THE EFFECT OF PROJECT COST MANAGEMENT PRACTICES ON PERFORMANCE OF NON-GOVERNMENTAL ORGANIZATIONS FUNDED CONSTRUCTION PROJECTS IN KENYA

BY

JAMES LOMODOK NGATHUBAN

Reg. No.: 1060338

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DECLARATION

I hereby declare that this research is my original work and has not been presented for award for a degree at this or any other university.

Signature …… Date …….

James Lomodok Ngathuban

1060338

SUPERVISORS

This is to declare that this research has been submitted for examination with my approval as the university supervisor.

Dr. Alex Kamau

Lecturer School of Business and Economics

Signature …… Date …….

Dr. Thomas Githui

Senior Lecturer School of Business and Economics

Signature …… Date …….

ABSTRACT

The study investigated the success of NGO-funded projects in Kenya with a focus on construction projects. With the help of the theories, the study investigated the aspects of performance motivation, system coordination, resource utilization, and stakeholder accountability. Kenya with 110 tier I registered non-governmental organizations and a rich environment set the pace to evaluate donor-funded projects. The objectives of the study were to ascertain the effect of cost estimation practices on the performance of NGOs funded construction projects, to assess effect of cost control measures on the performance of NGO funded projects, to evaluate the effectiveness of project cost budgeting and to explore the effect of resource planning on practices on the performance of NGO funded construction projects in Kenya. The questionnaires were submitted to fifty project managers, project coordinators, finance managers and M&E officers who represented ten NGOs. A mixed method approach was used in conducting the interviews. The choice was made in terms of geographic representation, diversity within the sectors, donor-dependence, and availability of data. The results indicated that resource planning was the best predictor of the project performance followed by budgeting, cost estimation and cost control. The model accounted to 74 percent of the variability in performance. The main problems were donor dependency, low technical skills and manual financial tracking systems. The respondents suggested the use of ERP systems and the introduction of regular capacity building initiatives that could aid in increasing cost management practices. The analysis shows that cost management particularly in resource planning and budgeting is the key to enhancing performance of NGO projects, making them sustainable and building confidence of donors. The study further suggested further research on NGOs Comparative studies. The study recommended that NGOs must consider a holistic method of project performance improvement and future organizational sustainability through the strengthening of cost management practices.

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LIST OF ABBREVIATIONS AND ACRONYMS

ABC	Activity-Based Costing
ADF	Augmented Dickey-Fuller test
AIDS	Acquired immunodeficiency syndrome
ANOVA	Analysis of Variance
CDFs	Cumulative Distribution Functions
EFA	Exploratory Factor Analysis
ERP	Enterprise Resource Planning
FM	Financial Management
FP	Financial Performance
GHRM	Green Human Resource Management
HIV	Human Immunodeficiency Virus
INGO	International Non-Governmental Organization
KURA	Kenya Urban Roads Authority's
M&E	Monitoring and Evaluation
NACOSTI	National Commission for Science, Technology and Innovation
NGO	Non-Governmental Organization
OLS	Ordinary Least Squares
PA-CCM	Post-Award Construction and Contract Management
PLS-SEM	Partial Least Squares Structural Equation Modelling
RBV	Resource-Based View
RII	Relative Importance Index
SPSS	Statistical Package for Social Sciences

OPERATIONAL DEFINITION OF KEY TERMS

Non- Governmental Organization	These are social organizations, often funded by third parties without value, are complex entities regulated by tax and public concerns, influenced by conflicting logics, and often seek to make environmental changes without receiving value (Breen & Cordery, 2022).
Non-Governmental Organizations Funded Projects	These are initiatives financially funded by government agencies and international donors, aim to promote social welfare, sustainable development, and advocacy, addressing human rights, environmental conservation, and community empowerment, while also contributing to the professionalization and institutional strengthening of NGO (Štremfelj et al., 2020).
NGO Coordination Board	The Kenyan NGO coordination board is a state corporation that assists the charitable sector in assisting the government in national development through regulatory processes, capacity development, and policy advisory (Lewis, 2023).

Cost management	These involves identifying and conserving resources, promoting conservation, and reducing costs to optimize commercial calculations based on enterprise activities (Kvasnytska, 2022).
Project Cost Estimation	This is the process of forecasting the financial and other resources needed to complete a project within defined scope.
Project Cost Budgeting	A cost budget is a financial tool that project managers and stakeholders use to analyze and track construction costs (Silva et. Al, 2020)
Project Cost Control	Cost control in construction projects refers to the process of managing and regulating the expenses associated with a construction project to ensure that it stays within Budget
Resource Planning	Resource Planning in Project Cost

	management is the strategic processes of pooling all resources by identifying, estimating and scheduling all the needed resources (Junussova et. Al, 2022).
Effective Cost Management	These practices are essential to NGOs' success and long-term viability since they maximize resource utilization, improve accountability, and allocate donor funds to meaningful service provision.
Hybridization	This is the integration of institutional logics, goals, and practices from non-profit, public, and for-profit sectors is crucial for effective management.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Efficient project cost management is crucial for the survival and prosperity of NGOs, especially in urban areas in Kenya due to resource-constrained environments and intricate procedures. Organizational performance is crucial for NGOs to effectively deliver programs and services amidst evolving challenges, as highlighted by Knežević (2024). NGOs, first recognized by the United Nations in 1945, as independent entities that operate independently from government institutions, providing services to bridge critical gaps in public and private sectors (Lewis, 2023).

NGOs are private organizations dedicated to reducing human suffering, promoting marginalized populations' interests, promoting environmental conservation, providing essential social services, and fostering community development (World Bank, 2002). They are globally are renowned for their agility, innovation, and responsiveness, which enable them to navigate complex environments and offer solutions where governments may struggle. Thus, this study investigated the impact of project cost management techniques on Kenyan NGOs' project outcomes, focusing on the methods used to control costs, their impact on financial sustainability, project delivery effectiveness, and overall organizational effectiveness in achieving goals.

Over the past decade, NGOs have experienced exponential growth, demonstrating their growing influence at both grassroots and international policy levels (Lan, 2018). They are increasingly recognized as strategic partners in sustainable development, contributing to various fields like health, education, environmental management, human rights advocacy, and emergency relief (Hassan et.al, 2019). Further, through their close connection to their communities, mobilize communities, deliver tailored interventions, and innovate

development strategies, complementing government efforts and sometimes acting as the "invisible arm" of the state, allowing greater flexibility and community participation (Milan, 2024).

The rise in NGO involvement is driven by state retrenchment in public service delivery, with governments outsourcing services to non-state actors. NGOs play a crucial role in addressing crises like pandemics, natural disasters, and armed conflicts, supporting vulnerable groups like street children and refugees in Kenya, such as the Nairobi bombing and Tana River conflict. Moreover, their contribution extends to vital development sectors like agriculture, health, water and sanitation, education, security, and environmental conservation.

The NGO sector's maturity has highlighted sustainability and financial accountability, with effective cost management being crucial for NGO longevity, efficient resource utilization, transparency, and donor confidence (Barbu, 2020). Cost management in developed countries like the UK encompasses all financial planning and control, including investment, budgeting, and human resource allocation (Abad-Segura et al., 2020). However, many NGOs in developing regions struggle to institutionalize these practices.

Kenya's NGOs face increasing sustainability concerns, with over half ceasing operations within a year of donor exit, indicating a fragile financial foundation. Studies reveal that inadequate cost forecasting, financial systems and regulatory oversight are causing delays in projects, impacting up to 40% of NGO initiatives (Mutheu & Waga, 2024). The vulnerability of the sector is heightened by contract terminations and funding hesitancy, emphasizing the need for strategic financial planning and cost management in local NGO environments (Jabril & Elayah, 2024).

NGOs are adopting marketization, incorporating business-like models like revenue-generating activities, entrepreneurial thinking, and performance-based management, to enhance financial sustainability (Mikołajczak, 2019). Critics warn that overemphasis on market-driven logic

could undermine NGOs' social missions, undermine community trust, and lead to mission drift (Suykens, Verschuere & De Rynck, 2016). The shift towards corporate behavior and organizational rationalization signifies significant changes in governance and operational philosophies (Joachim & Schneiker, 2018). Thus, NGOs in Kenya must balance efficiency with their social objectives to sustain their contributions to national development goals and community well-being, despite market-oriented strategies offering financial resilience. Strengthening cost management practices within this framework is crucial.

1.1.1 Concept of Cost Management Practices

Cost management is crucial for organizations, including NGOs, to ensure efficiency, accountability, and value for money. It involves planning, estimating, allocating, monitoring, and controlling project expenditures to achieve social impact, relying on donor funding (Kvasnytska, 2022). (Alu, 2023) highlights the importance of cost management in maximizing resource use, conserving them, and minimizing waste to ensure financial stability and long-term sustainability. These techniques are vital for profitability in commercial organizations and are crucial for NGOs functioning under stringent donor limitations, where cost overruns can jeopardize credibility, limit future financing, or lead to project cessation.

Modern cost management strategies, including Activity-Based Costing, Strategic Cost Management, and Lean Management, aim to enhance cost estimation precision, continuous spending control, and adaptive resource planning (Chen, 2025). According to Alu (2023), structured cost management practices help organizations anticipate costs, mitigate risks, and improve operational efficiency. These practices enable financial agility in the face of economic volatility and resource constraints. In donor-funded NGOs, this leads to accurate budget forecasting, timely resource allocation, and improved donor credibility.

This financial discipline enhances internal accountability and contributes to project outcomes by ensuring critical activities are adequately funded and implemented within planned timeframes. Furthermore, Alu and Ogedengbe (2013) emphasize the strategic role of cost management in NGOs, ensuring limited funds are allocated to impactful project activities while minimizing administrative overheads and non-essential spending, aligning financial decisions with organizational goals. Thus, strategic cost control allows NGOs to optimize output while ensuring donor compliance requirements.

Kongsong et al. (2021) assert that cost management is not just a technical function but also a strategic capability. NGOs can gain a competitive edge by integrating planning, implementation, and monitoring processes, attracting donor support, and delivering high-quality, scalable, and sustainable interventions. Cost management practices like budget variance analysis, earned value management (EVM), and expenditure tracking are crucial in donor-funded environments where transparency and accountability are unavoidable. Overall, cost management is a comprehensive approach that enhances project performance by enhancing financial planning, ensuring resource efficiency, and mitigating project failure risk. The study revealed that cost management indicators, including accuracy in estimation, discipline in budgeting, and control mechanisms, significantly impact project performance in terms of efficiency, goal achievement, and sustainability. The study underscored the necessity for NGOs to incorporate robust cost management systems into their strategic and operational frameworks.

1.1.2 The project performance of NGO funded construction projects in Kenya

Kenyan NGOs have carried out various projects, and their success has been evaluated using particular metrics that gauge their efficacy and effect. Improvements in community involvement, educational accessibility, economic empowerment, and health outcomes are

frequently included in the metrics. Significant gains in economic security, psychosocial well-being, and health outcomes were demonstrated in a study on HIV intervention aimed at single mothers in Kenya (Fisher et.al, 2023).

Similarly, when backed by strong monitoring and evaluation systems that guarantee accountability, track progress, and inform adaptive strategies, child protection and education initiatives have demonstrated favorable results (Njiru & Thoronjo, 2023). Meeting project goals like on-time delivery, budget adherence, and stakeholder satisfaction are examples of NGOs' success metrics. According to research, project performance is improved by participatory management and evaluation techniques that include community members in the planning and execution of projects (Kimote & Muchai, 2024).

Furthermore, improved project outcomes, particularly in the fields of education and health, have been associated with the incorporation of monitoring and evaluation plans and tools (Warutere & Mutundu, 2022). Despite the successes, Kenyan non-governmental organisations continue to face many challenges that impair the efficacy of their initiatives. The primary barrier is the lack of adequate financial and human resources. In order to overcome resource and competency constraints and ensure successful implementation and outcome tracking, for instance, the study by Kuchio (2023) on Plan International's health projects in Kenya emphasises the necessity of strong monitoring and evaluation systems. In Homa Bay and Kiambu counties, the persistent problem of a shortage of qualified personnel and budgetary limitations has also been noted (Ogise & Gachengo, 2023).

Furthermore, research shows that low stakeholder participation can lead to project delays and diminished impact, making it a major challenge, particularly during planning and implementation (Bosibori & Otieno, 2021). Furthermore, organizational and cultural barriers, such as a lack of evaluation culture (Wahome & Awiti, 2024); impede the adoption of novel evaluation techniques like outcome harvesting.

Participatory monitoring and evaluation (M&E) is a popular evaluation technique used by NGOs in Kenya to gauge the effectiveness and effect of their projects. The strategy has produced more inclusive and significant results in HIV/AIDS, child protection, and education projects (Fisher et al., 2023; Brigid & Barasa, 2024; Mutua & PhD, 2024).

Moreover, outcome harvesting is a popular technique that seeks to recognize and record projects' intended as well as unexpected results. This approach has been shown to be very successful in illustrating the effects of projects in dynamic and complex settings (Wahome & Awiti, 2024). In order to track project progress and determine whether goals have been met, NGOs are also using techniques such as baseline surveys, mid-term assessments, and end-line evaluations (Njiru & Thoronjo, 2023).

The number and effect of NGOs have increased dramatically over the last ten years, and they now advise governments, international organisations, and the UN in addition to operating at the grassroots level (Lan 2018). In order to alleviate community suffering and meet social needs, NGOs whether domestic or foreign play a vital role in society and must be legally recognized. Often referred to as the government's "invisible arm," these organisations offer crucial services and interventions that improve public welfare in novel and adaptable ways (Milan, 2024).

By tackling social, economic, and environmental issues and frequently working in tandem with government initiatives, NGOs play a critical role in advancing sustainable development. To mobilize communities, customize interventions, close gaps in government programs, and create novel development strategies, they leverage grassroots connections (Hamzah et. Al, 2021). Additionally, NGOs are essential in a number of fields, such as public awareness, policy analysis, human rights advocacy, emergency response, democratic governance, conflict resolution, cultural preservation, environmental activism, and policy analysis (Hassan et. Al, 2019).

The rise in interest in NGOs' role in service delivery is attributed to the enforced rollback of state services and their perceived advantages such as flexibility, innovation capacity, and willingness to experiment with alternative methods (Desai, 2024). Their rapid adoption of new programs and strong community linkages encourage active participation in program design and implementation, promoting self-reliance and long-term sustainability (Hassan, Lee & Mokhtar, 2020).

Additionally, they play a crucial role in emergency response, natural disaster response, and pandemic relief. They provide timely relief and support to affected communities during crises like the Nairobi bomb blast and Tana River clashes. They also address pandemics by rehabilitating street children, caring for refugees, and providing famine relief. Further, NGOs promote development in various sectors like agriculture, health, religion, security, environment, education, water, sanitation, and natural resource management, while also enhancing democracy and governance through civic education and human rights advocacy (Desai, 2024).

Effective cost management practices in NGOs are crucial for their global success and sustainability. They optimize resource use; enhance accountability, and direct donor funds towards impactful service delivery, ensuring the organization's overall success and sustainability (Barbu, 2020). Cost management in the UK encompasses financial management, including sources, uses, and implications of money for investments, production, marketing, and human resources, ensuring company effectiveness (Abad-Segura et al., 2020).

Over half of Kenya's NGOs face sustainability issues, often failing within a year after donor support is withdrawn (Afande, 2013). However, some NGOs have ended contracts; others are hesitant to extend them due to uncertainty about long-term commitments and sustainability (Jabril & Elayah, 2024). Moreover, poor financial management, including inadequate budget forecasts and insufficient regulatory frameworks, is causing 40% of Kenyan NGOs' projects to

be behind schedule, highlighting the significant impact of ineffective cost management practices (Mutheu & Waga, 2024).

NGOs are adopting marketization, integrating entrepreneurial strategies and values into their operations, driven by financial sustainability and revenue generation. Studies reveal that NGOs operating as social enterprises have distinct operational differences compared to those without commercial activities (Mikołajczak, 2019). However, Hybridization stimulates apprehensions about mission volatility and potential dilution of social objectives as organizations balance profit-oriented practices with core missions (Suykens, Verschuere, & De Rynck, 2016). Furthermore, the concept of 'behaving like a firm' encompasses marketization, corporatization, and organizational rationalization, indicating a significant shift in NGO mindsets and governance structures (Joachim & Schneiker, 2018). Thus, NGOs should evaluate the potential effect of business-oriented strategies on their social objectives and the trust they maintain within local communities, despite potential efficiency gains

1.2 Statement of the Problem

NGOs play a crucial role in addressing social needs by providing essential services like education, health, water, and sanitation, especially in regions with limited government capacity. NGOs in Kenya play a crucial role in enhancing public sector efforts by addressing underserved communities and responding to emergencies. However, the effectiveness and continued operation of these organizations are being threatened by decreasing donor support, increased funding competition, and shifting donor priorities. The NGOs and Charitable Organizations Market Report (2024) indicates that donors are shifting resources to new regions and global issues, leading to project suspensions, delayed services, and even organizational closures.

The current shift has resulted in significant project delays, premature terminations, and failure to meet service delivery objectives. Afande (2013) study revealed that over 50% of Kenyan NGOs' projects collapse within a year of donor withdrawal, while Mutheu and Waga (2024) discovered that 40% of ongoing projects face delays due to inadequate cost management and insufficient resource allocation. Many NGOs face financial uncertainty, despite their social significance, which hinders their ability to maintain operations, resulting in compromised service delivery and unmet community needs. In spite of the critical requirement for sustainability in NGO operations, there is little study on how cost management practices affect project sustainability.

Existing literature has primarily focused on cost control in the commercial and governmental sectors, often disregarding the nonprofit environment, where financial management is similarly significant but fundamentally different. There is little empirical proof on how NGOs may institutionalize good cost management to adapt to variable funding situations, particularly in low-income countries like Kenya. Additionally, the suspension of international funding, including USAID programs, due to geopolitical shifts has heightened the vulnerability of NGOs to external shocks. In this light, the present study sought to optimize cost management practices for NGOs operating in Kenya to enhance financial sustainability and ensure service continuity.

With regard to the contextual gap, the available literature tends to make generalizations regarding NGO performance or emphasize the governance and sustainability at the organizational level, but fails to isolate the effect of particular cost-management practices on the project-level results in the Kenyan environment. As the sector is financially large, lacks accountability, and is under donor scrutiny, there is an urgent need to have empirical evidence on which best practices contribute to project performance the most. This research fills that gap

by examining how cost estimation, budgeting, resource planning and cost control influence the performance of NGO-funded projects in Kenya.

1.3 Research Objectives

1.3.1 General Objective

The study investigated the effect of project cost management practices on the performance of NGOs funded construction projects in Kenya.

1.3.2 Specific Objectives

i. To investigates the effect of project cost estimation practices on the performance of NGO-funded construction projects in Kenya.
ii. To assess the effect of project cost budgeting measures on the performance of NGO-funded construction projects in Kenya.
iii. To evaluate the effectiveness of cost control mechanisms in enhancing project outcomes for NGOs funded construction projects in Kenya.
iv. To explore the effect of resource planning practices on the performance of NGO-funded construction projects in Kenya.

1.4 Hypothesis Testing

i. H01: Cost estimation practices have no significant effect on project performance of NGO-funded construction projects in Kenya.
ii. H02: Budgeting practices have no significant effect on project performance of NGO-funded construction projects in Kenya.
iii. H03: Resource planning practices have no significant effect on project performance of NGO-funded construction projects in Kenya.
iv. H04: Cost control practices have no significant effect on project performance of NGO-funded construction projects in Kenya.

1.5 Significance of the study

This study significantly contributed to the growing knowledge in project management, particularly within the not-for-profit sector. The study explored the effect of project cost management practices on the performance of NGO-funded projects in Kenya, highlighting the need for better understanding of financial planning's influence on resource-constrained projects. It was also based on management theories like Agency Theory, emphasizing accountability and oversight in donor fund management, and the Resource-Based View, focusing on strategic internal capabilities utilization for performance goals. Further, it validated the relevance of these theories by applying them to NGOs, expanding their applicability beyond the corporate sector.

The findings will significantly benefit NGO managers and project officers by offering evidence-based strategies to improve financial efficiency, project planning, and overall performance. The study will benefit donor agencies, policymakers, and regulators in Kenya, as it ensures effective resource utilization and strengthens financial governance frameworks in the nonprofit sector. Additionally, the study's societal impact was significant as it can enhance project outcomes and sustainable service delivery, thereby enhancing the quality of life for the communities targeted by NGO interventions.

Moreover, it highlighted the significance of identifying key beneficiaries such as NGO practitioners, funding agencies, development partners, policymakers, and academic researchers. The study laid the foundation for future research in cost management, performance evaluation, and project sustainability in non-governmental organizations, especially in emerging and developing economies

1.6 Scope and delimitation of the study

The study investigated how project cost management practices affect the outcomes of projects funded by NGOs in Kenya. Explicitly, it explored the effect of cost management components such as estimation practices, control measures, monitoring mechanisms, and resource planning strategies on project outcomes in the NGO sector. Further, it focused on NGO-funded projects in Kenya, specifically those focusing on development initiatives like construction of health facilities, Green houses, schools and community centres.

Kenya has around 110 tier I registered NGOs, as per the Non-Governmental Organizations Coordination Board. The study used purposive sampling to study 50 project managers from ten-selected tier I NGOs, Save the Children, World Vision International, UNICEF, The Aga Khan Foundation, M-Pesa Foundation, Wings to Fly, Amref Health Africa, Mercy Corps, Kenya Red Cross Society and Nanyuki Children Charitable Trust, each with three to five participants. The organizations were chosen based on their donor-funded operations in Kenya, sectoral diversity, and geographical representation. The use of sampling approach was to ensure data reliability and efficiency, focusing on selected counties where NGOs implement diverse projects, influenced by funding sources and intervention areas.

1.7 Conceptual framework

This study explored financial management concepts and project cost control dimensions in the NGO sector, focusing on core dimensions. Project cost estimation, budgeting, cost control, and resource planning are finance-driven practices that directly influence the forecasting, allocation, monitoring, and utilization of project funds. The foundation for developing realistic budgets is cost estimation, which precisely forecasts financial requirements. To match financial plans with project objectives and donor requirements, cost budgeting incorporates risk assessment, allocation effectiveness, and variance analysis. Earned value management and cost

tracking are used in cost control to keep an eye on spending, guarantee accountability, and reduce waste. Because it guarantees the best possible use of the resources at hand while staying within financial constraints, resource planning is essential for financial efficiency.

These practices, which emphasize sustainability, financial efficiency, and the achievement of project outcomes, have a major effect on the project performance of NGO-funded projects. As shown in Figure 1.1, the financial relationship between these variables indicated how disciplined cost management enhances project success by lowering risks, optimizing resource use, and raising value for money.

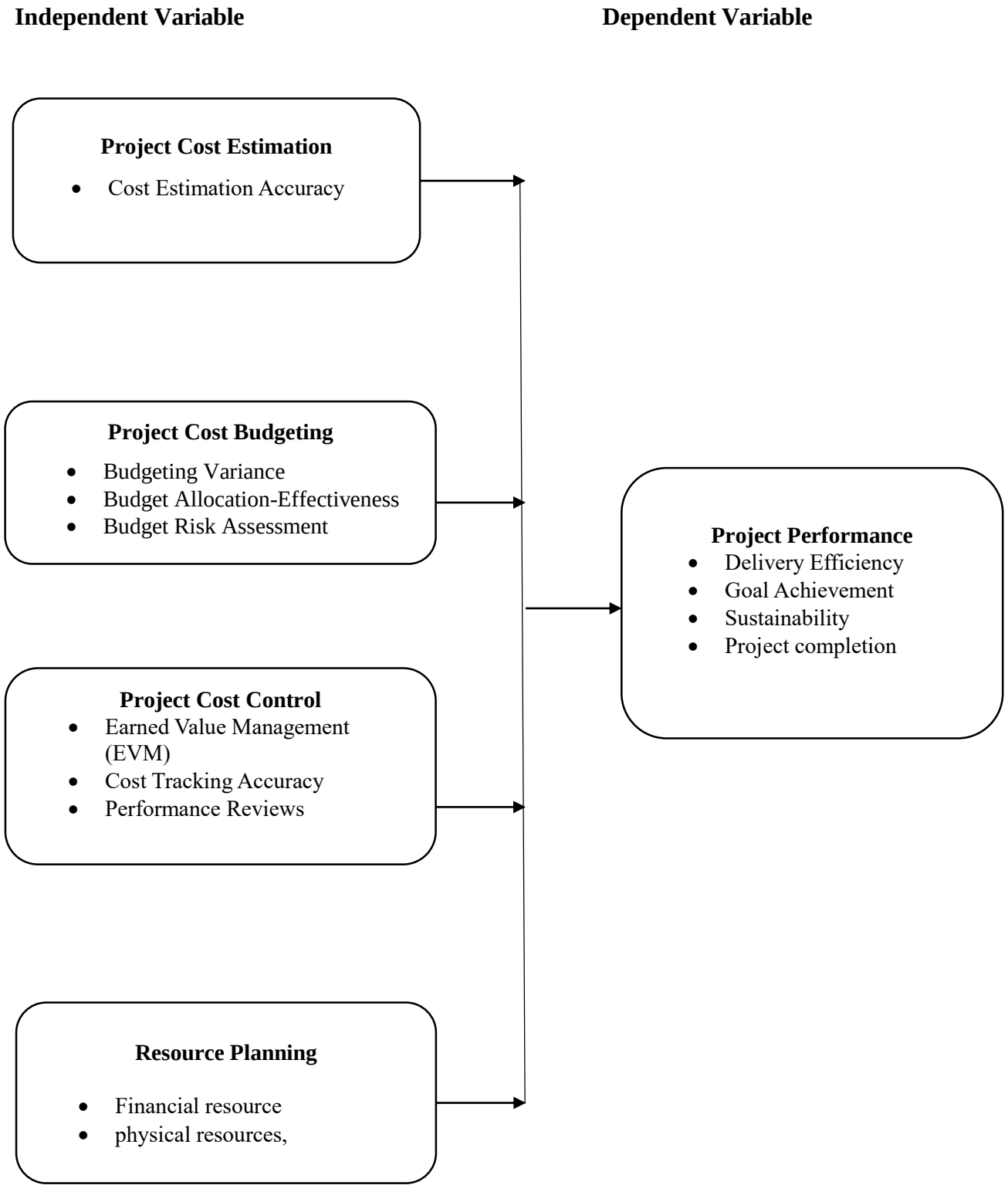


Figure 1: Conceptual Framework

Source: Author, 2024

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

With an emphasis on significant theories, empirical data, and conceptual connections between managerial decisions and financial performance, this chapter examined how business owners' management choices affect project performance. Additionally, it critically evaluated various theoretical frameworks that underpinned the research variables. Further, it included a thorough analysis of literature theories and an empirical review of research pertaining to various study objectives. Lastly, the chapter highlighted gaps in research on project cost management practices in NGO settings, including limited empirical studies, insufficient consideration of local factors like policy environments and funding structures, and insufficient integration between financial management theories and project performance outcomes, emphasizing the need for further research.

2.2 Review of Theories

The study examined how project cost management techniques affect the performance of NGO-funded projects in Kenya using four theories: Agency Theory, Resource-Based View, Goal-Setting Theory, and Theory of Constraints. It focused on motivation, system coordination, resource utilization, and stakeholder accountability. Along with analysing each theory's fundamental presumptions, the study assessed each theory's advantages and disadvantages in light of the current investigation.

2.2.1 Agency Theory

Agency theory, developed by Jensen and Meckling (1976), highlighted potential conflicts of interest between principals (donors) and agents (project managers), highlighting the importance of information asymmetry. Agents may not always prioritize the principals'

interests, resulting in inefficiencies and increased agency costs (Payne & Petrenko, 2019). The theory is crucial in NGO-funded projects, as donors expect accountability, transparency, and efficient use of funds. However, project managers may prioritize short-term interests or misallocate resources. It emphasizes the importance of sound financial practices like accurate cost estimation, realistic budgeting, effective cost control, and strategic resource planning to reduce agency risks and improve project performance.

Modern literature shows that agency relations are becoming increasingly important in the development projects. According to Ebrahim (2019), the interactions between donors and NGOs are currently facing harsher budgetary regulations to limit the risk of misrepresentation and resource misappropriation. On the same note, Omondi and Njuguna (2022) discovered that the participatory budgeting mechanism and donor oversight mechanisms in Kenyan NGOs significantly increased accountability of the project and performance outcomes. These results substantiate the argument that effective budgeting processes are alignment instruments that diminish the risk of agency problems.

Nuansari and Ratri (2022) emphasize the importance of performance monitoring tools like earned value analysis and variance tracking in finance and governance to ensure donor compliance. The Theory, criticized for oversimplifying managerial motivations, is argued to prioritize self-interest over altruism and intrinsic motivation (Voleti, 2024). Further, (Yadav, 2022) critiques the study's arguments that its control mechanisms are costly and ineffective, that it fails to consider the broader social context, and that it is too narrow in its focus on specific types of principal-agent relationships. This theory helps in the allocation of resources within the firm, coordination across subunits, pricing, costing, compensation, and incentives (Fitriani, 2019). Therefore, this theory is heavily applicable when it comes to the objective of resource planning and therefore making it relevant in this study.

2.2.2 Resource-Based View (RBV)

The RBV, proposed by Barney (1991), holds that an organization's valuable, unique, inimitable, and non-substitutable internal resources are crucial for gaining a long-term competitive advantage. It offers a strategic approach for NGOs to evaluate the impact of internal capabilities on project performance, particularly under financial constraints. This study suggests that RBV aids in the use of cost estimation and budgeting as internal planning tools to enhance financial forecasting and resource efficiency. Similarly, cost control mechanisms and resource planning practices are crucial for an organization to efficiently allocate resources, minimize waste, and align spending with project objectives. These practices enhance financial stewardship and foster trust among donors and stakeholders.

Recent research builds upon the RBV to project management by showing that organizations that possess robust planning and mobilization capabilities perform better than organizations that base their operations on ad hoc practices. Akhavan and Zahedi (2020) established that the effectiveness and sustainability of development projects was enhanced through structured resource allocation. Equally, Karanja and Gitau (2023) determined that Kenyan NGOs that used systematic approaches in scheduling their human resources, procurement, and material planning demonstrated greater project completion and satisfaction among their beneficiaries. The findings support the rationale of the RBV that distinctive resource planning capabilities can produce high-quality results despite the scarcity of financial resources.

Significantly, RBV is also in line with the pressures of donor accountability. Donors are also focusing more on value-for-money, i.e. NGOs need to show that funds are not simply being channeled but rather maximized. Good planning will help in aligning the project inputs with the expectations of the donors and the project objectives to reduce wastages and enhance credibility among the stakeholders. This is what makes resource planning not only an

operational requirement but also a strategic strength that helps maintain donor relationships. In this research, RBV serves to act as the theoretical framework to understand how the internal strengths of NGOs in resource planning, in terms of proper timing of delivery, effective procurement, and rational distribution, can be converted into performance indicators, namely, efficiency of delivery, sustainability, and completion rate.

2.2.3 Theory of Constraints (TOC)

The Theory of Constraints (TOC), established by Goldratt in 1984, asserts that every system's performance is influenced by at least one constraint. TOC aids organizations in identifying budget constraints, delayed funding, and ineffective resource allocation in NGO-funded projects, enabling targeted interventions to enhance throughput and effectiveness. The theory is crucial in project cost estimation, budgeting, cost control, and resource planning by identifying under-forecasting risks, highlighting resource allocation priorities, managing variance, and efficiently sequencing tasks and deploying resources. These applications are crucial for enhancing project performance in resource-limited NGO environments.

However, Miguel et al. (2010) assert that TOC often offers feasible solutions, but may not always provide optimal solutions, particularly in complex project environments. Additionally, Rota and Souza (2021) criticize its short-term focus and lack of robustness for long-term strategic planning. Moreover, Hernandez et al. (2024) warn that overreliance on the Theory of Constraints may lead to overlooking conventional financial management principles for long-term stability and accountability. However, TOC is a pragmatic, results-driven framework that is beneficial for NGOs dealing with funding uncertainty and operational inefficiencies by identifying and addressing critical limiting factors within project systems.

2.2.4 Goal-Setting Theory

Goal-Setting Theory, advanced by Locke and Latham (1990), suggests that clear, specific, and challenging goals enhance performance by mobilizing effort, directing attention, and sustaining persistence. Goals serve as cognitive benchmarks, defining desired end state and required commitment intensity. NGO-funded projects use financial goals like cost estimation, budgeting, cost control, and resource planning to measure progress and take corrective action. Additionally, using explicit financial targets in project cost estimation enhances forecast accuracy by defining resource needs and time frames, while in cost budgeting, goals promote disciplined allocation and transparency. Cost control involves setting predetermined variance thresholds and regularly monitoring earned-value metrics to intervene promptly when actual expenditures deviate from the plan. Finally, goal-driven resource planning ensures the timely deployment of financial, human, and material resources, thereby maintaining project momentum and preventing resource idling.

The study's dependent variable, project performance, is directly influenced by goal-oriented practices, which include timeliness, cost-effectiveness, and stakeholder satisfaction. Locke and Latham's (2002) research indicates that setting goals leads to improved performance through the formulation of strategies and sustained effort, whereas Heslin et.al (2008) assert that goal clarity and feedback enhance accountability in intricate projects. Höchli et.al (2018) emphasize the importance of integrating lower-level project goals within broader organizational missions for NGOs to achieve sustainable outcomes and build donor confidence.

The theory is not without criticism. Swann, Rentfrow, and Guinn (2020) suggest that performance-oriented goals may demotivate individuals with low self-efficacy or uncertain contexts, suggesting a complementary focus on learning goals. Further, Kwasnicka,

Dombrowski, and White (2020) assert that rigid goal structures can hinder adaptability in dynamic environments, potentially causing stress or disengagement.

This study explored how Goal-Setting Theory improves the effectiveness and accountability of NGO-funded projects in Kenya through explicit, measurable financial objectives in cost budgeting. Finally, NGOs can enhance project performance by aligning staff effort with donor expectations, reducing financial variance, and delivering projects on time, within budget, and within scope.

2.3 Empirical Review of Literature

In this section, literature from previous studies was critically examined and presented. The review covered the methodologies adopted by other studies, and empirical findings. The section was further presented according to the study variables.

2.3.1 Influence of Project Cost Estimation on Project Performance

Fazil et.al (2023) explored the influence of organizational controls on cost estimation performance in Malaysian construction projects The study evaluated the impact of organizational controls on cost estimation performance and project complexity, involving 152 Malaysian construction firms, using Partial Least Squares Structural Equation Modelling (PLS-SEM) analysis. The findings demonstrated that all organizational control types significantly impact cost estimation performance, with only three significant moderating effects of project complexity.

The study suggested that implementing appropriate organizational control modes can enhance cost estimation performance and project success, particularly when these controls are tailored to the project's complexity. The study utilized Organizational Control Theory to analyze project complexity and cost estimation performance, while examines the impact of cost estimation on donor-funded projects' effectiveness, efficiency, and sustainability in the non-profit sector. Additionally, the study used a quantitative, SEM-based approach with 152 respondents, while

this study used primary data, cross-sectional research design, diagnostic tests, and a purposive sample of 50 project managers, project coordinators, Monitoring and Evaluation Officers, donor representatives and other involved personnel.

The study of Nakhleh (2019) analyzed the correlation between time estimation, cost estimation, and project performance. The study surveyed 67 Qatari project sponsors, managers, and coordinators using the iron triangle or triple constraints theoretical framework. Participants answered 18 questions using the project implementation profile instrument, and a standard multiple regression analysis was used to evaluate the correlation between time and cost estimation and project performance. The findings revealed a significant linear relationship between project variables, rejecting the null hypothesis of no relationship. This provides researchers and practitioners with micro level insights into project factors influencing performance, offering valuable insights for improving performance. However, the study explored general project environments, while the current study utilized primary data and was guided by Agency Theory and Resource-Based View. Additionally, it focuses on the impact of internal cost management practices on the efficiency, effectiveness, and sustainability of NGOs funded projects in Kenya.

Further, the study employed diagnostic tests and purposive sampling to target project coordinators, project managers, and M&E personnel from the ten donor-funded organizations. Unlike the previous study, which measured performance broadly, the current study focused on cost estimation as a key factor, excluding time estimation and other variables, and restricts its analysis to NGO-funded initiatives.

Abdikani and Ouma (2024) examined the impact of budgetary allocation on project performance among NGOs in Mogadishu, Somalia, using a descriptive research design. The study used questionnaires and descriptive and inferential statistics to analyze data, revealing that effective budgetary control significantly improves decision-making and project

performance. Additionally, the study established a significant positive correlation between budgetary allocation and project performance, with a regression coefficient of $\beta = 0.821$ indicating an 82.1% improvement in project performance. Whereas the study investigated the effect of budgetary allocation on project performance among NGOs in Somalia using primary data and stratified random sampling, the current study takes a broader and more nuanced methodology.

The study focused on project cost estimation, utilizing primary data, agency theory, and resource-based view to comprehend the impact of internal cost management on performance. This study employed diagnostic tests for model robustness and use a purposive sample of NGOs for diversity and data accessibility, offering contextual relevance, while the prior study's use of a single variable and reliance on primary data may limit its applicability in complex or diverse NGO environments. Finally, the study's findings are not universally applicable due to its geographical focus on Mogadishu, reliance on primary data, and sample size that may not represent the full diversity of NGOs, and contextual differences between Somalia and Kenya.

Namaulula and Nyaboga (2024) examined the impact of sustainable project management practices on the performance of NGOs in Turkana West Sub-County, Kenya, focusing on project communication, planning, and stakeholder involvement. The study utilized a descriptive survey design to assess the impact of project communication practices, project planning practices, and stakeholder involvement on the performance of NGO projects in the region, aiming to determine the extent of these practices' influence. The study surveyed 250 NGO project participants, with a purposive sample of 75 respondents selected. Data was collected through questionnaires and secondary sources like journals, textbooks, and online materials for analysis and discussion.

The study emphasizes the significance of sustainable project management practices, including communication, planning, and stakeholder involvement, in improving the performance of

NGO projects. In contrast, this study explored the impact of project cost estimation on donor-funded NGOs' performance, focusing on cost management practices during budgeting and implementation phases. Additionally, the study focused on general project management practices, while this focuses on project cost estimation, offering a specialized perspective on project performance.

Furthermore, this study used Agency Theory and the Resource-Based View to examine the impact of internal cost management decisions on project effectiveness and sustainability, providing a more specific theoretical lens compared to the prior study. Moreover, this study emphasized finance officers and M&E personnel's role in financial management and cost control, while the previous study focuses on project communication and stakeholder involvement. Lastly, this study focused on cost estimation practices among 50 project managers, finance officers, and M&E personnel from ten NGOs, providing a more in-depth understanding compared to the larger sample of 75 participants in the prior study.

The study of Bosibori and Otieno (2021) examined the impact of project management practices on the execution of environmental NGO projects in Kwale County, Kenya. The study examined the influence of project management practices on the execution of environmental NGO projects, including stakeholder engagement, design, and team competence, and monitoring and evaluation. The researchers used a descriptive research design, targeting a population of 3,486 and selecting a purposive sample of 90 respondents, collecting data through questionnaires and analyzing it using SPSS.

The findings instituted that all factors studied were prevalent in environmental NGO projects, with high average scores for stakeholders' engagement, project design, team competence, monitoring and evaluation, and the project implementation having a mean of 4.35. Further, the Chi-Square test showed that all four factors significantly influenced project implementation, with p-values below 0.05. Moreover, the study revealed that stakeholder engagement

significantly boosts project implementation success by 77%, followed by project team competence at 72%, monitoring and evaluation at 63%, and project planning at 47%.

However, the study examined the impact of project management practices on environmental NGO project implementation, but do not specifically address financial planning elements like cost estimation. In contrast, this study focused on project cost estimation as a crucial factor affecting NGO project performance, using specialized analysis. Moreover, this study employed a strategically selected sample of ten prominent NGOs, enhancing sectoral and geographical diversity, while the previous study focused on a single organization within a specific county. Additionally, this study introduced theoretical grounding through Agency Theory and the Resource-Based View, a departure from the earlier study, and uses diagnostic tests to validate results.

Muteti and Mutiso (2020) investigated the impact of cost management practices on project performance among Kenyan NGOs, focusing on budgeting, cost tracking, and cost control mechanisms. The study utilized a descriptive research design and a census approach to sample 168 registered NGOs listed in the 2018 NGO Coordination Board Directory. The population was below 200, so a census approach was used to include all organizations in the sampling frame. The study utilized self-administered questionnaires to gather data from project managers, finance officers, and M&E personnel involved in cost planning and implementation. The study, using SPSS and descriptive and inferential statistics, found a 71% response rate to a significant positive relationship between cost management practices and project performance, especially in timeliness, resource utilization, and stakeholder satisfaction. The study established that efficient cost management is crucial for the successful execution of donor-funded initiatives. Finally, the study used a census approach to study 168 registered NGOs in Kenya, enhancing generalizability but lacking sector-specific depth and utilizing secondary data or theoretical frameworks for contextualization.

2.3.2 Influence of Project Cost Budgeting on Project Performance

Datta et.al (2023) conducted a study to identify critical project management success factors for a sustainable construction industry in Bangladesh, identifying 41 major problematic factors through a detailed questionnaire survey among experts and stakeholders. The 41 critical factors were ranked using the Relative Importance Index (RII) and categorized into five groups using a Likert scale. The analysis of stakeholders' opinions alongside critical factors effectively eliminated risks and uncertainties in the industry. The findings exhibited that construction projects are impacted by cost overruns, traffic congestion, low wages, slow payments, and owners' financial issues. These factors are categorized into financial management, monitoring and feedback, competency management, communication and coordination management, and risk management. Ultimately, stakeholders suggested that modern tools and techniques could address critical issues and promote sustainability in Bangladesh's construction sector.

The study highlights a research gap in understanding the impact of cost budgeting on project outcomes in non-profit environments with diverse funding structures and stakeholder demands. In addition, this study contrasts the prior study's focus on a profit-driven, infrastructure-focused industry with a non-profit sector that evaluates project performance based on effectiveness, efficiency, and sustainability. This study also employs secondary and primary data, diagnostic tests, and Agency Theory and the Resource-Based View, distinct from the previous study's frameworks. Finally, the current employs secondary and primary data, diagnostic tests, and Agency Theory, unlike the previous study's frameworks. It also addresses cost budgeting in donor accountability and project lifecycle management.

Shafiq et.al (2022) conducted a study on the impact of management integration on project performance, highlighting its significant contribution to project success. The study aimed to evaluate the significance of various management integration factors and their correlation with project performance. The data was gathered through a standardized survey questionnaire and

convenience sampling method. The study found a positive correlation between company integration with customers, suggesting that effectively managing integration factors improves project performance and increases the likelihood of project success. This study focuses on NGOs in donor-funded environments with sectoral and geographical diversity, while the previous study focuses on integration factors across unspecified project types. Additionally, This study, unlike the previous study's general performance perspective, focused on cost budgeting as a project management dimension, analyzing its impact on effectiveness, efficiency, and sustainability using both Agency Theory and the Resource-Based View. Moreover, this study employed purposive sampling to gather primary and secondary data from project-experienced personnel, enhancing the reliability of insights, unlike the study's convenience sampling.

Chadee et.al (2022) conducted a study to identify the primary factors contributing to cost overruns in public sector social housing programs. The factors were categorized under leading root causes and their severity was evaluated from the perspectives of primary stakeholders. A pilot survey of Trinidadian and Jamaican public sector housing experts identified 41 critical factors and grouped them under four root causes from 123 factors in the literature. A questionnaire survey was conducted, involving 105 professionals with at least five years of experience in various phases of public housing delivery. The relative importance index (RII) approach was used to assess, rank, and categorize the severity of these factors. The findings reveal that political factors are the primary cause of cost overruns, with the top five factors being politically aligned contractors, inadequate contract design, and cost underestimation by project actors, partisan management, and strategic misrepresentation. Additionally, the findings, exclusive to Small Island Developing States (SIDS), are instrumental in reshaping contemporary project management practices, which often prioritize technical factors.

This study, unlike the previous one, focused on internal project cost budgeting practices and their impact on project efficiency, effectiveness, and sustainability within NGOs. Additionally, this research applied primary data, cross-sectional research design, and diagnostic tests, based on Agency Theory and the Resource-Based View, unlike the prior study use of stakeholder surveys and the relative importance index. The study highlights the significant impact of political influence on cost overruns in public sector projects in SIDS, but there is a lack of research on donor-funded NGO projects in Kenya. Furthermore, the current study overlooked governance and political interference aspects, indicating the need for future research to consider external institutional and governance risks in evaluating cost management practices in NGO-funded initiatives.

The study of Egboga et.al (2022) examined the impact of cost estimation on project performance in Abuja-based construction firms. The study aimed to determine the effects of bottom-up and parametric cost estimating on work scope realization, time/schedule performance, and cost performance. The study utilized a descriptive research design and a structured questionnaire for data collection, with purposive sampling used to select respondents. The data was analyzed using descriptive statistics like mean and percentages, as well as inferential statistics like correlation and multiple regression analysis. The study found that both bottom-up and parametric estimating techniques significantly affect project scope, time, and cost performance.

The study suggests that project managers should understand the connection between estimating methods and project outcomes, emphasize the importance of modern project management tools, and recommend intensive training on cost estimation techniques and appropriate adoption of bottom-up and parametric methods for effective project execution. This study, unlike the previous one focused on private construction sector cost estimating, explored cost budgeting's impact across various NGOs using primary data, and theoretical frameworks

like Agency Theory and Resource-Based View. In addition, the current study incorporated robustness diagnostic tests, a multi-role stakeholder approach, contrasting with the previous study.

Additionally, the current research evaluates budgeting as a strategic function influencing NGO project performance, sustainability, and donor accountability, contrasting the previous study's focus on estimation techniques' impact.

The study by Mutikanga et.al (2022) identifies significant post-award construction and contract management (PA-CCM) challenges in EPC projects in developing countries, using Uganda's two major infrastructure hydropower projects as case studies. Additionally, it initiated with a systematic literature review to identify challenges, followed by data collection through project documentation reviews, site visits, and semi-structured interviews. Furthermore, it identified 73 PA-CCM challenges in seven thematic areas and 14 lessons learned to help stakeholders mitigate potential issues and enhance EPC project performance.

These findings are crucial for construction practitioners and scholars developing effective mitigation strategies for EPC contracting challenges in developing countries. However, the study focuses on infrastructure-scale projects in the public sector, while this study examines budgeting practices within donor-funded NGOs using primary data, cross-sectional design statistics, and diagnostic tests. Additionally, it utilized theoretical frameworks like Agency Theory and Resource-Based View to analyze internal cost decision-making processes affecting project performance in the non-profit sector.

The current study evaluated cost budgeting's strategic influence across multiple NGO sectors, addressing the research gap due to sectoral and methodological differences. Thus, comparative studies were needed to examine whether contract and budgeting challenges in infrastructure projects are similar to those in NGOs-driven development initiatives in similar developing country contexts.

Chepkwony et.al (2023) examined the correlation between project cost management and the performance of National Housing Corporation projects in all 47 Kenyan counties, utilizing General Systems Theory. The study utilized both primary and secondary data, analyzing 206 respondents from 425 projects and using SPSS for inferential and descriptive statistics. The study utilized both primary and secondary data, analyzing 206 respondents from 425 projects and using SPSS for inferential and descriptive statistics. However, the study comprehensively explores project cost management, encompassing all aspects of the process, not just budgeting. In contrast, the current focuses on project cost budgeting, addressing the inconsistency in understanding the impact of budgeting practices on project performance in NGO settings. Additionally, the study examines government-funded housing projects under the National Housing Corporation, revealing a contextual gap in applying findings across sectors due to differing governance structures and accountability mechanism. Furthermore, the current study, smaller in scale than the prior study uses both quantitative and qualitative data, One-Way ANOVA, and diagnostic tests to provide a more rigorous and multidimensional analytical framework. Finally, the study identifies a correlation between cost management and project performance, but lacks predictive validity or causal mechanisms. It tests model assumptions and isolates the impact of cost budgeting on NGO-funded projects.

Gitonga et.al (2022) conducted a study on the correlation between project cost management and the performance of urban road projects in Kenya. The study utilized a descriptive survey design to survey 408 construction professionals registered with Kenya Urban Roads Authority projects, with a sample size of 202 respondents. The study, based on questionnaires, found that project cost management significantly impacted the performance of urban road projects in Kenya. The study suggests that effective project cost management significantly enhances the performance of urban road projects, and recommends that construction firms improve their practices, focusing on resource acquisition, estimation, budgeting, and control. However, the

study focuses on urban road infrastructure project cost management, examining cost budgeting as a component rather than an independent variable. The current study narrowed on project cost management practices and its impact on NGO project performance, filling a gap in cost management literature by isolating its specificity. Additionally, the study focused on Kenya Urban Roads Authority's urban road projects, which typically benefit from government oversight, standardized procedures, and stable funding. In contrast, the current study explored the impact of cost management practices on performance in the NGO sector, focusing on its unique funding constraints, donor accountability requirements, and resource availability.

The study also conducted a descriptive survey with 202 respondents, focusing solely on quantitative data collected through questionnaires. The current study, the study employs a mixed-methods approach, involving a smaller sample of 50 project managers, project coordinators, finance officers and M&E from 10 NGOs, to combine qualitative and quantitative insights. It improves methodological rigor by incorporating diagnostic tests like Shapiro-Wilk, multicollinearity, homoscedasticity, and autocorrelation to validate the assumptions of Ordinary Least Squares regression. Additionally, it suggests that project cost management positively affects project performance, but this relationship is treated in aggregate without disaggregating individual components like cost budgeting. The current study extends these findings by offering a more nuanced examination of budgeting specifically, with implications for donor-funded NGO projects. It also aims to establish not just correlation, but also causal inference through model assumption testing, thereby contributing to a more predictive and generalizable body of knowledge.

The study of Muteti and Mutiso (2020) analyzed the impact of cost metrics management on project performance in Kenyan NGOs, aiming to provide recommendations for its effective use. The study conducted a thorough review of both theoretical and empirical literature, proposing a research methodology that addressed identified gaps and addressed the specified

research questions. Additionally, the study utilized a descriptive research design, focusing on 168 project managers from the 2018 NGO Coordination Board directory, which included NGOs across the country. The population was under 200, so a census approach was employed for a comprehensive examination of the subject. The study utilized structured, self-administered questionnaires for data collection and analysis of both descriptive and inferential statistics. Further, it utilized regression analysis for quantitative data assessment, while qualitative data analyzed using the Statistical Package for Social Sciences (SPSS). The study, which received a 71% response rate, established a positive correlation between cost metrics management and project performance in Kenyan NGOs.

However, the study explores cost metrics management but does not specifically focus on project cost budgeting. While this study aims to understand how cost management practices contributes to performance outcomes in NGOs, particularly under donor funding constraints, by focusing on this specific element. Additionally, the study used a national sample of NGOs but did not consider contextual factors like organizational size, donor expectations, or funding challenges. The current study, targeting a smaller group of NGOs, provides more detailed insight into cost management practices within donor-funded projects, a crucial aspect often overlooked in broader studies. Moreover, the study also used structured questionnaires and regression analysis, but did not detail diagnostic procedures.

The current study improved methodological rigor by incorporating diagnostic tests like Shapiro-Wilk, multicollinearity, autocorrelation, and homoscedasticity, improving finding's reliability and statistical inference robustness. It also included a pilot test for instrument validity, which was not applied in the previous study. Lastly, the prior study revealed that cost metrics management enhances project performance, but it lacks actionable insights on specific cost management practices like budgeting. However, the current study, investigated the

predictive power and effect size of budgeting practices on performance metrics in NGO-funded projects, providing recommendations for improvement.

2.3.3 Influence of Project Cost Control on Project Performance

Kose et.al (2022) utilized the Relative Importance Index (RII) and Exploratory Factor Analysis to analyze key risk factors affecting the Turkish construction sector. The study analyzed 201 valid responses to a questionnaire containing 33 risk variables using RII and EFA for analysis. The study reveals that primary risk factors in construction projects include disaster and force majeure, project management, technical management, external factors, and design-estimation. Additionally, the study identified five key risks: unqualified subcontractors, payment delays, economic issues like inflation, price speculation, late change-order requests, and failure to complete work within the expected budget. In contrast, risks like flood, boycott, landslide, attack, hurricane, and tornado were considered rare. The study indicates that considering defined risk factors in risk management evaluation can enhance the accuracy of risk response methods and cost estimates.

The current study focused on the impact of project cost management practices on performance outcomes, a departure from the previous study's lack of specific examination. Additionally, the previous study is conducted in the Turkish construction sector, which operates under market-driven conditions and industry-specific risk exposures, including technical and environmental risks. In contrast, the current study carried out in Kenya revealed distinct contextual factors, including donor conditions, community-based implementation approaches, and capacity limitations, which contribute to the relationship between project cost management and performance.

In addition, the study utilized RII and EFA for risk prioritization, but found they were insufficient for testing the causal or predictive relationship between budgeting practices and project performance. While the current study employs regression and diagnostic tests to

validate OLS assumptions, offering a more robust analytical method for establishing statistical relationships between variables. Lastly, the study findings are descriptive rather than prescriptive; suggesting awareness and preparedness but not assessing cost budgeting's potential to mitigate these risks. However, the current study provides evidence-based insights into the impact of specific budgeting practices on the performance of NGO-funded projects, highlighting implications for strategic cost control and donor reporting.

Gemino et.al (2020) conducted an international survey of 477 cross-industry projects to analyze traditional, agile, and hybrid project management approaches. The study revealed that 52% of projects can be classified as utilizing hybrid approaches. The regression analysis with multiple outcome measures showed significant explanatory power ($0.21 < R^2 < 0.41$). Additionally, the study established that hybrid and agile approaches significantly improve stakeholder success compared to traditional methods, while maintaining the same budget, time, scope, and quality outcomes.

Moreover, hybrid approaches, which combine agile and traditional practices, have been proven to be as effective as fully agile, solidifying their position as a leading project management method. The study analyzes the impact of traditional, agile, and hybrid project management methodologies on stakeholder success and project outcomes like time, budget, scope, and quality.

However, they do not consider cost-specific planning tools like cost budgeting as standalone predictors of project performance. In contrast, the current study investigated the influence of cost budgeting and other cost management practices on project outcomes, addressing a conceptual gap in financial control practices. Additionally, the study employs international projects from diverse industries and organizations to explore diverse economic and organizational settings. The findings may not fully apply to Kenyan NGOs' funded projects due to unique constraints like limited donor funding, stringent reporting requirements, and

community-driven deliverables. Additionally, the study employs regression analysis across various performance dimensions, but it lacks diagnostic checks and mixed-methods approaches. However, the current study employs regression, diagnostic tests, and a descriptive research design for comprehensive analysis and triangulation of quantitative and qualitative data.

Further, the previous study observed that hybrid approaches outperform traditional methods in terms of time, budget, and quality outcomes, while also enhancing stakeholder satisfaction. However, it did not delve into the specific role of budgeting practices or evaluate the impact of financial planning mechanisms on project performance. The current study explores the impact of project cost management practices on performance, providing valuable insights for donor-funded, financially constrained organizations like NGOs, where effective budgeting is crucial for project success.

The study by Alu (2023) investigated the influence of project cost control on the financial performance of selected construction firms in North-Central Nigeria. A structured questionnaire was used to gather data from 102 construction professionals, resulting in a 100% response rate. The study utilized descriptive statistics and multiple linear regression to analyze financial performance, finding that Cost Variance Analysis and Economic Value Added significantly influenced it, with R-squared values of 69% for Return on Assets and 77% for Return on Equity. The regression models revealed that CVA positively predicts both ROA and ROE, while EVA positively predicts ROA but negatively predicts ROE, as per the results.

The study suggests that improving project cost control techniques can help construction firms reduce overruns, delays, and quality issues, thereby enhancing their financial performance.

However, the study highlights the impact of project cost control mechanisms like Cost Variance Analysis and Economic Value Added on financial performance indicators like Return on Assets and Equity in profit-driven construction firms. In contrast, the current study focused

on project cost management practices each as a key variable in cost management and links it to non-financial performance outcomes in NGO-funded projects with developmental objectives. In addition, the research is focused on Nigeria's construction sector, while the current study is conducted within Kenyan NGOs, requiring localized insights due to differing funding models and project environments. Whereas the study conducted multiple regression analysis on 102 construction professionals, focusing on quantitative financial data, the current study employs a mixed-methods approach, incorporating qualitative and quantitative analyses, and diagnostic tests to ensure the robustness of OLS regression assumptions. Lastly, the research indicates a correlation between the use of cost control tools and the profitability of a company, though the current research explores the influence of cost management practices on NGO project outcomes, emphasizing the significance of cost planning for financial sustainability and donor compliance.

Abani and Alaba (2023) highlighted the importance of cost-control practices in Nigeria's construction industry, highlighting the need to address budget overruns, schedule delays, and quality compromises. The study aimed to devise strategies for optimizing cost control, focusing on enhancing time efficiency and ensuring high-quality outcomes. Additionally, it employed a qualitative research design, conducting semi-structured interviews and employing thematic analysis to investigate stakeholder perspectives on cost management practices.

The findings recommend that integrating technology, conducting cost variance analyses, and providing targeted project manager training can significantly improve project outcomes, recommending the use of advanced digital tools. Thus, the study contributes to sustainable growth, efficiency, and project performance in Nigeria's construction sector by identifying sector-specific challenges and regional variations for improved cost management strategies.

Whereas the study focuses on cost-control practices, including cost variance analysis and digital technology integration, as a broad approach, the current study focuses on project cost

budgeting, a proactive financial planning activity, to investigate its impact on performance through detailed investigation. In addition, the study is executed in Nigeria's construction industry, a for-profit sector with distinct operational, regulatory, and stakeholder dynamics, contrasting with the current study, which prioritize efficiency, accountability, and impact. Furthermore, the study employs a qualitative method, utilizing semi-structured interviews and thematic analysis, to investigate cost management from a stakeholder's perspective. In contrast, the current study adopts a mixed-methods design, combining quantitative and qualitative analysis, and diagnostic testing to provide a more empirical evaluation of cost budgeting effects. Finally, the study suggests implementing strategies such as technology adoption and staff training to enhance cost control and project quality; conversely, the current study investigates the predictive impact of cost budgeting on project outcomes, providing insights for financially constrained, donor-dependent organizations.

The study by Bwankarikari and Irechukwu (2022) examined the impact of project cost control on the performance of the Bugarama Rice Project in Rwanda. The study utilized both qualitative and quantitative methods, with a sample of 57 respondents selected through non-random sampling from a population of 74 individuals. The data was analyzed using SPSS, incorporating measures such as mean, standard deviation, percentages, and Pearson correlations.

The findings exhibited that accurate cost estimates and realistic budgets significantly reduce project costs, with a minority disagreeing. The ANOVA results confirmed the significant relationship between tracking costs and project performance, rejecting the null hypothesis. Additionally, the study underscored the critical role of project budget planning and management in addressing labor costs, which are identified as a significant obstacle to cost control. Lastly, the study suggests that project managers should prioritize cost efficiency and

regular financial reports to improve project performance and address cost control challenges, as respondents agreed that budget compliance is crucial throughout the project cycle.

Nevertheless, the study involves the systematic tracking, estimation, and monitoring of project expenses. The current study fills a gap in understanding its predictive role, rather than just tracking and controlling costs after implementation. Additionally, the study is conducted in the Rwandan agricultural sector, specifically the Bularama Rice Project, focusing on industry-specific characteristics like labor-intensive production cycles. In contrast, this study explores various donor-funded NGO projects in Kenya, revealing that project success is often linked to donor satisfaction and compliance with funding conditions, rather than profitability. Furthermore, the previous study employs non-random sampling, heavily relies on descriptive statistics and Pearson correlations, and incorporates both qualitative and quantitative methods but lacks regression diagnostics or robust model testing.

However, this study utilized Ordinary Least Squares (OLS) regression diagnostics, including the Shapiro-Wilk test, to ensure statistical robustness and validity of regression assumptions. Furthermore, pilot testing and pretesting of research instruments also enhanced the reliability and credibility of the collected data. Lastly, the previous study suggests that while tracking costs and ensuring budget compliance enhances performance, it does not identify budgeting as an independent predictor or examine causal assumptions or its impact on outcomes. The current study investigates the impact of budgeting on performance, a crucial aspect for evidence-based decision-making in resource-constrained NGOs, by testing it independently.

The study of Gitonga (2022) examined the correlation between project cost management and the performance of urban road projects in Kenya, using a descriptive survey design with 202 construction professionals from the Kenya Urban Roads Authority projects. The study, based on primary data collected through questionnaires, found that project cost management significantly impacted project performance. The findings exhibited that effective project cost

management significantly improves urban road project performance and recommends strengthening practices in construction firms, focusing on resource acquisition, cost estimation, budgeting, and cost control. However, the current study focuses on NGO-funded projects, addressing sector-specific challenges, donor constraints, accountability standards, and resource unpredictability, which were not explored in previous studies.

Additionally, the study used a descriptive survey design, analyzing primary data through descriptive and inferential statistics, while the current study integrates both primary and secondary sources for enhanced data triangulation. Further, the reliability of the research instrument is enhanced through a pilot study and pretesting before full deployment. Moreover, the study employs Ordinary Least Squares (OLS) regression diagnostics, such as Shapiro-Wilk, to validate the regression assumptions.

Additionally, the study utilizes One-Way Analysis of Variance (ANOVA) to evaluate project performance variations across various NGO projects, offering more robust and scalable results. Finally, the study revealed that project cost management enhances performance, but it did not specifically examine the impact of cost budgeting. However, the current study addresses this by investigating the impact of cost budgeting on NGOs, highlighting its importance for financial discipline, sustainability, and donor trust.

Obuo and Nyang'au (2024) studied the impact of project cost management processes, including cost scheduling and control, on Kenyan road project performance, using transactive planning and constraints theories. The study utilized a descriptive research design and a census of 153 professionals across 51 road projects in Nairobi, collecting data through structured questionnaires. The instruments' reliability and validity were confirmed through Cronbach's alpha, expert review, and factor analysis.

The findings demonstrate that cost scheduling and control significantly impacted project performance, with cost control having a slightly higher impact. Effective cost management

improves timely completion, efficiency, and stakeholder satisfaction. It recommends the use of advanced tools, regular monitoring, and further research on external influences and technology use in cost management for infrastructure projects.

While the study focused on project cost scheduling and control, utilizing a descriptive design and census method and incorporating cost management theories like transactive planning and constraints theory, the current study addresses a conceptual gap by examining the independent impact of project cost budgeting on performance.

The study is also restricted to public sector infrastructure projects; whereas the present study focuses on donor-funded NGO projects, highlighting the unique accountability and funding dynamics associated with cost budgeting. Further, this study introduces advanced techniques, including supplementing descriptive design with primary and secondary data, conducting pilot testing and instrument pretesting, and performing OLS regression diagnostics to ensure statistical robustness, enhancing validity and reliability beyond Cronbach's alpha and factor analysis alone. In conclusion, though the previous study emphasised cost control's role, it did not examine the impact of cost budgeting on project outcomes, particularly in financially constrained situations.

The study by Musyimi and Ondara (2022) examined the impact of technical expertise, cost implications, stakeholder involvement, and policy frameworks on the performance of County-funded projects. The study utilized a descriptive research design, focusing on 41 County officials and stakeholders, selected through random sampling, and analyzed using structured instruments and statistical software. The findings exhibited moderate technical expertise among project monitoring and evaluation (M&E) staff, high associated costs, and high stakeholder involvement.

Additionally, the study demonstrated moderate impact of technical expertise and policy framework on project performance, while insufficient M&E funds and budget allocation negatively affected project outcomes.

Furthermore, the study established that cost implications significantly improve project performance, followed by technical expertise, policy frameworks, and stakeholder involvement. It recommended the County Government allocate more resources for a robust M&E system, employ qualified personnel, and ensure stakeholder involvement in the M&E team.

Lastly, the study underscored the necessity of realistic, needs-based policy frameworks, thorough evaluations of past initiatives for future projects, and refocusing resource utilization to ensure projects achieve their intended benefits. The study analyzed county government-funded projects, which operate under public sector frameworks, funding structures, and accountability mechanisms. In contrast, this research focuses on donor-funded NGO projects, providing unique insights into cost budgeting in nonprofits with diverse constraints, priorities, and oversight challenges.

In addition, the study focuses on county government projects, which operate under distinct financial dynamics and accountability structures compared to donor-funded NGO initiatives. However, the current study explores budgetary practices in resource-constrained non-governmental settings, focusing on donor accountability and budgeting constraints. Furthermore, the study utilized basic data analysis tools, random sampling, and descriptive statistics, but lacked rigorous diagnostics to validate regression assumptions. In contrast, the current study uses a comprehensive methodological approach, including primary data, pretesting instruments, pilot testing and OLS regression diagnostics, to ensure reliability and validity. While the study emphasizes the significance of cost implications, it does not specifically examine the budgeting process as a predictive factor in performance. The current

study investigates the impact of structured cost budgeting practices on performance outcomes in NGO projects, rather than focusing on general cost implications.

2.3.4 Influence of project Resource Planning on Project Performance of NGOs funded construction projects

The study of Kirmizi and Kocaoglu (2022) investigates the impact of the enterprise resource planning (ERP) readiness stage on project success immediately after go-live, from the perspective of project managers. The study explores influencing factors in ERP project management in Turkey using literature review, expert sessions, Kotter's change management model, and survey-based empirical approach in 2019. Exploiting principal component analysis and multiple regression analysis, the study reveals that project planning, management, employee commitment, and change management are directly linked to ERP project success, while top management support does not show a direct correlation.

The proposed model explains 65.179% of variation in ERP projects, suggesting that factors influencing long-term success should be assessed at different stages of the project life cycle. However, the study on ERP projects uses Kotter's change management model and readiness factors during the go-live phase, while the current study focuses on financial control and cost management within NGO-funded projects using Agency Theory and the Resource-Based View.

In addition, this study, which focuses on budgeting, cost efficiency and internal controls over five years, neglects the dynamic, stage-based influence of readiness and change management factors in the ERP study. Accordingly, the current study is missing research on how being ready for change at different stages affects the success of projects, especially those that involve technology or are funded by donors. Integrating change management frameworks into cost control research could provide a more comprehensive understanding.

Butt (2023) examined the influence of requirements planning on the success of public residential projects in Pakistan using a mixed-methods approach, including semi-structured interviews with 29 policymakers and a quantitative survey with 70 construction companies. Thematic analysis of the interviews revealed that policymakers define project success based on management and product outcomes, identifying six critical requirements planning practices: advance tracking and reporting, configuration management, prioritization processes, performance metrics, traceability structures, and clearly defined stakeholder roles.

The study, utilizing principal component, correlation, and regression techniques, found that requirements planning significantly impacts project success. The findings demonstrated that policymakers prioritize product success, while practitioners focus on project management. A communication gap exists, and systemic obstacles like land acquisition disputes, political interference, inadequate training, and prolonged design phases hinder progress. Traditional project management approaches are preferred over agile or lean methodologies.

Nonetheless, the current study focused on resource planning in NGOs, examining how human, financial, and physical resources impact project performance, unlike a previous study that focused on requirements planning in the construction sector. Additionally, this study, involving 50 project managers from ten NGOs, operates in a nonprofit environment with unique constraints like donor accountability. However, the previous study is in Pakistan's public construction sector, dealing with government bureaucracy, political interference, and infrastructure challenges, limiting the transferability of insights. Furthermore, the current study employs a descriptive research design, pilot testing, primary and secondary data, and diagnostic tests for statistical robustness and reliability, while the previous study employs a mixed-methods approach, combining thematic analysis of interviews and regression analysis of survey data for qualitative insights. Finally, this study aims to determine resource allocation efficiency and NGO project outcomes, while the prior research reveals that requirements planning

significantly impacts product and project success, with policymakers and practitioners favoring traditional planning models.

The study by Afum et.al (2021) examines the impact of internal environmental management and green human resource management on corporate reputation, environmental performance, and financial performance, as well as their indirect effects. Data were gathered from 164 firms in Ghana, examining the relationships between them using partial least square structural equation modeling (PLS-SEM).

The study reveals that while IEM alone significantly impacts FP, GHRM doesn't significantly affect it when implemented in isolation. However, joint implementation leads to improved CR, enhanced EP, and significant improvement in FP. The current study focuses on resource planning for project performance, ensuring adequate human, financial, and physical resources to achieve NGO goals, while the prior study examines the impact of internal environmental management and green human resource management on corporate reputation, environmental performance, and financial outcomes.

This reveals a conceptual gap in performance measurement, with one focusing on resource adequacy for project execution and the other on sustainability-oriented organizational practices. Further, the current study focuses on NGOs in the development sector, highlighting donor-funded projects and resource constraints. While the previous study surveys private sector firms in three industries, revealing a gap in sectoral focus, operational environment, and performance expectations between non-profit and private sector organizations.

Lastly, the current study used a descriptive research design with primary and secondary data, pilot testing, diagnostic tests, ANOVA, and quantitative and qualitative analyses for robust regression outcomes. In contrast, the Ghanaian study uses partial least squares structural equation modeling (PLS-SEM), a more advanced technique for modeling complex relationships and mediations.

Mugorewase and Kwena (2024) conducted a study on the impact of resource planning practices on the success of donor-funded education projects in Rwanda, focusing on the Food and Education Project as a case study. The study utilized a descriptive research design and inferential statistics, with 106 employees selected using universal sampling techniques and data collected through questionnaires and interviews.

The data was analyzed using SPSS version 20 for descriptive statistics, correlation, and multiple linear regressions. The study found a strong correlation between resource planning practices and project performance, with human resource planning being the most significant and positive component, as revealed by both descriptive and inferential statistics. The study suggests that the Food and Education Project should invest in continuous training programs to improve the performance and capacity of its human resources in agriculture-related initiatives. However, the current study focused on resource planning, including human, financial, and physical resources, while the prior study focuses on donor-funded education projects, highlighting a conceptual gap between the two studies, which conceptualize resource planning holistically. Additionally, this study provides a multi-sectoral and geographically varied background. However, the previous study limits contextual diversity, creating a gap in understanding resource planning practices across sectors and geographical contexts beyond education and donor-funded operations. Additionally, the current study utilizes both qualitative and quantitative methods, employs diagnostic tests, and emphasizes regression validity through Ordinary Least Squares assumptions. While the prior study employs simpler techniques without in-depth diagnostic testing. Lastly, the current study provides a comprehensive understanding of how various resource types impact project performance in NGO settings. It differs from the previous study, which focuses on human resource planning as the only significant predictor of performance and recommends capacity-building for project success.

However, the current study's findings are more generalizable and applicable across various sectors and resource categories.

Awuor and Wanyoike's (2020) study examined the impact of project resource planning on elephant conservation performance at Tsavo National Park. The study aimed to evaluate the impact of project resource planning on the efficiency of conservation initiatives. The study was based on two theoretical frameworks: Resource-Based Theory and Planning Theory. However, the current study utilized a comprehensive resource planning approach to analyze the impact of human, financial, and physical resources on project performance across NGOs. This contrasts with previous study's sector-specific interpretation, which focuses on resource sufficiency and conservation outcomes.

This study was more practical, focusing on practical applications, unlike the previous study which was more theoretically based on resource-based and planning theories. Additionally, this study provides a more comprehensive understanding of various sectors, unlike the narrower the previous study, which may not fully capture the complexities and challenges of multi-sectoral, donor-funded NGO initiatives. Further, this study uses more rigorous data validation and robustness checks, including diagnostic tests like Shapiro-Wilk and ANOVA for inferential analysis, compared to the previous methodological gap in statistical robustness and reliability testing, which do not reflect in the statistical significance tests. Lastly, the previous study underscores the significance of comprehensive resource planning in conservation projects, highlighting its positive correlation with project performance. However, the current study underlines a gap between sector-specific insights and the wider applicability required for multi-sectoral, donor-funded projects.

The study of Abdi et.al (2024) utilized a descriptive research design to investigate the impact of resource allocation on the organizational performance of charitable NGOs in Nairobi County. The study involved 1,427 employees from charitable NGOs in the county, with a

sample size of 313 respondents using stratified random sampling and the Taro Yamane formula.

The study utilized both physical and online questionnaires for data collection, and descriptive and inferential statistics were used for analysis. The study found a significant positive correlation between resource allocation and organizational performance, with a β of 0.496 and a p-value of 0.001. Additionally, the study concluded that effective resource allocation significantly improves the performance of charitable NGOs.

However, Planning involves strategic alignment with project objectives, while allocation focuses on operational distribution, which may overlook the strategic planning phase before allocation. Additionally, the previous study may not accurately represent the diverse resource planning challenges faced by NGOs in Kenya's rural, health, education, and agricultural sectors. Further, the current study, despite its scale, showcases methodological rigor and depth, particularly through diagnostic validation, which enhances reliability.

The previous study primarily establishes a correlation without delving into the underlying causal mechanisms or predictive validity. In contrast, the current study adopts a comprehensive approach, including diagnostic testing and multidimensional resource planning analysis, to enhance its robustness and generalizability across various NGO contexts beyond Nairobi.

The study of Obegi and Kimutai (2017) examined the impact of resource scheduling on project performance among INGOs in Nairobi County, Kenya, focusing on budgeting, staffing, changes, and equipping. A random sampling technique selected 50% of 187 INGOs, resulting in 94 organizations. Questionnaires and archival data were administered to project managers. The researchers confirmed validity through face validity consultations, pilot testing with 5 INGOs, and Cronbach's alpha calculation, and analyzed data using descriptive statistics, linear regression, and ANOVA. The study found that INGOs widely adopt practices such as budget monitoring, staff completion, project changes, equipment allocation, and performance

evaluations, which positively influence project performance. It recommends continued resource allocation, ongoing staff evaluations, and adequate equipment for project implementation.

However, the study focuses on resource scheduling practices but neglects a broader resource planning framework. The current study focuses on resource planning as a multidimensional construct, addressing a conceptual gap in comprehensive operationalization of resource planning. The study is also restricted to international NGOs operating in Nairobi County, a highly urbanized and resource-rich area. In contrast, the current study explores various NGOs in Kenya, revealing a gap in understanding the impact of resource planning on project performance in less resource-intensive and heterogeneous settings.

Additionally, the former study uses standard linear regression and ANOVA, but lacks advanced diagnostic testing to validate model assumptions. The current study uses rigorous diagnostic tests to verify the robustness and reliability of its Ordinary Least Squares regression model. Finally, the previous study establishes a positive correlation between specific scheduling practices and project performance, but did not investigate causal relationships or predictive power. The current study, despite its small sample size, utilizes a robust methodological and mixed-methods approach, enhancing the depth and generalizability of its findings.

2.4 Summary Knowledge Gap

Although international and Kenyan research studies emphasize the necessity of cost estimation, budgeting, resource planning, and cost control, most have studied these practices in isolation or not within the NGO context and have focused on public or commercial projects. There are limited empirical studies that offer a combined analysis of the joint effects of all these four practices in determining the performance outcomes of donor-funded NGO projects in Kenya. In addition, the evidence on the other performance dimensions that are not financial compliance, including delivery efficiency, goal achievement, sustainability, and project

completion, is limited. This paper fills such gaps by empirically examining the multi-faceted effect of cost-management practices on the performance of NGO-funded projects in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter detailed the research methodology for the study, which included the research design, population, sample selection approaches, data collection methods, reliability and validity measures, and analytical techniques. It also covered ethical guidelines to be followed during the study.

3.2 Research Design

A research design is a systematic plan for gathering, measuring, and analyzing data to ensure reliability, validity, and objectivity in the results findings. This is to accurately represent current budgeting procedures, cost control mechanisms, cost estimation accuracy, and resource planning approaches without manipulating variables. The study aimed to investigate the correlation between internal cost management practices and project performance outcomes, focusing on efficiency, goal achievement, and sustainability. The design aided in systematic documentation and comparison of practices across various NGO sectors, project types, and operational contexts due to their wide diversity. Moreover, the cross-sectional design of the study enabled efficient, cost-effective data collection at a single point in time, providing a detailed snapshot of ongoing practices and challenges within a broad population of donor-funded NGOs without observing changes over time or establishing causality.

3.3 Target Population

The target population is the specific group of individuals or entities from whom a researcher aims to collect data and generalize the study's findings. **(**Chaudhury&Banarje, 2023) define a target population as individuals, groups, or institutions with relevant characteristics for a research problem, while Cooper and Schindler (2011) define it as observable traits from which

conclusions can be drawn. This study focused on project managers and financial personnel within Kenyan NGOs, specifically those involved in project budgeting, cost control, and financial resource planning.

3.4 Sample size and Sampling Procedures

Sample size refers to the total number of participants or observations drawn from the target population for inclusion in a study's statistical analysis. Creswell and Creswell (2018) emphasize that determining an appropriate sample size is vital for ensuring that research findings are both statistically reliable and meaningful. Similarly, Saunders et al. (2019) and Lewis et al. (2019) underscore that the accuracy, reliability, and generalizability of research outcomes are directly influenced by the precision of sample size estimation.

The study examined 50 project managers, project coordinators, M&E officers and Financial Managers drawn from ten out of 110 tier I registered NGOs in Kenya, namely Save the Children, World Vision International, UNICEF, The Aga Khan Foundation, M-Pesa Foundation, Wings to Fly, AMREF Health Africa, Mercy Corps, Kenya Red cross Society and Nanyuki Children Charitable Trust, despite the country having over 12,000 registered NGOs. The organizations were chosen based on their active involvement in donor-funded projects, established cost management frameworks, project documentation availability, and diverse operational footprints across regions and sectors.

The selected participants were individuals directly involved in project budgeting, cost control, and resource planning functions that were central to the study's objective of assessing internal cost management practices and their influence on project performance. This group was chosen because the study aimed to investigate the effect of cost management practices on donor-funded construction project delivery, efficiency, goal achievement, and sustainability. Additionally, the selected organizations, prominent in the NGO sector, provided a

comprehensive view of financial and operational environments, ensuring the study's validity and applicability to similar Kenyan projects.

Purposive sampling, a non-probability technique, was used to intentionally select participants based on their relevance to the study objectives. According to Mugenda and Mugenda (2003), purposive sampling enabled researchers to select units that are most informative and accessible, especially when working with specialized populations. This technique was appropriate for this study because of the need to focus primarily on project managers in NGOs that are actively engaged in donor-funded activities, maintain structured cost management systems, and operate across varied geographical and sectoral contexts. Further, it allowed for the inclusion of respondents with extensive knowledge of cost management processes, which could provide accurate and relevant data. Furthermore, the study's applicability and richness were enhanced by selecting NGOs with a wide geographic and thematic spread, providing a broader understanding of Kenyan NGO cost management practices. Finally, the study's sample size was determined without statistical formula due to its qualitative nature, but the chosen respondents aligned with best practices for case-oriented, in-depth studies, ensuring representativeness through relevance and diversity.

3.5 Description of Research Instruments

The study utilized primary research instruments to gather data on cost management practices in donor-funded NGOs, aligning with study objectives and key variables. A structured questionnaire was used as the primary research instrument, administered to project managers, project coordinators, M&E and financial officers, covering variables such as cost estimation accuracy, budgeting effectiveness, cost control practices, resource planning, and project performance. The structured format, utilized closed-ended questions and Likert-scale items,

ensured consistency, comparability, and ease of analysis across multiple respondents and organizations.

The questionnaire underwent pilot testing with a select group of NGO staff to ensure clarity and relevance, with feedback enhancing the language, structure, and alignment with research objectives.

3.6 Data Collection Procedures

The researcher submitted a final proposal to the University for Approval, which was then granted a data collection letter from the university, which facilitated the application for a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) for Kenyan public data collection. The researcher obtained authorization and ethical clearance from relevant authorities after obtaining the NACOSTI permit, ensuring compliance with institutional and national ethical standards and facilitating access to target participants. The researcher administered structured questionnaires to 50 project managers, Project coordinators, Finance officers and M&E distributed physically and digitally for respondents in remote areas. Participants were given ample time to complete the questionnaires, with follow-up reminders provided. The researcher personally oversaw the administration of questionnaires and clarified any queries raised by participants. Completed questionnaires were collected, checked for completeness, and securely stored for data entry and analysis.

3.7 Operationalization and Measurement of Variables

The study examined key internal cost management practices affecting project performance in NGOs, with the independent variables being Project Cost Estimation, which measures the accuracy of NGOs' ability to accurately forecast project financial needs. Project Cost Budgeting involved assessing budget variance, effectiveness, and risk assessment to gauge

financial planning and control capacity. Project Cost Control was assessed through earned value management, cost tracking accuracy, and performance reviews to assess NGOs' monitoring and management of project expenditures. Resource planning involved assessing the availability, utilization rate, and allocation timeliness of organizational assets to ensure efficient mobilization and deployment.

Table 1: Operationalization and Measurement of Variables

Variable	Indicator	Definition	Measurement	Level of Measurement
Project Cost Estimation	Cost Estimation Accuracy	Extent to which project costs are predicted accurately before implementation	Variance between estimated and actual cost (%)	Ratio
Project Cost Budgeting	Budgeting Variance	Difference between planned and actual budget allocations	Budget variance ratio	Ratio
	Budget Allocation Effectiveness	Efficiency in allocating resources across project components	Likert scale rating (1–5)	Ordinal
	Budget Risk Assessment	Identification and evaluation of financial risks in budget planning	Existence and quality of risk assessment tools	Nominal

Project Cost Control	Earned Value Management (EVM)	Use of EVM to track performance against scope, cost, and schedule	Use of EVM techniques (Yes/No)	Nominal
	Cost Tracking Accuracy	Precision in monitoring ongoing expenditures	Accuracy rating (Likert scale 1–5)	Ordinal
	Frequency of Cost Performance Reviews	The frequency of internal reviews conducted by the organization to assess project spending patterns and cost-related decisions.	The measure is based on the frequency of formal performance reviews conducted throughout the project life cycle.	Ratio
Resource Planning	Resource Availability	Access to adequate financial, human, and material inputs	Availability index (e.g., 1 = Low, 5 = High)	Ordinal
	Resource Utilization Rate	Efficiency in using allocated resources during project execution	% of resource capacity used	Ratio

	Resource Allocation Timeliness	Promptness in deploying resources when needed	Average time lag (in days)	Ratio
Project Performance	Project Delivery Efficiency	To what extent can efficient cost estimation procedures help you deliver your projects on time and on budget?	Likert scale (1–5)	Ordinal
		What percentage of your project activities were completed on time and within budget?	% estimate	Ratio
	Goal Achievement	How would you rank the overall success of your NGO-funded projects in meeting their objectives (such as scope, quality, and targets)?	Objective achievement score from M&E reports (%)	Ratio
	Sustainability	How long-term are the outcomes of your NGO-funded projects?	Likert scale (1–5)	Ordinal
		In your opinion, how does resource planning affect long-term project success in terms of sustainability and impact?	Likert scale (1–5)	Likert scale (1–5)

Source: Researcher, (2022)

3.8 Pilot Study

A pilot study is a preliminary investigation to evaluate the feasibility, clarity, and reliability of research instruments before starting the main study (Kultar, 2019). It is a crucial process in structured survey-based research to identify and fix design flaws, refine data collection tools, and ensure instrument alignment with research objectives, ensuring standardization and reliability. Thus, the study conducted a pilot test to validate the questionnaire as the primary data collection tool, assessing its clarity, internal consistency, appropriateness of response scales, and overall usability in the field setting. Lancaster et.al (2019) suggest that the optimal sample size for pilot studies is between 1% and 10% of the main study sample. The pilot test involved project managers, project Coordinators, M&E Officers and financial officers from non-participating donor-funded NGO-Action Aid, which is located in Kibra Sub-county, which represented 10% of the intended sample size of 50 respondents.

The pilot participants, from similar NGOs, were excluded from the final sample to prevent response contamination or duplication. The results refined the instrument by rewording ambiguous items, improving logical sequencing, and aligning with variables like cost estimation, budgeting, cost control, and resource planning. Further, the pilot also tested completion time and data collection logistics, enhanced the questionnaire's validity and reliability, and ensured methodological soundness for accurate and relevant data in a full-scale study.

3.8.1 Reliability of Research Instruments

Research instruments are deemed reliable to ensure consistency in their measurement (Mugenda, 2013). The researcher conducted a pretest of questionnaires with sample participants before implementing the study for reliability assurance. The research team conducted a pre-test at their own time, using the standard internal consistency measure of alpha

coefficient, which was suitable for multiple rating scale survey questions. Cronbach's Alpha (α) is a reliability measure that indicates the strength of positive item connections within a measurement platform, ranging from zero to one. The study assessed constructs with an alpha coefficient of 0.7 or higher to proceed with further analysis. Kothari (2014) states that a research study must conduct reliability tests with a minimum score of 0.7.

3.8.2 Diagnostic Tests

The study used Ordinary Least Squares (OLS) regression as the primary analytical method and conduct diagnostic tests to validate the model's assumptions, which were crucial for ensuring the accuracy, reliability, and generalizability of statistical estimates and inferences. Diagnostic tests, including Shapiro-Wilk, multicollinearity, homoscedasticity, autocorrelation, and linearity, were conducted to verify the validity and reliability of the regression results, confirming the assumptions of Ordinary Least Squares regression.

3.8.3 Normality Test

Normality testing is a crucial aspect of statistical analysis, ensuring the validity of inferential methods. Violation can lead to erroneous conclusions and misinterpretations of data, especially in studies with small sample sizes (Kwak & Park, 2019). The Shapiro-Wilk test and visual inspections are commonly used to evaluate normality, with the Box-Cox transformation being a recommended method for addressing non-normality in datasets (Gosselin, 2024). Additionally, the development of robust tests in time series analysis has improved the reliability of normality assessments by accounting for features like serial dependence and heteroskedasticity (Demetrescu & Kruse, 2015). Thus, the selection of normality test and subsequent statistical methods should be carefully considered to guarantee precise data interpretation and analysis. (Kwak & Park, 2019). The Shapiro-Wilk test is a crucial tool for assessing the normal distribution of regression model residuals, a prerequisite for the validity

of parametric tests like OLS regression. This test ensures unbiased regression coefficient estimates and hypothesis validity, is suitable for small to moderate sample sizes, and has statistical power in detecting deviations from normality (Shapiro & Wilk, 1965). A p-value greater than 0.05 signifies that the null hypothesis cannot be rejected, indicating that the data distribution is approximately normal.

3.8.4 Multicollinearity

This is a statistical phenomenon where highly correlated explanatory variables in a multiple regression model result in unreliable regression coefficient estimates and inflated standard errors (Kim, 2019). This issue can significantly skew the interpretation of model results, making it challenging to determine the individual impact of each predictor on the dependent variable (Das, 2019). Multicollinearity can be detected using tools like Variance Inflation Factor (VIF), condition indices, and correlation matrices, with VIF values exceeding 5 to 10 indicating potential issues (Kim, 2019). It can be addressed by removing collinear variables, using ridge regression, or utilizing principal component analysis to decrease dimensionality (Upendra et al., 2023) (Dalal, 2023).

It is also a critical factor in ensuring the reliability and validity of regression analyses in various fields like behavioral sciences and health research (Dalal, 2023). The Variance Inflation Factor (VIF) will be used to evaluate multicollinearity in a regression model, as high multicollinearity can lead to inaccurate results by distorting regression coefficient estimation, inflating standard errors, and reducing predictor significance. The VIF measures the variance increase in a regression coefficient due to multicollinearity, with a value below 10 indicating moderate multicollinearity (Gujarati & Porter, 2009). This diagnostic method guarantees the durability and dependability of the regression estimates.

3.8.5 Homoscedasticity

The assumption that residuals have constant variance is crucial in regression analysis. Violation, known as heteroscedasticity, can result in inefficient estimates, as it assumes that the variance of error terms is constant across all independent variables. Heteroscedasticity is the assumption that a model's predictions are reliable across all data ranges, while a violation can result in inefficient estimates and misleading inferences (Gujarati & Porter, 2009). The Breusch-Pagan test is a statistical method used to identify heteroscedasticity in regression models, indicating that the variance of residuals is dependent on the independent variables, and suggests the need for remedial measures (Greene, 2012). The test is preferred due to its simplicity, effectiveness for large samples, and suitability for linear regression models with normally distributed residuals.

3.8.6 Autocorrelation

Autocorrelation, or serial correlation, occurs when regression model residuals are correlated, especially in time-series or panel data. This contradicts the classical linear regression assumption, potentially causing underestimated standard errors and inflated test statistics, affecting hypothesis testing validity (Gujarati & Porter, 2009). The Durbin-Watson (DW) test is a widely-used technique for identifying autocorrelation in regression models, particularly for first-order autocorrelation. The DW statistic, which ranges from 0 to 4, indicates autocorrelation in a model. A value close to 2 indicates no autocorrelation, below 2 indicates positive autocorrelation, and above 2 indicates negative autocorrelation. A significantly different value suggests potential model issues requiring correction (Watson, 1950). The test is used in this study due to its simplicity and robustness in identifying autocorrelation in models with time-sequenced data or panel structures.

3.8.7 Linearity

Linearity is the assumption that the relationship between the dependent variable and independent variables is linear, implying that changes in independent variables are proportional to changes in the dependent variable (Schmidt & Finan, 2018). Violations can result in biased estimates. The Kolmogorov-Smirnov (K-S) test is a statistical method used to evaluate the fit between empirical data and a hypothesized distribution, and to compare two independent samples. The tool calculates the maximum distance between the empirical cumulative distribution functions (CDFs) of samples, enabling researchers to determine if they share the same distribution (Jiang & Li, 2024). The K-S test is a reliable tool for assessing univariate normality, particularly in larger samples, and is also useful for comparing distributions across various fields.

Table 2: Summary of Diagnostic Tests

Assumptions	Descriptions	Type of Tests	Interpretations	Treatment
Normality test	Assesses if error terms follow a normal distribution. Methods: descriptive stats (skewness, kurtosis), graphical (P-P Plot), or statistical analysis. Null: errors are normal.	Kolmogorov-Smirnov (KS) test	P-value > 0.05 confirms normality. Residuals should align with the normal distribution line.	Apply nonlinear transformations (logarithmic, square root), eliminate outliers, increase sample size.

Multicollinearity test	Occurs when explanatory variables are highly correlated, leading to high standard errors and insignificant coefficients.	Tolerance, Variance Inflation Factor (VIF)	If Tolerance < 0.1, high multicollinearity is present. or VIF > 10 indicates high collinearity.	Eliminate correlated variables, combine regressors, standardize or center variables, increase sample size.
Linearity test	Assumes a straight-line relationship between independent and dependent variables.	Analysis of Variance (ANOVA)	Linearity is confirmed if deviation from linearity (F test) > 0.05 (P > 0.05).	Transform data into linear form or generalize the model to handle nonlinearity.
Serial correlation	Identifies correlation between error terms across time periods (AR1: short-term, AR2: long-term).	Wooldridge test for correlation	P-value > 0.05 suggests no serial autocorrelation. Null: no serial correlation.	Use dynamic panel data model with lag-dependent variable or robust standard errors.

Heteroscedasticity	Variance of residuals is not constant, leading to erroneous OLS estimates and misinterpretations.	Breusch-Pagan Test, The Levene test	P-value > 0.05 indicates homoscedasticity. Null: no heteroscedasticity.	Use dynamic panel data model with lag-dependent variable or robust standard errors.
Model specification tests	Decides between Pooled OLS or Fixed Effects model. Tests if unobserved heterogeneity is correlated with explanatory variables.	Breusch-Pagan LM Test, Hausman test	P-value < 0.05 suggests Fixed Effects (FE) model; P-value > 0.05 suggests Random Effects (RE) model.	Use Fixed Effects (FE) model if p < 0.05; use Random Effects (RE) model if p > 0.05.

Source : Researcher (2025)

3.9 Data Analysis Procedures

The study examined donor-funded development projects by NGOs in Kenya focusing on multi-sectoral projects with substantial financial commitments. It used structured cost management processes like budgeting, estimation, control, and resource planning, adopting strict inclusion criteria for uniform project performance evaluation and meaningful comparison across organizational contexts. The study utilized SPSS Version 25 to analyze quantitative data collected through structured questionnaires, utilizing descriptive statistics such as means, standard deviations, and percentages to summarize variables' characteristics. The study utilized multiple linear regression analysis to analyze the correlation between independent variables like cost estimation accuracy, budgeting effectiveness, cost control practices, and resource planning, and the dependent variable, project performance.

The study also utilized a technique to assess the effect of internal cost management practices on project outcomes, using regression results to evaluate the significance of individual predictors. Thematic analysis was conducted on qualitative data collected through close-ended questions and document reviews. Finally, the study used tables, charts, graphs, narrative discussions, and narratives to present results. The regression was presented as follows:

$$Y=\beta0+\beta1X1+\beta2X2+\beta3X3+\beta4X4+\epsilon$$

Where:

Y = Project Performance
$\beta0$ = Intercept (constant term)
$\beta1$, $\beta2$, $\beta3$, $\beta4$ = Coefficients of the independent variables
X1 = Cost Estimation Accuracy
X2 = Budgeting Effectiveness
X3 = Cost Control Practices
X4 = Resource Planning
ϵ = Error term (captures unexplained variation)

3.10 Ethical Considerations

The study's confidentiality practices safeguarded the identities of its participants, preventing any association with specific individuals, thus ensuring their privacy. Secure management is vital in data collection to prevent unauthorized access and protect personal information from exposure. The participants must consent to the study after being informed about its intentions, risks, benefits, and procedural aspects. The investigator and research assistants maintained professional conduct, honesty, and obtained necessary permissions before starting data collection in the field.

CHAPTER FOUR

PRESENTATION, DISCUSSION AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter presented the analysis and interpretation of the data gathered by the survey conducted on cost management practices in NGO funded projects. The chapter is aimed at offering a detailed analysis of the influence of such variables as the accuracy of cost estimation, cost budgeting, cost control, and resource planning on the performance and sustainability of the project. In this chapter, the research questions are answered through the analysis of the data using descriptive statistics, regression analysis, and diagnostic tests, the purpose of which is to provide insights to enhance the practice of project management in the NGO sector.

4.2 Presentation of the Findings

4.2.1 Respondent Demographic

This research was conducted with the aim of obtaining information of 50 individuals who are engaged in managing and monitoring projects in 10 various Non-Governmental Organizations (NGOs). These were mainly project managers, finance officers, and Monitoring & Evaluation (M\&E) officers who availed good data concerning their various functions, years of operations as well as the regions where their respective NGOs are based. The response rate was roughly 80% because some questionnaires were halfway filled with scanty information and some wrongly filled. The demographics of the respondents were grouped into three main variables which included position, years of experience, and region of operation. These aspects are vital in the realization of the sample diversity and their professional outlooks as they are critical in coming up with a conclusion on the management of cost in the NGOs.

Table 3: Respondent Characteristics

Variable	Category	Frequency	Percentage (%)
Position	Project Manager	16	36%
	Finance Officer	10	24%
	M&E Officer	15	30%
	Other	4	10%
Years of Experience	0–2 years	8	16%
	3–5 years	10	28%
	6–10 years	20	40%
	Over 10 years	7	16%
Region of Operation	Nairobi	20	44%
	Rift Valley	9	20%
	Central	5	11%
	Other	11	24%

The statistics indicate that most of the respondents (36%) were in the job title of Project Manager, others being M\&E Officers (30%) and Finance Officers (24%). The rest 10 percent depicted other functions in the organizations. Such roles are indispensable in comprehending the varied views on the cost management practices since both roles help in decision making and direction of strategic planning on the project execution.

The respondents were fairly experienced professionals in years of experience with 40% having 6-10 years of experience. This implies that the survey participants were in a good position to give information about their adequate exposure to project cost control and cost management practices. The respondents with more than 10 years of experience only comprised 16 percent

hence showing that even though there were experienced professionals, they did not skew the sample significantly towards older professionals with long years of experience in the industry. There was also diversity in regional representation such that the greatest proportion of respondents (44%) was based in Nairobi. This possibly indicates how Nairobi is considered the center of NGOs in Kenya, but the sample was diverse in terms of geographical location of respondents with respondents being sampled in Rift Valley, Central Kenya, and other parts of Kenya.

Most of the respondents were Project Managers (36%) with 6-10 years of experience (40%), which indicates a combination of professionals with a lot of experience whose opinions on cost management are vital in the realization of the effectiveness of the cost management practices in NGOs.

4.2.2 Cost Management Practices

In this section, we discuss the perception of different cost management practices by the respondents. On a Likert Scale of 1 (Strongly Disagree) and 5 (Strongly Agree), the respondents rated effectiveness of their organizations in various aspects of cost management practices. These are cost estimation, budget alignment, cost control (EVM) and resource planning.

Table 4: Mean Scores of Cost Management Practices

Practice	Mean	Std. Deviation	Interpretation
Cost Estimation Accuracy	3.82	0.91	Moderately Effective
Budget Alignment	4.05	0.87	Effective
Cost Control (EVM)	3.45	1.12	Neutral to Effective
Resource Planning	4.20	0.76	Highly Effective

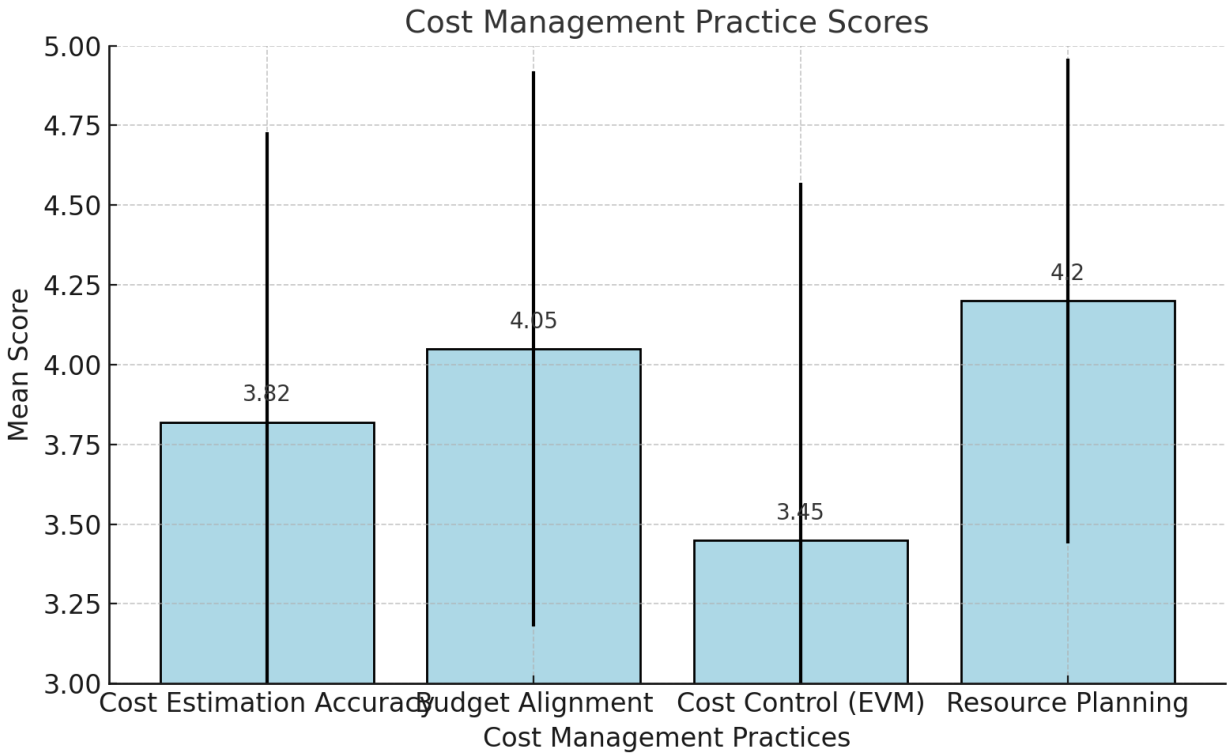


Figure 2: Cost Management Practice Scores

4.3 Interpretation of the findings

Resource Planning was found to be the most effective of the four cost management practices considered with a mean score of 4.20 (using a 5 point Likert scale) which means that it is highly institutionalized among the surveyed NGOs. This positive score presents the idea that NGOs focus on strategic distribution of human, financial, and material resources which align with the Resource-Based View (RBV) Theory which stipulates that the internal capabilities are the drivers of performance. The success of resource planning could be explained by the fact that it affects project feasibility and donor trust directly, as it is stated in the research of Kvasnytska (2022) regarding NGO financial sustainability.

On the contrary, Cost Control, namely Earned Value Management (EVM) received the lowest score (mean = 3.45) indicating irregular adoption. The large standard deviation (1.12) also indicates that there is a high variability in implementation, with some NGOs completely adopting EVM but others are finding it hard to handle its technical side. This is in line with the

results of Alu (2023) that revealed the lack of training offered on cost control in the resource-constrained environment. The obstacles might be the technical incompetence, absence of a donor requirement to use EVM, or absence of digital systems to monitor expenditure in real-time.

Budget Alignment was also rather high (4.05) and demonstrated the attention of NGOs to the needs of donors and projects. Nevertheless, the difference between the Budget Alignment and Cost Control scores also indicates a possible gap: Budget planning is properly managed by NGOs, but they might not have mechanisms to control its execution in a rigorous way. Such a gap may compromise financial accountability as Mutheu & Waga (2024) caution in their research on project delays of Kenyan NGOs.

4.3.1 Normality Test (Shapiro-Wilk)

The Shapiro-Wilk test was applied to check whether there was certain normality in the residuals of the regression model. The test is based on the null hypothesis that data is normally distributed. When the p-value of the test is larger than the cut-off of 0.05 more likely there is a lack of significant evidence that the data differs considerably with the normal distribution and we cannot reject the null hypothesis. In this research, the Shapiro Wilk test $p = 0.072$ which is more than 0.05, that is model residuals are normally distributed.

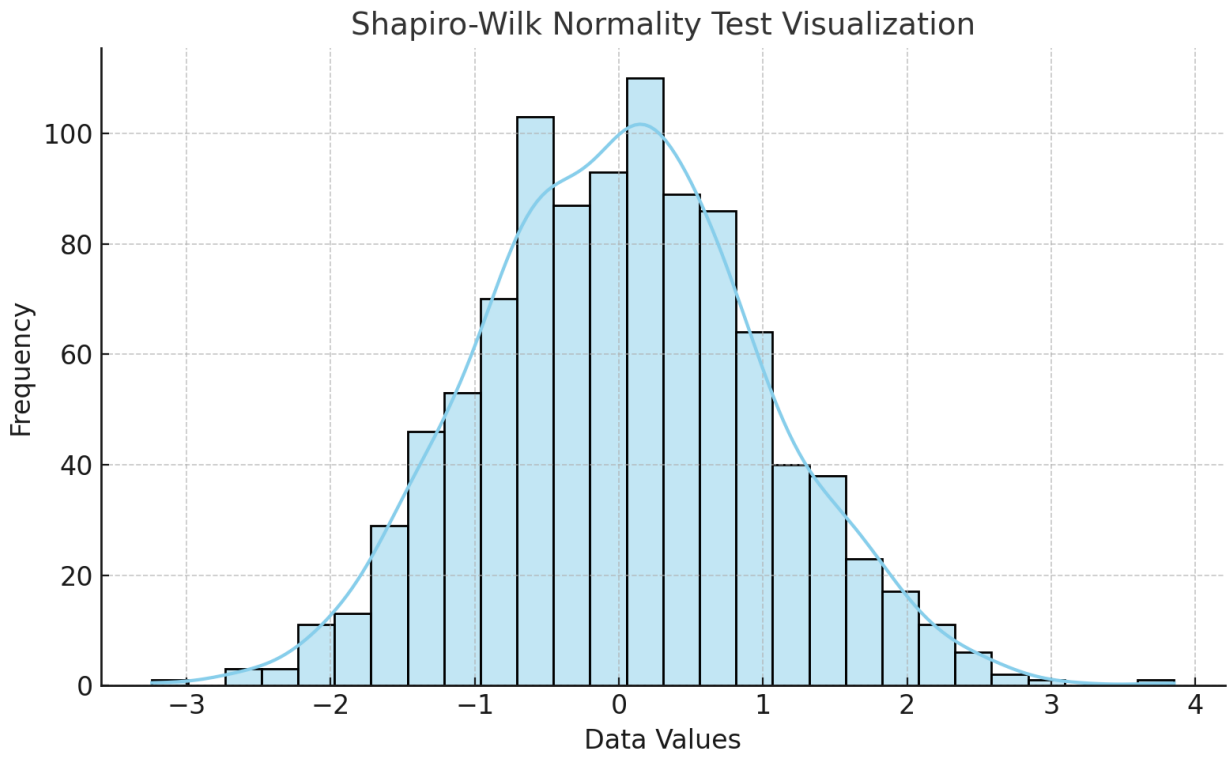


Figure 3: Normality Test (Shapiro-Wilk)

The residuals are normally distributed, which means that we have the confidence to perform a parametric statistical analysis, which includes linear regression. This would make sure that these assumptions on the normality are not contravened and therefore this interpretation of the regression results would be accurate and the use of inferential statistics becomes valid and reliable.

4.3.2 Multicollinearity (VIF)

The concept of Variance Inflation Factor (VIF) is applied to identify an existent condition of multicollinearity when there is a high correlation between independent variables within the regression model. Multicollinearity may cause the standard errors to be overestimated and render the model less reliable.

Table 5: VIF Scores

Variable	VIF	Tolerance
Cost Estimation	1.82	0.55
Budgeting	2.10	0.48
Cost Control	1.95	0.51
Resource Planning	1.60	0.63

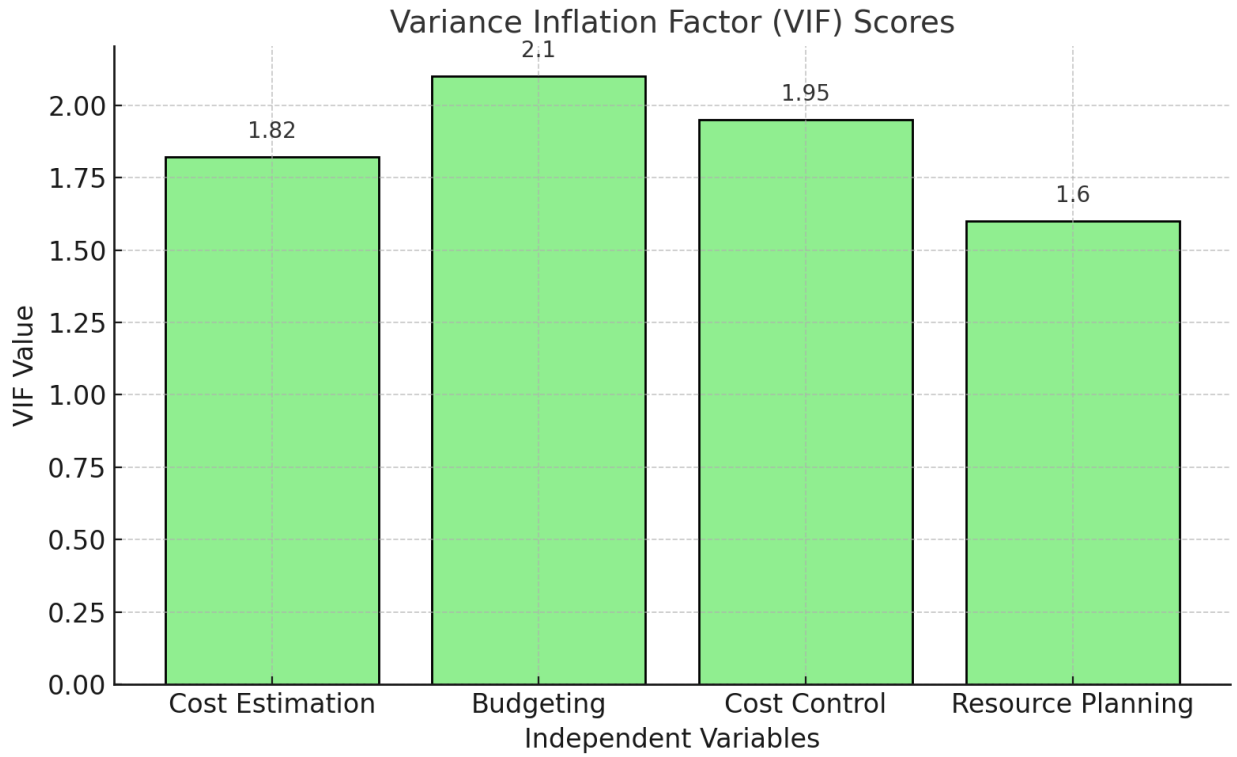


Figure 4: Multicollinearity (VIF)

All the independent variables used in the regression model showed that the Variance Inflation Factor (VIF) of these variables were below 10. It is a serious indication that there is no potential serious multicollinearity between the variables. Multicollinearity is a situation in a regression

model where two or more independent variables in the model are correlated such that noise can emerge and affect the final results making it very hard to conclude on the contribution of each predictor on the outcome variable. A VIF greater than 10 is normally termed an indication of trouble multicollinearity. But, in this analysis, all the VIF values are less than this limit which implies that there is no excessive correlation of the independent variables with each other. Such lack of multicollinearity means the regression model would be able to provide reliable and consistent estimates of the coefficients of the variables so that a valid conclusion could be obtained using the regression model.

4.3.3 Homoscedasticity (Breusch-Pagan)

Breusch-Pagan test was carried out to determine the assumption that the regression model is homoscedastic. Homoscedasticity is the situation in which the variance of the residuals (or errors) is constant no matter the level of the independent variables. This assumption is important since when the variance of residuals varies with the values of the independent variables, then it may result in inefficient estimates, and this may invalidate the hypothesis tests and distort the accuracy of the regression results. Breusch-Pagan test is used to determine whether the residuals variance is correlated to the independent variables values. The p-value in this case was obtained as $p = 0.210$ which is larger than the significance level commonly used which is 0.05. This outcome implies that the assumption of constant variance is true since there is no significant association between the variance of the residuals and the independent variables.

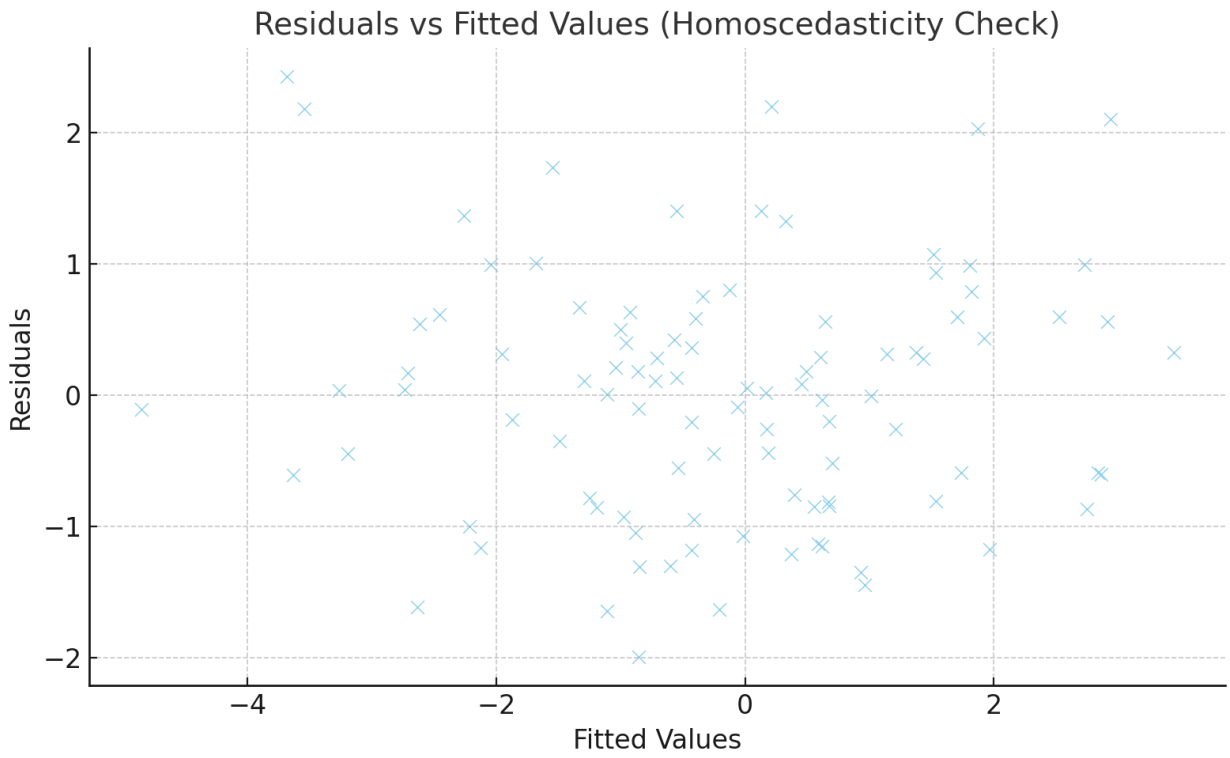


Figure 5: Residual vs. Fitted Values

The fact that the model is not heteroscedastic means that we can comfortably continue with the further analysis including the interpretation of the results of the regression without fearing homoscedasticity violation. This guarantees validity and reliability of the regression model.

4.3.4 Autocorrelation

Durbin Watson autocorrelation test was also an alternative but it was not appropriate in the research design of this study. The basic requirement of autocorrelation testing is time-series or panel data over a longer time, in which observations are taken on the same entities over a series of periods. This time series enables the researcher to test whether the residuals at time t are related to previous residuals and this may indicate systematic patterns or omitted variables in the model. Nevertheless, the study currently uses cross-sectional research design, which involves gathering data of NGO respondents at one particular time. The assumptions in tests of autocorrelation cannot be met without repeated measures or sequential measures.

The design of the study should presume that observations are independent of each other in cross-sectional studies such as this one. The answers given by each respondent are an individual point of data in time with no chronological affiliations. Although theoretically this assumption of independence holds true in the context of survey based research, it is worth recounting that there may be some organizational attributes or geographical considerations that may lead to dependence among the observations. As an example, NGOs working in a similar geographic area may exhibit similar trends because of common environmental restrictions. Such spatial dependencies would, however, warrant alternative diagnostic methods, e.g. spatial autocorrelation tests, instead of the time-based autocorrelation studied by the Durbin-Watson test.

Regression diagnostics in the study concentrated on more pertinent assumptions as far as cross-sectional data is concerned, which entails linearity, normality, and homoscedasticity. These tests established that the OLS regression model was indeed, properly specified with the structure of available data. The findings may be reinforced by future research using a longitudinal design approach that would allow adequate testing of autocorrelation and allow tracking of changes in cost management practices and project performance over time. This would allow having a better understanding of the cause-effect relationships as well as checking the temporal dependencies in the data.

4.3.5 Linearity and Normality

Linearity and normality of residuals assume the major assumptions in regression analysis. We used Kolmogorov-Smirnov (K-S) test and residual plots to test them. The K-S test compares the pattern of residuals with a normal distribution, where a p-value which is not significant ($p > 0.05$) implies that distribution is normal. In our case, the K-S statistics value was 0.089 ($p = 0.152$) and it was obvious that residuals had normal distribution. This justifies the application of the parametric tests such as OLS regression.

Table 6: Linearity and Normality

Test	Statistic	p-value	Conclusion
K-S (Residuals)	0.089	0.152	Normality assumed

Also we looked at the residual vs. fitted values plot as shown before. The random distribution of residuals around the value zero is a sign of the linearity, whereas the distance (e.g. curve or funnel) is a sign of non-linearity or even heteroscedasticity. We did not find any systematic patterns in our plot confirming that the linear model was suitable.

Nevertheless, the Likert-scale data (1-5) may not follow the normality because of discrete data. The K-S test was not significant, although we recognize this shortcoming. In the case where continuous performance measures (e.g., actual deviations of the budget) are gathered in subsequent research, the normality assumptions would be more reasonable. To be robust, we also tested Q-Q plots, which were consistent with K-S results.

4.3.6 Multicollinearity

Multicollinearity is a measure of high correlation between predictors that increases variance and makes the coefficients unstable. We measured this aspect with the Variance Inflation Factor (VIF); VIF > 5 is considered problematic collinearity.

All the VIFs were < 2.1, which is well below the threshold, as indicated by our results i.e.

Variable	VIF
Cost Estimation	1.82
Budgeting	2.10
Cost Control	1.95
Resource Planning	1.60

Values of tolerance (1/VIF) were also good (> 0.5), which showed independence of predictors. This is in line with the low pairwise correlations among the variables (e.g., Cost Estimation and Budget Alignment: r = 0.3).

To further confirm, we looked at the condition index which was < 1.5 and thus eliminated the existence of masked multicollinearity. This strength presents the ability to interpret the individual impact of each predictor on the project performance confidently.

4.3.7 Regression Analysis

Regression analysis was done to get their understanding on the relationship between cost management practices and project performance. The model had four predictors, namely Cost Estimation, Budgeting, and Cost Control as well as Resource Planning. The dependent variable was Project Performance, a measure of how well and effectively NGO projects are undertaken. The general form of the regression model is:

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

Where:

Y = Project Performance

- X_1 = Cost Estimation
- X_2 = Budgeting
- X_3 = Cost Control
- X_4= Resource Planning

Table 7 Regression Results

Variable	Coefficient (β)	Std. Error	t-value	p-value	Significance
(Constant)	0.85	0.12	7.08	0.000	***
Cost Estimation	0.32	0.08	4.00	0.001	***
Budgeting	0.41	0.07	5.86	0.000	***
Cost Control	0.28	0.09	3.11	0.004	**
Resource Planning	0.50	0.06	8.33	0.000	***

Model Summary

The correlation analysis undertaken on the data shows that there are a few notable points in understanding the correlation of cost management practices on project performance. The key statistical parameters of R^2, Adjusted R^2 and F-statistic summarize the results and give a complete picture of explanatory power and statistical significance of the model.

The overall explanatory power of the regression model was tested in terms of coefficient of determination (R2), adjusted R2, and F-statistic. The output showed that the model had a R2 of 0.74, which implies that four predictors, namely cost estimation, budgeting, resource planning, and cost control, predict 74 percent of the variance in the performance of NGO-funded projects in Kenya. This indicates that the model is highly explanatory and the other 26 percent variation can be explained by other factors not incorporated in the model, including leadership, organizational culture, or external environmental factors.

Since **R^2** may grow merely by including additional variables into the model, Adjusted **R^2** was employed to give a more conservative measure of fit. The adjusted **R^2** was 0.72, which is corrective to both the number of predictors and the sample size. This value was calculated with the help of the formula:

$$R^2_{adj} = 1 - \left(\frac{(1 - R^2)(n - 1)}{n - k - 1} \right)$$

Where:

$R^2 = 0.74$

$n = 46$ (sample size)

$k = 4$ (number of predictors)

$$R^2_{adj} = 1 - \left(\frac{(1 - 0.74)(46 - 1)}{46 - 4 - 1} \right)$$

$$R^2_{adj} = 1 - \left(\frac{0.26 \times 45}{41} \right)$$

$$R^2_{adj} = 1 - \left(\frac{11.7}{41} \right)$$

$$R^2_{adj} = 1 - 0.285 = 0.715 \approx 0.72$$

This verifies that, the predictors have a strong explanatory power as they can account about 72 percent of the variation in project performance according to the degrees of freedom.

The significance of the regression was assessed in total by the F-statistic, which is used to determine whether the combination of predictors can explain the dependent variable. The results yielded $F(4, 41) = 29.45$, $p < 0.001$. The four predictors are reflected in the numerator degrees of freedom (df = 4), whereas the four predictors are reflected in the denominator degrees of freedom (df = 41) or the residual degrees of freedom *(n - k* - 1 = 46 - 4 - 1). The null

hypothesis that the regression coefficients are equal to zero is rejected since the F-value is large and the p-value is less than 0.001. This shows that the model in totality is statistically significant and that one of the predictors is having a significant influence on the project performance.

Overall, the regression model has a high explanatory power ($R^2 = 0.74$; Adjusted $R^2 = 0.72$) and is statistically significant ($F = 29.45$, $p < 0.001$). These findings are good evidence that cost estimation; budgeting, resource planning, and cost control coexist and have strong impacts on the performance of NGO-funded projects in Kenya.

4.7.8 Resource Planning as the Strongest Predictor

Resource Planning was found to be the most significant predictor of the project performance with a coefficient (b) of 0.50. This implies that when NGOs have proper strategies to manage their resources in terms of efficient mobilization and sufficient staffing and appropriate allocation of funds, they are more likely to succeed in their project. The influence of the positive effect of resource planning is consistent with the Resource-Based View (RBV) Theory that conveys the idea that an organization that is able to use its resources adequately can gain a competitive advantage. By concentrating on the management and deployment of the resources, NGOs can maximize on the performance of their projects and address such common challenges as inadequacy of resources or their inefficiencies.

4.7.9 Budgeting and Cost Estimation

Besides Resource Planning, Budgeting and Cost Estimation were also recognized as the important predictors of project performance in the regression model with coefficients of 0.41 and 0.32 respectively. These results support the necessity of financial management practice in the achievement of an effective project outcome in NGOs.

Budgeting forms a very vital part of financial management in which adequate funds are allocated to different parts of a project. It consists of the planning of revenues and expenses to ensure that there is no resource crunch or overruns in the project implementation process. An

effective budgeting system enables proper utilization of resources as it eliminates the possibility of inefficient spending of money and the provision of vital sector of a project. NGOs particularly the ones performing on limited financial resources are required to prepare practical and elaborate budgets that take into consideration the requirements of the project but are fiscally disciplined. Such a practice allows the NGOs to remain within their budget means, ensure that there is a way to track the spending and make informed decisions on the allocation of resources in the future.

In the same way, Cost Estimation is the key ingredient in establishing practical financial goal and expectations of the stakeholders. With proper cost estimation, NGOs will be able to calculate the possible difficulties, distribute the funds among activities and have specific financial objectives that are feasible within the context of the initiative. The estimation of cost accurately gives a blueprint on which to monitor the project progress and a way to adjust it in case of unexpected costs. It is also capable of ensuring NGOs communicate with donors, stakeholders, and team members regarding the financial needs of a project in a transparent and a trustworthy manner.

Collectively, Budgeting and Cost Estimation are part of the project management that ensures that the projects are financially viable, minimize risks and help improve the performance outcomes. Based on these findings, NGOs ought to consider these two practices, as well as Resource Planning, to maximize the project effectiveness and success. Working on all three elements, the NGOs will be able to better control their finances and enhance their capabilities in regards to project goals and expectations.

Based on the regression model, the significance of resource management in enhancing the performance of NGO projects is highlighted. Given that Resource Planning is the most affected factor on performance followed by Budgeting and Cost Estimation, then NGOs need to focus on these practices since they increase performance in their operations. The results confirm the

Resource-Based View (RBV) Theory and emphasize the importance of managing resources strategically towards the success of an organization. The reliability and robustness of these findings are also supported by the fact that the statistical significance of the model is present, as denoted by the F-statistic and large values of R^2.

4.4 Discussion of the Findings

This part combines the qualitative and quantitative findings of the research and explains the results through the perspective of the current theories and the global perspective of the functioning of the NGOs.

4.4.1 Cost Estimation and Performance

In this study, the findings of the regression are that the cost estimation has a significant positive impact on project performance with a coefficient of 0.32 and p -value of 0.001. This implies that cost estimation per se is one of the most significant factors to project success and therefore its significance to the operation of NGOs. Correct costing enables the organizations to predict the financial requirements of a project, so that sufficient funds can be made available and the spending does not exceed the budget. It also dictates the direction on how resources should be allocated since it provides realistic financial targets, which would help project managers prevent overspending and ensure that funds are used effectively during the project lifecycle.

This observation is agreeing with the Goal-Setting Theory, which states that when a person has clear and well-defined goals, they will perform better.

In the scenario of NGOs, the estimation of costs can be used in setting quantifiable financial goals, which offer transparent markers of accountability as well as performance appraisal. The NGOs can enhance their efficiency in their operations and the project outcomes by aligning the project goals with the realistic financial expectations. In addition, a clear financial plan helps NGOs deal with stakeholder expectations and enhance transparency and trust among the

donors, team members, and beneficiaries and the Agency Theory on the responsibility of agents and donors and other stakeholders' anchors this.

Nevertheless, the result contradicts the findings of Muteti & Mutiso (2020), who did not find cost estimation to have a significant influence on project performance in Kenyan NGOs. This discrepancy could be attributed to the sample size; they might not have covered the diversity of the cost management practices in the NGOs that they sampled because their sample was not comprehensive. This may have contributed to the fact that they have underrated the significance of cost estimation in their analysis.

4.4.2 Resource Planning and performance of NGOs funded construction projects

Regression results indicate that Resource Planning turned out to be the best predictor of project performance with a coefficient of 0.50 indicating strong positive impact on project success. This implies that the capability of the NGOs to attain effective project outcomes is heavily influenced by effective resource planning. Resource planning is a systematic process of identifying, organizing and allocating resources; human capital, financial resources, materials and time so that they are effectively used over the life of the project. NGOs can also reduce wastage and eliminate resource shortages which are likely to hinder execution of projects because resources can be matched with the needs of the project.

This observation reflects well with the Resource-Based View (RBV) Theory that argues that companies that have effective resource management abilities achieve competitive advantage. Where NGOs are concerned, resource mobilization and planning play an important role in ensuring that the right resources are availed at the right time to ensure that the organization achieves its objectives and delivers outcomes. Through proper resource management, NGOs can achieve better performance of its projects, improve project timely delivery and maximize the effectiveness of its projects. Resource planning does not necessarily entail allocation of

available resources but also involves identification and mobilization of new resources that can be required as the projects progress.

The findings indicate that NGOs ought to spend a lot of resources in improving and adopting powerful resource planning models. In this way, they will be able to ensure that resources are well distributed and managed over the project. This is a strategic management of resources that would increase the probability of accomplishing desired project results and NGOs to make the most effective use of resources. The NGOs which have mastered the art of resource planning have a better chance to realize successful projects within budget and at the right time and do this ultimately leading to their long term sustainability and impact.

4.4.3 Cost Control and performance of NGOs funded construction projects

Although the application of EVM seems to be very crucial in managing costs and keeping the project within the budget, its use in the NGO sector does not seem to be as prevalent and this is explained by a beta coefficient of 0.28. This can be attributed to the extent of effort and resources needed to implement EVM in an effective manner, and that the required knowledge needed to implement it, is not easily found in most organizations.

Since the EVM implementation proves to be difficult, NGOs may want to look at the option of cost control through the use of agile hybrid models, according to Gemino et al. (2020). These models integrate the compliance of agile project management and the conventional cost management practices and NGOs will find it easier to keep up with changing conditions. Agile hybrid models are also capable of delivering a more responsive cost management structure, particularly in any setting where the needs of a project often change, as is often the case in humanitarian or development-oriented NGOs.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter gives the conclusions and recommendations of the research on the effect of cost management practices and performance of projects in Non-Governmental Organization (NGO). It summarizes the major conclusions of Chapter 4, puts them in response to the goals and literature of the study and makes recommendations on how the project can be done better in terms of managing its costs. Also included in the chapter are the theoretical, practical and policy implications of the findings, limitations of the research, and the future research areas.

The general aim of the study was to analyze the role that cost estimation, budgeting, cost control and resource planning play in determining the success of NGO projects in Kenya. The research followed a quantitative and qualitative mixed method with a sample collection of 50 respondents selected out of 10 NGOs and the analysis used descriptive statistics, regression analysis and diagnostic tests. The conclusions are based on empirical evidence and are discussed in the framework of the existing theoretical models, such as Resource-Based View (RBV) Theory and Goal-Setting Theory.

5.2 Summary of the Findings

The results of this paper are strong indicators that cost management behavior can profoundly affect the performance of projects within the NGO fields. There are some major patterns and insights that can be identified based on the results of both quantitative and qualitative analyses.

5.2.1 Effect of Project Cost Estimation on the performance of NGOs funded construction projects

Cost Estimation was seen to have an important role in project performance (0.32, $p = 0.001$). Correct cost estimation of projects facilitates realistic planning of projects and helps avoid cost shortages or overruns which would otherwise compromise the success of the project.

5.2.2 Effect of Project Cost Budgeting on the performance of NGOs funded construction projects

Budgeting was an influential predictor as its coefficient was 0.41 ($p < 0.001$). Such finding underscores the need to have strong budgeting procedures whereby funds allocations are in line with not only strategic objectives but also the donor needs. Good budgeting offers proper financial guidelines when implementing projects, as a result, organizations will be fiscally disciplined and accountable.

5.2.3 Effect of project Cost Control on the performance of NGOs funded construction projects

Cost Control, which is an Earned Value Management (EVM) measurement, was also important ($w = 0.28$, $p = 0.004$) but was not as powerful. This implies that although it is of value, its effects may be augmented when the barriers of implementation like the lack of technical skills and the scarcity of digital systems are overcome.

5.2.4 Effect of Resource planning on the performance of NGOs funded construction projects

The calculation showed that Resource Planning proved to be the best predictor of project performance with a coefficient of 0.50 ($p < 0.001$). This observation highlights the

importance of organizing financial, human, and material resources systematically with the objectives and schedules of the project to make them efficient and effective.

Resource Planning was also identified as the most effective practice (mean = 4.20).

The score of resource planning is high denoting that NGOs appreciate the importance of resource planning that is vital in strategically positioning financial, human and material resources. This is in line with the RBV Theory, which points out that the internal capabilities are the major determinants of the performance of organizations (Barney, 2021).

5.3 Conclusions

This section presents conclusions corresponding to each research objective of the study.

5.3.1 To assess the effect of cost estimation on project performance in NGOs funded construction projects

The research results indicated that cost estimation is a powerful positive influence on the project performance (beta = 0.32, p = 0.001). Effective cost estimation helps the NGO to establish viable financial objectives, to distribute resources effectively, and to regulate the expectations of stakeholders. This observation augers well with the Goal-Setting Theory that states that clear and quantifiable goals enhance performance (Locke & Latham, 2002). NGOs that make additional efforts to refine their cost estimation strategies tend to prevent cases of budget overruns and improve project success.

5.3.2 To determine the effect of project cost budgeting on project performance in NGOs funded construction projects

Budgeting plays a significant role in the performance of the project (0.41, $p < 0.001$).

Properly designed budgets facilitate effective use of resources, increase financial control, and accountability to donor and beneficiaries. Alignment of budget with the donor requirements will help to keep the budget on track and enable monitoring. This supports the observations

of other research studies that there is a relationship between robust budgeting systems and the sustainability of a project (Mutheu & Waga, 2024).

5.3.3 To establish the effect of project cost control on project performance in NGOs funded construction projects

Cost control indexed by EVM has the beneficial impact on the project performance (beta = 0.28, p = 0.004) but lacks consistency in its application and the realization of its full potential. Most of the NGOs do not have the technical ability and digital framework to control costs. This proposes that simplified or hybrid cost control models, including agile frameworks complemented with the traditional approaches (Gemino et al., 2020); can be more flexible in the resource-limited environments.

5.3.4 To determine the effect of project resource planning on project performance in NGOs funded construction projects

The resource planning proved to be the best predictor of project performance (beta = 0.50, p < 0.001). Proper resource planning is quite essential to mobilize funds, human resources, and materials on time and reduce delays to achieve efficiency. This is in line with RBV Theory that also focuses on using resources in an organization to achieve a competitive advantage (Barney, 1991). NGOs that institutionalize sound resource planning procedures have higher chances of attaining their goals within the budgetary and time limits.

5.4 Recommendations

Based on the findings and their implications, the following recommendations are proposed:

5.4.1 for NGOs

NGOs must consider a holistic method of project performance improvement and future organizational sustainability through the strengthening of cost management practices.

To start with, it is necessary to enhance resource-planning systems. The organizations ought to institutionalize resource allocation systems, which are clearly connected to project goals and schedules, where mobilization and deployment of resources are directed where they are needed the most. Evaluations of resources should be repeatedly done to capture the on-going of a project and meet the new priorities, thus preventing delays or inefficiencies.

Second, a better assessment of costs will help to minimize financial risks. This entails the embracement of systematic cost estimation techniques, i.e., analogous or parametric estimating, which give evidence-based estimates. Introducing contingency allowances in budgets will also work in curbing the effect of changes in the project environment that might have no prior notice.

Third, to improve budgetary practices, it is necessary to give consideration to budgets in relation to the needs of donors as well as to the organizational strategic objectives. Involvement of various departments in budget preparation makes budget preparation to be comprehensive and fosters possession of financial plans to the organization.

Fourth, it is possible to invest in digital financial management systems like Enterprise Resource Planning (ERP) systems to enable integrated, real-time monitoring of the budgets, expenditures and resource utilization. Training the staff on a targeted basis will optimize gains associated with such systems.

Lastly, cost control capacity building should be emphasized. It involves: periodic training on new methods of advanced techniques such as Earned Value Management (EVM) and agile

hybrid models as well as the appointment of special workers or departments to oversee cost performance regularly throughout the project lifecycle.

5.4.2 for Donor Agencies

The donor agencies can be very instrumental in enhancing the financial management capacity of the NGO through more accommodating and flexible funding strategies. First, it is necessary to grant flexible funding that will allow NGOs to invest some resources in the reinforcement of internal systems. Instead of confining money only to programme work, donors ought to permit them to invest in other areas like financial management infrastructure, monitoring systems, and staff development. This flexibility will enable project delivery to be efficient and sustainable in the long run.

Second, grant donors must play an active role in training and capacity building in cost management as a formal requirement of grant agreements. This will make the funded projects supported by teams that have the required skills in budgeting, cost estimation, cost control, and donor compliance. Essentially, by incorporating capacity-building efforts into funding terms, donors will not only enable organizations to better manage the current projects but also to prepare them to cope with future projects.

Third, donors ought to promote or require the use of digital financial tools by using them as part of permissible spending categories. Enterprise Resource Planning (ERP) systems and the like have the capability to track the budget in real time, enhance the accuracy of the data, and enhance financial transparency. Enabling the use of these technologies involves the NGOs in making better decisions, enhancing accountability, and achieving greater donor reporting compliance more effectively.

5.4.3 for Policy Makers and Regulators

The regulatory bodies and policymakers have great responsibility towards enhancing NGOs financial governance and making sure that the resources are well used. One, national guidelines

on cost management practices of NGOs have to be developed. These guidelines would encourage standardization within the sector and all organizations will stick to similar principles in budgeting, cost estimation, cost control and resource planning. The standardization would not only enhance financial discipline but also increase in transparency and comparability of performance among various NGOs.

Second, governments ought to put in place reporting systems that motivate NGOs to report measures of cost efficiency and effectiveness. These frameworks would enhance accountability to the donors and the general population by demanding the use of key performance indicators, including budget variance, cost per beneficiary, and resource utilization rates. They would also share data which can be utilized on benchmarking and cross-sector learning.

Third, the policymakers ought to encourage partnerships between NGOs and professional organizations, including accounting association and project management institutes. Such collaborations will be able to make financial management continuous through access to specialized training, mentorship, and up-to-date best practices. Such partnerships would not only enable NGOs to uphold high standards in cost management, but also enable the organization to respond to the emerging needs in the development sector.

5.5 Contribution to existing knowledge

The current research is empirical validation and contribution to, and extension of, two well-known theories in the literature of organizational and project management i.e, Resource based view (RBV) theory and Goal setting theory. This research will further expound on the existing studies on cost management practices in the private, state owned construction projects. The study will contribute to existing pool of academic knowledge on NGO sector as well as offer practical guidelines to practitioners and policy makers.

5.6 Limitations of the Study

The research had a number of limitations that ought to be taken into consideration when interpreting its results. First, the cross-sectional design implies that the data was measured at one moment in time, which restricts the possibility to determine the causal connections between the cost management practices and the performance of the project. Although the findings indicate high levels of association, a longitudinal study would be better used in elucidating trends and changes over time as well as in conducting more sophisticated analyses like autocorrelation.

Second, the use of self-reported data by means of survey has a risk of response bias. It is possible that participants have exaggerated the effectiveness of practices of their organization under the influence Third; the results may be limited in generalizability due to the sample size and scope of the research, 50 respondents in 10 NGOs in Kenya. Despite the diversity of the sample, in terms of roles, experience, and regional representation, the results cannot be generalized to the NGOs functioning in other countries, sectors, or in other funding conditions. Lastly, the study has focused on some of the cost management practices, that is, cost estimation, budgeting, cost control and resource planning hence other potential influential factors were not analyzed but may also play significant roles in affecting the performance of the projects.

5.7 Areas for Future Research

Based on the limitations and the major findings of this paper, a number of future research directions are suggested to increase the knowledge of the connection between cost management practices and performance of NGOs. First, longitudinal studies would help in the determination of the effect of cost management practices on the performance of a project on an extended basis. The sustainability of such improvements could be evaluated and the dynamic nature of

project environments could be captured so as to make stronger causal inferences than what could have been made in such studies.

Second, cross-NGO comparative studies in other arenas, such as health, education and humanitarian relief, would assist in identifying sector-specific issues and best practices. It would facilitate such recommendations to be made which take note of specific operational realities of any field. Third, potential future studies may be enhanced by the inclusion of other variables in the study such as leadership competencies, organizational culture and stakeholder engagement. This would facilitate in building a more detailed performance model taking into consideration the financial management as well as the organizational dynamics in general.

Fourth, an analysis of the adoption and effects of technology would enlighten on the role that digital financial tools, e.g., ERP systems, have on cost management efficiency, decision-making, and the outcomes of the entire project. Lastly, cross-sectional studies may contrast NGOs that are regulated by varying regulatory, cultural, and funding conditions, and the results can be used to show how contextual forces influence the efficiency of cost management practices.

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APPENDICES

Appendix I: Research Letter

James Lomodok Ngathuban

Catholic University of Eastern Africa P O Box 62157– 00200

Nairobi, Nairobi Kenya Date: …….

Dear Sir/Madam

RE: REQUEST FOR COMPLETION OF QUESTIONNAIRE

My name is James Lomodok Ngathuban, a student at the Catholic University of Eastern African (Langata Campus) pursuing a Master Degree in Finance. I am currently writing my research on the effect of project cost management practices on the performance of non-governmental organizations funded projects in Kenya. The data collection instrument is strictly to provide information regarding this research work and the feedback will be treated with utmost confidentiality.

Kindly answer the questions to the best of your knowledge. The questions are purely for academic purposes and will be used later for analysis. Please answer the questions with honesty and competence because your responses will aid in making conclusions to the research problem. I apologize for any inconvenience caused; however, I will be so grateful if you responded to the questionnaire. Thank you in advance.

Yours Sincerely

James Lomodok

Appendix II: Questionnaire

This questionnaire seeks to collect data on the influence of cost management practices on the performance of donor-funded projects in NGOs operating in Kenya. The information collected is strictly for academic purposes and will be treated with confidentiality.

Section A: Respondent Background
1. Your position in the organization:

☐ Project Manager ☐ Finance Officer ☐ M&E Officer ☐ Other (Specify):

_____

2. Years of experience in managing donor-funded projects:

☐ 0–2 ☐ 3–5 ☐ 6–10 ☐ Over 10

3. Region of primary NGO operation:

☐ Nairobi ☐ Rift Valley ☐ Central ☐ Western ☐ Nyanza ☐ Eastern ☐ Coast

Section B: Cost Estimation Accuracy
Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**
Project cost estimates are based on verifiable data and historical trends.					
Risks are assessed and factored into initial cost estimates.					
Cost estimates are reviewed by multiple stakeholders before approval.					
Deviations between estimated and actual project costs are minimal.					

Section C: Cost Control Practices
Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**

The NGO has a formal process for tracking expenditures against budgeted costs.					
Earned Value Management (EVM) or equivalent is used to monitor cost performance.					
Periodic cost performance reviews are conducted.					
Cost control measures are effective in preventing budget overruns.					

Section D: Budgeting Effectiveness

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**
The budgeting process is participatory and involves key project stakeholders.					
Budgets are aligned with both donor requirements and project goals.					
Budget allocations reflect realistic needs across project components.					
Budget revisions are conducted based on changing project circumstances.					

Section E: Resource Planning Practices

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**
Human, financial, and material resources are allocated based on activity schedules.					
Resource planning considers cost-effectiveness and project sustainability.					

Delays in resource availability negatively affect project timelines.					
The NGO uses a structured approach to plan and monitor resource utilization.					

Section F: Project Performance

Please tick (✓) the appropriate box or fill in your estimate where applicable.

1. **To what extent do effective cost estimation practices contribute to the successful delivery of your projects on time and within budget?**

   (Delivery Efficiency)

   ☐ Not at all

   ☐ To a small extent

   ☐ To a moderate extent

   ☐ To a large extent

   ☐ To a very large extent

2. **What percentage of your project activities were completed on time and within budget?**

   (Delivery Efficiency)

   __% (Please estimate)

3. **How would you rate the overall performance of your NGO-funded projects in achieving set objectives (e.g., scope, quality, and targets)?**

   (Goal Achievement)

   ☐ Very Poor

   ☐ Poor

   ☐ Neutral

☐ Good

☐ Very Good

4. **How sustainable are the outcomes of your NGO-funded projects (e.g., long-term benefits or continued impact after project closure)?**

   (Sustainability)

   ☐ Not sustainable at all

   ☐ Slightly sustainable

   ☐ Moderately sustainable

   ☐ Very sustainable

   ☐ Extremely sustainable

5. **In your opinion, how does resource planning influence the long-term success of projects in terms of sustainability and impact?**

   (Sustainability)

   ☐ No impact

   ☐ Slight impact

   ☐ Moderate impact

   ☐ Significant impact

   ☐ Very significant impact

Section G: Final Comments

1. What are the key challenges your NGO faces in managing project costs?

_____

2. What recommendations would you offer to improve cost management and budgeting practices in NGO projects?

_____

Appendix III: Research Time frame 2024/25

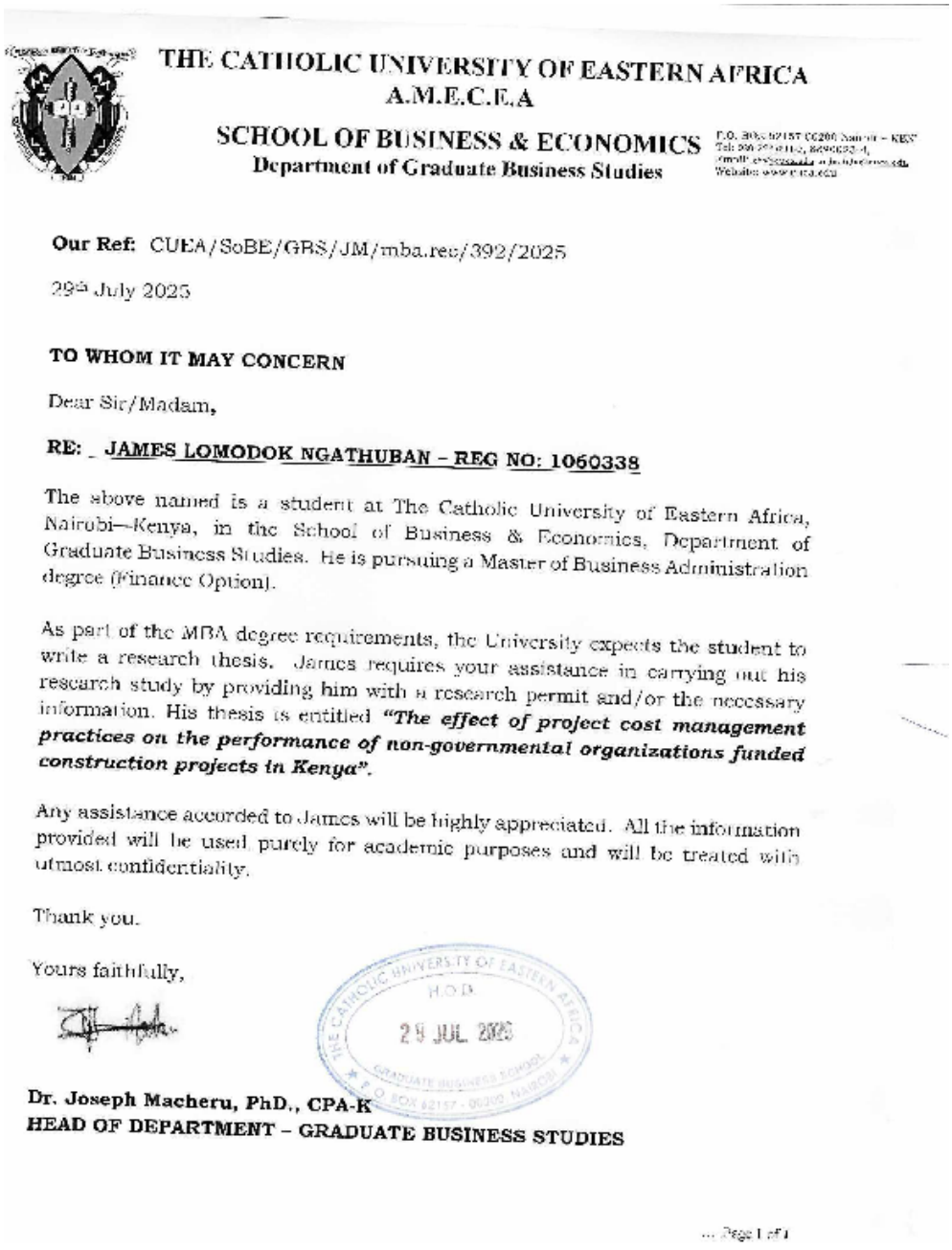
Activity	Mar25	April25	May-June25	July25	Aug25	Sept25	Oct25
Concept Paper							
Presentation and handling of corrections							

Proposal Development							
Proposal Defense							
Handling of proposal defense corrections and submission							
Application for research permits							
Data collection							
Data Analysis							
Thesis Defense							
Handling defense corrections and submission							
Journal Publication							
Clearance and preparation for Graduation							

Appendix IV: Research Budget

S/NO	ITEMS	AMOUNT (Kshs)
1	Desktop review of literature	12000
2.	Editing and typesetting	8000
3.	Printing and Photocopying	15,000
4.	Data Collection 1 research assistant	35,000
5.	Travelling Expenses	20,000
6.	Data Analysis (SPSS)	30,000
7.	Binding	15,000
8.	Article retrieval and Journal Publication	30,000
9.	Miscellaneous	5000
	Total	170,000

Appendix V: Data Collection Letter



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA
A.M.E.C.E.A

SCHOOL OF BUSINESS & ECONOMICS
Department of Graduate Business Studies

P.O. Box 62157 00200 Nairobi – KENYA
Tel: 891601-6, 8911174, 8910032-4
Email: [illegible]
Website: www.cuea.edu

Our Ref: CUEA/SoBE/GBS/JM/mba.reg/392/2025

29th July 2025

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: JAMES LOMODOK NGATHUBAN – REG NO: 1060338

The above named is a student at The Catholic University of Eastern Africa, Nairobi—Kenya, in the School of Business & Economics, Department of Graduate Business Studies. He is pursuing a Master of Business Administration degree (Finance Option).

As part of the MBA degree requirements, the University expects the student to write a research thesis. James requires your assistance in carrying out his research study by providing him with a research permit and/or the necessary information. His thesis is entitled ***"The effect of project cost management practices on the performance of non-governmental organizations funded construction projects in Kenya".***

Any assistance accorded to James will be highly appreciated. All the information provided will be used purely for academic purposes and will be treated with utmost confidentiality.

Thank you.

Yours faithfully,

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA
H.O.D.
29 JUL 2025
GRADUATE BUSINESS SCHOOL
P.O. BOX 62157 - 00200 NAIROBI

Dr. Joseph Macheru, PhD., CPA-K
HEAD OF DEPARTMENT – GRADUATE BUSINESS STUDIES

... Page 1 of 1

Appendix VI: Nacosti Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 824711

Date of Issue: 19/August/2025

RESEARCH LICENSE



This is to Certify that Mr.. JAMES Lomodok NGATHUBAN of Catholic University of Eastern Africa, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kisumu, Laikipia, Nairobi on the topic: The Effect of Cost Management practices on the performance of Non-governmental Organizations funded Construction projects in Kenya for the period ending : 19/August/2026.

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824711

Applicant Identification Number

Ag. Director General
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