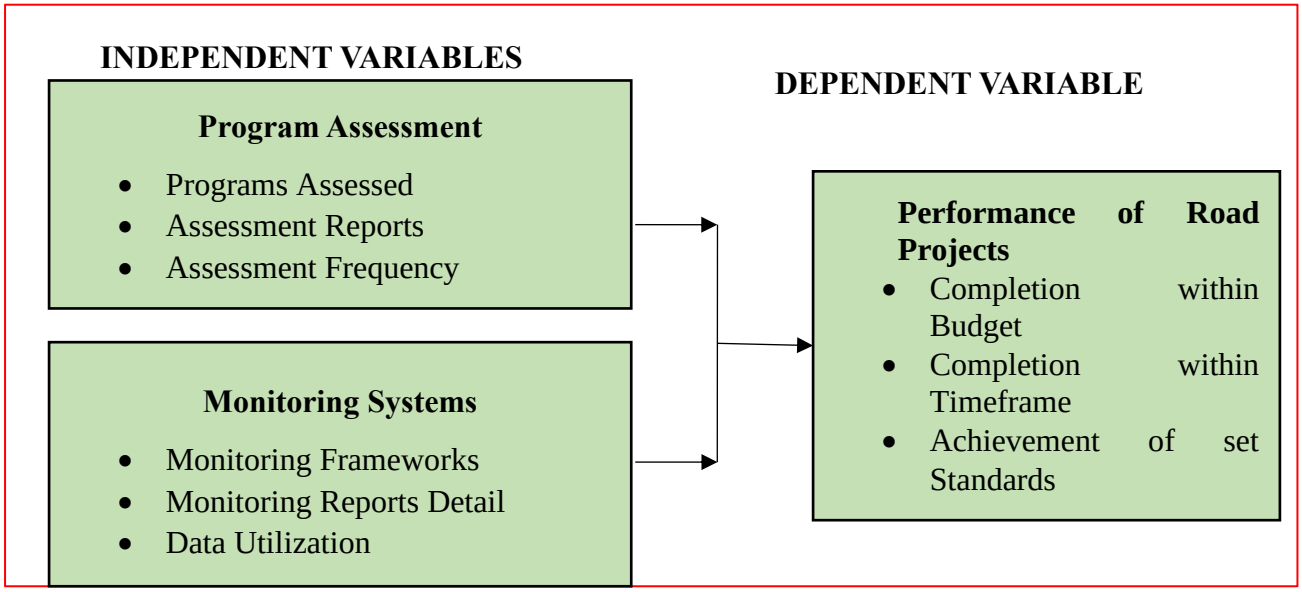
Systems Theory is highly relevant to monitoring systems within organizations. Monitoring systems can be viewed as complex systems themselves, comprising various components such as data collection tools, analysis frameworks, reporting mechanisms, and feedback loops. According to Systems Theory, effective monitoring requires understanding how these components interact and contribute to the overall performance of the monitoring system. By adopting a systems perspective, organizations can better design and implement monitoring frameworks that account for the dynamic interactions and feedback mechanisms within the system. This study used systems theory to assess the influence of monitoring systems on performance of road projects in Nairobi City County, Kenya.

Conceptual Framework

The conceptual framework is an instrument of research enables a researcher to gain knowledge and conceptualize the variables under study (Mugenda & Mugenda, 2018). Program

assessments, monitoring systems are the independent variables, while performance of road projects in Nairobi City County, Kenya is the dependent variable. Figure 2.1 shows the conceptual framework.

Figure 2. 1: Conceptual Framework



Program Assessment

Program assessment involves systematically evaluating the effectiveness and quality of educational, training, or operational programs within an organization. This process helps ensure that the programs meet their objectives, improve over time, and align with the strategic goals of the institution or organization (Bell & Aggleton, 2016). Programs typically assessed include academic curricula, professional development initiatives, operational efficiency programs, and service delivery frameworks. For example, in an educational context, program assessment might focus on degree programs, certificate courses, and other academic offerings. In a corporate setting, it could involve evaluating training programs, leadership development initiatives, and employee wellness programs. Each program's assessment is tailored to its specific goals and metrics, ensuring a comprehensive understanding of its performance and impact.

Assessment reports are detailed documents that present the findings of the program assessment process. These reports typically include an overview of the program being assessed, the objectives of the assessment, methodologies used, data collected, and a thorough analysis of the results. They also provide insights into the strengths and weaknesses of the program, areas for improvement, and recommendations for future actions. The frequency of program assessments varies based on the type of program, regulatory requirements, and organizational priorities (Nkwake, 2019). Regular assessment is crucial to ensure continuous improvement and adaptability to changing needs and environments. In educational institutions, academic programs might be assessed annually or biennially, with more comprehensive reviews every five to ten years as part of accreditation cycles.

Monitoring Systems

Monitoring systems rely on structured frameworks to systematically track, evaluate, and report on the progress and performance of various programs, projects, or organizational activities. A monitoring framework typically includes clearly defined objectives, key performance indicators (KPIs), data collection methods, and reporting mechanisms. It serves as a blueprint for how monitoring activities will be conducted, ensuring consistency and reliability in the data

gathered (Lopez-Acevedo et al., 2012). The framework outlines the roles and responsibilities of different stakeholders involved in the monitoring process, establishes timelines for data collection and analysis, and sets benchmarks or targets against which performance can be measured. By providing a structured approach, monitoring frameworks help organizations ensure that their monitoring efforts are comprehensive, aligned with strategic goals, and capable of identifying areas for improvement.

Monitoring reports are detailed documents that present the findings of the monitoring process, offering insights into the performance and progress of the activities being monitored (Lopez-Acevedo et al., 2012). These reports typically include an executive summary, detailed analysis of KPIs, data visualizations such as charts and graphs, and narrative explanations of the findings. The detail in monitoring reports provides a thorough examination of the data collected, highlighting trends, variances, and any deviations from expected outcomes. Additionally, the reports often include contextual information to explain why certain results were achieved, potential challenges encountered, and recommendations for corrective actions or strategic adjustments (Forss, 2013). The comprehensive nature of monitoring reports ensures that decision-makers have a clear and accurate understanding of current performance levels, enabling informed decisions and effective management of programs and initiatives.

Empirical Review

Program Assessment and Performance of Projects

Rumenya and Kisimbi (2020) examined the influence of M&E systems on performance of NGOs education projects in Mombasa. The study targeted 220 project staff in education where a sample of 69 respondents were selected using Yamane formula. The study examined how organizational structures, human capacity, M&E plan, and Work Plan influence performance of education projects in Mombasa. The study found that project M&E plan and M&E plan had weak positive significant correlation with performance of projects in the education sector (Rumenya & Kisimbi, 2020).

Matu (2020) examined 'stakeholder participation in project life cycle management, risk management practices and completion of urban roads transport infrastructure projects in Kenya.' The study adopted mix correlational and descriptive survey design. The target population Kenya Urban roads authority (KURA) where a sample of 309 respondents was used. The study found that stakeholder participation in in initiation had a significant influence on completion of roads projects. The study also established that stakeholder participation in project planning had a significant influence on completion of road projects. Combined stakeholder participation in the project life cycle management had a significant influence on completion of read projects (Matu, 2020).

Wekesa and Maurice (2021) in their study of PM&E on sustainability of youth funded projects in Bungoma and Nairobi counties found that participatory planning has positive relationship with project sustainability of Youth funded projects in Nairobi and Bungoma. Since the p-value was less than the selected level of significance the influence was significant. Based on the findings, the study concludes that an increase in participatory planning will result to an increase in project sustainability of Youth funded projects in Nairobi and Bungoma Counties. Mulyungi (2018) investigated influence of monitoring and evaluation planning on NGOs project implementation in Gasbo district in Rwanda. Descriptive research design was adopted, and primary data gathered through issue of questionnaires among 106 respondents who were selected through simple random sampling. Univariate and correlation analysis analyzed the data. The study found that M&E planning influences performance of NGOs projects. The study also established that there is a positive correlation between M&E planning and project performance in Kigali Rwanda.

RESEARCH METHODOLOGY

This research study used descriptive research design.This study was conducted in Nairobi City County. The unit of analysis in this case was the road construction projects in Nairobi City County while the unit of observation was project staff members working with Kenya National Highway Authority (KeNHA), Kenya Rural Roads Authority (KeRRA), and Kenya Urban Roads (KURA). Therefore, the target population for the research was all the staff members (top management and other cadres) at road agencies in Kenya which are KeNHA, KeRRA, and KURA. The total target population was therefore 695 respondents. Yamane formula (1967) was used to determine the sample size. Thus, the study was administered with questionnaires of 254 respondents. The sampling technique that was used in this study is simple random sampling. With simple random sampling, each unit of the population has an equal probability of inclusion in the sample (Creswell, 2014).

Data was collected by use of structured questionnaires. According to Cauvery, Nayak, Girija and Meenakshi (2019), pilot study should be between 1% and 10% of the actual sample size. Therefore, in this study, the pilot group was 25 individuals which represented 10% of the total study sample size. The pilot group was excluded from the final study. Quantitative data collected was analyzed using descriptive statistics which include percentages, means, standard deviations and frequencies. The information was displayed by use of tables, bar charts, graphs, and pie charts. Content analysis was used to test data that was collected from the open-ended questions and findings were presented in tables and figures. This study also conducted inferential statistics through correlation analysis and regression analysis. Pearson correlation analysis was used to test the strength and the direction of the relationship between the independent and the dependent variables. Multiple regressions were done to establish the influence of monitoring and evaluation practices on performance of road projects in Nairobi City County in Kenya.

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

The sample size for the study comprised of 254 respondents. The researcher sampled 254 respondents who were each administered with the questionnaires. From the 254 questionnaires 234 were filled and returned hence a response rate of 92.1%. The response rate was considered as suitable for making inferences from the data collected.

Descriptive Statistics Analysis

4.5.1 Program Assessments and Project Performance

The first specific objective of the study was to establish the influence of program assessments on performance of road projects in Nairobi City County, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to program assessments and performance of road projects in Nairobi City County, Kenya. The results were as presented in Table 1.

From the results, the respondents agreed that programs within their department are assessed regularly (M=3.904, SD= 0.976). In addition, the respondents agreed that the frequency of program assessments meets the needs for effective planning and decision-making (M=3.847, SD= 0.612). Further, the respondents agreed that the process for assessing programs is well-structured and systematic. (M=3.699, SD=0.822). The respondents also agreed that stakeholders are adequately involved in the program assessment process (M=3.601, SD= 0.505). The respondents also agreed that assessment reports are effectively used to inform strategic planning in their department (M=3.541, SD= 0.708). In addition, the respondents agreed that assessment reports significantly influence budget allocation decisions (M=3.539, SD=0.725).

Table 1: Program Assessments and Project Performance

	Mean	Std. Deviation
Programs within my department are assessed regularly.	3.904	0.976
The frequency of program assessments meets the needs for effective planning and decision-making.	3.847	0.612
The process for assessing programs is well-structured and systematic.	3.699	0.822
Stakeholders are adequately involved in the program assessment process.	3.601	0.505
Assessment reports are effectively used to inform strategic planning in my department.	3.541	0.708
Assessment reports significantly influence budget allocation decisions.	3.539	0.725
Aggregate	**3.689**	**0.725**

Monitoring Systems and Project Performance

The second specific objective of the study was to determine the influence of monitoring systems on performance of road projects in Nairobi City County, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to monitoring systems and performance of road projects in Nairobi City County, Kenya. The results were as presented in Table 2.

From the results, the respondents agreed that their department has a comprehensive monitoring framework in place for overseeing program implementation (M=3.957, SD= 0.756). In addition, the respondents agreed that the monitoring framework is regularly updated to reflect changes in program objectives and external conditions (M=3.819, SD= 0.872). Further, the respondents agreed that monitoring reports generated by their department provide detailed and actionable insights (M=3.701, SD= 0.795). The respondents also agreed that the level of detail in monitoring reports facilitates effective decision-making and planning (M=3.699, SD= 0.928). In addition, the respondents agreed that data collected through monitoring efforts is effectively used to inform planning and decision-making (M=3.687, SD=0.838). Further, the respondents agreed that there is a systematic process for incorporating monitoring data into the continuous improvement of programs (M=3.672, SD=0.685).

Table 2: Monitoring Systems and Project Performance

	Mean	Std. Deviation
My department has a comprehensive monitoring framework in place for overseeing program implementation.	3.957	0.756
The monitoring framework is regularly updated to reflect changes in program objectives and external conditions.	3.819	0.872
Monitoring reports generated by my department provide detailed and actionable insights.	3.701	0.795
The level of detail in monitoring reports facilitates effective decision-making and planning.	3.699	0.928
Data collected through monitoring efforts is effectively used to inform planning and decision-making.	3.687	0.838
There is a systematic process for incorporating monitoring data into the continuous improvement of programs.	3.672	0.685
Aggregate	**3.756**	**0.812**

Performance of Road Projects

The respondents were requested to rate various statements relating to performance of road projects in Nairobi City County, Kenya. The results were as presented in Table 3.

From the results, the respondents agreed that the road project are completed within the allocated budget (M=3.844, SD= 0.822). In addition, the respondents agreed that cost overruns are effectively managed throughout the project (M=3.777, SD= 0.610). Further, the respondents agreed that the projects stay within financial projections set at the beginning (M=3.719, SD= 0.815). In addition, the respondents agreed that budget adjustments are communicated and approved in a timely manner (M=3.716, SD= 0.765).

From the results, the respondents agreed that resource allocation is efficiently handled to prevent unnecessary expenses (M=3.705, SD=0.753). In addition, the respondents agreed that the road projects meet all quality standards specified at the outset (M=3.698, SD=0.764). Further, the respondents agreed that the projects adhere to all safety regulations and standards (M=3.654, SD=0.545). The respondents also agreed that the materials used in the road construction are of the required quality (M=3.632, SD=0.876).

Table 3: Performance of Road Projects

	Mean	Std. Deviation
The road projects are completed within the allocated budget	3.844	0.822
Cost overruns are effectively managed throughout the project.	3.777	0.610
The projects stay within financial projections set at the beginning	3.719	0.815
Budget adjustments are communicated and approved in a timely manner	3.716	0.765
Resource allocation is efficiently handled to prevent unnecessary expenses	3.705	0.753
The road projects meet all quality standards specified at the outset.	3.698	0.764
The projects adhere to all safety regulations and standards.	3.654	0.545
The materials used in the road construction are of the required quality	3.632	0.876
Aggregate	**3.718**	**0.744**

Correlation Analysis

This research adopted Pearson correlation analysis determine how the dependent variable (performance of road projects in Nairobi City County, Kenya) relates with the independent variables (program assessments, monitoring systems

Table 4: Correlation Coefficients

		Project Performance	Program Assessments	Monitoring Systems
Project Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	234		
Program Assessments	Pearson Correlation	.805**	1	
	Sig. (2-tailed)	.003		
	N	234	234	
Monitoring Systems	Pearson Correlation	.815**	.297	1
	Sig. (2-tailed)	.000	.060	
	N	234	234	234

From the results, there was a very strong relationship between program assessments and performance of road projects in Nairobi City County, Kenya (r = 0.805, p value =0.003). The relationship was significant since the p value 0.003 was less than 0.05 (significant level). The findings are in line with the findings of Rumenya and Kisimbi (2020) who indicated that there is a very strong relationship between program assessments and project performance.

Moreover, there was a very strong relationship between monitoring systems and performance of road projects in Nairobi City County, Kenya (r = 0.815, p value =0.000). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the findings of Okafor (2021) who indicated that there is a very strong relationship between monitoring systems and project performance.

Regression Analysis

Table 5: Regression Coefficients

	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	B	Std. Error	Beta		
(Constant)	0.335	0.085		3.941	0.000
program assessments	0.345	0.088	0.344	3.920	0.001
monitoring systems	0.361	0.092	0.362	3.924	0.000

The regression model was as follows:

$$\mathbf{Y = 0.335 + 0.345X_1 + 0.361X_2}$$

According to the results, program assessments have a significant effect on performance of road projects in Nairobi City County, Kenya β_1=0.345, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the findings of Rumenya and Kisimbi (2020) who indicated that there is a very strong relationship between program assessments and project performance.

The results also revealed that monitoring systems has a significant effect on performance of road projects in Nairobi City County, Kenya, β1=0.361, p value= 0.000). The relationship was considered significant since the p value 0.000 was less than the significant level of 0.05. The findings are in line with the findings of Okafor (2021) who indicated that there is a very strong relationship between monitoring systems and project performance.

Conclusions

The study concludes that program assessments have a positive and significant effect on performance of road projects in Nairobi City County, Kenya. Findings revealed that programs assessed, assessment reports and assessment frequency influence performance of road projects in Nairobi City County, Kenya.

In addition, the study concludes that monitoring systems has a positive and significant effect performance of road projects in Nairobi City County, Kenya. Findings revealed that monitoring frameworks, monitoring reports detail and data utilization influence performance of road projects in Nairobi City County, Kenya.

Recommendations

The study recommends that project managers should implement rigorous and continuous program assessments throughout the project lifecycle. Program assessments should encompass comprehensive monitoring and evaluation frameworks that track key performance indicators (KPIs), project milestones, and budgetary adherence.

Further, the study recommends that project managers should establish a robust and integrated monitoring system that utilizes modern technology and real-time data analytics. Implementing such a system allows for continuous monitoring of key project parameters such as progress milestones, budget utilization, quality standards, and adherence to timelines.

Suggestions for Further Studies

This study was limited to the influence of monitoring and evaluation practices on performance of road projects in Nairobi City County, Kenya hence the study findings cannot be generalized to project performance in other projects in Kenya. The study therefore suggests further studies on the influence of monitoring and evaluation practices on project performance at other projects in Kenya.

REFERENCES

Abdi, A. H., & Kimutai, G. (2020). 'M&E and Performance of constituency Development Fund projects in Garissa County, Kenya'. *International Academic Journal of Information Sciences and Project Management, 3*(2), 418-445.

Aken, S. (2019). *Infleunce of stakeholder's role on performance of constituencies development fund projects a case of Isiolo North cosntitutency, Kenya.* University of Nairobi.

Association for Project Management. (2018). *APM Body of Knowledge,* (6th ed.). Association for Project Management: Buckinghamshire.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management, 17*(1), 99-120.

Bell, S., & Aggleton, P. (2016). *Monitoring and evaluation in health and social development: Interpretive and ethnographic perspectives*. Routledge.

Bertalanffy, L. V. (2003). *General system theory: Foundations, development, applications*. G. Braziller.

Bhattacherjee, A. (2019). *Social Science research: principles, methods, and practices.* . Textbook collections.

Forss, K. (2013). *A study of monitoring and evaluation in six Norwegian civil society organisations.* Norwegian Agency for Development Cooperation.

Leonard-Barton, D. (2018). *Applying innovation diffusion theory to the management of change*. Leopold Classic Library.

Makori, J. O., & Wanyoike, D. (2018). *Assessment of result based monitoring and evaluation on performance of donor funded value chain projects in Kenya.* PhD Thesi, JKUAT.

Matu, J. M. (2020). *Stakeholer particpation in project life cyle mangement, risk management practices and completion of urban roads transport infrastructure projects in Kenya.* PHd Thesis, University of Nairobi.

Matyoko, P. A. (2019). *Effectiveness of M&E systems on project sustainabilityin Tanzania: A case of NGOs in Shinyanga Municipal.* M.A. thesis in Monitoring and Evaluation, University of Tanzania.

Mgoba, S. A. (2019). *Effectiveness of PM&E on achevement of commnuity based water projects in Chamwino district Tanzania.* M.A. Thesis in Project management, Sokoine University of Agriculture Morogoro.

Murumba, G. (2022). *Effects of PM&E on livelihood projects outcomes: A case of selced enterprise projects in Kakuma.* M.A. in M&E, Africa Nazarene University.

Noreen, E., Smith, D., & MAckey, J. (2008). *The Theory of constraints and its implications for management accounting.* Montvale, Institute of MAnagement Accounts and Great Barrington. MA: North River Press.

Ocharo, D. R., Rambo, C., & Ojwang, B. (2020). 'Influence of M&E frameworks on performance of public agriclutral projects in Galana Kilifi county Kenya'. *European Journal of Physical and Agricultural Sciences, 8*(1), 1-10.

Orre, F., Ramadhani, A., & Yusuf, M. (2019). Role of stakeholders on project performance of Kenya power and Lighting company last mile connectivity project in Embu county

Kenya. *International Journal of Management and Commerce Innovations , 7*(2), 1186-1195.

Ottaro, M. M. (2017). *'Effect of M&E system in program implementation: a case of NGOs in Nairobi County , Kenya'.* MBA thesis, United states International University -Africa.

Paton, S., & Andrew, B. (2019). The role of project mangemenrt office in product life cycle management: A cas study in the defence industry. *International journal of production Economics, 208*, 43-52.

Penrose, E. (2009). *The theory of growth of the firm* (4th ed.). Oxford University Press.

PMI. (2017). *A Guide to the Project Management Body of Knowledge: PMBOK Guide* (6th ed.). Newtown Square, PA: Project Management Institute, Inc.

Ragsdell, G., West, D., & Wilby, J. (2012). *Systems theory and practice in the knowledge age*. Springer Science & Business Media.

Rumenya, H., & Kisimbi, J. M. (2020). Influence of Monitoring and Evaluation Systems on Performance of Projects in Non-Governmental Organizations: A Case of Education Projects in Mombasa County, Kenya. *Journal of Entrepreneurship and Project Management, 5*(2), 46-66.

Serrador, P. (2018). The Impact of Planning on Project Success-A Literature Review. *The Journal of Modern Project Management* .

Silva, F., Jeronimo, H., & Viera, P. (2019). Leadership competencies revisited: A casual conficguraion analysis of succes in the requifrements phase of infomation system projects. *Journal of business Research, 5*(41), 159-4.

UNDP. (2019). *Handbook on planning, Monitoring and Evalaution for Development results.* New York: United Nations Development Programme.

Wang'aya, T. I., & Kagiri, A. (2018). 'Determinants of M&E on performance of humanitorian and development aid organization : a case of Finn church aid'. *The strategic journal of business & change management, 5*(4), 1307-1328.

Wekesa, W. F., & Maurice, P. (2021). PM&E on the sustainability of youth funded projects in Nairobuu and Bungoma counties Kenya. *International Journal of Strategic Management, 5*(1), 57-76.

Yamane, T. (1967). *Statisitics: An Introduction Analysis* (2nd ed.). New York: Harper and Row.

Zhukovskya, V. I., & Pivovarov, D. V. (2015). Critical Analysis of the Systems Approach. *Journal of Siberian Federal University. Humanities & Social Sciences*, 8(4), 1569-1575. https://elib.sfu-kras.ru/bitstream/handle/2311/19725/06_Zhukovsky.pdf;jsessionid=462BC496719EF3B96210AC33EFF38E91?sequence=1