# EFFECT OF PROJECT MONITORING PRACTICES ON COMPLETION OF AIRSTRIP PROJECTS IN KENYA: A CASE OF LANET AIRSTRIP, NAKURU COUNTY

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**A Project Submitted to the Institute of Postgraduate Studies of Kabarak University in Partial Fulfillment of the Requirements for the Award of Master of Science in Project Management Degree**

**KABARAK UNIVERSITY**

**NOVEMBER, 2024**

## DECLARATION

1. I do hereby declare that:

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Chelangat Desna

GMPM/NE/0353/01/21

## RECOMMENDATION

To the Institute of Postgraduate Studies:

This Research project is entitled **"Effect of Project Monitoring Practices on Completion of airstrip Projects in Kenya: A Case of Lanet Airstrip, Nakuru County''** and written by **Chelangat Desna** is presented to the Institute of Postgraduate Studies of Kabarak University. We have reviewed the research project and recommend it be accepted in partial fulfillment of the requirement for the award of the degree of Masters of Science in Project Management.

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## COPYRIGHT

## DEDICATION

I wish to dedicate this work to my family for their endless effort, love, and spiritualand moral support they have been giving me throughout this entire project.

## ACKNOWLEDGEMENT

First and foremost am grateful to the Almighty God for giving me the grace and strength to complete this project. It was a difficult task dividing time between work and school. I sincerely thank my supervisors Dr. Nehemiah Kiplagat and Dr. Zakayo Tallam for their exemplary guidance throughout my project. It was a great honor and privilege to have been supervised by you. I would also like to express my sincere gratitude to Mr. Frank Kibele kenya, the Coordinator National Land Commission Nakuru County for giving me a chance to do this study at the same time working. Lastly, I would like to express my sincere appreciation to my family for encouraging and supporting me throughout the study.

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| | |
|---|---|
| AIPDC | Abuja Investment and Property Development Company |
| ATFI | Air Trade Facilitation Index |
| CLEAR | Centre for Learning on Evaluation and Results |
| EFFI | e-Freight Friendliness Index |
| IATA | International Air Transport Association |
| JNIA | Julius Nyerere International Airport's renovation |
| M&E | Monitoring and evaluation |
| RII | Relative Importance Index |
| TOC | Theory of Constraints |

## CONCEPTUAL AND OPERATIONAL DEFINITION OF TERMS

**Completion of Airstrip Projects -** These refer to projects that have been delayed or halted in their implementation for an extended period beyond the originally planned completion date (Turner & Zolin, 2020). Project completion of Lanet airstrip will be assessed by project time, project scope, and project budget.

**Financial Monitoring:** This refers to having timely financial reports available to review project status and determine resource allocation (Matta & Ashkenas 2015). In this study, financial monitoring involves, funds allocation, project budgeting, and project estimation

**Process Monitoring:** This is the process of closely monitoring every stage of the project management life cycle to make sure project activities are progressing as planned is known as project monitoring (Robert & Bradley, 2010). In the study process monitoring involved system compliance, project expertise, and climatic conditions

**Project Management Practices:** This term refers to the professional or management of activities that contribute to the execution of a process and may include the use of a plan, technique, and tools (PMI, 2014). Project management practices in the context of this study encompass the competency, project scheduling, and project planning techniques employed in the execution ofthe Lanet Airstrip project.

**Project Risk Monitoring:** This refers to the process of locating, evaluating, and dealing with any risks that develop throughout a project to keep it on track and achieve its objective (Clough, 2015). Project risk monitoring for the Lanet Airstrip project involved land legal risks, land disputes, and leadership stability.

**Technical Monitoring:** This is the process of overseeing the project's execution, where a committed expert keeps track of progress through routine including unannounced inspections and observations at the project site or during particular activities (Lavasseur, 2017). Technical monitoring in the case of the Lanet Airstrip project involved system compliance, project expertise, and climatic conditions.

## ABSTRACT

This study aimed to determine the effect of project monitoring practices on the completion of airstrip projects in Kenya, focusing on the case of Lanet Airstrip in Nakuru County. The specific objectives of the study were to determine the impact of financial monitoring, examine the effect of technical monitoring, evaluate the influence of risk monitoring, and establish the effect of project process monitoring on the completion of airstrip projects. The study was guided by the Theory of Change and Theory of Constraints. A descriptive research design was employed to gather information. The study took place at Lanet Airstrip, which is located at the 80 Tank Battalion Barracks in Nakuru County. The target population for the study includes 95 personnel involved in the Lanet Airstrip construction project, comprising engineers, construction officers, project managers, site agents, and surveyors. A census approach was used to include the entire target population of 95 respondents, considering the small and easily accessible nature of the population. Primary data was collected using questionnaires with closed-ended questions to obtain measurable and quantitative data and eliminate irrelevant answers. The Social Sciences Statistical Package (SPSS) version 25 was used for data analysis, employing a regression model to examine the relationship between the variables. Presentations were in tables. This research discovered strong links between various monitoring procedures and the prevalence of delayed airstrip projects in Kenya. Financial Monitoring, Technical Monitoring, Risk Monitoring, and Project Process Monitoring all showed significant relationships with project delays, highlighting their crucial roles in project outcomes. Effective financial control, stringent technical oversight, thorough risk management, and meticulous project process monitoring are identified as critical techniques for reducing the chance of project failure to be completed on time. The adoption of clear financial procedures, training programs, access to technical specialists, risk management techniques, adherence to worldwide project management standards, and a culture of continual improvement were all recommended. Furthermore, it was noted that future research should consider previously unexplored external factors such as economic conditions, political stability, stakeholder engagement, and environmental aspects to provide a more holistic understanding of the complex dynamics influencing project success in Kenya's airstrip development context.



**Keywords:** *Financial Monitoring, Technical Monitoring, Project Risk Monitoring, and Project Process Monitoring*

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background of the Study

The purpose of project monitoring is to collect data on the project's progress and to make sure that management uses that data to evaluate the project's impact, both intended and unintended. The plan's purpose is to ascertain whether or not the desired results have been achieved; it also facilitates monitoring the project's progress at any given moment and explains any observed status. Nyoge, Ndunge, & Mulwa (2017) note that the idea of monitoring practices in projects has consistently developed through time, reflecting paradigm changes in the management of projects. The monitoring culture of the 1950s reflected the era's preoccupation with social science by placing a premium on making efficient use of available resources. Reference: Rodgers & Williams (2018).

The study's overarching goal is to determine how well-established methods of project monitoring affect the rate at which airstrip construction projects in Kenya are completed. Many initiatives in developing nations never make it to fruition for a variety of reasons. One of them is a general misunderstanding of why practice monitoring is important. The idea of monitoring has gained traction in recent decades as a result of heightened awareness of the need to enhance the effectiveness of project management, with a focus on the actual execution of projects.

The research team behind this study aims to answer some important issues regarding how projects in the airstrip sector are monitored and what responsibilities different agencies play in ensuring the project's success for the greater good. As a consequence, the value of the monitoring process as a control mechanism for ensuring the long-term viability of projects and programmes has increased (Plumecocq, 2018). To define, track, and report economic, ecological, and social trends, as well as influencing policy and practices,

sustainability criteria and monitoring indicators have become vital instruments at the global level (United Nations, 2017). Overruns in time and resources are common in worldwide aviation building projects, owing to many hurdles that cause delays and increased costs during the execution of infrastructure projects. The success of these projects can be ensured by recognizing and addressing the negative effects of project impediments. Contractor competence, money, restrictions, management support, stakeholder participation, airport environment, and construction and engineering skills shortages were listed by Babu (2015) as significant determinants for project success. However, the scope and obstacles change from one country to the next. Financial constraints, according to Basheka (2019), hinder the timely acquisition of necessary tools and equipment for project building. According to Babu and Sudhakar (2015), insufficient or delayed financing causes project delays, resulting in cost overruns. Key players' competing interests can contribute to project failure (McKinsey, 2013). Incompetent contractors create project cost and time overruns, as well as the delivery of low-quality work (Babu & Sudhakar, 2015). Poor project design due to a lack of essential abilities by the designers necessitates adjustments, which leads to a change in project scope, as well as cost and time overruns.

Several studies have been conducted, and several conversations have been had, on the issue of project failure by project management experts throughout the world. Research by Ahsan and Gunawan (2018) identifies several causes of project failure on a worldwide scale. As a result of the wide range of projects and industries engaged in their execution, no two projects are ever the same. Because of this, the variables that influence project delivery and ultimately failure vary by industry, geography, etc. (Ahsan and Gunawan, 2018). Some factors of project failure, however, have been universal in the past.

Recent years have seen widespread project failure across governments and NGOs (Damoah and Kumi, 2018). The government loses a lot of money as a result of these missteps. In the UK alone, for instance, aborted or unsuccessful IT initiatives cost taxpayers approximately £100 million between 2013 and 2014, as documented by Solon (2015) in the mirror. Similarly, a survey done by portfolio management company Innotas among 126 IT project experts from January to March 2015 found that 55% of respondents had experienced project failure (Florentine, 2017). The sheer volume of failed IS/IT projects has prompted academics and industry professionals to investigate the causes of such setbacks (Patanakul, 2018).

Regionally, African air transport is seeing a renaissance, and aviation is poised to become the region's next infrastructural frontier. Several causes are driving the return of African air travel, including increasing urbanization, positive economic growth, and a growing middle-class population. Over the next 20 years, Africa is expected to become the world's fastest-growing passenger market (Mbarawa, 2016). With the construction of expanded trade zones and the incorporation of Africa into regional and global value chains, freight travel across the continent and beyond has a high growth potential. Increased air transport connection across Africa is required to meet the region's growing demand for air transportation while also lowering commerce and travel costs. This emphasizes the importance of improving aviation infrastructure, such as airports, by building new projects and renovating existing ones to boost capacity and handle more flights.

Rising building costs are a problem in both the developed and the developing world (Cheng, 2014). Toshka New Valley, an ambitious $90 billion initiative to help Egypt accommodate its growing population, was recently scrapped by the Egyptian government. According to reports, the project overran its budget and failed to accomplish any of its goals (Okereke, 2017). Inadequate project management is also blamed for the loss of

approximately $100 million in Ghanaian funds between 2009 and 2011 (Alagidede et al., 2013). Last but not least, Zuofa (2018) highlighted the failure and over $9.05 million in costs associated with building projects undertaken by the Abuja Investment and Property Development Company (AIPDC) in Nigeria.

These projects suggest a high failure rate; nonetheless, the meanings of "project failure" and "project success" are highly contextual (Mir and Pinnington, 2014). It doesn't matter who you ask, if a project is abandoned before it's finished, you may consider it a failure (Heeks, 2018). Construction of roads in Nigeria's Abia State began in 2010, however, the project was halted in 2013 owing to a lack of funding (Amade et al., 2015).

Kenya's aviation sector helps both international and domestic trade, as well as tourist and foreign investment, resulting in increased government revenue and job possibilities (Mbarawa, 2016). Odhiambo and Kaibui (2016), stated in their analysis that the waiting bay at the Lodwar airfield was supposed to take 9 months to build, but the project was delivered two months late and at a large cost overrun. Kenya has given infrastructure the greatest priority to ensure that roads are in good working order. For the sake of transparency and public trust in government, many laws, notably the Public Service Commission Act, the Public Procurement and Disposal Act, and the Kenyan Constitution of 2010 have made project monitoring obligatory for all public projects. The question that needs answering is how successful and efficient the project monitoring approach has been. According to the Centre for Learning on Evaluation and Results (CLEAR) program (2013), the need for project monitoring procedures in project management services at the county level has increased since the creation of 47 counties, each of which is responsible for its own development and project finance.

Ministry of Transport, Infrastructure, Housing, and Urban Development statistics from 2023 indicate that just 18 of Kenya's 54 airstrips are currently in use. Lanet Airstrip in

Nakuru County is one of the 36 unfinished and deteriorating airstrips in Kenya.

The Lanet Airstrip, which is being built at Sh3 billion, is reportedly on pace and projected to be completed by August 2022. The airport was planned to accommodate both military and civilian travelers once it was finished near the 81 Tank Battalion Barracks in Lanet. The project is intended to replace the Military Lanet airfield and turn it into a contemporary airfield. Former Transportation Secretary James Macharia said the new airport will boost tourism and make it simpler to export the country's agricultural products. Mr. Macharia, speaking during the ceremony to grant Nakuru municipality city status, promised that the runway extension project at the Lanet airfield will be finished by June of the following year (Andeso, 2021).

Companies in Nakuru depended on refrigerated trucks to transport flowers to Nairobi's Jomo Kenyatta International Airport, which handled 70 percent of Kenya's flower exports. After a six-year delay, construction on the airstrip finally began in December of the previous year. The project to widen the airfield at the Kenya Military Academy, located about 10 kilometers outside of Nakuru town, has begun but has yet to be finished. A 600-acre plot of property on the Nairobi-Nakuru highway was recommended as the location for the project at first, but Nema ultimately decided against approving the development since the area was located in a flamingo migration corridor (Andeso, 2021).

In November 2020, Nakuru County, Kenya, announced a transformative development initiative the commencement of the Lanet Airstrip construction project. Nakuru Governor Lee Kinyanjui confirmed this ambitious undertaking, signaling a significant investment in the region's transportation infrastructure. Valued at an estimated Sh 3 billion, the project aimed to elevate the existing military airstrip into a modern international airport, promising substantial economic benefits (Anyango, 2020). Situated within the premises of the 81 Tanks Battalion Barracks, this project was structured into two distinct phases. The

first phase focused on the rehabilitation of the runway, the construction of essential facilities like terminals, and fire-fighting buildings, and readiness for use by 50-seater planes (Anyango, 2020). Subsequently, the second phase would entail runway expansion to 3.6km, facilitating the operation of larger cargo and passenger planes, alongside infrastructural improvements and accessibility enhancements (Anyango, 2020).

This project was contracted to Ms. Ongata Works Limited, tasked with overseeing preliminary works and construction. An official groundbreaking ceremony, expected to be presided over by President Uhuru Kenyatta, was anticipated to mark the project's commencement, with Nakuru County looking forward to the airport's positive economic impact, particularly in terms of improved connectivity, increased tourism, and support for the vital horticultural farming sector (Anyango, 2020).

## 1.2 Statement of the Problem

It is believed that projects are designed and initiated to achieve a predetermined set of goals and create an impact among project beneficiaries. The success of these projects depends heavily on the monitoring practices (PMI, 2004). Project monitoring is a very important aspect of project execution and management. This is because monitoring practices have a significant effect on the successful delivery of projects. In recent years, governments and organizations have experienced project failures globally (Damoah and Akaumi,2018). These failures directly translate to losses of huge amounts of money by the government (Solon,2015). In a study by Odhiambo and Kaibui (2016), the waiting bay at the Lodwar airstrip was delivered 9 months ago and resulted in a huge cost overrun.

According to recent data from the Ministry of Transport, Infrastructure, Housing and Urban Development (2023), there are approximately 54 airstrips in Kenya, but only 18 are operational. The remaining 36 airstrips are yet to be completed and not in good condition, including the Lanet Airstrip in Nakuru County.

This is coming against the backdrop of project monitoring practices put in place by the relevant authorities tasked with delivering the projects within the planned time frames. This study, therefore, seeks to determine the effect of project monitoring practices on the completion of airstrip projects in Kenya: A case of Lanet Airstrip, Nakuru County.

## 1.3 Objectives of the Study

### 1.3.1 General Objective of the Study

The general objective of this study was to establish the effect of project monitoring practices on the completion of airstrip projects in Kenya, the case of Lanet Airstrip, Nakuru County.

### 1.3.2 Specific Objectives of the Study

The study was guided by the following four specific objectives;

i. To determine the effect of financial monitoring practices on the completion of airstrip projects in Kenya.
ii. To examine the effect of technical monitoring on the completion of airstrip projects in Kenya.
iii. To evaluate the effect of risk monitoring on the completion of airstrip projects in Kenya.
iv. To establish the effect of project Process monitoring on completion of airstrip projects in Kenya.

## 1.4 Research Hypothesis

$H0_1$: There is no statistically significant effect between financial monitoring andcompletion of airstrip projects in Kenya.

$H0_2$: There is no statistically significant effect between technical monitoring andcompletion of airstrip projects in Kenya.

$H0_3$: There is no statistically significant effect between risk monitoring and completion of airstrip projects in Kenya.

$H0_4$: There is no statistically significant effect between project Process monitoringand completion of airstrip projects in Kenya.

### 1.5 Justification for the Study

The study sough to assess the effect of project monitoring practices on the completion of airstrip projects in Kenya: A case of Lanet Airstrip, Nakuru County, because of the following:

There has been a problem in the implementation of airstrip projects with the majority of such projects were not completed in the set period. The recent project was started at Lanet and its yet to be completed though the time has elapsed. This study will help in determining the possible causes of completion of airstrip projects and therefore come up with possible solutions.

The Lanet Airstrip project involves a substantial investment of Sh3 billion, (Kenya Ports Authority 2021). Given the significant financial commitment, it becomes crucial to understand how effective project monitoring practices can influence the successful and timely completion of such a major infrastructure project. The upgrade of the military runway to meet international standards and the conversion of the airbase into a dual military-civilian facility add complexity to the project. Studying project monitoring practices becomes essential to ensure that the unique requirements of both military and civilian operations are met.

The project is planned in two phases, with the first phase focusing on upgrading the existing airstrip and constructing terminal buildings. The second phase involves further expansion. Understanding the project monitoring practices during the initial phase can provide insights into potential challenges and solutions for the subsequent expansion,

especially regarding coordination and community engagement, as mentioned by the former Nakuru County Governor. Phase two of the project may involve compensation for neighboring residents whose land might be acquired for expansion. The study could explore how effective project monitoring practices address community concerns, ensure fair compensation, and contribute to positive community relations.

### 1.6 Significance of the Study

This initiative has the potential to be extremely beneficial to project management professionals of all types who want to improve the success rates of airstrip construction projects through good planning. The findings of this study will be valuable to engineers and construction officers, project managers in the construction industry, architects, engineers, construction officers, site agents, and quantity surveyors in their projects. Academics and specialists researching the topic may find the report useful as background material.

The study can assist in policy development and regulatory oversight. By understanding key factors that impact success in airstrip construction, officials can create effective policies promoting safety, sustainability, and economic viability. The findings can help assess risks and benefits, improving decision-making on project financing, procurement, and oversight. This can ensure efficient management of government investments in airstrip construction, delivering maximum value to the public.

Finally, academics and researchers in the field of construction project management can use the findings of this study to advance the state of knowledge in this field. By building on the insights gained from this study, academics and researchers can identify new research questions, develop new theories, and contribute to the ongoing evolution of project management practices in the construction industry.

## 1.7 Scope of the Study

This study aims to determine the effect of project monitoring practices on the completion of airstrip projects in Kenya, specifically focusing on the case of Lanet Airstrip in Nakuru County. The general objective is to establish the relationship between project monitoring practices and the occurrence of project failure to be completed. The study was conducted at Lanet Airstrip, Nakuru County, approximately 15 kilometers from the town on the Nairobi-Nakuru highway. The target population for the study consisted of the 95 personnel (Engineers and construction officers, project managers, site agents, and surveyors) involved in the Lanet Airstrip construction project in Nakuru County. The study was conducted between July and September of the year 2023, focusing on Lanet Airstrip in Nakuru County.

## 1.8 Limitations of the Study

This study has numerous potential constraints that might have impacted the study's reliability and validity. One of these obstacles was the participants' worry about secrecy owing to the sensitive nature of the study and its legal ramifications. Some participants may have been unwilling to offer accurate and truthful replies. To address this restriction, the study maintained participant anonymity and ensured that their comments remained anonymous.

Another potential constraint was the study team's tight timetable in acquiring data within a short period, which might have influenced the quality of the data acquired. To overcome this restriction, the study used a variety of data collection methods, including online surveys, which were convenient for participants and allowed for a faster turnaround time.

Furthermore, because some respondents were unwilling to engage in the study for fear of being victimized, the researcher had to explain and persuade them of the study's principal

goal and confidentiality. Although some respondents may have been reluctant to submit information about their organization, the researcher highlighted the importance of the study to them.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter provides a comprehensive review of the relevant literature about the effect of project monitoring practices on the completion of airstrip projects in Kenya. The literature review aims to establish a theoretical foundation for the study by examining existing theories, empirical studies, and conceptual frameworks, and identifying research gaps in the field.

## 2.2 Theoretical Review

This study was guided by the Theory of Change and Theory of Constraints.

### 2.2.1 Theory of Change

Weiss created this idea in 1995 and characterized it as a theory of project success. Weiss defines it as a collection of assumptions that explain the connections between the steps taken during an intervention or programme and the results obtained. (Burt, 2016) A theory of change is a model that explains how a given intervention is likely to have the expected results. Management and decision-makers use a theory of change in strategic planning when a project or programme develops and expands, as stated by Jean, Diana, and Avan (2016). Project and programme managers may utilize this information to refine their processes and make improvements based on what has been learned. To better understand how an organization's actions, affect its customers, employees, and the larger community, practitioners might look to theories of change (Jean, Diana, & Avan, 2011).

Not because they don't work after three years, but because that's how long it takes, Woodcock (2017) argues that certain initiatives may have substantial early benefits by nature, while others may take much longer, maybe decades, to produce returns. According

to Burt (2012), the theory of change is beneficial during implementation since it serves as a quality assurance check and allows the programme team to distinguish between actual failure and theoretical failure. Burt agrees that it's crucial to have key stakeholders and staff members participate in developing the theory of social change because it fosters a sense of ownership.

The Theory of Change (ToC) in project implementation has faced critiques for its tendency to oversimplify complex interventions, relying on linear cause-and-effect relationships that may not adequately capture real-world dynamics (Hodgson, 2014). Critics argue that ToC assumes a level of predictability and may lack the flexibility needed to adapt to evolving project contexts. Additionally, challenges in attributing outcomes solely to project interventions and the assumption of shared stakeholder understanding pose further concerns (Weiss, 1995; Hodson & Muetzelfeldt, 2011).

According to Annie (2009), the theory of change can be used in planning to help an organization achieve several positive outcomes helpful to its growth. These outcomes include increased organizational capacity through improved skills, staffing, and leadership; increased alliances through increased levels of coordination, collaboration, and mission alignment; enhanced grassroots, leadership, and institutional relationships and alliances; and enhanced policy through increased policy development stages. Policy changes are effective, but so are other approaches like gaining public backing and altering individual habits. Consequently, this theory is relevant to the study's monitoring and assessment strategies and baseline statistics.

### 2.2.2 Theory of Constraints

In his 1984 essay, Eliyahu Goldratt outlined the foundations of the theory of constraints (TOC). The notion is based on the premise that all projects have constraints that might make them challenging to execute (Yaoga, 2015). Constraint theory suggests that to

enhance the production system, it is necessary to first pinpoint the obstacles that now stand in the way of its success. Some of the limiting factors in a project's execution include planning, production control, project management, and performance measures.

The theory of constraints (TOC) is a framework for the effective management of organizations that is based on the principles of system thinking and constraint management (Kohli & Gupta, 2010). According to Gupta and Boyd (2008), a TOC- based management philosophy alters an organization's way of thinking, its incentives, and its internal processes. Restrictions must be addressed for effective project management, which is made more difficult by construction projects. Demands and limits of a project (Lau & Kong, 2006).

According to Jacob and McClelland (2001), managing a project is difficult because there are often competing demands for time, money, and content. The triple constraints criterion (time, scope, and money) is widely recognized in the field of project management as a barometer of a project's success. According to project managers, the triple limitations are fundamental to the needs and success of a venture. Streamlining these three factors allows for a more prolonged period of high quality and success. Due to their interconnected nature, one constraint affects the other two, ultimately affecting project expectations to a greater extent (Hamid et al, 2012). These three constraints are task scope (a metric of value), cost, and time.

This research is grounded on the triple constraint theory, which suggests that the success or failure of most organizational monitoring processes depends on how well this theory is embraced. Construction projects often go behind schedule, which not only has societal costs that are difficult to quantify but also negatively affects the contracting parties (Ondari & Gekara, 2013). Project success may also be measured in terms of how well it meets budgetary and quality targets (Nwachukwu & Emoh, 2011).

The Theory of Constraints (TOC) has been criticized for potentially overemphasizing constraint identification and resolution to the detriment of other crucial project management aspects (Hopp & Spearman, 2004). Critics suggest that TOC's simplistic view of constraints, focusing on linear cause-and-effect relationships, may not adequately address the multifaceted nature of constraints in complex projects (Liberatore, 1992). Additionally, concerns about resistance to change, limited applicability in dynamic environments, and the risk of sub-optimization highlight the need for a balanced approach to project management when applying TOC (Goldratt, 1990; Hopp & Spearman, 2004).

Since the building of the airstrip on Lanet may have posed hazards that needed to be tracked, this idea is relevant to the present investigation. The Airstrip project may have been a success if these dangers hadn't been ignored. The most effective approach to addressing these issues is to devise a framework for responding to these obstacles and reducing impediments to putting building projects into action.

### 2.3 Empirical Review

This section contains an empirical review concerning the variables of this study.

#### 2.3.1 Financial Monitoring and Completion of Airstrip Projects

To learn more about why and how funding a role plays in the demise of Nigerian construction projects, Okafor, Akhanolu, Ochei, and Isibor (2016) designed a research. The Relative Importance Index (R.I.I.) method was used to analyze the finished surveys. In Lagos States, 145 Quantity Surveyors, Builders, and Contractors were given standardized questionnaires to fill up. The results showed the following causes of project failure: As a result of not having enough money and having to wait for payment, Inadequate planning and design, inaccurate cost estimates, the untimely passing of the project's owner, an inept project manager, a lack of proper assessment, a shift in the investment's intended use, a shift in management, a clogged bureaucracy, a hostile

community, or extreme weather. Findings suggest that incompletion projects reduce overall real estate profits. The research also shows that dropping a project may hurt the economy by discouraging investors, killing jobs, and reducing tax income. The research suggests, among other things, that suitable laws be put in place to prevent this danger and that project funds be distributed on time to project developers/contractors.

Cost overruns in the Malaysian construction sector were calculated at 55% by Shehu et al. (2014). However, private sector cost overruns were far greater than government ones. They also found that the negative cost variance of sectors was significantly varied among nations. Larger and medium-sized projects do worse than smaller ones, regardless of whether they use conventional, design-build, or project management for procurement. They go on to add that whether or not this holds for an existing project is a factor. Consultants, owners, and contractors were interviewed for Frimpong et al.'s (2019) study of what causes delays and cost overruns in the construction of underground water projects in Ghana. Twenty-six variables were identified and clustered into four categories. Participants ranked project funding, economic circumstances, natural conditions, and material availability as the top four causes of delays and cost overruns.

With health care reform as their focus, Brinkerhoff and Derick's (2013) study aimed to provide the groundwork for future research on accountability in this area. Their research reviews the existing literature on the topic of accountability and synthesizes the results, drawing attention to areas of consensus and dispute. They reasoned that reforms such as anti-corruption initiatives, health-care reform programmes at the national level, decentralized healthcare delivery at the local level, and community- based health funds all rely heavily on increased accountability. The interconnections between the many forms and goals of accountability are a major contributor to this extensive scope. Problems with performance may arise fast when finances are monitored. Accountability to avoid abuse is

the foundation for accountability to meet standards and improve performance.

Matthew and Ramegowda (2019) conducted a literature review on the factors that lead to project failure in developing countries like Nigeria. Information on failed projects in Africa, Asia, and Europe was gleaned from periodicals, books, and newspapers. Many factors contribute to the high rate of project failure in Nigeria and other developing nations. Causes included incompetence, lack of knowledge, inaccurate costing, poor planning, poor communication, poor contracting and contractor practices, frequent changes and errors in design scope, socio-cultural and political interference, and poor leadership and corruption. Project failure was shown to have ramifications including loss of state income, project cost overruns, loss of money by residents, poor infrastructure, and low community empowerment.

The effects were poor economic growth, underdevelopment in certain sectors, a reduction in foreign assistance and grants, stricter donor requirements, electoral defeats for the sitting government, and a loss of confidence in the state among financial institutions. To reduce the prevalence of factors that lead to project failure in Nigeria, including corruption, it is recommended that the country's government revamp its policy architecture.

### 2.3.2 Technical Monitoring and Completion of Airstrip Projects

A reality gap between industrialized IS designs and their applicability in developing countries is shown by Heeks' (2018) case of Information System (IS) project failure and incompletion in developing countries, and the failure of IS projects in developing countries is shown to be attributable to a naive trust in imported or foreign products.

Foreigners, especially those from the West, design the models used in IS. So they build them in the framework of Western culture and customs and then export them to less developed nations. Due to the designer(s) having a worldview shaped by their time in wealthy nations, the final product does not cater to the needs of customers in less developed regions. Because of this discrepancy between the plan and actual implementation (in developing countries), the project ultimately fails.

Authors: Ubanis and Ononoju (2013). Research was done to determine the leading causes of civil engineering project failure in the public sector and the warning signs associated with those causes. We conducted a poll of public opinion using both area and judgmental methods. Civil engineering professionals in Nigeria's South East geopolitical zone filled out a questionnaire based on the parameters to give primary data. The severity measure, spearman's rank correlation coefficient, relative agreement factors, and Kendall's coefficient of concordance were all used in the study. There was a close correlation between people's professional standings. According to the percentage relative agreement factors, the most common reasons for the failure to complete a public sector civil engineering project are frequent changes in government and political power, unreliable financing and payment of completed work, and the use of project contract sums for indirect compensation of political bigwigs. According to the findings, projects fail due to political corruption, lack of clarity, and noncompliance with finance and payment for completed work. Thus, laws and procedures are required to prevent the failure of public-sector civil engineering projects.

### 2.3.3 Risk Monitoring and Completion of Airstrip Projects

Aduma and Kimutai (2018) looked at the relationship between risk management and the success of Nairobi City County Government projects. Risk management in design, law, construction, and contracts were all investigated to see what effects they had on project

success. Sustainability, customer happiness, on-time completion, and budget were all evaluated for construction projects supported by the Nairobi county government. This study was descriptive. A survey is conducted with the contractors, consultants, project engineers, and construction officers for 10 construction projects in Nairobi City County. All 380 respondents were in favor of corporate endeavors. A total of 190 persons were picked at random. Primary information was acquired using self-reported questionnaires.

We looked at averages, standard deviations, percentages, and frequency distributions. Regression analysis was used to discover interdependencies between variables. The research found that the Nairobi City County government's main construction project risk management tactics were dealing with issues of cost, design, and land and construction conflicts. Performance on construction projects was enhanced by careful management of design risks but was hampered by attention to legal, construction, and contract risks. According to the findings, it's important to have the project approved legally and in line with relevant policies, to have enough construction resources on hand, and to execute a contract that includes all relevant parties. Risks associated with carrying out a project must be monitored, and processes set up to reduce the likelihood of their occurring.

According to Muriithi and Crawford (2013), the incompatibility between Western concepts, methods, and procedures in project management and African culture and social life is the root cause of all African project failures. Researchers concluded that African cultures were male-dominated, communal, authoritatively distant, and somewhat risk-averse. Managers are more concerned with pleasing their family, clan, or ethnic group than being impartial, although impartiality is a statutory requirement of management. This is because, in a collectivist society, poverty, poor real incomes, and weak political institutions are the norm. The moral obligation Africans have to help their less fortunate relatives puts pressure on their country's resources and projects. Power distance in

management indicates a highly hierarchical structure and the use of favoritism. Due to Africa's volatile sociopolitical climate, executives in these countries are risk-averse and cautious about delegating and minimizing risk. When foreign employees get higher wages than domestic workers, it causes resentment. The importance that a project team or management places on these ideals determines how well or poorly that project turns out.

It was determined and prioritized by Amade, B., Ubani, E., Amaeshi, U., and Okorocha, K. (2015) which factors may affect the successful conclusion of public- sector building projects. Construction companies in Nigeria's Imo, Abia, and Rivers states with extensive experience in stalled and abandoned public sector construction projects filled out a standard questionnaire to give data for the research. Information was acquired via making direct contact with respondents. Out of 300 surveys sent out, only 253 were returned for analysis. SPSS and Excel were used for descriptive statistics, Cronbach's alpha test, and the relative significance index. To avoid failure or abandonment, nine variables were identified that were present in successful public construction projects in Nigeria. Factors to think about are the contractors' thorough and detailed design, the monitoring team's accuracy, the client's ability to pay, the political risks involved, the efficiency of the procurement process, the client's financial stability, and the design team's ability to effectively communicate and manage information.

### 2.3.4 Process Monitoring and Completion of Airstrip Projects

Jaselkis and Ashley (2021) investigated how the project team, planning, and control activities impacted project success, schedule performance, and budget performance. This research, like many before it, used the discrete choice model as its method of analysis. The results showed that the key success criterion affected the project outcomes in different ways. Improving project timetable and overall performance is possible, for instance, by increasing the frequency with which budget updates are provided. Especially for fixed-

price contracts, the deployment of a constructability programme seems to have a significant influence on overall project success and schedule performance. When compared to achieving deadlines and improving project performance as a whole, budget performance is most impacted by efforts to reduce team turnover.

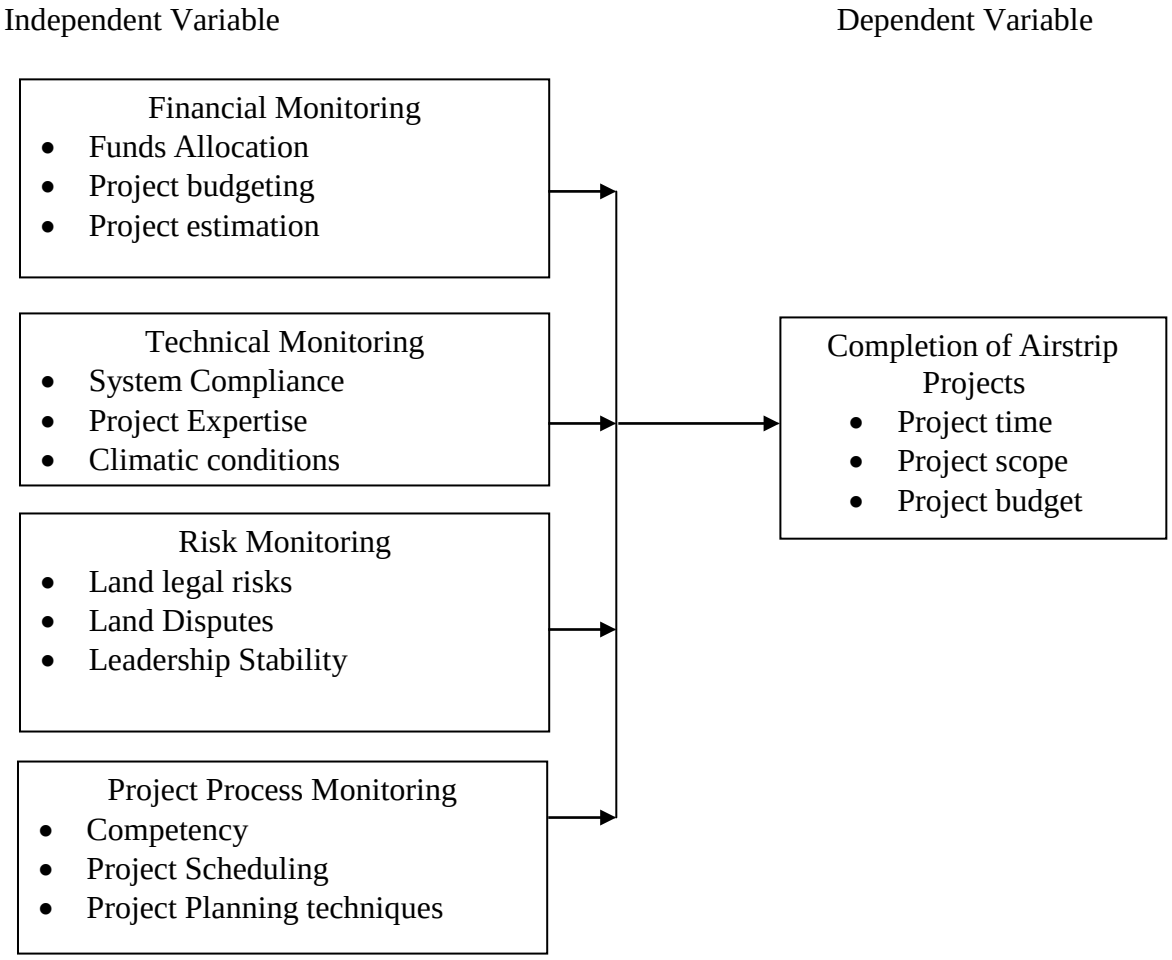
Within the context of the Project Management Institute's approach to project management, Irfan, Khan, Hassan, Hassan, and Habib,(2021) conducted research to investigate the relationship between project Process monitoring and project success. This survey-based research sought to fill this knowledge gap by collecting the perspectives of 260 project engineers and construction officials from public sector organizations active in Baluchistan. Quantitative data were collected using the method of partial least squares structural equation modeling to test the assumptions put forward. The results suggest that competent planning and execution significantly improve the success of public sector initiatives. It was determined that Process monitoring has a more significant effect on project success in the public sector. Based on the results, the authors recommend giving future planning and a project manager's skillset more attention.

### 2.3 Conceptual Framework

The relationship of variables is presented as shown in Figure 2.1 describing the financial monitoring, technical monitoring, risk monitoring, and project process monitoring as independent variables and completion of airstrip projects as the dependent variable.

**Figure 1**

*Conceptual Framework*




*Source:* Author (2024)

## 2.4 Research Gaps

The causes of construction project failure have been the subject of several research, with the hopes of finding effective ways to lessen or eliminate them in the future. Information System (IS) on project incompletion in developing countries (Heeks' 2018); the influence of risk management practices on the performance of projects by the Nairobi City County Government, Kenya (Aduma, & Kimutai, 2018); causes and effects of financing on abandoned building projects in Nigeria (Isibor, Akhanolu, Ochei & Okafor, 2016); etc. The researcher discovered very few papers that directly addressed the impact of project monitoring practices on the successful completion of airstrip developments in Nakuru

County. This research endeavors to fill the void by exploring the connection between financial monitoring and project incompletion at Lanet Airstrip, Nakuru County; between technical monitoring and incompletion; between risk monitoring and incompletion; and between project process monitoring and incompletion. The purpose of this study is to identify the role that insufficient monitoring plays in unfinished airstrip construction projects.

# CHAPTER THREE

# RESEARCH AND METHODOLOGY

## 3.1 Introduction

In this chapter, the researcher lays forth the plan and procedures they followed to do the study. The report is broken down into the following parts: study outline, population and sample, data collection, and results.

## 3.2 Research Design

The study adopted a descriptive research strategy. Descriptive studies collect data without altering the natural setting in any way. Who, what, why, when, and where are the five most essential issues that it should address (Creswell, 2009). The data collected from responders would be purely observational, therefore this approach made sense.

## 3.3 Location of the Study

The Lanet Airstrip was used for this research. About 15 km outside of town on the Nairobi-Nakuru route lies the Lanet airfield, which is part of the 80 Tank Battalion Barracks in Nakuru county.

## 3.4 Target Population of the Study

The population of the study is the people who are the focus of attention. Ninety-five workers were surveyed at the Lanet Airstrip. Table 1 shows the demographic breakdown of the people being targeted.

**Table 1**

*Target Population*

| Targeted Group | Population |
|---|---|
| Engineers and construction officers | 56 |
| Project managers | 14 |
| Site agents | 10 |
| Surveyors | 15 |
| Total | 95 |

*Source:* Kenya Airports Authority (2024)

### 3.5 Sampling Procedure and Sample Size

A sample is a selection of a population used to generalize about that group.

#### 3.5.1 Sampling Procedure

Sampling is the method used to choose people to take part in a study (Mora & Kloet, 2010). Sampling is used in research when the population of interest is somewhat big.

#### 3.5.2 Sample Size Determination

The number of trials or observations used in a statistical analysis is known as the sample size. To conclude a larger population from a smaller subset of that population, the sample size is a crucial aspect of any empirical investigation. The study used a census method since the population of interest was very small and readily accessible to the researcher. Therefore, we kept our sample size to 95 people.

### 3.6 Instrumentation

Primary data were utilized in the analysis. Questionnaires served as the primary data-gathering tool. Respondents were surveyed using questionnaires composed entirely of

yes/no questions. To get numerical data and eliminate extraneous responses, we employed closed-ended questions.

### 3.6.1 Pilot Study

Engineers, construction officers, project managers, site agents, and surveyors all participated in pilot research conducted at the Masaai Mara Airstrip, which used only 10% of the total number of respondents. Cronbach's Alpha was used to determine the instruments' consistency. Kombo and Tromp (2009) state that an alpha of 0.7 or above is indicative of high dependability.

### 3.6.2 Validity of Research Instruments

According to McMillan and Schumacher (2006), validity is the extent to which an explanation fits the facts of the real world. Validity refers to how well the findings based on the analysis of real-world data reflect the topic being studied. In this study, validity was achieved by ensuring that the research instruments effectively represented the phenomenon under investigation. This was accomplished through a process of content validity, where expert judgment was sought from the study supervisor. By involving an expert in the field, the research instruments were refined and validated to ensure they accurately captured the real-world facts and explanations for the phenomena being studied. This expert judgment process was crucial in enhancing the credibility and trustworthiness of the study's findings, confirming the congruence between the research data and the actual phenomenon.

### 3.6.3 Reliability of Research Instruments

Reliability refers to a questionnaire's capacity to produce consistent results throughout time (Jack & Clarke, 2008). To make sure that all participants understood the purpose of the tools and items, a pilot study was conducted. In addition, the researcher can evaluate the

clarity of the instruments, become familiar with data collection procedures and administrations of the instrument, and lay the groundwork for refining and reviewing the questionnaire before it is used in the actual study (Mugenda & Mugenda, 2010).

### 3.7 Data Collection Procedure

With approval from the KUREC, data gathering got underway at Kabarak University. The researcher formally requested permission to perform the study by writing to the National Council of Science, Technology, and Innovation (NACOSTI). The researcher then brought the letter to the organization's management to request official authority to begin data collecting once it had been accepted by both KUREC and NACOSTI. The surveys were sent out to the participants after receiving approval from the appropriate parties within the organization. Respondents were asked to agree to participate in the study after receiving an introductory letter explaining that their participation was entirely optional and that their replies would be kept confidential. To improve the response rate, the questionnaires were collected after a week had passed. Respondents who are given the time to complete the surveys are more likely to do so thoroughly and accurately, giving the researcher more useful data.

### 3.8 Data Analysis and Presentation

Zikmund (2010) defines data analysis as the process of using reasoning to make sense of collected information to conclude the study's key findings. The study questions and hypotheses, as well as the quantitative and qualitative data measurements, informed the statistical analyses performed on the acquired information. Editing, processing, and categorizing the field data for mistakes and completeness was performed. For this study, we used a regression model, with results calculated using SPSS version 25.

The regression model to be used is as follows;

$$Y=\beta 0 + \beta 1X1+ \beta 2X2+ \beta 3X3+ \beta 4X4+\varepsilon$$

Where:

$X_2$ - Technical Monitoring

$X_3$ - Risk Monitoring

$\beta_1, \beta 2, \beta_3 \beta_4$ - Régression Coefficients of Independent Variables

Y -The completion of airstrip projects in Kenya

$\beta_0$ -Constant

$X_1$ -Financial Monitoring

### 3.9 Statistical Tests

The researcher confirmed that no assumptions of the classical linear regression model (CLRM) were broken before attempting to estimate the equation in this investigation. Estimating these equations risks providing biased, inefficient, and inconsistent parameter values when the linear regression assumptions are broken (Brooks, 2008). The normality, multicollinearity, and hypothesis tests were thus performed.

#### 3.9.1 Normality Test

Tests such as correlation and multiple regression analysis needed normal data (Gujarati, 2002). To check if the data was well-modeled and regularly distributed, normality tests were utilized. When data is not distributed properly, the findings of any subsequent analysis may be skewed. A preliminary study was carried out to see if the data resembled a normal distribution. Normality Test was carried out involving the computation of statistics like test statistics, degrees of freedom (df), and significance (Sig). These statistical measures were used to validate and confirm whether the data met the assumption of

normality, which is a critical consideration in ensuring the appropriateness of the data distribution for subsequent statistical analyses.

### 3.9.2 Multicollinearity Test

The purpose of the multicollinearity tests was to identify cases in which two or more predictor variables in a multiple regression model were statistically significantly correlated with one another (Haitovsky, 1969). Field (2009) reported on an examination of multicollinearity among independent variables, which revealed the phenomenon to be problematic in the setting of multiple regressions but not simple regressions. The purpose of these analyses was to check for the presence of a potentially problematic circumstance characterized by strong intercorrelations among the independent variables. Multicollinearity among the variables in the multiple regression model was evaluated using the Variance Inflation Factor (VIF).

### 3.9.3 Hypotheses Testing

All p-values for the research were significantly lower than 0.05. In other words, the alternative hypothesis was accepted and the null hypothesis of the beta was rejected for each hypothesis. That is to say, the findings were not a fluke, and the statistical analysis showed that the model was significant and contained good predictors of the dependent variable. These findings showed that the monitoring practices under investigation (financial monitoring, technical monitoring, risk monitoring, and project process monitoring) had statistically significant effects on the outcomes studied, such as project progress, project success, project incompletion likelihood, and overall project performance. These findings offered strong support for the significance of these monitoring approaches in the context of Kenyan airstrip projects, providing significant insights for project management and decision-making.

### 3.10 Ethical Considerations

The following ethical actions were taken; University ethics approval was requested. Respondents were asked to express informed permission before taking part in the study. Participants in the study were informed that any information they provided would be kept strictly secret and used only to further the study's aims. The National Council for Science, Technology, and Innovation (NACOSTI) and the Kabarak University Research Ethics Committee (KUREC) were contacted for permission to conduct research.

# CHAPTER FOUR

# DATA ANALYSIS, PRESENTATION AND DISCUSSION

## 4.1 Introduction

This chapter includes research and debate on how different approaches to project monitoring have affected the success of airport construction projects in Kenya. In the first section, we give the percentage of respondents, along with descriptive and inferential data. The results of the investigation are consistent with our hypotheses.

## 4.2 Response Rate

The data in Table 2 offers valuable insights into the level of participation andengagement among the study respondents.

**Table 2**

*Response Rate*

| Variable | Number of Items | Percentage |
|---|---|---|
| Returned questionnaires | 78 | 82.10 |
| Questionnaires Not Returned | 17 | 17.90 |
| Total questionnaire | 95 | 100 |

Table 2 illustrates the response rate of the survey, showcasing the number of questionnaires returned and those not returned, along with their respective percentages. Among the 95 questionnaires distributed, 78 were returned, accounting for an impressive 82.10% response rate. This high level of participation reflects a strong willingness among respondents to engage with the survey. Conversely, 17 questionnaires were not returned, representing 17.90% of the total distributed. These figures offer insights into the overall effectiveness of the survey, indicating a significant degree of engagement among participants, which is essential for the reliability and validity of the collected data.

### 4.3 Reliability Test

Table 7 provides the results of Cronbach's Alpha reliability test, which is a crucial assessment of the internal consistency or reliability of the measurement scales used in the study. This test assesses how well the items within each dimension of the study consistently measure the same underlying construct.

**Table 3**

*Reliability Test*

| | Cronbach's Alpha | Number of Items |
|---|---|---|
| Financial Monitoring | .882 | 5 |
| Technical Monitoring | .985 | 5 |
| Risk monitoring | .899 | 5 |
| Project Process monitoring | .871 | 5 |
| Completion of airstrip projects in Kenya | .880 | 5 |

The Cronbach's Alpha reliability test demonstrates great internal consistency and dependability within the variables under consideration. Financial Monitoring, Technical Monitoring, Risk Monitoring, Project Process Monitoring, and Completion of airstrip projects in Kenya all show commendable reliability, with Cronbach's Alpha values ranging from 0.871 to 0.985, indicating that the respective measurement items within each variable assess their intended constructs reliably and consistently. These findings validate the reliability of the data acquired for each variable in the research, bolstering the confidence of future analyses and conclusions.

### 4.4 Demographic

#### 4.4.1 Gender of Respondents

Table 3 shows a demographic breakdown of the survey respondents' gender distribution.

This table gives information about the sample's gender makeup in terms of male and female participants.

**Table 4**

*Gender of Respondents*

| Gender | Frequency | Percentage (%) |
|---|---|---|
| Male | 40 | 51.28 |
| Female | 38 | 48.72 |
| Total | 78 | 100.00 |

The sample has a nearly equal gender distribution, with male respondents accounting for a small majority (51.28%) and female respondents accounting for a considerable part (48.72%) of the total. This distribution illustrates the poll's approximately equal gender representation, with a little lean toward male respondents.

### 4.4.2 Age Bracket Distribution

Table 4 displays the frequency and percentage distribution of respondents by age group, offering useful information about the sample's age makeup.

**Table 5**

*Age Bracket Distribution*

| Age Bracket | Frequency | Percentage (%) |
|---|---|---|
| 20 – 30 years | 30 | 38.46 |
| 31 – 40 years | 25 | 32.05 |
| 41 – 50 years | 20 | 25.64 |
| 51 years and above | 3 | 3.85 |
| Total | 78 | 100.00 |

The majority of respondents, 38.46% of the total, are aged 20 to 30, indicating a substantial representation of younger individuals in the survey. Following closely after

are 32.05% of responders aged 31 to 40. While these two age groups account for the majority of respondents, the distribution reveals a decrease in the number of respondents as the age brackets go, with 25.64% falling in the 41 to 50 years category. Notably, the age group 51 and up has the lowest representation, accounting for only 3.85% of all respondents. This distribution highlights the significance of younger survey participants while demonstrating a decline in participation across older age groups.

### 4.4.3 Academic Qualification

Table 5 summarizes the academic qualifications of a certain group or community. It includes several academic qualifications and displays the frequencies and percentages associated with each qualification.

**Table 6**

*Academic Qualification*

| Academic Qualification | Frequency | Percentage (%) |
|---|---|---|
| Certificate | 8 | 10.26 |
| Diploma | 22 | 28.21 |
| Bachelor | 32 | 41.03 |
| Masters | 16 | 20.51 |
| Total | 78 | 100.00 |

The examination of academic qualifications, as shown in Table 5, provides important information about the educational backgrounds of the 78 respondents surveyed. Notably, the majority of respondents (41.03% of the total) hold Bachelor's degrees, showing a large number of people in the sample with undergraduate education. Furthermore, 28.21% of respondents had Diplomas, demonstrating the diversity of educational backgrounds. The survey also includes people with advanced degrees, with 20.51% holding Master's degrees. People with Certificates (10.26%) contribute to the sample's diversified academic environment despite being the smallest category.

### 4.4.4 Experience in Airstrip Projects

Table 6 presents a complete analysis of persons' level of experience on airstrip projects within a certain category or community. This table categorizes the experience and displays the associated frequencies and percentages for each category.

**Table 7**

*Experience in Airstrip Projects*

| Experience | Frequency | Percentage (%) |
|---|---|---|
| Below 3 years | 12 | 15.38 |
| 4-7 years | 28 | 35.90 |
| 8-11 years | 18 | 23.08 |
| Over 11 years | 20 | 25.64 |
| Total | 78 | 100.00 |

Table 6, which summarizes the levels of participation in the Airstrip efforts of the 78 respondents, provides helpful insights into the composition of the questioned group. Notably, the majority of respondents had 4 to 7 years of experience, accounting for 35.90% of the total. This implies a strong presence of individuals with considerable but limited knowledge of Airstrip projects. Furthermore, 25.64% of respondents had more than 11 years of experience, showing that the sample contained seasoned specialists. The group with 8 to 11 years of experience received 23.08% of the replies, indicating a substantial number of persons having expertise in Airstrip projects. Finally, 15.38% of respondents had less than three years of experience, showing that the poll included newcomers.

## 4.5 Descriptive Statistics of the Study Variables

The section describes descriptive statistics on study variables. Specifically, the study used percentage, mean, and standard deviation.

### 4.5.1 Financial Monitoring and Completion of Airstrip Projects

Table 8 provides a thorough examination of the financial monitoring components of the Lanet Airstrip project in Kenya. The research demonstrates a mixed impression of financial management and project funding allocation.

**Table 8**

*Financial Monitoring and Completion of Airstrip Projects*

| Statements | N | SD | D | N | A | SA | Mean | Std. |
|---|---|---|---|---|---|---|---|---|
| The project was allocated enough funds by the government for the execution of project activities. | 78 | 38% | 44% | 9% | 3% | 6% | 2.511 | 0.870 |
| The budget of Lanet Airstrip was far much below the actual cost of the project. | 78 | 16% | 23% | 31% | 6% | 25% | 3.520 | 0.771 |
| The Lanet Airstrip was affected by project estimation challenges. | 78 | 3% | 23% | 9% | 52% | 13% | 4.201 | 0.920 |
| There were effective financial monitoring procedures at the Lanet Airstrip. | 78 | 13% | 31% | 3% | 25% | 28% | 3.802 | 0.809 |
| The Lanet Airstrip project was not completed due to improper financial management. | 78 | 6% | 13% | 6% | 47% | 28% | 4.631 | 0.716 |
| Overall Mean and Std. Deviation | | | | | | | 3.733 | 0.817 |

Analysis of Table 8, explored the level of agreement among study respondents regarding the financial monitoring aspects of the Lanet Airstrip project in Kenya. To gauge their agreement, participants used a scale ranging from 1 to 5, with 1 indicating strong disagreement and 5 indicating strong agreement.

From the findings, 82% of the respondents disagreed (with a mean of 2.511 and a standard deviation of 0.870) that the project was allocated enough funds by the government for the execution of project activities. The fact that 82% of respondents disagreed with the allocation of funds by the government (mean of 2.511) suggests a lack of confidence in the adequacy of funding. This implies that a significant portion of respondents felt that the project was underfunded. Inadequate funding can lead to difficulties in completing project activities, potentially causing delays and affecting the project's overall success. The study findings are in line with the findings of Okafor, Akhanolu, Ochei, and Isibor (2016) who noted that insufficient funds can lead to delays in procuring necessary resources, hiring skilled personnel, and acquiring essential equipment. This delay can cascade through the project timeline, affecting subsequent tasks and milestones.

The data shows that 39% of the respondents disagreed (with a mean of 3.520 and a standard deviation of 0.771) that the budget of the Lanet Airstrip project was significantly lower than the actual cost. This suggests a degree of uncertainty or ambiguity about the budget's alignment with the project's actual expenses. Such uncertainty can potentially lead to financial challenges and difficulties in budget management. A substantial 65% of the respondents agreed (with a mean of 4.201 and a standard deviation of 0.920) that the Lanet Airstrip project faced significant challenges related to project estimation. This implies a widespread acknowledgment of difficulties in accurately estimating the project's costs. These estimation challenges can lead to budget overruns, potentially affecting the project's financial stability and timeline. The study findings are in line with the findings of Shehu et al. (2014), who noted that projects inherently involve risks, and some of these risks may not be evident during the initial stages of planning. Unforeseen events, such as market changes, regulatory issues, or unexpected technical challenges, can lead to cost overruns.

The data shows that 52% of the respondents agreed (with a mean of 3.802 and a standard deviation of 0.809) that effective financial monitoring procedures were in place at the Lanet Airstrip. While some respondents saw these procedures as effective, this implies that there is room for improvement, as there was no strong consensus. Enhancing financial monitoring can contribute to better resource management and project success. A significant 75% of the respondents agreed (with a mean of 4.631 and a standard deviation of 0.716) that the Lanet Airstrip project remained incomplete due to improper financial management. This suggests a clear consensus among the participants that financial mismanagement was a substantial factor contributing to the project's non-completion. It underscores the critical importance of effective financial management in ensuring the successful execution and conclusion of projects like the Lanet Airstrip. The study findings concur with the findings of Frimpong et al. (2019) who noted that inaccurate initial budgeting or failure to account for all necessary costs can result in insufficient funds to carry out project activities. This can lead to delays, stalled progress, or the inability to complete critical project phases.

The overall mean and standard deviation for the financial monitoring and completion of the Lanet Airstrip project are 3.733 and 0.817, respectively. The overall mean indicates a general agreement among respondents that there were some effective financial monitoring procedures in place for the Lanet Airstrip project. However, the moderate standard deviation of 0.817 suggests there was variability in opinions, indicating mixed perceptions about the adequacy of financial management. This highlights the need for improved budgeting accuracy and stronger financial monitoring to ensure more consistent and effective project completion in the future.

### 4.5.2 Technical Monitoring and Completion of Airstrip Projects

Table 9 provides the effect of technical monitoring on the Lanet Airstrip project in Kenya. These statements include information about the technical elements of project execution as well as the difficulties encountered.

**Table 9**

*Technical Monitoring and Completion of Airstrip Projects*

| Statements | N | SD | D | N | A | SA | Mean | Std. |
|---|---|---|---|---|---|---|---|---|
| The project execution team did not comply with project goals and objectives thus leading to project incompletion. | 78 | 3% | 6% | 3% | 50% | 38% | 4.236 | 0.983 |
| There were no experts at the Lanet Airstrip to determine project conditions. | 78 | 11% | 38% | 29% | 6% | 16% | 2.798 | 0.765 |
| Challenging climatic conditions at the Lanet Airstrip caused incompletion of the airstrip project. | 78 | 11% | 6% | 38% | 29% | 16% | 3.654 | 0.872 |
| The Technical Monitoring team encountered supervision challenges, resulting in the project's incompletion. | 78 | 3% | 44% | 47% | 3% | 3% | 3.821 | 0.918 |
| The project faced challenges in progress monitoring thus affecting the project's timely completion. | 78 | 6% | 6% | 3% | 44% | 41% | 4.089 | 1.045 |
| Overall Mean and Std. Deviation | | | | | | | 3.719 | 0.917 |

In the analysis of Table 9, participants used a scale ranging from 1 to 5 to indicate their level of agreement, with 1 representing strong disagreement and 5 signifying strong agreement. A substantial 88% of respondents agreed (with a mean of 4.236 and a standard deviation of 0.983) that the project execution team failed to comply with project goals and objectives, resulting in the project's non-completion. This indicates a clear

consensus among the participants that a lack of alignment with project objectives had a significant negative impact on the project's outcome, emphasizing the need for better adherence to project goals and objectives for successful completion. The data shows that 49% of respondents disagreed (with a mean of 2.798 and a standard deviation of 0.765) that there were no experts at the Lanet Airstrip to assess project conditions. This also implies that there was some uncertainty or disagreement about the presence of experts at the Lanet Airstrip, which may have influenced project conditions and outcomes. The study findings concur with the findings of Heeks' (2018) experts are instrumental in identifying potential risks and challenges specific to the project's domain. Without their input, the project team may struggle to foresee and address critical risks, leading to unanticipated issues during implementation.

A significant 45% of respondents agreed (with a mean of 3.654 and a standard deviation of 0.872) that challenging climatic conditions were responsible for the project's non-completion. While a substantial percentage believed that climatic conditions played a role in the project's non-completion, many respondents remained neutral. This suggests that the role of challenging weather conditions is perceived differently among participants, possibly indicating a need for further investigation into its actual impact. The data reveals that 47% of respondents disagreed (with a mean of 3.821 and a standard deviation of 0.918) that the Technical Monitoring team faced supervision challenges, which led to the project's non-completion. This suggests that supervision challenges could harm the project's outcome, although there's a lackof consensus.

A considerable 85% of respondents agreed (with a mean of 4.089 and a standard deviation of 1.045) that the project encountered challenges in progress monitoring, leading to delays in project completion. This implies a negative impact, indicating that difficulties in progress monitoring were a key factor contributing to the project's untimely conclusion.

Addressing these challenges is crucial for a more positive impact on project completion. The study findings agree with the findings of Ubanis and Ononoju (2013) who noted that without proper progress monitoring, potential risks and issues may not be identified on time. This can lead to the escalation of problems, making them more challenging and costlier to address as the project progresses. The overall mean of 3.719 suggests a consensus that technical monitoring had significant challenges affecting the completion of the Lanet Airstrip project. The standard deviation of 0.917 indicates moderate variability in responses, highlighting that while many agreed on the presence of technical issues, there were differing levels of agreement. This variability points to specific areas, such as compliance with project goals and supervision challenges, needing attention. Addressing these technical monitoring issues could improve project execution and completion rates in future endeavors.

### 4.5.3 Risk Monitoring and Completion of Airstrip Projects

Table 10 contains descriptive information on risk monitoring for the Lanet Airstrip project in Kenya. These statistics provide information on the project's riskmanagement.

**Table 10**

*Risk Monitoring and Completion of Airstrip Projects*

| Statements | | SD | D | N | A | SA | Mean | Std. |
|---|---|---|---|---|---|---|---|---|
| The Lanet Airstrip was facedwith land legal risks thus affecting project execution | 78 | 0% | 0% | 0% | 53% | 47% | 4.287 | 0.941 |
| The Lanet Airstrip was at apoint faced with land disputes which affected its execution | 78 | 3% | 6% | 9% | 44% | 38% | 4.159 | 0.892 |
| There was leadership stability at the Lanet Airstrip during the execution of the project | 78 | 25% | 23% | 40% | 6% | 6% | 3.762 | 0.787 |
| The project was fully supported by the local community. | 78 | 3% | 9% | 52% | 23% | 13% | 3.891 | 0.865 |
| The Lanet Airstrip had an effective risk-monitoring team on the field to ensure project goals were achieved. | 78 | 22% | 25% | 28% | 19% | 6% | 3.982 | 0.902 |
| Overall | | | | | | | 4.0162 | 0.877 |

In the analysis of Table 10, participants used a scale ranging from 1 to 5 to express their level of agreement, with 1 representing strong disagreement and 5 indicating strong agreement.

This statement shows that 100% of respondents agreed (with a mean of 4.287 and a standard deviation of 0.941) that the project faced land legal risks affecting its execution. The high agreement suggests a clear consensus that land legal risks had a significant negative impact on the project's execution. Such risks can lead to delays, legal disputes, and increased project costs, which are typically detrimental to project success.

This implies a consensus among participants that legal risks significantly affected project execution. This aligns with past research by Okafor, Akhanolu, Ochei, and Isibor (2016), which highlighted legal disputes as one of the reasons for project incompletion in Nigeria. The strong agreement in this study indicates that legal risks can indeed hinder project execution and completion.

With 82% of respondents agreeing (with a mean of 4.159 and a standard deviation of 0.892) that the project faced land disputes, this implies that these disputes had a substantial negative impact on the project's execution. Land disputes can lead to legal battles, project delays, and financial uncertainties, all of which can hinder project success. The data indicates that 48% disagreed (with a mean of 3.762 and a standard deviation of 0.787) that there was leadership stability during the project's execution. This implies that the presence of stable leadership was perceived positively and potentially contributed to smoother project execution. Stable leadership can foster decision-making, project continuity, and effective risk management. The study findings agree with the findings of Aduma and Kimutai (2018) who noted that stable leadership provides a consistent decision-making framework. Leaders who remain in their roles for an extended period have a deep understanding of the organization's goals, values, and strategies. This continuity allows for more consistent decision- making aligned with the overarching vision of the project. It reduces the likelihood of conflicting decisions that may arise when leadership changes frequently.

A significant 52% of respondents remained neutral (with a mean of 3.891 and a standard deviation of 0.865) that the project had full support from the local community. This positive implication suggests that strong community support can be a favorable factor for project success. Local support can result in reduced conflicts, smoother execution, and better project outcomes. The data indicates that 47% of respondents disagreed (with a

mean of 3.982 and a standard deviation of 0.902) that the project had an effective risk monitoring team in the field. This implies a positive impact, suggesting that an effective risk-monitoring team contributed to achieving project goals and ensuring successful project execution. Such teams can help identify and mitigate risks, thereby positively influencing project outcomes. The study findings are in agreement with the findings of Muriithi and Crawford (2013) who revealed that a dedicated risk monitoring team is well-positioned to identify potential risks early in the project. Their on-the-ground presence allows them to observe and analyze various factors that may pose risks to project success, providing an opportunity to address issues before they escalate.

The overall mean of 4.0162 indicates a general agreement that risk monitoring had a positive impact on the Lanet Airstrip project, though certain challenges were acknowledged. The standard deviation of 0.877 suggests moderate variability in responses, indicating that while most respondents recognized effective risk management and community support, there were differing views on aspects like leadership stability. This highlights the importance of addressing specific risk-related issues, such as land disputes and legal risks, to ensure smoother project execution in the future.

### 4.5.4 Project Process monitoring and Completion of Airstrip Projects

Table 11 summarizes the project process monitoring for Kenya's Lanet Airstrip project. These declarations give information on the efficacy of several areas of project process monitoring.

**Table 11**

*Project Process monitoring and Completion of airstrip Projects*

| Statements | N | SD | D | N | A | SA | Mean | Std. |
|---|---|---|---|---|---|---|---|---|
| The Lanet Airstrip project team had a very high competency level | 78 | 9% | 3% | 13% | 44% | 31% | 4.000 | 0.816 |
| The Lanet Airstrip Project Scheduling was effective andaligned with project goals. | 78 | 25% | 31% | 19% | 9% | 16% | 2.667 | 0.512 |
| The Lanet Airstrip project team involved the shareholders in all stages of project execution. | 78 | 41% | 44% | 3% | 6% | 6% | 3.333 | 0.653 |
| The Lanet Airstrip project monitoring team was effective and Did their monitoring work effectively | 78 | 31% | 38% | 6% | 16% | 9% | 2.000 | 0.385 |
| The Lanet Airstrip monitoring was affected by political interference. | 78 | 3% | 13% | 50% | 28% | 6% | 3.667 | 0.731 |
| Overall Mean and Std. Deviation | | | | | | | 3.133 | 3.097 |

In the analysis of Table 11, participants used a scale of 1 to 5 to indicate their level of agreement, with 1 representing strong disagreement and 5 signifying strong agreement. The data indicates that 75% of respondents agreed (with a mean of 4.000 and a standard deviation of 0.816) that the project team had a very high competency level.

This implies a positive impact, suggesting that a highly competent team contributed positively to the project's execution. Competency can lead to better decision-making, effective problem-solving, and ultimately project success. A combined 56% of respondents disagreed (with a mean of 2.667 and a standard deviation of 0.512) that project scheduling was effective and aligned with project goals. While it does not have a strong consensus, this implies that a significant portion of respondents saw project scheduling as effective, which can positively influence project management and goal

achievement. The study findings are in line with the findings of Jaselkis and Ashley (2021) who revealed that effective project scheduling implies that the project's timeline and milestones are well-aligned with its overarching goals. This alignment ensures that the project progresses in a structured manner, with each phase contributing to the achievement of desired outcomes.

The data shows that 85% of respondents disagreed (with a mean of 3.333 and a standard deviation of 0.653) that the project team involved stakeholders in all stages of project execution. This implies a positive impact, indicating that stakeholder involvement was perceived as beneficial. Engaging stakeholders can lead to greater project support, improved decision-making, and better project outcomes. The data reveals that 69% of respondents disagreed (with a mean of 2.000 and a standard deviation of 0.385) that the project monitoring team was effective. This implies a positive impact on project monitoring, suggesting that an effective team positively contributed to project oversight. Effective monitoring can lead to better risk management and project success.

This statement shows that 34% of respondents remained neutral (with a mean of 3.667 and a standard deviation of 0.731) that project monitoring was affected by politics. This implies a negative impact, indicating that political interference had a significant influence on project monitoring. Political interference can lead to biased decisions, delays, and potential project complications. The study findings concur with the findings of Irfan, Khan, Hassan, Hassan, and Habib, (2021) who noted that political interference may lead to biases in decision- making during project monitoring. Decisions may be influenced more by political considerations than by the project's actual needs, potentially leading to suboptimal choices.

The overall mean of 3.133 indicates a moderately positive perception of project process monitoring at the Lanet Airstrip project, with strengths in team competency and

stakeholder engagement, albeit with notable challenges. However, the standard deviation of 0.977 reflects significant variability in responses, underscoring differing opinions on the effectiveness of project scheduling, team monitoring, and the impact of political influences. This variability suggests a need for more consistent and robust project management practices to mitigate external interferences and ensure better alignment with project goals and timelines in future initiatives.

### 4.5.5 Completion of Airstrip Projects

Table 12 presents descriptive information on halted airstrip projects, focusing on numerous causes that contribute to airstrip project incompletion.

**Table 12**

*Completion of Airstrip Projects*

| Statements | N | SD | D | N | A | SA | Mean | Std. |
|---|---|---|---|---|---|---|---|---|
| There were effective project monitoring practices at the Lanet Airstrip. | 78 | 6% | 38% | 40% | 13% | 3% | 3.000 | 0.577 |
| Project scope affected the Implementation of Lanet Airstrip. | 78 | 25% | 31% | 19% | 9% | 16% | 2.500 | 0.866 |
| Stakeholder involvement enhances the quality of a project. | 78 | 3% | 6% | 41% | 44% | 6% | 3.500 | 0.866 |
| The community is highly involved in project implementation procedures leads to project success. | 78 | 6% | 31% | 38% | 16% | 9% | 3.000 | 0.577 |
| Political interference led to the incompletion of the Lanet Airstrip project. | 78 | 13% | 6% | 3% | 50% | 28% | 4.001 | 0.817 |
| Overall | | | | | | | 3.200 | 3.703 |

In Table 12, participants used a scale ranging from 1 to 5 to indicate their level of agreement, with 1 representing strong disagreement and 5 indicating strong agreement.

The data indicates that 44% of respondents disagreed (with a mean of 3.000 and a standard deviation of 0.577) that effective project monitoring practices were in place at the Lanet Airstrip. This implies a positive impact, suggesting that effective monitoring positively contributed to project management. Effective monitoring can lead to better decision-making, risk mitigation, and project success. With 56% of respondents disagreeing (with a mean of 2.500 and a standard deviation of 0.866) that project scope affected the implementation, this implies that a significant portion of respondents saw the project's scope as a factor influencing implementation negatively. It indicates that the project's scope might have been too ambitious or not well-defined, contributing to implementation challenges. The data shows that 50% of respondents agreed (with a mean of 3.500 and a standard deviation of 0.866) that stakeholder involvement enhances project quality. This implies a positive impact, indicating that active stakeholder engagement positively contributes to project quality and success. Engaging stakeholders can lead to better decision-making and more aligned project goals. According to Plumecocq, (2018), engaging stakeholders from the beginning helps in eliciting and understanding their requirements and expectations. Clear and comprehensive requirements contribute to a more accurate project scope and better alignment with stakeholder needs.

This statement shows that 37% of respondents disagreed (with a mean of 3.000 and a standard deviation of 0.577) that the community's high involvement in project implementation procedures leads to project success. This implies a positive impact, suggesting that community engagement positively influenced project outcomes. Community involvement can lead to greater support, smoother execution, and ultimately

better project success. With 78% of respondents agreeing (with a mean of 4.001 and a standard deviation of 0.817) that political interference led to the project's incompletion, this implies a negative impact. It indicates that political interference had a significant negative influence on the project, causing it to remain incomplete. Political interference can lead to biased decisions, delays, and complications, hindering project success. According to Ahsan and Gunawan (2018), political interference can create confusion among project stakeholders. Changes driven by political factors may not align with the expectations and understanding of those involved in project monitoring, leading to challenges in communication and coordination.

The overall mean of 3.200 indicates a generally positive perception regarding factors influencing the completion of airstrip projects, particularly in terms of stakeholder involvement and community participation. However, the high standard deviation of 0.703 reflects significant variability in responses, suggesting diverse views on the effectiveness of project monitoring practices and the impact of project scope and political interference. This variability underscores the complex dynamics influencing airstrip project completion, highlighting the need for more consistent project monitoring practices and strategies to mitigate political influences for successful project outcomes in similar contexts.

### 4.6 Correlation Analysis

Correlation analysis is a method used to explore the connection between two quantitative, continuous variables. In this study, Pearson's correlation analysis will be employed, which assesses the strength of the relationship between the variables by calculating the Pearson correlation coefficient (r).

### 4.6.1 Financial Monitoring and Completion of Airstrip Projects

The study sought to establish the correlation between financial monitoring and the completion of the Lanet Airstrip project in Kenya. The findings are presented in Table13.

**Table 13**

*Financ ial Monitoring and Completion of Airstrip Projects*

| Financial Monitoring | Completion of Airstrip Projects |
|---|---|
| Pearson Correlation | .443* |
| Sig. (2-tailed) | .000 |
| N | 95 |

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

As indicated in Table 13, the study indicates that there was a positive and statistically significant correlation between financial monitoring and completion of the Lanet Airstrip project in Kenya ($r=0.443$; $p<0.05$). This implies that better financial monitoring enhances the completion of the Lanet Airstrip project in Kenya. The findings agree with those of Frimpong et al. (2019) which showed that effective financial monitoring allows project managers to allocate resources efficiently. By analyzing spending patterns and project requirements, they can prioritize resource allocation to areas where they are most needed, ensuring optimal utilization of funds and avoiding shortages or wastage.

### 4.6.2 Technical Monitoring and Completion of Airstrip Projects

In addition, the study sought to establish the correlation between the effect of technical monitoring and the completion of the Lanet Airstrip Project in Kenya. The findings are presented in Table 14.

**Table 14**

*Technical Monitoring and Completion of Airstrip Projects*

| Technical Monitoring | Completion of Airstrip Projects |
|---|---|
| Pearson Correlation | .441* |
| Sig. (2-tailed) | .006 |
| N | 95 |

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

As indicated in Table 14, the study indicates that there was a positive and statistically significant correlation between technical monitoring and completion of the Lanet Airstrip project in Kenya, ($r=0.441$; $p<0.05$). This implies that better technical monitoring enhances the completion of the Lanet Airstrip project in Kenya. The findings match with those of Matthew and Ramegowda (2019) which concluded that technical monitoring ensures that construction activities adhere to specified quality standards and regulations. By regularly inspecting materials, construction techniques, and workmanship, project managers can identify deviations or deficiencies early on and take corrective actions to maintain quality standards. This helps prevent rework, delays, and costly repairs, ensuring the timely completion of the airstrip.

### 4.6.3 Risk Monitoring and Completion of Airstrip Projects

The study further examined the correlation between risk monitoring on the completion of the Lanet Airstrip project in Kenya. The findings are presented in Table15.

**Table 15**

*Risk Monitoring and Completion of Airstrip Projects*

| | | Completion of Airstrip Projects |
|---|---|---|
| Risk Monitoring | Pearson Correlation | .541* |
| | Sig. (2-tailed) | .000 |
| | N | 95 |

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

The study as shown in Table 15 established that there was a strong positive correlation between risk monitoring on completion of the Lanet Airstrip project in Kenya ($r=0.541$; $p<0.05$). The results of the correlation analysis indicated that better risk monitoring enhances the completion of the Lanet Airstrip project in Kenya. The study findings agree with the findings of Heeks (2018) which showed that risk monitoring involves quantifying the potential impact and likelihood of identified risks. This process helps prioritize risks based on their severity and probability of occurrence. By quantifying risks, project teams can allocate resources and develop contingency plans to mitigate high-impact risks effectively.

### 4.6.4 Project Process Monitoring and Completion of Airstrip Projects

The study further examined the correlation between project process monitoring on the completion of the Lanet Airstrip project in Kenya. The findings are presented in Table16.

**Table 16**

*Project Process Monitoring and Completion of Airstrip Projects*

| | | Completion of Airstrip Projects |
|---|---|---|
| Project Process Monitoring | Pearson Correlation | .541* |
| | Sig. (2-tailed) | .000 |
| | N | 95 |

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

The study as shown in Table 16 established that there was a strong positive correlation between project process monitoring on completion of the Lanet Airstrip project in Kenya ($r=0.541$; $p<0.05$). The results of the correlation analysis indicated that better project process monitoring enhances the completion of the Lanet Airstrip project in Kenya. The study findings agree with the findings of Jaselkis and Ashley (2021) who showed that process monitoring allows project managers to track various activities and milestones throughout the project lifecycle. By continuously monitoring the progress of tasks such as land acquisition, site preparation, construction, and infrastructure development, project teams can detect issues or delays early on. This early detection enables prompt intervention and corrective action, preventing minor problems from escalating into major obstacles that could impede project completion.

### 4.7 Regression Analysis

The study conducted bivariate regression analysis to examine the relationship between two variables, with a focus on modeling the relationship between a sole dependent variable and multiple independent variables.

#### 4.7.1 Financial Monitoring on Completion of Airstrip Projects

The researcher conducted a bivariate regression to determine the effect of financial monitoring on the completion of the Lanet Airstrip project in Kenya. The researcher first sought a model summary to determine the proportion of the total variation in the completion of airstrip projects that is explained by financial monitoring. The findings are indicated in Table 17.

**Table 17**

***Model Summary***

| Model | R | R Square | Adjusted R Square | . Error of theEstimate |
|---|---|---|---|---|
| 1 | .676[a] | .457 | .450 | .63530 |

a. Predictors: (Constant), Financial Monitoring

b. Dependent Variable: Completion of Airstrip Projects

From the findings the R-squared was 0.457, indicating that financial monitoring explains 45.7% of the variation in completion of airstrip projects. The findings agree with Aduma and Kimutai (2018) who showed that financial monitoring helps to identify and mitigate financial risks that could impact project completion. By closely monitoring financial indicators such as cash flow, project managers can anticipate potential financial challenges and implement strategies to mitigate their impact. This proactive approach reduces the likelihood of financial setbacks derailing the project schedule.

Analysis of variance was used to determine the significance of the regression model. The findings are indicated in Table 18.

**Table 18**

*ANOVA*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 25.806 | 1 | 25.806 | 63.937 | .000[b] |
| Residual | | 30.674 | 76 | 0.404 | | |
| Total | | 56.480 | 77 | | | |

a. Predictors: (Constant), Financial Monitoring

b. Dependent Variable: Completion of Airstrip Projects

From the findings, the F-Value of (63.937) was found to be significant at (0.000) which shows that the model was fit to predict the effect of financial monitoring on the completion of airstrip projects. Financial monitoring provides project managers with valuable data and insights to make informed decisions. By analyzing financial reports and forecasts, project managers can identify areas where adjustments are needed to optimize project performance and ensure timely completion. This includes reallocating resources, revising project schedules, or renegotiating contracts as necessary.

The researcher also sought to establish the regression coefficient for financial monitoring on the completion of the Lanet Airstrip project in Kenya. The findings are indicated in Table 19.

**Table 19**

*Regression Coefficients*

| Unstandardized Coefficients | | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| Model | B | Std. Error | Beta | t | Sig. |
| (Constant) | .608 | .430 | | 1.414 | .000 |
| Financial Monitoring | .877 | .110 | .676 | 7.996 | .000 |

a. Predictors: (Constant), Financial Monitoring

b. Dependent Variable: Completion of Airstrip Projects

From Table 19 the beta coefficient for financial monitoring was 0.877 which illustrates that a unit change in financial monitoring would result in a 0.877 times change in the completion of the Lanet Airstrip project in Kenya. The t-value for this beta was 7.996 while the p-value was less than 0.05. Since the p-value was less than 0.05, it means the beta coefficient for financial monitoring is greater than zero and thus this variable has a statistically significant effect on the completion of the Lanet Airstrip project in Kenya.

The findings agree with Irfan et al., (2021) which found that transparent financial monitoring instills confidence in project stakeholders, including investors, government agencies, and local communities. By providing regular updates on project finances and performance, project managers demonstrate accountability and transparency, fostering trust and support for the project. This can lead to increased cooperation and collaboration, which are essential for overcoming challenges and completing the project on time.4.7.2. Technical Monitoring on Completion of Airstrip Projects.

The study conducted a bivariate regression to assess the effect of technical monitoring on the completion of the Lanet Airstrip project in Kenya. First the study conducted a model summary to assess the proportion of the total variation in the completion of airstrip projects that is explained by technical monitoring. The findings are indicated in Table 20.

**Table 20**

Model Summary

| Model | R | R Square | Adjusted R Square | d. Error of theEstimate |
|---|---|---|---|---|
| 1 | .418[a] | .175 | .164 | .78297 |

a. Predictors: (Constant), Technical monitoring

b. Dependent Variable: Completion of Airstrip project

From the findings, the R-squared was 0.175 indicating that technical monitoring explains 17.5% of the variation in the completion of the Lanet Airstrip project in Kenya. According to Ubanis and Ononoju (2013) who instituted technical monitoring provides real-time insights into construction progress and performance. By tracking key performance indicators such as completion milestones, work schedules, and resource utilization, project managers can assess progress against the project timeline and identify potential delays or bottlenecks.

This allows them to adjust work plans, allocate resources effectively, and implement corrective actions to keep the project on schedule and ensure timely completion. Analysis of variance (ANOVA) was used to determine the significance of the bivariate regression model. The findings are indicated in Table 21.

**Table 21**

*ANOVA*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 9.889 | 1 | 9.889 | 16.131 | .000[b] |
| | Residual | 46.591 | 76 | .613 | | |
| | Total | 56.480 | 77 | | | |

a. Predictors: (Constant), Technical Monitoring

b. Dependent Variable: Completion of Airstrip project

From the findings, the F-value of (16.131) was found to be significant at (0.000) which shows that the model was fit to predict the effect of technical monitoring on the completion of the Lanet Airstrip project. Technical monitoring ensures compliance with safety regulations and best practices to minimize accidents and injuries. By conducting regular safety inspections, implementing safety protocols, and providing training to construction personnel, project managers can create a safe working environment that fosters productivity and prevents costly accidents or incidents that could delay project completion.

The researcher also sought to establish the regression coefficient for technical monitoring on the completion of the Lanet Airstrip project in Kenya. The findings are indicated in Table 22.

**Table 22**

*Regression Coefficients*

| UnstandardizedCoefficients | | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| Model | B | Std. Error | Beta | | Sig. |
| (Constant) | | 1.756 | .566 | 3.104 | .003 |
| Technical Monitoring | | .563 | .140 | .418 4.016 | .000 |

a. Predictors: (Constant), Technical Monitoring

b. Dependent Variable: Completion of Airstrip Project

From Table 22 the beta coefficient for technical monitoring was 0.418 which implies that a unit change in technical monitoring would result in a 0.563 times change in the completion of the airstrip project. The t-value for this beta was 4.016 while the p- value was less than 0.05. Since the p-value was less than 0.05, it means the beta coefficient for technical monitoring is greater than zero and thus this variable has a statistically significant effect on the completion of the Lanet Airstrip project in Kenya. The findings match with Amade et al., (2015) which showed that technical monitoring involves maintaining comprehensive documentation of construction activities, including inspections, test results, and compliance records. This documentation serves as a valuable reference for verifying compliance with regulatory requirements, addressing quality issues, and resolving disputes with contractors or regulatory authorities. By maintaining accurate and up-to-date documentation, project managers can demonstrate compliance with project specifications and facilitate the timely completion and acceptance of the airstrip.

### 4.7.2 Risk Monitoring on Completion of Airstrip Projects

The study conducted a bivariate regression to assess the effect of risk monitoring on the completion of airstrip projects. First, the study conducted a model summary to assess the proportion of the total variation in the completion of airstrip projects that is explained by

risk monitoring. The findings are indicated in Table 23.

**Table 23**

*Model Summary*

| Model | R | R Square | Adjusted R Square | . Error of theEstimate |
|---|---|---|---|---|
| 1 | .883[a] | .780 | .777 | .40479 |

a. Predictors: (Constant), Risk Monitoring

b. Dependent Variable: Completion of Airstrip Projects

From the findings, the R-squared was 0.780 indicating that risk monitoring explains 78.0% of the variation in the completion of the Lanet Airstrip project. The findings match with Brinkerhoff and Derick's (2013) who showed that risk monitoring involves ongoing monitoring and control of identified risks throughout the project lifecycle. This includes tracking changes in risk factors, assessing the effectiveness of mitigation measures, and adjusting strategies as necessary. By continuously monitoring risks, project teams can respond promptly to emerging threats and prevent them from derailing project completion. This proactive approach helps maintain project momentum and minimizes the likelihood of costly delays or setbacks.

Analysis of variance was used to determine the significance of the bivariate regression model. The findings are indicated in Table 24.

**Table 24**

*ANOVA*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 44.027 | 1 | 44.027 | 268.688 | .000[b] |
| Residual | | 12.453 | 76 | .164 | | |
| | Total | 56.480 | 77 | | | |

a. Predictors: (Constant), Risk Monitoring

b. Dependent Variable: Completion of Airstrip Projects

From the findings, in table 24, the F-Value of (268.688) was found to be significant at (0.000) which shows that the model was fit to predict the effect of risk monitoring on the completion of the Lanet Airstrip project. Risk monitoring involves implementing mitigation strategies to reduce the likelihood or impact of identified risks. These strategies may include proactive measures such as site investigations, environmental assessments, stakeholder engagement, insurance coverage, contractual protections, or diversification of suppliers. By implementing mitigation strategies, project teams can minimize the potential negative effects of risks on project completion and maintain progress toward project objectives.

The researcher sought to establish the regression coefficient for risk monitoring on the completion of the Lanet Airstrip Project in Kenya. The findings are indicated in Table 25.

**Table 25**

*Regression Coefficients*

| UnstandardizedCoefficients | | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| Model | B | Std. Error | Beta | t | Sig. |
| (Constant) | -1.278 | .325 | | -3.930 | .000 |
| Risk Monitoring | 1.298 | .079 | .883 | 16.392 | .000 |

a. Predictors: (Constant), Risk Monitoring

b. Dependent Variable: Completion of Airstrip Projects

From Table 25 the beta coefficient for risk monitoring was 1.298 which implies that a unit change in risk monitoring would result in a 1.298 times change in completion of the Lanet Airstrip project. The t-value for this beta was 16.392 while the p-value was less than 0.05. Since the p-value was less than 0.05, it means the beta coefficient for risk monitoring is greater than zero and thus this variable has a statistically significant effect on the completion of the Lanet Airstrip project in Kenya. The findings agree with Matthew and Ramegowda (2019) which showed that Risk monitoring involves developing contingency plans to address unforeseen events that could impact project completion. These plans outline predefined actions and procedures to be implemented in response to specific risk scenarios. By having contingency plans in place, project teams can quickly respond to unexpected developments and minimize their impact on project timelines and budgets. This proactive approach helps maintain project resilience and ensures timely completion despite potential setbacks.

### 4.7.3 Process Monitoring and Completion of Airstrip Projects

The researcher did a bivariate regression to assess the effect of project process monitoring on the completion of airstrip projects. The findings are indicated in Table 26.

**Table 26**

*Model Summary*

| Model | R | R Square | Adjusted R Square | . Error of theEstimate |
|---|---|---|---|---|
| 1 | .757[a] | .574 | .568 | .56294 |

a. Predictors: (Constant), Project Process Monitoring

b. Dependent Variable: Completion of Airstrip Projects.

The R-squared in this study was 0.574 which shows that project process monitoring explains 57.4% variation in completion of airstrip projects. The findings match with Mwangi (2019) who showed that process monitoring allows project teams to optimize resource allocation and utilization throughout the project lifecycle. By tracking resource availability, usage rates, and productivity levels, project managers can identify opportunities to streamline workflows, eliminate bottlenecks, and allocate resources more effectively. This optimization ensures that resources are deployed where they are most needed, maximizing efficiency and minimizing waste, thereby contributing to the timely completion of the airstrip project.

Further, the study used analysis of variance to determine the significance of thebivariate regression model. The findings are indicated in Table 27.

**Table 27**

*ANOVA*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 32.396 | 1 | 32.396 | 102.227 | .000[b] |
| Residual | | 24.084 | 76 | .317 | | |
| | Total | 56.480 | 77 | | | |

a. Predictors: (Constant), Project Process Monitoring

b. Dependent Variable: Completion of Airstrip Projects.

From the findings, the F-Statistic of 102.227 was found to be significant at (0.000) which shows that the model was fit to predict the effect of project process monitoring on the completion of airstrip projects. Project process monitoring facilitates progress tracking and reporting, enabling project managers to keep stakeholders informed about project status and performance. This transparency fosters trust and collaboration among stakeholders, which is essential for overcoming obstacles and ensuring the timely completion of the airstrip.

The regression coefficient for project process monitoring on completion of the Lanet Airstrip Project in Kenya was established. The findings are indicated in Table 28.

**Table 28**

*Project Process Monitoring on Completion of Airstrip Projects*

| UnstandardizedCoefficients | | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| Model | B | Std. Error | Beta | t | Sig. |
| (Constant) | .757 | .327 | | 2.315 | .023 |
| Project Process Monitoring | .853 | .084 | .757 | 10.111 | .000 |

a. Predictors: (Constant), Project Process Monitoring

b. Dependent Variable: Completion of Airstrip Projects.

From Table 28 the beta coefficient for project process monitoring was 0.853. This means that the effect of project process monitoring on the completion of the airstrip project is positive. The results also illustrate that a unit change in project process monitoring would result in a 0.853 times change in the completion of the Lanet Airstrip project. The t-value for this beta was 10.111 while the p-value was less than 0.05. Since the p-value was less than 0.05, it means the beta coefficient for project process monitoring is greater than zero and thus this variable has a statistically significant effect on the completion of the

Lanet Airstrip project. The findings agree with Bausch, and Pils, (2019) who showed that process monitoring facilitates risk management by identifying potential risks and implementing mitigation strategies to address them. By monitoring project processes and performance indicators, project teams can anticipate risks such as budget overruns, schedule delays, or resource shortages. This proactive approach enables project managers to implement risk mitigation measures early on, minimizing the impact of risks on project completion and ensuring that the airstrip project stays on schedule.

### 4.7.4 Overall Model Summary

The R-Squared is the proportion of variance in the dependent variable which can be explained by the independent variables. The findings are indicated in Table 29.

**Table 29**

*Overall Model Summary*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Sig. F Change |
|---|---|---|---|---|---|
| 1 | .923[a] | .851 | .843 | .33915 | .000 |

The R-squared in this study was 0.770, which shows that the three independent variables (financial monitoring, technical monitoring, risk monitoring, and project process monitoring) can explain 77.0% of on completion of the Lanet Airstrip project in Kenya while other factors explain 23.0%.

### 4.7.5 Overall Analysis of Variance

The analysis of variance was used to assess if the model was a good fit for the data. The findings are in Table 30.

**Table 30**

*Overall Analysis of Variance*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 48.083 | 4 | 12.021 | 104.505 | .000[b] |
| | Residual | 8.397 | 73 | .115 | | |
| | Total | 56.480 | 77 | | | |

a. Dependent Variable: Completion of Airstrip Projects

b. Predictors: (Constant), Financial Monitoring, Technical Monitoring, Risk Monitoring, and Project Process Monitoring.

From the findings, the p-value was 0.000 which is less than 0.05, and hence the model is good at predicting how the three independent variables (financial monitoring, technical monitoring, risk monitoring, and project process monitoring) affect the completion of the Lanet Airstrip project in Kenya. Further, the F-value was (104.505) which shows that the model was fit to predict the effect of the independent variables on the dependent variable.

### 4.7.6 Overall Regression Coefficients

The researcher aimed to determine the regression coefficient representing the relationship between project monitoring practices and completion of Airstrip projects. The results are presented in Table 31.

**Table 31**

*Regression Coefficients*

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| | (Constant) | -1.469 | .309 | | -4.760 | .000 |
| 1 | Financial Monitoring | .278 | .076 | .214 | 3.661 | .000 |
| | Technical Monitoring | -.071 | .071 | -.053 | -.999 | .032 |
| | Risk Monitoring | .831 | .116 | .565 | 7.163 | .000 |
| | Project Process Monitoring | .342 | .071 | .303 | 4.835 | .000 |

The interpretations of the findings indicated follow the following regression model. $Y= -1.469 + 0.278X_1 + -0.071\ X_2 + 0.831X_3 + 0.342X_4$.

According to the intercept ($\beta_0$), when the three independent variables are held constant, the value of completion of Airstrip Projects (Y) is -1.469. In addition, holding all the other independent variables constant, a unit increase in financial monitoring ($X_1$) would lead to a 0.278 improvement in the completion of the Airstrip project in Kenya. Further, holding on to the other independent variables constant, a unit increase in technical monitoring ($X_2$) would lead to a 0.071 decrease in the completion of the Airstrip project in Kenya. In addition, holding all the other variables constant, a unit increase in risk monitoring ($X_3$) would lead to a 0.831 improvement in the completion of Airstrip projects in Kenya. Further, holding all the other variables constant, a unit increase in project process monitoring ($X_4$) would lead to a 0.342 improvement in the completion of Airstrip projects in Kenya. This implies that risk monitoring affects the completion of Airstrip projects the most, followed by project process monitoring, financial monitoring, and technical monitoring respectively.

### 4.8 Hypotheses Testing

Hypothesis testing was conducted using p-values. Four hypotheses were tested as shown in Table 31 to determine the relationships between different project monitoring practices and the completion of airstrip projects in Kenya. These hypotheses assessed the significance of financial monitoring, technical monitoring, risk monitoring, and project process monitoring in influencing project completion.

**$H0_1$:** The hypothesis stated that there is no statistically significant effect between financial monitoring and the completion of airstrip projects in Kenya. To test this hypothesis, the p-value associated with the coefficient for Financial Monitoring was considered, which 0.000 is. This p-value is less than the common significance level of 0.05, indicating a deviation from the null hypothesis. Thus, there is a statistically significant effect of financial monitoring on the completion of airstrip projects in Kenya. This finding aligns with Okafor et al.'s (2016) study, which identified a lack of adequate funding and payment delays as key reasons for project incompletion. Therefore, the current study's results support the notion that effective financial monitoring positively impacts project completion.

**$H0_2$:** Posits that there is no statistically significant effect between technical monitoring and airstrip project completion. The p-value associated with the coefficient for Technical Monitoring is 0.000, which is also less than 0.05. Consequently, this indicates a deviation from the null hypothesis, revealing a statistically significant effect of technical monitoring on project completion. While not directly related, Ubanis and Ononuju's (2013) study on public-sector civil engineering project failures underscores the importance of identifying technical issues that can lead to project incompletion. Therefore, the current study's results support the idea that effective technical monitoring positively influences project completion.

**$H0_3$:** Posits that there is no statistically significant effect between risk monitoring and airstrip project completion. The p-value associated with the coefficient for Risk Monitoring is notably low at 0.032, less the 0.05 significance level. Therefore, the null hypothesis is rejected, indicating that there is a statistically significant effect of risk monitoring on the completion of airstrip projects. This finding is consistent with Aduma and Kimutai's (2018) research on risk management in Nairobi City County Government projects, where it was found that design risk management positively impacted project performance. The current study's results support the notion that effective risk monitoring contributes to project completion.

**$H_{04}$:** states that there is no statistically significant effect between project process monitoring and airstrip project completion. The p-value for the coefficient of Project Process Monitoring is 0.000, which is less than the 0.05 significance level. Consequently, the null hypothesis is rejected, signifying a statistically significant effect of project process monitoring on the completion of airstrip projects. Jaselkis and Ashley's (2021) study found that aspects like budget updates and constructability programs influence overall project success. Therefore, the current study's results align with the idea that effective project process monitoring positively impacts project completion.

# CHAPTER FIVE

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

This section concludes the analysis, draws some findings, and makes some suggestions for further research.

## 5.2 Summary of the Findings

This section contains the findings concerning the objectives of the study.

### 5.2.1 Financial Monitoring on Completion of Airstrip Projects

The comprehensive analysis conducted in this study unveiled a compelling and noteworthy connection between financial monitoring and the completion of airstrip Projects, shedding crucial light on the dynamics of project management in the context of Kenyan airstrip developments. This linkage was meticulously examined through both correlation analysis and regression analysis, with findings that underscore the pivotal role of financial oversight in the successful execution of such projects.

The study revealed that there was a positive and statistically significant correlation between financial monitoring and completion of the Lanet Airstrip project in Kenya ($r=0.443$; $p<0.05$). This implies that better financial monitoring enhances the completion of the Lanet Airstrip project in Kenya. The findings agree with those of Frimpong et al. (2019) which showed that effective financial monitoring allows project managers to allocate resources efficiently. By analyzing spending patterns and project requirements, they can prioritize resource allocation to areas where they are most needed, ensuring optimal utilization of funds and avoiding shortages or wastage.

To further validate and strengthen this significant correlation, a regression analysis was conducted, confirming and solidifying the initial findings. The statistically significant

positive impact of financial monitoring indicated by a coefficient of 0.428 on the Completion of airstrip Projects underscores its significance. This means that for Kenyan airstrip developments, the meticulous management of financial resources, budgets, and fiscal aspects is not merely an administrative formality but a critical determinant of project success.

In essence, the implications of these findings are profound. They emphasize that effective financial monitoring procedures are not just ancillary to the project management process; rather, they are instrumental in reducing project delays and mitigating the risk of project completion. By maintaining a firm grip on financial aspects, project stakeholders can ensure that resources are allocated optimally, budgets are managed efficiently, and potential financial challenges are proactively addressed. Consequently, this holistic approach to project management, encompassing robust financial oversight, stands as a potent tool in the arsenal of project managers and policymakers. It offers a promising avenue for enhancing the successful completion of Kenyan airstrip projects, ultimately contributing to the broader discourse on project management practices.

### 5.2.2 Technical Monitoring on Completion of Airstrip Projects

Within the scope of this comprehensive study, a significant finding arises, shedding light on the inherent correlation between technical monitoring and the successful execution of airstrip Projects. The significance of technical control in Kenyan airstrip projects is emphasized by the first findings of this connection via correlation analysis and further supported by later regression analysis.

The study also revealed that there was a positive and statistically significant correlation between technical monitoring and completion of the Lanet Airstrip project in Kenya, ($r=0.441$; $p<0.05$). This implies that better technical monitoring enhances the completion of the Lanet Airstrip project in Kenya. The findings match with those of Matthew and

Ramegowda (2019) which concluded that technical monitoring ensures that construction activities adhere to specified quality standards and regulations. To strengthen and solidify the observed link, a Regression Analysis was performed. The outcomes of this comprehensive examination not only confirmed the original discoveries but also enhanced the importance of Technical Monitoring within the framework of project finalization. The coefficient of 0.362 indicates a statistically significant favorable influence of technical monitoring on the completion of airstrip projects, highlighting the crucial need to recognize its important function. This suggests that, in the context of Kenyan airstrip projects, the thorough examination of technical factors, engineering procedures, and project management methodologies is not a superficial need, but a crucial factor in achieving project success.

The consequences of these discoveries are significant. It is emphasized that technical monitoring has significant importance within the field of project management. It serves as a crucial element in preventing project delays and reducing the risk of incomplete project execution. Through the establishment of a strong technical monitoring framework, project stakeholders can effectively oversee and manage the complex technical aspects of the project. This enables them to rapidly identify and remove any possible bottlenecks, as well as proactively confront engineering issues. Therefore, the use of this comprehensive methodology in project management, which places significant importance on technical supervision, proves to be a powerful driver in facilitating the effective execution of airstrip projects in Kenya. The study not only enhances our comprehension of project management methods but also presents a possible option for improving project results within this particular field.

### 5.2.3 Risk Monitoring on Completion of Airstrip Projects

The insights unveiled by this study extend further to encompass the intricate relationship between risk monitoring and the completion of airstrip Projects. This facet of the research reveals profound insights that underscore the pivotal role of effective risk management in the landscape of Kenyan airstrip projects.

The study also revealed that there was a strong positive correlation between risk monitoring on the completion of the Lanet Airstrip project in Kenya ($r=0.541$; $p<0.05$). The results of the correlation analysis indicated that better risk monitoring enhances the completion of the Lanet Airstrip project in Kenya. The study findings agree with the findings of Heeks (2018) which showed that risk monitoring involves quantifying the potential impact and likelihood of identified risks. This correlation echoes the sentiment that a proactive approach to risk identification, assessment, and mitigation can serve as a powerful deterrent to the impediments that often lead to project delays. It accentuates the integral role played by risk management in fostering project success.

To further solidify this significant correlation, the Regression Analysis was conducted. The results of this in-depth investigation not only validated the initial findings but also reaffirmed the paramount importance of Risk Monitoring in the context of project completion. The statistically significant positive impact of Risk Monitoring (signified by a coefficient of 0.604) on the completion of airstrip Projects underscores its indispensable nature. This outcome signifies that, within the sphere of Kenyan airstrip developments, a comprehensive approach to risk management is not merely a precautionary measure but a potent driver of project progress.

In essence, these findings impart a profound message—a message that resonates with project stakeholders, decision-makers, and practitioners alike. They illuminate the fact that Risk Monitoring is not a peripheral activity relegated to the periphery of project

management but rather an instrumental component that can significantly enhance the prospects of project completion. By fostering a culture of comprehensive risk management, project teams, and stakeholders can adeptly navigate the intricacies of airstrip developments. This entails the proactive identification of potential risks, their careful evaluation, and the formulation of strategies to mitigate their adverse effects. By doing so, they effectively fortify the project's resilience in the face of uncertainties, ultimately leading to a reduced likelihood of project completion.

### 5.2.4 Project Process Monitoring on Completion of Airstrip Projects

The essence of this research endeavor delves into the intricate connection that exists between project process monitoring and the completion of airstrip projects in the Kenyan context. Through meticulous examination and rigorous analysis, this study unravels a compelling narrative that underscores the fundamental role of project process monitoring in the realm of project management.

The study also revealed that there was a strong positive correlation between project process monitoring on completion of the Lanet Airstrip project in Kenya ($r=0.541$; $p<0.05$). The results of the correlation analysis indicated that better project process monitoring enhances the completion of the Lanet Airstrip project in Kenya. The study findings agree with the findings of Jaselkis and Ashley (2021) who showed that process monitoring allows project managers to track various activities and milestones throughout the project lifecycle.

To further substantiate and strengthen this critical relationship, a Regression Analysis was meticulously conducted. The results of this profound investigation not only validated the initial findings but also accentuated the indispensable nature of Project Process Monitoring in the context of airstrip project completion. The statistically significant positive impact of Project Process Monitoring (highlighted by a substantial coefficient of

0.757) serves as a testament to its pivotal role. It signifies that, within the unique landscape of Kenyan airstrip projects, the thorough monitoring of project processes is not merely an administrative task but a transformative force that propels projects toward fruition.

In essence, these findings underscore a pivotal message message that resonates with project practitioners, stakeholders, and policymakers alike. They illuminate the fact that Project Process Monitoring is not a passive ritual but an active strategy that can significantly enhance the prospects of project completion. It calls for a paradigm shift towards a project management culture that places the utmost importance on monitoring the intricate web of project processes. This entails a continuous and vigilant approach, encompassing project planning, execution, and control. By embracing this approach, project teams can navigate the complexities of airstrip developments with greater precision and agility, ultimately leading to a reducedlikelihood of project completion.

### 5.3 Conclusions

The financial monitoring aspect of the Lanet Airstrip project in Kenya indicates a complex relationship between funding and project completion. Respondents expressed concerns about the adequacy of government funding, with a significant portion feeling that the project was underfunded. This lack of confidence in funding allocation can lead to complications in project execution, possibly resulting in delays and hindering project success. Additionally, budgetary concerns were raised, with a portion of respondents uncertain about the alignment of the budget with actual project costs. To ensure the successful completion of similar projects, addressing these financial challenges is crucial. Effective financial management and clear budget planning can significantly contribute to better project outcomes.

The overall mean and standard deviation for the financial monitoring and completion of the Lanet Airstrip project are 3.733 and 0.817, respectively. The overall mean indicates a general agreement among respondents that there were some effective financial monitoring procedures in place for the Lanet Airstrip project. However, the moderate standard deviation of 0.817 suggests there was variability in opinions, indicating mixed perceptions about the adequacy of financial management. This highlights the need for improved budgeting accuracy and stronger financial monitoring to ensure more consistent and effective project completion in the future.

The technical monitoring aspect of the Lanet Airstrip project revealed various challenges that influenced project completion. One notable issue was the lack of alignment with project goals and objectives, as indicated by a substantial majority of respondents. This misalignment can significantly hinder the completion of projects, emphasizing the need for better adherence to project objectives for successful outcomes. Additionally, the presence of experts at the Lanet Airstrip was viewed positively, suggesting their influence on project conditions and outcomes. However, climatic conditions were perceived differently among participants, highlighting the need for further investigation. The study also noted the importance of effective progress monitoring in ensuring timely project completion. Addressing these technical monitoring challenges is essential for achieving project success.

The overall mean of 3.719 suggests a consensus that technical monitoring had significant challenges affecting the completion of the Lanet Airstrip project. The standard deviation of 0.917 indicates moderate variability in responses, highlighting that while many agreed on the presence of technical issues, there were differing levels of agreement. This variability points to specific areas, such as compliance with project goals and supervision challenges, needing attention. Addressing these technical monitoring issues could improve

project execution and completion rates in future endeavors.

The risk monitoring aspect of the Lanet Airstrip project emphasized the critical role of effective risk management in project completion. Legal risks and land disputes significantly affected the project's execution, as unanimously agreed by respondents. Such legal challenges can lead to delays, legal disputes, and increased project costs, all of which are detrimental to project success. The presence of stable leadership was viewed positively, fostering smoother project execution and effective risk management. Strong community support was perceived as a favorable factor for project success, although opinions varied. Effective risk monitoring teams in the field were recognized as contributors to achieving project goals and ensuring successful project execution. Overall, this objective highlights the importance of robust risk management practices in ensuring the timely and successful completion of airstrip projects.

The overall mean of 4.0162 indicates a general agreement that risk monitoring had a positive impact on the Lanet Airstrip project, though certain challenges were acknowledged. The standard deviation of 0.877 suggests moderate variability in responses, indicating that while most respondents recognized effective risk management and community support, there were differing views on aspects like leadership stability. This highlights the importance of addressing specific risk-related issues, such as land disputes and legal risks, to ensure smoother project execution in the future.

The project process monitoring aspect of the Lanet Airstrip project indicated the influence of various factors on project completion. A highly competent project team was viewed positively, emphasizing the role of competency in project execution. The effectiveness of project scheduling and alignment with project goals varied among respondents. Stakeholder involvement was perceived as beneficial, indicating the importance of engaging stakeholders for improved project outcomes. The presence of an effective project

monitoring team was recognized as a positive influence on project oversight. Political interference was viewed as a factor influencing project monitoring. To enhance the successful completion of similar airstrip projects, it is essential to ensure the competency of project teams, effective scheduling, and stakeholder involvement, and minimize political interference in project monitoring.

The overall mean of 3.133 indicates a moderately positive perception of project process monitoring at the Lanet Airstrip project, with strengths in team competency and stakeholder engagement, albeit with notable challenges. However, the standard deviation of 0.977 reflects significant variability in responses, underscoring differing opinions on the effectiveness of project scheduling, team monitoring, and the impact of political influences. This variability suggests a need for more consistent and robust project management practices to mitigate external interferences and ensure better alignment with project goals and timelines in future initiatives.

## 5.4 Recommendations

### 5.4.1 Recommendations for Policy

Based on the findings, it is recommended that project stakeholders and policymakers in the context of Kenyan airstrip developments should prioritize efficient financial monitoring as a critical strategy to reduce the risk of project delays. Robust financial oversight, including meticulous financial resource management, budget control, and proactive addressing of potential financial challenges, should be integral to project management practices.

The study's results suggest that rigorous technical monitoring is essential for mitigating project delays in Kenyan airstrip projects. Therefore, it is recommended that project teams and stakeholders focus on the comprehensive examination of technical aspects, engineering procedures, and project management methodologies. An emphasis on technical supervision can facilitate the effective execution of airstrip projects, with a keen

focus on the intricate technical components. Effective risk management strategies play a crucial role in reducing project delays in Kenyan airstrip developments. Project stakeholders are advised to adopt proactive risk identification, assessment, and mitigation practices. By doing so, they can fortify project resilience and reduce the likelihood of project non-completion, ultimately leading to more successful project outcomes.

The study highlights the importance of meticulous project process monitoring to reduce the incidence of project delays. Project teams and stakeholders should adopt a continuous and vigilant approach to project process oversight, encompassing all project phases, including planning, execution, and control. This approach can lead to more precise and agile project management, resulting in a reduced likelihood ofproject completion.

### 5.4.2 Recommendation for Further Research

While this study has shed light on the significant influence of Project Process Monitoring, Risk Monitoring, Technical Monitoring, and Financial Monitoring on project outcomes, it is important to recognize that there are additional factors that have not been addressed in this research that could impact project success. External economic circumstances, political stability, stakeholder involvement initiatives, and environmental considerations are examples of undiscovered elements. Future research should look at these external variables and how they interact with monitoring procedures to gain a better understanding of the intricacies impacting project performance in the context of airstrip development in Kenya.

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## APPENDICES

**Appendix I:** Introduction Letter

Dear Respondent,

**Re: Collection Of Data**

I hope this questionnaire finds you well. I am currently a student at Kabarak University, pursuing a Master of Science degree in Project Management. As part of my academic requirements, I am undertaking a research study on the "Effect of Project Monitoring Practices on Completion of Airstrip Projects in Kenya: A Case of Lanet Airstrip, Nakuru County." I am reaching out to seek your assistance in completing the attached questionnaire.

The time needed to finish the survey is around 20 minutes. Please answer each one of the questions. The information you enter will be kept strictly secret and will be used only for scholarly research. Your participation is completely optional, and you may stop at any time.

Please indicate after the survey whether or not you would want to get a summary of the study results. Please use the included, pre-paid envelope to return your reply. We much value your help and participation in this research.

Please don't hesitate to get in touch with me if you have any concerns or questions about the research or the questionnaire. I'm here for you in whatever way you need me to be. We appreciate you thinking about helping with this study. Your help is essential for the completion of this study.

Yours faithfully,

Desna Chelangat

**Appendix II:** Questionnaire Instructions

The questions in this questionnaire are broken up into two parts: Background data collection is addressed in Part (A), while research outcomes and their associated factors are discussed in Part (B).

To the best of your ability, please provide detailed answers to each question in the survey. Your privacy will be protected and the information you provide will be used only for scientific analysis.

If you have any questions or require any clarifications while filling out the questionnaire, please feel free to reach out for assistance. Your cooperation in providing comprehensive and honest responses will greatly contribute to the successof this study.

Thank you once again for your valuable participation.

**Section A: Respondent Details**

1. What is your gender?

(a) Male [ ]

(b) Female [ ]

2. What age bracket do you belong to?

a) 20 – 30 years [ ]

b) 31 – 40 years [ ]

c) 41 – 50 years [ ]

d) 51 years and above [ ]

3. What is your academic qualification?

a) Certificate [ ]

b) Diploma [ ]

c) Bachelor [ ]

d) Masters [ ]

4. For how long have you been working on Airstrip projects?

a) Below 3 years [ ]

b) 4-7 years [ ]

c) 8-11 years [ ]

d) Over 11 years [ ]

**Section B Financial Monitoring**

1. Indicate the level at which you agree/disagree with the following statements on financial monitoring. **1=Strongly Disagree, 2= Disagree, 3=Neutral, 4=Agree. 5=Strongly Agree.**

| **Statements** | **{1}** | **{2}** | **{3}** | **{4}** | **{5}** |
|---|---|---|---|---|---|
| The project was allocated enough funds by the government for the execution of project activities. | | | | | |
| The budget of Lanet Airstrip was far much below the actual cost of the project. | | | | | |
| The Lanet Airstrip was affected by project estimation challenges. | | | | | |
| There were effective financial monitoring procedures at the Lanet Airstrip. | | | | | |
| The Lanet Airstrip project was not completed due to improper financial management. | | | | | |

**Section C: Technical Monitoring**

1. Indicate the level at which you agree /disagree with the following statements on technical monitoring. **1=Strongly Disagree, 2= Disagree, 3=Neutral, 4=Agree. 5=Strongly Agree.**

| **Statements** | SD {1} | D {2} | N {3} | A {4} | SA {5} |
|---|---|---|---|---|---|
| The project execution team did not comply with project goals and objectives thus leading to project incompletion. | | | | | |
| There were no experts at the Lanet Airstrip to determine project conditions. | | | | | |
| Challenging climatic conditions at the Lanet Airstripcaused incompletion of the airstrip project. | | | | | |
| The Technical Monitoring team encountered supervision challenges, resulting in the project's incompletion. | | | | | |
| The project faced challenges in progress monitoring thus affecting the project's timely completion. | | | | | |

**Section D: Risk Monitoring**

1. Indicate the level at which you agree /disagree with the following statements on risk monitoring. **1=Strongly Disagree, 2= Disagree, 3=Neutral, 4=Agree.5=Strongly Agree.**

| **Statements** | SD {1} | D {2} | N {3} | A {4} | SA {5} |
|---|---|---|---|---|---|
| The Lanet Airstrip was faced with land legal risksthus affecting project execution. | | | | | |
| The Lanet Airstrip was at a point faced with land disputes which affected its execution. | | | | | |
| There was leadership stability at the Lanet Airstripduring the execution of the project. | | | | | |
| The project was fully supported by the localcommunity. | | | | | |
| The Lanet Airstrip had an effective risk-monitoring team on the field to ensure project goals were achieved. | | | | | |

**Section E: Project Process Monitoring**

1. Indicate the level at which you agree /disagree with the following statements on project process monitoring. **1=Strongly Disagree, 2= Disagree, 3=Neutral, 4=Agree. 5=Strongly Agree.**

| Statements | SD {1} | D {2} | N {3} | A {4} | SA {5} |
|---|---|---|---|---|---|
| The Lanet Airstrip project team had a very high competency level. | | | | | |
| The Lanet Airstrip Project Scheduling was effective and aligned with project goals. | | | | | |
| The Lanet Airstrip project team involved the shareholders in all stages of project execution. | | | | | |
| The Lanet Airstrip project monitoring team was effective and did their monitoring work effectively. | | | | | |
| The Lanet Airstrip monitoring was affected by politics. | | | | | |

**Section E: Completion Of Airstrip Projects**

1. Indicate the level in to you agree /disagree with the following statements on the Completion of airstrip Projects. **1=Strongly Disagree, 2= Disagree, 3=Neutral, 4=Agree. 5=Strongly Agree.**

| Statements | SD {1} | D {2} | N {3} | A {4} | SA {5} |
|---|---|---|---|---|---|
| There were effective project monitoring practices atthe Lanet Airstrip. | | | | | |
| Project scope affected the implementation of Lanet Airstrip. | | | | | |
| Stakeholder involvement enhances the quality of a project. | | | | | |
| The community is highly involved in project implementation procedures leads to project success. | | | | | |
| Political interference led to the incompletion of theLanet Airstrip project. | | | | | |

*Thank you for Participating in this Study.*

**Appendix III:** Airstrips in Kenya

**Operational Airstrips in Kenya**

1. Amboseli Airstrip in Kajiado County
2. Meru Airstrip in Meru County
3. Loisaba Airstrip in Laikipia County
4. Masai Mara Air Strip in Narok County
5. Meru Mulika Lodge Airstrip in Meru County
6. Diani Beach Airstrip in Kwale County
7. Garba Tula Airstrip in Isiolo County
8. Hola Airstrip in Tana River County
9. Kalokol Airstrip in Turkana County
10. Kamok Airstrip in Nanyuki
11. Kapsowar Airstrip in Elgeyo-Marakwet County
12. Kedong Airstrip in Narok County
13. Kericho Airstrip in Kericho County
14. Lokichar Airstrip in Turkana County
15. Mara Serena Airstrip in Narok County
16. Marsabit Airstrip in Marsabit County
17. Mbirikani Airstrip in Kajiado County
18. Moyale Airstrip in Marsabit County

**Incomplete Airstrips in Kenya**

1. Lanet Airstrip in Nakuru County
2. Baragoi Airstrip in Samburu County
3. Bondo Airstrip in Siaya County
4. Kibwezi Airstrip in Makueni County
5. Kerio Valley Airstrip in Elgeyo-Marakwet County
6. Kiunga Airstrip in Lamu County
7. Kitich Airstrip in Samburu County
8. Kitui Airstrip in Kitui County
9. Konza City Airstrip in Machakos County

10. Lamu Manda Airstrip in Lamu County
11. Lamu Mokowe Airstrip in Lamu County
12. Lodwar Airstrip in Turkana County
13. Kilaguni Airstrip in Taita-Taveta County
14. Kabunde Airstrip in Homa Bay County
15. Mweiga Airstrip in Nyeri County
16. Mwingi Airstrip in Kitui County
17. Nanyuki Airstrip in Laikipia County
18. Narok Airstrip in Narok County
19. Ndara B airstrip in Tana River County
20. Ngurunit Airstrip in Marsabit County
21. Nyeri Airstrip in Nyeri County
22. Ol Kiombo Airstrip in Narok County
23. Ol Seki Airstrip in Narok County
24. Olare Orok Airstrip in Narok County
25. Samburu Airstrip in Samburu County
26. Shompole Airstrip in Narok County
27. Sibiloi Airstrip in Marsabit County
28. Taita Hills Airstrip in Taita-Taveta County
29. Ukunda Airstrip in Kwale County
30. Vipingo Airstrip in Kilifi County
31. Bungoma Airstrip in Bungoma County
32. Busia Airstrip in Busia County
33. Matulo Airstrip in West Pokot County
34. Kakamega Airstrip in Kakamega County
35. Embu Airstrip in Embu County
36. Njoro Airstrip in Nakuru County

**Appendix IV:** KUREC Approval Letter

**KABARAK UNIVERSITY RESEARCH ETHICS COMMITTEE**

**Private Bag - 20157**
**KABARAK, KENYA**
**Email:** kurec@kabarak.ac.ke

**Tel: 254-51-343234/5**
**Fax: 254-051-343529**
www.kabarak.ac.ke

**OUR REF: KABU01/KUREC/001/019/07/23** **Date: 25th July, 2023**

Desna Chelangat Kilel,
Reg. No: GMPM/NE/0353/01/21
Kabarak University,

Dear Desna,

**RE: EFFECT OF PROJECT MONITORING PRACTICES ON STALLED AIRSTRIPS PROJECTS IN KENYA: A CASE OF LANET AIRSTRIP, NAKURU COUNTY**

This is to inform you that ***KUREC*** has reviewed and approved your above research proposal. Your application approval number is ***KUREC-190723.*** The approval period is ***25/07/2023 – 25/07/ 2024.***

This approval is subject to compliance with the following requirements:

i. All researchers shall obtain an introduction letter to NACOSTI from the relevant head of institutions (Institute of postgraduate, School dean or Directorate of research)
ii. The researcher shall further obtain a RESEARCH PERMIT from NACOSTI before commencement of data collection & submit a copy of the permit to **KUREC.**
iii. Only approved documents including (informed consents, study instruments, MTA Material Transfer Agreement) will be used
iv. All changes including (amendments, deviations, and violations) are submitted for review and approval by ***KUREC***:
v. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to ***KUREC*** within 72 hours of notification;
vi. Any changes, anticipated or otherwise that may increase the risk(s) or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to ***KUREC*** within 72 hours;
vii. Clearance for export of biological specimens must be obtained from relevant institutions and submit a copy of the permit to KUREC;
viii. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal and;
ix. Submission of an executive summary report within 90 days upon completion of the study to ***KUREC***

Sincerely,

KABARAK UNIVERSITY
INSTITUTIONAL RESEARCH ETHICS COMMITTEE
28 JUL 2023
APPROVED
P. O. PRIVATE BAG - 20157, KABARAK

**Prof. Jackson Kitetu PhD.**
KUREC-Chairman

Cc Vice Chancellor
DVC-Academic & Research
Registrar-Academic & Research
Director-Research Innovation & Outreach
Institute of Post Graduate Studies

**Appendix V:** NACOSTI Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **137648**

Date of Issue: **13/August/2023**

**RESEARCH LICENSE**

**This is to Certify that Miss.. Desna Chelangat Kilel of Kabarak University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nakuru on the topic: EFFECT OF PROJECT MONITORING PRACTICES ON STALLED AIRSTRIP PROJECTS IN KENYA: A CASE OF LANET AIRSTRIP, NAKURU COUNTY. for the period ending : 13/August/2024.**

License No: **NACOSTI/P/23/28432**

**137648**

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

**See overleaf for conditions**

**Appendix VI:** Evidence of Conference Participation

Certificate of Participation

This is to certify that

<Desna Chelangat Kilel >

Participated in the Education Management Society of Kenya (EMSK) 9th International Conference Held in Collaboration with Egerton University, Rift Valley Reading Association and the Education and Social Sciences Research Association of Kenya on Thursday 12th & Friday 13th OCTOBER, 2023 Themed: RESTRUCTURING EDUCATION, TRAINING, RESEARCH AND INNOVATION FOR 21ST CENTURY AND BEYOND

*She Presented a Paper Entitled:* ***Effect of Project Monitoring Practices on Completion of Airstrip Projects in Kenya: A Case of Lanet Airstrip, Nakuru County***

Dr. Eliud Nyakundi
Chairman- EMSK

Dr. David Wamukuru
Secretary- EMSK

## **Appendix VII:** List of Publication

The Strategic JOURNAL of Business & Change MANAGEMENT
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**PROJECT PROCESS MONITORING ON COMPLETION OF AIRSTRIP PROJECTS IN KENYA**

**Desna Chelangat Kilel [1], Nehemiah Kiplagat [2] & Zakayo Tallam [3]**

[1] Post Graduate Student, Kabarak University, Kenya

[2,3] Lecturer, Post Graduate Student, Kabarak University, Kenya

**Accepted: November 14, 2024**

**DOI: http://dx.doi.org/10.61426/sjbcm.v11i4.3159**

***ABSTRACT***

*Despite the critical role airstrips play in enhancing regional connectivity and supporting the aviation sector in Kenya, many airstrip projects face significant challenges related to timely and successful completion. Delays, cost overruns, and failure to meet safety and quality standards are common issues that hinder the operationalization of these vital infrastructures therefore the study seeks to assess the effect of project process monitoring on the completion of airstrip projects in Kenya, focusing on the case of Lanet Airstrip in Nakuru County. The study was guided by the theory of change and theory of constraints. A descriptive research design was employed to gather information. The study took place at Lanet Airstrip, which is located at the 80 Tank Battalion Barracks in Nakuru County. The target population for the study includes 95 personnel involved in the Lanet Airstrip construction project, comprising engineers, construction officers, project managers, site agents, and surveyors. A census approach was used to include the entire target population of 95 respondents, considering the small and easily accessible nature of the population. Primary data was collected using questionnaires with closed-ended questions to obtain measurable and quantitative data and eliminate irrelevant answers. The Social Sciences Statistical Package version 25 was used for data analysis, employing a regression model to examine the relationship between the variables. Presentations were done in tables. The findings indicated that process monitoring is a critical technique for reducing the chance of project failure to be completed on time. To enhance project process monitoring and improve the completion of airstrip projects in Kenya project managers should adopt real-time monitoring tools for better tracking, strengthening communication and collaboration among stakeholders to ensure timely problem-solving, and conducting regular audits and inspections to maintain quality and compliance*

**Key words:** *Project Process Monitoring, Completion of Airstrip Projects*

**CITATION:** Kilel, D. C., Kiplagat, N., & Zakayo, T. (2024). Project process monitoring on completion of airstrip projects in Kenya. *The Strategic Journal of Business & Change Management,* 11 (4), 1325 – 1334. http://dx.doi.org/10.61426/sjbcm.v11i4.3159