(JEPM) Drivers of Successful Implementation of Infrastructure Projects in Laikipia County, Kenya



ISSN: 2520-9116 (Online)

Crossref



Vol.10, Issue No.1, pp 71 – 87, 2025

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# Drivers of Successful Implementation of Infrastructure Projects in Laikipia County, Kenya

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Accepted: 30th Apr, 2025, Received in Revised Form: 7th May, 2025, Published: 14th May, 2025

# ABSTRACT

**Purpose:** The purpose of this research study was to investigate determinants of successful implementation of infrastructure projects in Laikipia County. The objectives of the study included assessing the role of stakeholder engagement, funds disbursement, monitoring practices and project leadership on successful implementation of infrastructure projects. There were four theories adopted including stakeholder theory, resource based view, human capital theory and transactional theory.

**Methodology:** A descriptive survey design was used to conduct the study. The researcher targeted 108 project managers.. The respondents were purposively selected because they are in the frontline in the implementation of the project. The data was collected using questionnaires. Data was then analysed using descriptive and inferential statistics. Quantitative was analysed using SPSS software. This was presented by use of both quantitative and qualitative analysis in form of frequency tables, pie charts, percentages and bar charts.

**Findings:** The study results showed that all the four independent variables were statistically significant relationship with successful implementation of projects.

Unique Contribution to Theory, Policy and Practice: This study uniquely advances theory by integrating local socio-economic factors into infrastructure project success models. For policy, it offers evidence-based recommendations tailored to Laikipia County's governance and resource contexts, promoting more effective project oversight. Practically, it provides actionable strategies for stakeholders to enhance stakeholder collaboration, risk management, and resource allocation, improving implementation efficiency and sustainability of infrastructure projects in similar developing regions.

Keywords: Monitoring, Stakeholders Engagement, Project Identification

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#### **INTRODUCTION**

#### **Background of the Study**

Project management has become popular as an important management concept that is driving the economic development agenda of nations, especially developing countries and business organizations are also using it to drive their objectives (Barghot, & Ismail, 2020). Project implementation strategy is extremely important to understand, because the success of any project is contingent upon the project manager's ability to manage and cope with change. A project manager is seen as a leader and is usually held accountable for things that go beyond the scope of the project. Therefore, they should also be available to help others manage change. Project implementation is the Process whereby project inputs are converted to project outputs (Smith, 2018).

The literature on successful project implementation spans global, regional, and Kenyan perspectives, emphasizing diverse factors influencing project outcomes. Globally, Menon (2024) identifies barriers such as unsupportive top management, ineffective stakeholders, and poor project planning as critical challenges. Shamim (2022) underscores the increasing adoption of project management principles to enhance competitive advantage, while Fauzi et al. (2021) highlight project management maturity and knowledge management as key success determinants. Thomson (2018) stresses the importance of operational plans to navigate complex implementation processes, and Bach et al. (2021) caution that despite methodological advances, many projects still fail. Raman et al. (2022) in Ethiopia find communication, technical, team, and environmental factors crucial for success, corroborated by Venczel et al. (2021) who emphasize defining success factors clearly. Thakur (2015) expands success criteria beyond traditional KPIs to include stakeholder emotions and perspectives.

Regionally, studies reinforce the importance of implementation and risk management practices. Watema and Tuliriny (2021) link these directly to project success. In Ethiopia, Getaye (2017) and KirubelHailu (2018) identify leadership, organizational structure, and cost factors as major influences, while Gebru (2020) quantifies the significance of leadership, stakeholder involvement, team commitment, and monitoring and evaluation on project outcomes. Taana and Raju (2020) highlight Ghana's declining project success, pointing to poor handling and execution despite available expertise. Al-Nabae and Sammani (2021) and Fesha (2023) further emphasize performance improvement through feedback, resource management, and project team composition, particularly in IT projects.

In Kenya, localized studies focus on specific counties and sectors. Makumi and Rosemary (2020) reveal that resource allocation, staff competence, managerial support, stakeholder participation, and monitoring and evaluation positively impact development projects in Laikipia County, though implementation delays and resource inefficiencies persist. Mitungu and Sakwa (2020) link monitoring and evaluation to health outcomes in Kakamega County, recommending expanded research on influencing factors. Sambu et al. (2019) identify project planning, stakeholder

ISSN: 2520-9116 (Online)

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participation, top management support, and organizational culture as pivotal for project implementation at Kenya Pipeline Company Limited. Mati et al. (2020) observe that poor accountability and monitoring reduce Constituency Development Fund project performance, urging stronger oversight policies. Hassan and Mutuku (2024) in Garissa County find communication, stakeholder involvement, and leadership crucial to healthcare project success, though project planning was less influential.

#### **Statement of the Problem**

Project implementation is a complicated undertaking since it requires harmonized attention from a variety of human, budgetary and technical variables. A study by Reilly (2015), on project management practices in public sector disclosed that lack of project management practice may lead to approximately 30% towards public sector projects non-performance. An assessment done by PricewaterhouseCoopers on project management practices suggests that use of project management practices increases the likelihood of project success (PricewaterhouseCoopers, 2014). Extant literature shows that project management is a catalyst for development for most countries (Ernest *et al*, ,2015) and that many governments and organizations are adopting and implementing PMM's which is helping them achieve high project success rates (Balana *et al.*, 2020).

Watema and Tulirinya (2021) aimed to establish the relationship between project implementation, risk management practices and project success for projects implemented by NGOs in Iganga Municipality. Ndirangu and Gichuhi (2019) looked at factors affecting successful completion of national government constituency development fund projects in Laikipia County. Hassan and Mutuku (2024) assessed critical success factors and implementation of healthcare projects in Garissa. Mahamud et al (2019) studied factors affecting implementation of National Government projects in Mvita Constituency, Kirui and Kitheka (2023) looked at influence of project planning on implementation of road construction projects in Kilifi County.

Many of the studies done earlier on project implementation mostly concentrated on general projects being implemented in different areas such as the building and construction sector, development projects like, banking sector, education and manufacturing organizations. Nonetheless, research on county projects has been done with room for more to be explored. It has been shown may be appropriate some projects area could not necessarily work in the implementation of health projects.

# General Objective of the study

The objective of this study was to assess the drivers of successful implementation of infrastructure projects in Laikipia County, Kenya.

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#### Specific Objectives of study

- i. Investigate the influence of stakeholder engagement on successful implementation of infrastructure projects in Laikipia County.
- ii. To assess the influence of funds disbursement practices on successful implementation of infrastructure projects in Laikipia County.
- iii. To determine the influence of monitoring practices on successful implementation of infrastructure projects in Laikipia County.
- iv. To examine the influence of project leadership on successful implementation of infrastructure projects in Laikipia County.

#### LITERATURE REVIEW

### Theoretical Framework Stakeholder theory

The stakeholder theory was advanced by Freeman (1980) and it shows a stakeholder as a person, group of people or an individual (supplier, shareholder, employee, customer or directors) with specific interest in a given firm. This theory maintains that a stakeholder can distress or be affected by the activities of the organization. The stakeholder theory proposes that any organization should accord much importance to the stakeholder, since without whom the organization would fail or stop to exist (Donaldson & Preston, 1995).

Community members are stakeholders in community projects and it is important to include them in projects activity from the beginning. Stakeholder's theory maintains that every person or group participating in the activities of a firm or organization, do so to obtain benefits, and that the precedence of the interest of all legitimate stakeholders is not self-evident (Donaldson, and Preston, 1995). The theory was used in this study to explain the variable on stakeholder commitment.

#### **Resource Based View Theory**

The core basis of the resource-based theory is that organizational resources and abilities can differ significantly across companies, and that these differences can be constant (Hijzen, Gorg & Hine, 2005). If resources of a firm are utilized in a suitable way they can generate competitive advantage for the firm. Organizations with greater competitive advantage tend to create a sense of confidence in stakeholders that their support, whether financial or otherwise, will be treasured and put into action. Stakeholders will want to be involved in projects that have accessible resources appropriately managed. The resource-based view builds from a proposition that an organization that lacks important, uncommon, unique and organized resources and capabilities, shall seek for an external supplier in order to overcome that challenge (Muller and Jugdev, 2012). Steinfort and Walker (2007) in their study records that adequate financial and non-financial resources are precisely significant success factor for implementation of any project. Establishing project costs

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and a committed funding is vital for any effective project implementation. In the context of the current study, the theory was used to explain funds disbursement as a way to ensure availability of resources.

## **Human Capital Theory**

This theory sees a business as an entity whereas worker morale is a primary contributor to productivity, and so seeks to improve productivity by modifying the work environment to increase morale and develop a more skilled and capable worker. Human capital theory according to Schultz (1961) proposes that improving value to people working within a firm can aid in increasing an organization performance. The human capital theory treats people as goods and not as expenses within a firm. Human capital, according to Bontis (1998), signifies the human factor in organizations brainpower, abilities and collective skills that give the organization its unique character. Human capital theory emphasizes the added value that people can contribute to an organization. Boxall (1996) refers to this state as one that gives "humanitarian advantage". Human capital is an imperceptible asset to the organization- it is not owned by the firm that uses it. Regardless of the lack of formal ownership of human capital, organization can and do take advantage of the high level of employee training and knowledge through strategies such as creating company cultures or vocabulary words to build solidarity. Economic capital can be measured by its ability to generate wages, but there is inherent value to human capital, though not always measured. Human capital can be kept but is not utilized at all, making balanced discovery and learning difficult (Boxall, 1996). Lastly Crawford, (2010) suggests that often project managers lack the required skills or do not perform the full activities required to implement the changes in the project they are managing. The theory explains project monitoring as a means to ensure that the human activities contribute to the project goals.

#### **Transactional Theory**

Transactional Leadership, also known as managerial leadership, focuses on the role of supervision, organisation, and group performance; transactional leadership is a style of leadership in which the leader promotes compliance of his followers through both rewards and punishments (Bass, 1996). Unlike Transformational leadership, leaders using the transactional approach are not looking to change the future, they are looking to merely keep things the same. These leaders pay attention to followers' work in order to find faults and deviations. This type of leadership is effective in crisis and emergency situations, as well as when projects need to be carried out in a specific fashion.

Within the context of Maslow's hierarchy of needs, transactional leadership works at the basic levels of need satisfaction, where transactional leaders focus on the lower levels of the hierarchy. Transactional leaders use an exchange model, with rewards being given for good work or positive outcomes. Conversely, people with this leadership style also can punish poor work or negative outcomes, until the problem is corrected. One way that transactional leadership focuses on lower

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level needs is by stressing specific task performance (Hargis et al, 2001). Transactional leaders are effective in getting specific tasks completed by managing each portion individually.

Transactional leaders use reward and punishments to gain compliance from their followers. They are extrinsic motivators that bring minimal compliance from followers (Hargis *et al*, 2001). They accept goals, structure, and the culture of the existing organization. Transactional leaders tend to be directive and action-oriented. Transactional leaders are willing to work within existing systems and negotiate to attain goals of the organization. They tend to think inside the box when solving problems (Garcia-Morales *et al*, 2008). This theory has been adopted in this study to explore the variable of project leadership and how it influences project performance.

#### **Conceptual Framework**



# Independent Variable

Figure 1: Conceptual Framework

# **Empirical Review**

Munene (2022) examine the role of stakeholder participation in project performance of funded project in Rwanda. The specific objectives of the study were based on assessing the role of consultative planning, collective implementation and joint monitoring and project performance of

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AVEH Umurerwa project in Bugesera District of Rwanda. The results also showed a positive significant relationship.

Namiyingo *et al* (2016) examined the antecedent role of stakeholder participation on the level of stakeholder commitment in Health projects managed by NGOs in Uganda. Findings showed that there is a significant positive relationship between Stakeholder Participation and Stakeholder Commitment and that the independent dimensions of stakeholder participation, that is, consultation, Decision Making, and Role participation, have a significant positive relationship with Stakeholder Commitment.

Hakizimana (2021) examined the contribution of monitoring and evaluation on project implementation in Rwanda. The study revealed that the project budget is very pertinent and affects all areas in both planning and implementation of a project. This shows that an improvement in monitoring and evaluation plan leads to an increase effective implementation of project by 16.8 per cent.

Ngugi (2022) focused on the effect of monitoring and evaluation results on project performance. The need to be successful and have a more remarkable performance has created the need for regular tracking of projects to ensure the project follows the right course for optimal performance. The findings show that utilization of monitoring and evaluation results significantly influences project performance at r=.231 p<0.005.

Bourdeau (2019) examined managers' leadership behaviour when working on a simulated team project regarding task-oriented versus relationship-oriented leadership behaviour to effectively achieve successful project completion. Managers attending an advanced project management development program responded to the Fielder Leadership Behaviour Style Self-Assessment, which is a useful framework to determine task-oriented versus relationship-oriented leadership behaviour styles. The degree of task-oriented versus relationship oriented leadership behaviour styles was assessed to determine the approach taken by the managers for achieving successful project completion.

Ahmed (2018) also argued that leadership and organizational culture are linked to project performance. The culture of the organization exerts an influence on the leader and shapes the actions and competencies of the leader with the passage of time. For last few decades, project management has extensively been involved in management of projects but still projects are not guaranteed to be successful in various organizational environments. There are certain factors affecting management of projects in different situations where the competence of project leadership is one of the key factors.

Namusonge (2020) determined the various interventions that influence the youth entrepreneurs towards the Youth Enterprise Development Fund and their role in attracting the youth towards the

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Youth Enterprise Development Fund. It focused on youth who have benefitted from the fund either to enhance their existing businesses or to start new businesses.

Sakyi (2019) studied local government finance in Ghana with a focus on disbursement and utilization of MPs share of the District Assemblies common fund. The study findings point to the absence of legislative instrument on the management of the MPs CF. Further, monitoring of the fund was a responsibility shared by the LGAs and other external stakeholders. Finally, the effectiveness of monitoring the disbursement and utilization of the MPs CF was strongly influenced by the relationship between the Chief Executive of the Local Government Authority (LGCE) and MPs in the local government area.

### **Research gaps**

Even though previous studies have tried to evaluate factors influencing project implementation, most studies in Kenya have emphasized on donor-funded health projects. A literature review revealed that (Abuya, Obare, Matanda, Dennis, & Bellows, 2018) surveyed stakeholder perspectives regarding transfer of free maternity services to National Health Insurance Fund in Kenya with implications for universal health coverage. This study was biased towards stakeholder's involvement in project implementation. The research did not factor other variables that may affect project implementation in the community. Little has been done on how stakeholders' engagement affects project implementation, especially in the quite dynamic health sector. In her work to thoroughly investigate the factors that determine effective implementation of health planning in Gedo region in Somalia, Maureen says there is a need for further investigation in this area (Auma, 2016). Also, her study based on the World Vision funded a project in Somalia. Therefore, there is a gap in understanding on factors influencing implementation of infrastructure projects.

# METHODOLOGY

This research employed a descriptive survey research design. The study population consisted of all the projects managers assigned to various infrastructure projects within Laikipia County. For the current study, there were 108 project managers available as respondents.Sampling is applied for research functions where the target population is more than a hundred respondents. According to Krejcie and Morgan (1970), for a population of 108, the required a sample is 88. This study therefore sampled a total of 88 managers. Purposive sampling was used to select the study participants. Data was collected using a questionnaire. Pilot testing was conducted with a sample of 9 respondents. Quantitative information was coded carefully and then analyzed with SPSS version 21. A descriptive analysis of the quantitative data was also done. For each variable of the study, descriptive statistics (mean, median, mode, range and standard deviation) was calculated and presented in the form of tables (the frequency and percentage distributing), graphs, and charts

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(categorical data). In this study, multiple linear regression method which provides an analysis of casual effect of one variable upon the other.

# **RESEARCH FINDINGS AND DISCUSSION**

### **Response rate**

Response rate indicates the total number of questionnaires that were filled and returned with complete responses against the number distributed by the researcher. For this study, the researcher disseminated 88 self-administered questionnaires to project managers in the existing infrastructure projects in Laikipia County. Seventy eighty completed questionnaires were successfully returned by the respondents. Hence a response rate of 89% was attained.

#### Table 1: Response rate

Respondents	Response rate	Frequency	Percentage (%)
Project	Returned	78	89
Managers	Not returned	10	11
	Total	88	100

According to Mugenda (2003), a response rate of above 50% is appropriate to carry out statistical reporting and a response rate of over 70% is excellent. Thus, it can be concluded that responses rate for the study was good for data analysis and interpretation of the study findings.

# **Descriptive Results**

# **Descriptive Results for Stakeholders engagement**

Table 2 summarizes the findings on the stakeholder's engagement and successful project implementation using descriptive statistics as shown

# Table 2: Stakeholders Engagement and project implementation

	Mean	SD
Stakeholders influence decision making and problem-solving processes since	3.97	0.90
they often possess valuable insights, expertise, and perspectives.		
Strategies of engaging stakeholders are well arranged at the planning stage.	3.82	0.90
Stakeholder expectations, needs, and desires are evaluated and met by projects	3.84	0.94
There is clear and transparent communication helps project managers convey	3.93	0.86
their purpose, values, and objectives to stakeholders.		
We identify key stakeholders who hold significant sway and develop strategies	3.82	0.83
to effectively engage and manage their impact.		
We conduct stakeholder mapping exercises to identify and assess the influence	3.93	0.95
of stakeholders based on their proximity to decision-making processes.		
Managers commit to actively listening and responding to stakeholder input.	3.69	0.75
Grand Mean	3.85	

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Table 2 shows strong agreement that stakeholder management positively influences project success in Laikipia County, with a grand mean of 3.85 and reliability (Cronbach's Alpha) of 0.75. Respondents agreed stakeholders influence decision-making (M=3.97, SD=0.90), strategies for engagement are well planned (M=3.82, SD=0.90), and expectations are met (M=3.84, SD=0.94). Clear communication (M=3.93, SD=0.86), stakeholder mapping (M=3.93, SD=0.95), and active listening (M=3.69, SD=0.75) were also emphasized.

### **Descriptive Results on Project Fund disbursement**

Table 3 summarizes the findings on the fund disbursement and successful project implementation using descriptive statistics as shown

#### **Table 3: Funds Disbursement**

	Mean	SD
Managers have a good understanding of disbursement policies, guidelines,	3.88	0.80
practices, and procedures.		
There is inadequate funding which harms effectiveness of projects in counties	4.00	0.79
The staff have the relevant technical and managerial capacity to manage funds	3.98	0.81
The management ensures there is timely provision of funds for the project	2.50	0.69
Grand Mean	3.59	

The section of the evaluation sought to assess fund disbursement and successful project implementation. The first that managers have a good understanding of disbursement policies, guidelines, practices, and procedures was agreed to by respondents with (M=3.88, SD=0.80). Also, the respondents agreed that there was inadequate funding which harms effectiveness of projects in counties (M=4.0, SD=0.79). Another key factor that was noted to be important in fund disbursement was that the staffs have the relevant technical and managerial capacity to manage funds (M=3.98, SD=0.81). Finally, the respondents were reluctantly in agreement that the management ensures there is timely provision of funds for the project (M=2.5, SD=0.69). The grand mean was 3.59 indicating that the staff generally agreed that donor conditionalities affected successful project completion.

#### **Descriptive Results for Monitoring**

Table 4 summarizes the findings on the monitoring in successful project in implementation using descriptive statistics as shown

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#### Table 4: Monitoring Practices in project implementation

	Mean	SD
Managers engage in process monitoring aimed at tracking the resources and	4.00	0.83
inputs while understanding how outputs and results are delivered.		
We do beneficiaries monitoring to ensure that the plan meets the customers need	2.90	0.70
Compliance monitoring is used to check if the project complies with the regular	3.88	0.80
audits and meet all regulatory and legislative requirements		
Financial monitoring is used to track the financial efficiency of the project to	3.10	0.74
ensure the appropriate fund transfer from end to end.		
Result monitoring helps to assess the effectiveness and impact of the project	2.14	0.60
outcome.		
Grand Mean	3.20	

From these findings, majority of the respondents agreed to a great extent with the statement that project managers engage in process monitoring aimed at tracking the resources and inputs while understanding how outputs and results are delivered (M=4.0, SD=0.83). Majority of the respondents neutrally agreed that they do beneficiaries monitoring to ensure that the plan meets the customers need (M=2.90, SD=0.90). The respondents were also in agreement that compliance monitoring is used to check if the project complies with the regular audits and meet all regulatory and legislative requirements (M=3.88, SD=0.80). In addition, the respondents agreed that financial monitoring is used to track the financial efficiency of the project to ensure the appropriate fund transfer from end to end (M=3.10, SD=0.74). However, majority of the respondents were of contrary opinion and disagreed with the statements that result monitoring helps to assess the effectiveness and impact of the project outcome.

#### **Descriptive Results for Project Leadership**

Table 5 summarizes the findings on the project leadership and successful implementation using descriptive statistics as shown below.

Table 5: Project Leadership and implementation
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	Mean	SD
Leaders motivate and inspire teams to achieve a common vision	4.10	0.93
Leaders coordinate the teams to work together effectively	4.20	0.94
Managers negotiate, communicate and listen to their teams	4.30	0.90
As leaders, we are armed with conflict resolution strategies to ensure we can identify and tackle conflict proactively	3.50	0.89
Grand Mean	3.488	

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On the extent to which respondents agreed on project leadership and successful implementation, the respondents overwhelmingly agreed that leaders motivate and inspire teams to achieve a common vision (M=4.10, SD=0.93). Most respondents greatly agreed that leaders coordinate the teams to work together effectively (M=4.20, SD=0.93). The respondents were also keen on identifying the main problem where they overwhelmingly agreed that managers negotiate, communicate and listen to their team (M=4.30, SD=0.90). On the contrary, the respondents least moderately indicated that the leaders were armed with conflict resolution strategies to ensure they could identify and tackle conflict proactively, (M=3.50, SD=0.89).

#### **Successful Implementation of Projects**

The study also aimed to establish the extent to successful implementation of projects existed in Laikipia County. Respondents were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree as shown in Table 6.

		Std.	Median	Mode
	Mean	Deviation		
Execute the project details into a full-proof action plan	3.48	0.497	3.02	2.89
Establishing how different tasks might influence the	4.50	0.339	4.15	3.96
deadlines of the entire project				
Holding periodic meetings to regularly track progress	3.67	0.290	3.20	3.01
Preparing regular reports along the entire project life.	2.01	0.390	1.86	1.54
Having a firm eye on the process and the budget	2.92	0.173	2.53	2.11
Resolving issues at every stage of the project	3.74	0.155	3.47	3.28
Overall mean score	3.26	1.020		

#### Table 6: Descriptive Results for Successful Implementation

Table 7 presents findings showing that the overall mean score is 3.26 which indicates a moderate perception of the drivers. The standard deviation value of 1.02 indicates that the responses fall on 1.02 away from the mean as dispersed thus most of the responses falls from the range of data between 3.26 towards 5 which is for strongly agree on the impact of the drivers on successful implementation of projects. The median gives where half (50%) of the respondents lie with a median of 3.02 for managers execute the project details into a full-proof action plan indicates that 50% of the respondents agree with the statement. Mode is the most common response in the Likert scale like for "establishing how different tasks might influence the deadlines of the entire project" the mode for the response is 3.96 which indicates that the most common response is agree which indicates that majority of the respondents agreed that their projects were largely successful. Further results are depicted in the table.

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# **Regression Analysis**

Regression is a procedure which selects, from a certain class of functions, the one which best fits a given set of empirical data (usually presented as a table of x and y values with, inevitably, some random component). The 'independent' variable x is usually called the regressor (there maybe one or more of these), the 'dependent' variable y is the response variable (Jan, 2023).

Variable	Unstandardized Coefficients		Standardized	t	Sig.
			Coefficients		
	В	Std.Error	Beta		
(Constant)	8.582	1.291		6.647	.000
Stakeholders engagement	.233	.063	.131	3.698	0.017
Fund disbursement	0.482	.106	.626	4.547	0.004
Project monitoring	0.373	.136	.104	2.743	0.024
Project leadership	0.341	.095	.113	3.589	0.003

## Table 7 Regression Results

The regression equation above has established that taking all factors constant at zero, successful implementation would be 8.582. From the regression coefficients results it can be noted that the independent variables has a probability of 0.05 and below which implies that the coefficients are statistically significant.

# **Hypothesis Testing**

**Ho1:** The first null hypothesis for the study was that stakeholder engagement had no influence on the successful implementation of infrastructure projects in Laikipia County. The hypothesis was tested using regression analysis. The criteria for rejecting the null the hypothesis was based on the p value of the regression analysis. If the p value is less than the specified level of significance (usually 0.05) then the null hypothesis is rejected. The results of the regression analysis in table 4.9, the calculated p-value was equal 0.017, which was less than the level of significance 0.05 hence the null hypothesis was rejected. This indicated that there exists a significant relationship between stakeholders' engagement and successful implementation of projects (p=0.017<0.05) since the value of significance (p-value) was less than 5%. Therefore, the null hypothesis H<sub>0</sub>1 is rejected.

**Ho2:** The second hypothesis of the study was that funds disbursement had no significant influence on the successful implementation of projects in Laikipia County. The criteria for rejecting the null the hypothesis was based on the p value of the regression analysis. If the p value is less than the specified level of significance (usually 0.05) then the null hypothesis is rejected. From the regression analysis results in table 4.9, the calculated p-value was equal to 0.004, which was less than the level of significance 0.05 hence the null hypothesis is rejected. This indicated that there

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existed a statistically significant relationship between fund disbursement and successful implementation of infrastructure projects in Laikipia County (p=0.004<0.05). Hence the study therefore fails to accept H<sub>0</sub>2.

**Ho3:** The third hypothesis of the study was that monitoring practices have no significant influence on the successful implementation of projects in Laikipia County. The criteria for rejecting this null the hypothesis was based on the p value of the test statistics. If the p value was less than the specified level of significance (usually 0.05) then the null hypothesis was rejected. From the regression analysis results in table 4.9, the calculated p-value was equal 0.024, which was less than the level of significance 0.05 hence the null hypothesis was rejected. This result, indicated that monitoring practices significantly influenced successful implementation of the project in Laikipia County (p=0.024<0.05). Hence the study therefore rejected the null hypothesis H<sub>0</sub>3.

**Ho4:** Lastly the fourth hypothesis of the study stated that project leadership had no significant influence on the successful implementation of the projects in Laikipia. The criteria for rejecting the null the hypothesis is based on the p value of the test statistics. If the p value is less than the specified level of significance (usually 0.05) then the null hypothesis is rejected. From the results of the regression analysis in table 4.9, the calculated p-value was equal to 0.003, which was less than the level of significance 0.05 hence the null hypothesis is rejected. This result, indicated that project leadership significantly influenced the successful implementation of the projects (p=0.003<0.05) since the value of significance (p-value) was less than 5%. The study therefore rejects the null hypothesis H<sub>0</sub>4.

# CONCLUSIONS AND RECOMMENDATIONS

# Conclusions

The findings of this study concludes that stakeholder engagement has an influence on successful implementation of infrastructure projects. Engaging stakeholders is crucial for successful strategic planning. It involves identifying, understanding and involving people who have a stake in the outcome of the plan. Effective stakeholder engagement management requires a comprehensive approach that includes ongoing communication, listening, and collaboration.

Further the study concludes that funds disbursement significantly influences successful implementation of projects. It usually involves a series of steps required to allow this money to be properly allocated and delivered appropriately. Disbursement of funds is quite a significant function in personal and corporate finance. While the disbursement of funds is generally straightforward, there are many complications involved in transactions that have led to delays in service provision and delivery. The disbursement processes are vulnerable to fraud in case there are no proper mechanisms of verification and tracking.

Similarly, the study concluded that monitoring practices influence the successful implementation of projects. The importance of project monitoring and control goes beyond the project level, as

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projects that are not properly monitored can affect other projects and programs within their organization's project portfolio. Project monitoring is done together with the project's execution in order to make sure the project is executed as per the schedule and budget.

Finally, it was concluded that project leadership influenced the successful implementation of the projects. The delivery of any project is a team effort. Effective leaders must draw on many essential project management skills and competencies. The leader sets the vision. They inspire the people around them. Someone with excellent project leadership skills builds agreement and cohesion through the team, as well as being able to do day-to-day team management.

#### Recommendations

The study recommends that stakeholder's engagement and participation should be enhanced at all levels of project implementation. This will encourage the implementation of project management since there will be little struggle from stakeholders and aid in user acceptance. This in turn will minimize the chances of project failure, reduce project isolation and ensure project ownership by all stakeholders.

The study recommends that funds should be disbursed in good time to allow for service provision. These ought to be properly documented. The records are important because they provide management with amounts being spent on specific items, such as inventory, wages and salaries, materials, and other elements necessary to operate the business. Timely disbursement will help eliminate the potential of discontinuing the project for lack of resources and funds. Also, there is need to ensure there is a degree of project autonomy and independent oversight in utilization of the funds.

The study also recommends that project monitoring should be encouraged as it helps tracking a project's metrics, progress and associated tasks, making sure that everything is completed on time, within the project budget, and according to project requirements and standards. It also makes sure that work does not go beyond the initial project scope.

The study recommends that regular monitoring of the project should be undertaken as a management tool learning, documentation and decision making. It is the recommendation of the researcher that the monitoring team should ensure promptly provision of immediate and timely performance-related information feedback to the project team. This can be enhanced by building the capacity of personnel undertaking M & E activities. This could be achieved by having regular training and on job trainings so as to relay useful skills that are needed in monitoring.

Finally, the study recommends that the choice of project leadership should be encouraged as leadership in project management is an essential skill for steering the project to a successful completion. The project leader require to demonstrate a range of competencies and behaviors. From directing the team to project governance, leadership is fundamental to ensuring that projects deliver a great result.

ISSN: 2520-9116 (Online)

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# REFERENCES

- Abuya, T., Obare, F., Matanda, D., Dennis, M. L., & Bellows, B. (2018). Stakeholder perspectives regarding transfer of free maternity services to National Health Insurance Fund in Kenya: Implications for universal health coverage. *The International Journal of Health Planning and Management*, 33(2).
- Al-Nabae, M., & Sammani, D. (2021). Factors That Influencing Project Management Performance: A Review. International Journal of Academic Research in Business and Social Sciences, 11(8), 628–643.
- Bass, B. M. (1996). Anew paradigm of leadership: An inquiry into transformational leadership. Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.
- Donaldson, L., 1995a (editor) Contingency Theory. Volume 9 in *History of Management Thought Series*, Dartmouth Publishing Company.
- Fauzi, M.A., Anuar, K.F., Rahman, R.A & Jupir, J. (2021). Determinants of project management success: view from an emerging economy, Journal of Engineering Design and Technology ahead-of-print(ahead-of-print) DOI:10.1108/JEDT-04-2021-0223
- Garcia-Morales, V.J., Llorens-Montes, F.J. and Verdu Jover, A.J. (2008) The Effects of Transformational Leadership on Organizational Performance through Knowledge and Innovation. British Journal of Management. 19(4): 299–319
- Hargis, M. B., Wyatt, J.D., Piotrowski, C. (2001). Developing Leaders: Examining the Role of Transactional and Transformational Leadership across Contexts Business. Organization Development Journal 29 (3): 51–66
- Hassan, A. A., & Mutuku, M. (2024). Critical success factors and implementation of healthcare projects by Garissa County, Kenya. The Strategic Journal of Business & Change Management, 11 (4), 197 – 213. http://dx.doi.Org/10.61426/Sjbcm.v11i4.3073
- Kirui, M., & Kitheka, S. (2023). Influence of project planning on implementation of road construction projects in Kilifi County. The Strategic Journal of Business & Change Management, 10 (4), 341 – 355. http://dx.doi.org/10.61426/sjbcm.v10i4.2754.
- Mahamud, Z., Muchelule, Y., & Ogolla, P. (2019). Factors affecting implementation of National Government projects in Mvita Constituency of Mombasa County. The Strategic Journal of Business & Change Management, 6 (3), 788 – 803.
- Makumi, M., & Rosemary, J., (2020). Critical success factors in implementation of development projects in Laikipia County, Kenya. The Strategic Journal of Business & Change Management, 7(3), 151 165.
- Mati, R. K., & Ongore, V. (2020). Factors affecting the performance of constituency development fund projects in Kenya: A case of Tharaka Constituency. The Strategic Journal of Business & Change Management, 7(3), 1112 – 1124.
- Menon, S. (2024). Best Practices and Implementation Challenges in Effective Project Management, International Business Research, 17(2):66-66

ISSN: 2520-9116 (Online)

Vol.10, Issue No.1, pp 71 – 87, 2025



www.carijournals.org

- Mitungu, P. M., & Sakwa, M. (2020). Establish how monitoring and evaluation of beneficiaries' health affects performance health project in Kakamega County, Kenya. The Strategic Journal of Business & Change Management, 7(3), 373 394.
- Mugenda, O. & Mugenda, G. (2003). Research methods; Quantitative & Qualitative Approaches. Nairobi: Acts Press.
- Ndirangu, C., & Gichuhi, D. (2019). Factors affecting successful completion of national government constituency development fund projects in Laikipia County, Kenya. The Strategic Journal of Business & Change Management, 6 (2), 113 131.
- Sambu, C., Ogolla, P., & Kitheka, S. (2019). Factors influencing project implementation in Kenya Pipeline Company Limited, Kenya. The Strategic Journal of Business & Change Management, 6 (3), 486 – 502.
- Shamim, M.I (2022). Exploring the Success Factors of Project Management, American Journal of Economics and Business Management 5(7):64-72
- Taana, I.H. & Raju, V. (2022). Determinants of project management methodologies and its effects on project success in Ghana–A conceptual paper, Journal of administrative and business studies 6(3) DOI:10.20474/jabs-6.3.2
- Venczel, B.T., Berenyl, L & Hrizco, L. (2021). Project Management Success Factors Journal of Physics Conference Series 1935(1):012005 DOI:10.1088/1742-6596/1935/1/012005
- Watema, J., & Tulirinya, J. (2021). Project Implementation, Risk Management Practices and Project Success. East African Journal of Business and Economics, 3(1), 36-50. https://doi.org/10.37284/eajbe.3.1.296



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