INFLUENCE OF PROJECT MANAGEMENT PRACTICES ON IMPLEMENTATION OF NON-GOVERNMENTAL ORGANIZATION PROJECTS IN KAKAMEGA COUNTY, KENYA

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DECLARATION

I declare that this research project is my original work and has not been submitted for the award of any degree or diploma in any other institution. No part of the paper should be reproduced without the authority of the author and / or Kenyatta University.

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This research project has been submitted for the course examination with my approval as the University supervisor.

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DEDICATION

I dedicate this project to my family.

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I thank God for the strengths and guidance in writing this project. I further acknowledge my supervisor, Ms. Gladys Kimutai, for the guidance. I am also thankful for the emotional support and continuous encouragement from my family. Lastly, I extend my heartfelt appreciation to my friends who have accompanied me on this educational adventure and have assisted me along the way.

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ABBREVIATIONS AND ACRONYMS

CBOs	Community Based Organizations
CSF	Critical Success Factors
CWOs	Community Watersheds Organizations
GPFOD	Global Policy Forum Operational Directive
ICT	Information Communication Technology
IT	Information Technology
KAA	Kenya Airports Authority
KENHA	Kenya National Highways Authority
KRA	Key Result Area
KSF	Key Success Factor
M & E	Monitoring and Evaluation
MSMEs	Micro Small and Medium Enterprises
NACOSTI	National Commission for Science, Technology and Innovation
NGCDF	National Government Constituency Development Fund
NGOs	Non-governmental organizations
NTCP	Novelty, Complexity, Technology and Pace (NTCP)
PIP	Project Implementation Profile
PM	Project Management
PMBOK	Project Management Body of Knowledge
PMTT	Project Management Tools and Techniques
PPP	Public Private Partnerships
UN	United Nations
USA	United States of America
USAID	United States Agency for International Development
VIF	Variance Inflation Factor

OPERATIONAL DEFINITION TERMS

ICT Adoption means adoption of technological skills. It will be measured by available ICT equipment/infrastructure, time spend using computers and the level of ICT technical skills.

Project Funding refers to the resources allocated towards undertaking of a project operationalized in this study as funds availability, adequacy and timely disbursement

Project Implementation refers to timely project completion, number of projects completed, compliance to budget and compliance to scope.

Project Management Practices refer to the set of principles, processes, methods, and techniques used by managers of projects and their groups to incept, plan, implement, monitor, regulate, and close projects with an aim of guiding efficient and effective management of projects to achieve their objectives within specified constraints, such as time, budget, and scope.

Project Management Training refers to **s**kill and knowledge transfer to staff to enable them delivery on the project implementation mandate of an organization. It has been measured by the number of trainings, areas covered and mode of training.

Project Management: Is the of application of knowledge, techniques, tools, and skills that meet the needs of the donor and the expectations of the community.

Risk management: The level of preparedness for uncertainties that may face project lifecycle and coming up with ways of mitigating them. It has been measured by risk mitigation, identification of risk types and risk assessment.

ABSTRACT

Considering their important role in sustainable development, the performance of projects delivered by NGOs goes a long way in enhancing sustainable development and poverty reduction. In contrast, a report by Non-Governmental Organization coordination board documents that most organizations in Kenya face a range of challenges in implementing their projects with all of them linked to weak project management practices related to limited funds, low uptake of technology by staff, high risks in handling cash from the field to office and low capacity among staff. In regard to the above, this study interrogated how project management practices specifically, funding, information and communication technology adoption, risk management, and training affect the implementation of NGO projects narrowing down to Kakamega anchoring on the Agile Project Management, Systemic Approach Theory, Novelty, Complexity, Technology and Pace "Diamond" Theory as well as the Uncertainty Reduction Theory. The research used descriptive and explanatory research designs and targeted 87 projects by the organizations based in Kakamega. The study further targeted 206 project management personnel determined using the Yamane formula who were furnished with structured questionnaires to collect quantitative data. The results of the data analyzed through inferential and descriptive methods indicated that funding, risk management, ICT adoption and training have a significant and positive influence on project implementation among NGOs. Given so, it was recommended that project managers in the NGO sector can implement effective funds management practices to ensure adequacy, diversity, and consistent disbursement. They can also invest in ICT adoption to improve their ICT skills, hardware, and software development. Furthermore, the findings led to a recommendation to invest in training and capacity development by having more regular trainings, outsourcing of trainings as well as internal capacity building practices. Lastly, NGOs need to enhance implementation of risk management practices such as risk evaluation, analysis, identification, and mitigation with an aim of minimizing risks and enhancing project success.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Momentary projects are on goings aimed at meeting the set objectives on time but with the subsequent outcome outlasting them. An example is a classroom which can be constructed in 3 months only to be used by learners in a period exceeding 15 years. A project is termed as a success if it delivers value to the beneficiaries in the long run (Horine, 2005). Regardless, projects have been termed as successful if they have been implemented within time scope, budget, attains the set quality requirements as well as ends up being accepted by the beneficiaries it was intended to benefit (Ruhara, & Moronge, 2016).

The existence of a number of failed projects can be explained by various factors some of which are funds inadequacy, inadequate top management as well as government support and also in adequate community support. Other projects are defined by unsustainably whereby upon leaving the cite, the community members are unable to perpetually sustain the project.

Globally, in Spain, Zidane et al. (2018) emphasized the role of organizational structures, technical skills, team work and organizational culture in implementation of NGO projects. Similar views were held by Dezdar and Amin (2019) who stated that in Malaysia, organizational elements like communication, senior management buy-in and technical skills played an important role in delivery of NGO projects. Furthermore, Oliveira et al. (2018) argued that for the Brazilian case, leadership skills was the main reason behind delivery of the projects funded by NGOs while Thulth and Sayej (2019) recommended availability of resources, adoption of ICT and training as critical factors in NGO project implementation in Palestine.

Regionally, in Africa, Anikan and Oyewole (2028) stated that supervisory support and leadership played an important role in delivery of NGO projects in Nigeria. Additionally, Agasa (2019) stated that training and resource availability were critical factors in Ghana.

Locally, in the Kenyan context, Mwangi and Mutiso (2018) argued that some of the antecedents that lead to reduced projects success were lack of stakeholder involvement, inadequate capacity and communication. In regard to NGO projects in Kenya, Gichoya (2005) linked project failure to lengthy periods during implementation, economy-related challenges as well as mismanagement of the donor funds. Additionally, the projects experience high failure rates because of inadequate consultations as well as coordination with state actors. Horine (2005) agreed that while proper funds management, inclusivity and accountability increase the success of the projects under not-for profit organizations, the projects may nevertheless face failure issues as a result of the above-mentioned reasons. In an environment characterized by poor policies, the failure of such projects by non-state actors increases. Additionally, poor integration increases the chances of failure, but non-state actors are nowadays careful to ensure that they implement projects where the implementation systems are strong and government policies reasonable (Knack, 2006).

In most cases, as argued by Atack (1999), non-state actors are known for their ability to deliver projects successfully to the target groups. This contrasts the position of the government and private sectors which have demonstrated poor results in projects delivery. NGOs, in most cases, are deemed to have at their disposal, skills which the government and private sector doesn't have in regard to projects delivery. In line with the argument by Steinberg (2003), NGOs are not mandated democratically to be transparent. The challenge facing most of these organizations is that the expenses of the development services they provide are not covered by the profits of the customers they represent (Fowler, 1997).

1.1.1 Project Implementation

The successful project delivery involves coordinating resources and team members to achieve the intended outputs in the specified timeframe (Thairu, 2015). Investors and stakeholders now recognize the importance of effective project implementation over the project's vision itself, as without it, the project will not achieve its goals. Well executed project management is essential in ensuring project realization; there are four basic criteria to consider: time frame, budget, effectiveness, and customer satisfaction (Hyvari, 2016). Project success relies on management support, as it can greatly impact client satisfaction. The degree of management support is

determined by the allocation of resources, such as time, manpower, and finances, and is influenced by the organization's future plans and goals (Kerzner & Kerzner (2017). Overall, PMBOK (2008) defines a project as a task with a set time frame, performance characteristics, and intended use by specific individuals.

According to the Project Implementation Profile (PIP) developed by Pinto (2010), the ten Critical Success Factors (CSF) for project implementation includes; Project clear goals and general direction (Vision), Communication: which includes providing the relevant data for the actors, top management support: where the leaders provide sufficient resources and other support, Project schedule which details all the necessary activities to be undertaken within specific scope ; Client consultation where there is interaction, communication and liaising with the involved parties, personnel which involves assembling of a competent team to undertake the project as well as monitoring and feedback and the preparedness to handle crisis and risks if they emerge (Kerzner & Kerzner, 2017).

CSF's identification helps the project team to manage challenges and uncertainty that are encountered during the project implementation (Pinto, 2010). Chandra (2008) regarded project implementation as the actualization of a plan aimed at operationalizing a dream and realizing the benefits. While that is the case, achievement of the stakeholders' expectations is not a walk in the park as documented by White (2011) who posited that only 65 percent of projects do so. In addition, Burke (2013) documented that only 18 percent of projects meet the budget plans, 50 percent meet the cost plans and a third are terminated before completion.

Pinto (2010) agreed that project implementation stage is complex and needs collective efforts to meet the targets. Its success will also depend on handling the critical success factors associated with it. On the contrary, Slevin and Pinto (2011) warned that failure to meet these critical success factors would result to failure since in the modern era, projects face unprecedented uncertainties, influence, requirements and constraints.

Mochal (2009) offered an encouragement that with sound teams and plans, projects stand a better chance. Meredith and Mantel (2011) the implementation stage is very important since it accounts for up to 85 percent of the project activities and thus, proper coordination at this stage is very

important. In this study, project implementation was determined by timely project completion, sum of projects completed, compliance to budget and compliance to scope.

1.1.2 Project Management Practices

Successful project delivery will usually be calculated by how well the customer set goals are achieved, in addition to whether it achieves the task expected to be adequately fulfilled and if it addresses the established issue within the period, cost and quality requirements set (Yeoh & Koronios, 2010). Good management of project planning will be required to meet this objective.

Given their importance and role, emerging nations are called upon to take lessons from industrialized nations to ensure that critical success factors are adapted to the end. Ofori (2007) stated that design of measures for the successful implementation of these principles requires a strategy that needs to be followed; caution in the detection of new developments, the application of new ideas and approaches to match the circumstances of the various nations and the observing of results using the measures listed. Loo (2002) also identified areas for enhancing project quality for developing countries to include: improving range management, incorporating project control measures, improving budget management, introducing generic critical success factors, technical areas, Organizational preparation, progress assessments and evaluations, efficient management planning, manager and staff training, team capacity building and strategic planning.

Different scholars and project management specialist have listed some of the critical success. Baker, Murphy (1974) and Fisher (1988) identified accurate adequate funding to completion, initial cost, availability of competent team, committed team, effective and efficient planning, limited start up hardships, no bureaucratic policies, on site project manager and efficiently established critical success factors. Similarly, Pinto and Slevin (1988) argued that client consultation, monitoring and evaluation, technical tasks, project mission, project schedule, client acceptance, top management support personnel recruitment, communication and troubleshooting as the critical success factors required for project success.

Lechler (1998) had a different opinion and argues that a suitable technology has been chosen for the project, Before the start of the project, communication channels were established, both strategies and resources were used to aid the project effectively. The project leader with the requisite authority are the factors that determined the project progress. Crawford (2001) asserts

that monitoring and control, technical performance, supportive management, team development, project definition, task-oriented problem solving and decision making, selection of teams, leadership and communication, strategic direction and stakeholder management are crucial.

Cooke-Davies (2002) asserted that in light of the various critical elements for successful project implementation as given by various scholars, this study investigated level of funding, ICT adoption, risk management and training as supported by Ofori (2007); Loo (2002); Pinto and Slevin (1988) and Crawford (2001). In the study ICT adoption has been measured by available ICT equipment/infrastructure, time spend using computers and the level of ICT technical skills. On the other hand, level of funding has been measured by funds availability, adequacy and timely disbursement. Training has on the other side been measured by the number of trainings, areas covered and mode of training while risk management has been measured by risk mitigation, identification of risk types and risk assessment as recommended by Ofori (2007); Loo (2002); Pinto and Slevin (1988) and Crawford (2001).

1.1.3 Non-governmental Organizations Projects in Kakamega County

NGOs are non-profit organizations which work independently from the governmental and inter-governmental organizations. The entities are formed by either non-citizen and citizens to offer services to the communities. The NGOs can also be described dot be large organization which are managed by the volunteers and tend to avoid formal funding but get funds from donations and the entities get involved in different activities in the community. In support of the entities, most of the NGOs are not subjected to tax issues. The use of NGO was initially established in 1945 by support of UN as way of allowing provision of services to the community (NGO Coordination Act, 1990). NGOs have experienced an increase in roles of the international development specifically in alleviation of poverty and humanitarian assistant sector (Abilla, 2023).

USAID describes NGOs as part of privately-owned entities but voluntary in structure. However, various researchers have made some contrast on such a definition considering that most of the NGOs have been made a public entity and managed by government agencies. NGOs undertake various roles such as improving environmental condition, promoting health, advocating for human rights among others. There are two types of NGOs based on their orientation (charitable,

participatory, and empowering) and level (CBOs, CWOs, State, National and International NGOs) of how they operate (Muchilwa & Okoth, 2021).

In Kenya, NGOs are active in various sectors of the economy including children's rights, education, small scale business, training, population, counseling, poverty alleviation, peace, health environment, water, gender and development, agriculture, and human rights etc. The NGO Council offers the expected leadership guidance to the sector of NGO. This supports important values of honesty, openness, responsibility, fairness, and good governance. This strengthens the nature of self-regulating the NGO's leaders and makes the leaders identify their capability to improve key services which enhances the socio-economic status of Kenyan Community in the direction of having sustainable development (Mogoa, 2016).

According to the NGO Council (2019), Kenya has 2,248 NGOs mostly dealing with environmental and human rights-based issues. These NGOs are distributed in different parts pf all the 47 counties in Kenya. In Kakamega County, there are 87 NGOs undertaking different projects in different parts of the county (NGO Coordination Council, 2023). The list of NGOs based in Kakamega County is as shown in appendix III.

1.2 Statement of the Problem

NGOs in Kakamega face a myriad of issues such as prolonged delays, frequent changes, overruns in costs and schedule and quality issues especially at the implementation stage (Muchilwa & Okoth, 2021). Statistics from the NGO Coordination council demonstrated average performance of NGO funded projects with up to 46% of the projects experiencing cost overruns and quality challenges. Failure rate among these projects was also established to be close to 29% (NGOs Council, 2020) report. Based on their significant role in the society in terms of sustainable growth and poverty decrease, the failure rate of these projects negates this mandate which then necessitate creation of the factors behind this low rate of results with an aim of enhancing delivery success.

Daniel and Ugochuku (2020) demonstrated that through effective management of resources, both financial and human as well as having a clear project management plan in place, then a project would be well executed. To that end, Senbeta and Shu (2019) emphasized the importance of

allocation of resources, coming up with a workable risk mitigation plan, assembling a team with the right technical skills as well as ensuring that the right modern technology is adopted, to the success of projects.

Despite non-governmental organization starting landmark projects aimed at eliminating hunger and improving the living standards of Kenyans as well as alleviating diseases in Kenya and Africa, their implementation has faced a myriad of challenges (Nyambura, Rambo & Nyonje, 2019). Some of these challenges include limited funding, poor ICT infrastructure, high risks associated with its framework which faces high cases of fraud. According to the annual reports by NGO council (2020), the NGO faces a major challenge in implementing its projects in Western Kenya due to high cases of fraud among beneficiaries and staff, limited funds and diversity of risks involved in project execution. As a way of enhancing the state, it's crucial for the stakeholders to first recognize key causes of poor project implementation or various non-implementations of projects. Many reports have already been conducted on failure and success of programs in firms (Muchilwa & Okoth, 2021).

A study by Njogu (2016) interrogated the influence of stakeholder's involvement on project performance and established that M & E positively improved its performance. The study however presents conceptual research gap since the study focused on stakeholder's involvement as the only factor. Another study by Novo et al. (2017) established the effect of leadership on project success and established that leadership traits are directly linked to project success. The study similarly presented conceptual research gap since it focused on leadership as the main factor. Another study by Buba and Tanko (2017) which focused on leadership and its role in project success presented a contextual research gap that aimed at other projects. While these studies have interrogated the role of various factors in project implementation, there is a lack of research connecting these factors to project implementation within an NGO context, which highlighted the need for this study.

1.3 Objectives of the Study

1.3.1 General Objective

To determine the influence of project management practices on implementation of non-governmental organization projects in Kakamega County.

1.3.2 Specific Objectives

i. To establish the influence of level of funding on implementation of non-governmental organization projects in Kakamega county.
ii. To determine the effect of ICT adoption on implementation of non-governmental organization projects in Kakamega County.
iii. To establish the influence of risk management on implementation of non-governmental organization projects in Kakamega County.
iv. To determine the influence of training on implementation of non-governmental organization projects in Kakamega county.

1.4 Research Questions

i. What is the influence of level of funding on implementation of non-governmental organization projects in Kakamega county?
ii. How does ICT adoption influence implementation of non-governmental organization projects in Kakamega County?
iii. In what way does risk management influence implementation of non-governmental organization projects in Kakamega County?
iv. What is the influence of training on implementation of non-governmental organization projects in Kakamega county?

1.5 Significance of the Study

It's expected that the study can contribute to the current knowledge regarding this project's implementation through identification of project management applications in the process based on NGOs sector in Kakamega County. Moreover, findings can be of great relevance to NGOs in other counties in Kenya and across the globe.

Non-governmental organizations can gain insights in identification and application of project management practices to ensure diligent project implementation. The research also offers an opportunity for the non-governmental organizations to manage and assess their project management practices and how they rate compared to other organizations. In addition, the NGOs can benefit from the findings as it enables them to initiate the most appropriate project management applications. Scholars in project implementation and management stand to gain from the study by identifying project management practices that affect project implementation and identifying gaps in literature to advance their research.

1.6 Scope of the Study

The study interrogated NGOs in Kakamega County implementing a total of 87 projects where 425 project implementation team members were targeted. The team comprised of project managers, project administrators, project coordinators, project technical support team and community representatives. The study established the role of sufficient funding, ICT adoption, training and risk management on successful projects implementation. The focus was on NGO projects existing for more than 5 years (2018 - 2022).

1.7 Limitation of the Study

A fraction of the respondents did not want to be open in sharing the data required with fears that the data would be used to show a negative image of them or their NGO. In addition, some respondents refused completely to fill out the questionnaires. The researcher however made introductions through the university letter and NACOSTI, as well as explained the study purpose clearly.

In other cases, some respondents gave skewed and biased responses to paint a superior image about their NGO. This was mainly because, the responses being sought by the study related to sensitive issues about the success of management and staff in implementation of projects. These factors evoked emotions leading to biased responses. To this end, the researcher convinced the respondents to be objective in their responses considering that the study would make recommendations which would also benefit them. The researcher was also willing to share the study results with the responding NGOs where necessary.

1.8 Organization of the study

The first Chapter of this study discusses circumstantial view while highlighting the link between the variables form a global to a local level. Here, the objectives are clearly stated. The second gives an overview of other scholarly works on the same theme while highlighting points of deviation and convergence to identify gaps. The third gives the methodological procedures adopted to achieve the objectives and the fourth gives the findings based on survey data. The last chapter states the conclusions based on the findings, highlights areas for improvement on the recommendations and gives way forward in terms of subsequent research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature associated to the theme of the study has been presented in this section. It consists of the theoretical framework of theories used to support the study. The chapter has given a summary of studies by other researchers in this field while also finding out research gap from them. In addition, a figurative presentation of the conceptual framework.

2.2 Theoretical Review

Agile Project Management, Systemic Approach Theory, Novelty, Complexity, Technology and Pace (NTCP) "Diamond" Theory and the Uncertainty Reduction Theory have anchored the study as explained in the subsequent paragraphs.

2.2.2 Theory of Agile Project Management

Robert, Austin and Richard (1998) who were the proponents of the agile project management theory emphasized the need to have a flexible approach to the scope of work to enable the planners to deliver value in a short period of time. Agile project management theory also stresses upon division of project work into smaller units for the purpose of ensuring that project team members work together with a vivid vision regarding the scope of their duties and responsibilities as well as roles they are supposed to play in the project (Hoda, Noble & Marshall, 2008).

The theory also advocates for regular control and evaluation to make sure that the final product of the project falls within the stipulated standards as well as regular contact and collaboration with the clients and stakeholders to factor in their input. The theory advocates for inclusion of stakeholders, systems and structures in order to realize success (Owen & Koskela, 2006).

The theory of Agile Project Management is the main study theory on which the study anchors on and it emphasizes flexibility, collaboration, and continuous adaptation in project management. It anchors on all the study variables and in context of project funding, Agile allows for incremental funding based on evolving project needs and outcomes, aligning financial resources with the dynamic nature of project development. In terms of ICT adoption, Agile promotes iterative implementation and welcomes changes, facilitating the integration of evolving technologies as the project progresses. Agile's emphasis on regular reassessment and adaptation aligns well with effective project risk management, allowing teams to promptly identify and mitigate risks throughout the project lifecycle. Additionally, Agile's focus on empowering and cross-functional project teams encourages continuous training and skill development, ensuring that teams remain adaptable and well-equipped to handle evolving project challenges and technological advancements.

2.2.2 Systemic Approach Theory

Propounded by Von Bertalanffy (1930), the theory highlights that various parts which can be integrated together to ensure smooth flow of a whole part constitute a system. In this system, information flow is very critical to the overall functioning of the system (Madapusi, & D'Souza, 2012). If the flow of information is effective, then the understanding of the entire system is made easy and the whole system can function properly.

Kerzner (2017) argued that effective information flow drives successful exploitation of the parts in the system, exploiting the strengths of each part and ensuring that the advantages improve the ability to forecast decision making. Where information channels are not clear, information asymmetry increases and that leads to agency issues between the manager and the project clients. In addition, good forecasting can be achieved by availability of technology hence the theory presents importance of technology adoption in project success.

The Systemic Approach Theory, aligns to this study as it views projects as interconnected components within a broader system, emphasizing holistic and integrated management. In terms of project funding, this approach advocates for a comprehensive understanding of the project's systemic context, allowing for a more accurate assessment of resource needs and facilitating optimal allocation. Regarding ICT adoption, the systemic approach encourages a unified and

coordinated integration of technology, ensuring that ICT solutions align with the overall project system. In project risk management, the theory suggests a systemic analysis of potential risks, recognizing the interdependencies among project elements and addressing vulnerabilities across the entire system. For project team training, the systemic approach underscores the importance of cross-disciplinary skills, promoting a holistic understanding among team members to enhance their ability to navigate the complexities of the interconnected project system.

2.2.3 Novelty, Complexity, Technology and Pace (NTCP) "Diamond" Theory

This theory was developed by Shenhar and Dvir (2007). The theory tries to explain the success of projects in different dimensions while also putting into perspective its overall firm contributions. The theory argues that different project management styles can be implemented to yield different project results with different project types. It was argued that different project management styles can be used to manage project failures and accidents among different projects.

Shehar and Dvir (2007) argued that when the opinions of the potential users are incorporated in the project planning, project communication is enhanced, the expertise of the project managers is considered, there is better planning and risk management, then the project is likely to have success.

The theory is relevant to this study offering a nuanced perspective on project management. In terms of project funding, the theory implies that projects characterized by higher levels of novelty, complexity, and technological innovation may require increased financial resources to navigate these challenges successfully. For ICT adoption, the theory posits that projects with a higher technological component should emphasize the integration of advanced tools and systems to meet their specific requirements. Regarding project risk management, the NTCP Diamond suggests that projects with elevated levels of novelty and complexity need a sophisticated risk management strategy to address uncertainties associated with technological advancements and intricate project structures. Concerning project team training, the theory advocates for comprehensive and continuous training programs to equip project teams with the skills necessary to handle the novel, complex, and technologically advanced aspects of their projects.

2.2.4 Uncertainty Reduction Theory

Hogg and Adelman (2013) founded the theory which explains the role of communication in reducing uncertainty and improving project success. The theory explains the methods which can be used to enhance relationship between project implementors to successful delivery. Hogg *et al* (2013) indicated that in the scenario involving implementation of a project, there is a need to have better communication plan so as to enhance understanding of what is being dealt with thus improving the success rate of the project.

Smith (2013) argued that communication provides a clear focus of the project on results. At the inception stage, it is of paramount importance to enhance the relationship between the project team members thus better communication practices are necessary. The main argument is that for people to work toward a common goal, there is a need to manage their communication since it reduces uncertainty.

In this study, the Uncertainty Reduction Theory can be applied to various aspects of project management. In terms of project funding, the theory suggests that a higher level of uncertainty in project outcomes may necessitate increased funding to mitigate potential risks and uncertainties. Regarding ICT adoption, the theory implies that incorporating advanced technological solutions can help reduce uncertainty in project processes and outcomes. For project risk management, the Uncertainty Reduction Theory underscores the importance of developing robust risk management strategies to minimize uncertainties associated with project complexities. In project team training, the theory emphasizes the need for continuous skill development and knowledge acquisition to enhance the team's ability to navigate uncertainties effectively and adapt to changing project dynamics.

2.3 Empirical Review

In this section a review of literature is presented demonstrating how other studies interrogated the study concepts. The section examines other studies focusing on the themes arranged per objective. In the review, critical literature is demonstrated, highlighting the gaps in the research and how the current study sought to fill these gaps.

2.3.1 Level of Funding and Project Implementation

Level of funding in the study was measured through funds available, funds adequacy and period of funding. Studies have been conducted to link project funding to its implementation. Chukwuma and Uchenna (2020) conducted a study to evaluate the level of funding necessary for successful project implementation in Umuchu, Nigeria. It established whether the amount of funding required, identify the sources of funding, and analyse the difficulties associated with financing project implementation. The results indicated that a large amount of funding was needed for successful project execution, and the main sources of this funding were grants and loans from both international and local organizations. Additionally, the challenges of funding project implementation included lack of funds, insufficient government aid, and mismanagement of funds (Chukwuma & Uchenna, 2020).

In India, Kumar (2020) explored the connection between the amount of funding and the successful execution of a project. Through mixed methods, it was demonstrated that inadequate funds can cause delays in implementation or result in project failure. The study also identified factors such as complexity of the project, team capacity, as well as external environment that affect the funding and implementation of the project. Strategies such as proper planning, sufficient funding, and effective communication were proposed to optimize the implementation of the project.

A study by Wibowo and Alfen (2013) to establish whether financing infrastructure projects under PPP arrangements was beneficial to the economy. The study which focused on a number of randomly sampled projects up to 100, indicated that effective financing mechanisms positively influenced the impact of the projects on the economy.

Another study by Siborurema et al. (2015) which interrogated how funds availability can affect project delivery within cost, time and quality in Rwanda demonstrated that indeed, funding was a critical determinant. It was demonstrated that poor cost estimation practices interfered with the funding arrangements and that influenced delivery of the projects in a negative manner.

Locally, Cheboi (2014) established whether funding of projects in the government ministries determined its delivery. Through a selective approach, the study targeted 42 projects across the ministries between the year 2008 and 2013. It was established through regression modelling that

poorly financed projects, especially through donor funds which faced delays in releasing funds experienced overruns.

Kariuki (2013) also interrogated whether financing projects through the PPP arrangement was a determinant of infrastructural projects performance in Kenya. Focusing on 60 projects under the PPP arrangement in Kenya by the year 2013, it was established that such financing arrangements bore positive results. Its ultimate effect on economic development was positive and significant.

In another study, Orellana (2013) demonstrated that in PPP projects, availing funds was the main driving force behind the success of the initiatives. This he notes emanated from the capability of regional governments to solicit for financial resources from private companies, private for-profit companies and non-profit organizations that invested in hospital refurbishment, provision of medical equipment and health informatics.

2.3.2 Adoption of ICT and Project Implementation

ICT adoption refers to the use of technological skills. It was measured by available ICT equipment/infrastructure, time spend using computers and the level of ICT technical skills. Studies have linked ICT adoption to project implementation. This study, conducted in Malaysia by Nurul Adilah and Mohd Suki (2020) got to explore the level of ICT acceptance and project success. The study evaluated the ICT adoption rate among industry practitioners and to recognize the key elements influencing adoption in the construction sector. The study utilized an online survey of Malaysian construction practitioners to analyze the data. It was indicated that ICT adoption in the industry was moderate, and the most crucial success factors were identified as IT infrastructure, management attitude, training and support, competitive pressure and IT culture.

The study, conducted by Omotayo (2020) sought to understand how ICT projects have been embraced and implemented in Nigerian universities. A qualitative methodology was used to gather information from faculty staff at three universities in Nigeria. The results showed that inadequate ICT infrastructure and lack of technical support were the major challenges impeding the adoption of ICT in Nigerian universities. The study also suggested strategies such as increased funding, improved ICT infrastructure, and technical support as potential solutions to successful ICT projects in Nigerian universities.

A study conducted by Samiul and Kabir (2020) established what antecedents were essential to ICT adoption and how its adoption affected delivery of projects. To do so, a quantitative survey of 200 IT professionals from both the private and public sectors of Bangladesh was conducted. It was shown that absence of management commitment, technical expertise, ICT infrastructure and insufficient budget were the primary barriers to successful adoption of ICT and project implementation. The results also highlighted the need for additional research to explore alternative strategies for successful ICT adoption and project implementation.

This mirrored the findings by Ali (2020) who established that organizations which have factored in ICT in their projects perform better through successful projects deliveries. A study that was carried out by Spriano (2013) examined the success of implementation of -Government ICT projects. It was established that project success rate based on a scale of 0 to 100 was only 55 percent. Additionally, poor ICT infrastructure contributed to the high failure rate of the projects.

Lin and Lee (2005)'s study illustrated the factors influencing implementation of IT projects and revealed that implementing a technology related strategy in an organization was directly correlated with the availability of technical skills. Lack of such skills was associated with an increase in failure rate of the IT projects.

Kikuvi (2016) conducted a study on determinants of project performance in Mombasa County narrowing down to water projects. It specifically established what elements affects effective implementation of slum projects and how they influence sustainable development. Descriptive survey was adopted, and the sample was adopted through random. It was emphasized that in the M & E process, the use of technology enhanced success. Tafara (2013) interrogated the sustainability of water projects in Mtito Andei by diagnosing the critical success factors towards the same. It was established that some of the issues facing the sustainability of the projects were lack of technical skills, low adoption of IT in billing as well as poor project ownership transition.

2.3.3 Risk Management and Project Implementation

It is the level of preparedness for uncertainties that may face project lifecycle and coming up with ways of mitigating them. It was measured by risk mitigation, identification of risk types and risk assessment. Studies have linked project risk management to its implementation. In a study by Adamek and Richardson (2019) which cross-surveyed project managers randomly in USA, it

was demonstrated that as a result of risk mitigation practices, projects experienced higher chances of success.

In another study in the USA, Rea (2019) suggested that event though risk management strategies are often underutilized, leading to unnecessary delays and cost overruns, their importance in projects cannot be understated. IN another study, D'Souza and Patankar (2020) through a critical review of literature, demonstrated that the most common sources of risk included budget and schedule overruns, changes in scope, and inadequate resources. Finally, the authors concluded that risk management techniques such as using project management software and employing a risk management team are effective in mitigating potential risks and ensuring successful project implementation.

Similarly, while focusing on IT projects, and using a survey of 250 project managers, Wallace, Keil and Rai (2004) established that effective risk monitoring was essential for project success. In the regional context of Nigeria, Kishk and Ukaga (2008) interrogated some of the risk analysis processes adopted by organizations in the infrastructure projects and indicated that some of the projects did not conduct risk analysis and that greatly hampered their delivery. Additionally, it was established that such low implementation practices led to high costs overruns and longer time delivery as a result of emergent risks.

In Ghana, Hayford and Sarfraz (2013) established the extent to which MSMEs had adopted risk management factors in their projects. The study also found out the extent to which the factors impacted contributed to the project performance. The MSMEs were established to have inadequately implemented risk mitigation practices which explained their poor project delivery. In another Kenyan study, Musyoka (2012) established the risk management practices among capital projects and its impact on their success. Focusing on projects at KAA, the study revealed that indeed various risk management practices, monitoring, analysis and mitigation had been put in place. The higher its adoption, the better.

2.3.4 Training and Project Implementation

Project Management Training refers to skill and knowledge transfer to staff to enable them delivery on the project implementation mandate of an organization. It was measured by the number of trainings, areas covered and mode of training. A study by Wang and Zhou (2020)

examined whether project implementation was determined by training of the team. Through a survey of 360 professionals with experience in project implementation and training, it was confirmed that training had an important role in project success.

A study conducted by Lytras et al. (2010) stated that the project manager cannot do their job without a proper instrument and that is why it was important to train and equip the team with necessary skills for delivery. Such methods don't need to be reputable applications or anything, but they can be easy and tested strategies for handling project work. Inadequate research and expertise are an obstacle to the use of PMTT by managers to make successful use of PMTT in projects. This as a result results to a more appropriate operating civil society sector local staff.

Jones (2020) sought to explore the effect of training on project implementation. The objectives of the research were to evaluate the role of training in project implementation, determine the difficulties encountered during implementation, and assess the efficacy of training in addressing these issues. The results revealed that training was essential for project implementation, as it developed employees' knowledge and skills, encouraged them to work more productively, and raised their involvement in the project. The main challenges encountered during implementation, such as lack of resources and poor communication, were also identified. In conclusion, the study found that training was effective in overcoming these challenges, resulting in successful project implementation.

A study by Rajkumar (2013) on the other hand established that technical skills were essential in delivery of PPP projects in India. The same finding was established by Adongo (2012) who stated that inadequacy of well trained and experienced staff in the implementation process highly contributes to the failures of PPPs. In Ethiopia, Beyene (2012) focusing on water projects in the Amhara region, stated that after handover, train the community on the technical skills to handle the water projects proved to be a great success to its sustainability. Jenner (2018) also explored the effectiveness of training in project implementation and its effect on project success. The findings concluded that training was an effective tool in increasing the success of a project, with the more training provided resulting in a greater chance of success.

2.4 Research Gaps

A review of literature has presented a number of research gaps which the current study sought to fill. From the review, the study established contextual, conceptual and methodological research gaps which the current study pursued. Table 2.1 provides a summary of the research gaps from the literature reviewed.

Table 2.1: Research Gaps

Author	Focus	Findings	Gaps
Nyandika & Ngugi (2014)	Role of Stakeholders' Participation on success of road projects	Involvement of stakeholders increased the chances of project success	Contextual Research gap since the study focused on KENHA
Njogu (2016)	Stakeholder's involvement on project performance	Involving stakeholders in project planning, implementation, M & E positively improved its performance	Conceptual research gap since the study focused on stakeholder's involvement
Adan (2012)	Stakeholder's role on performance of NG-CDF Projects	Involving stakeholders in project planning, implementation, M & E positively improved its performance	Conceptual research gap since the study focused on stakeholder's role
Yang et al. (2011)	The role of leadership on project delivery	Project success is shaped by good leadership	Methodological research gap since the study was a qualitative study
Novo et al. (2017)	Leadership and its role in project Success	Leadership traits are directly linked to project success	Conceptual research gap since the study focused on leadership
Buba and Tanko (2017)	Leadership and its role in project Success	Strategic direction by the project manager greatly determines project delivery	Contextual Research gap since the study focused on construction projects

Source: Researcher (2022)

2.5 Conceptual Framework

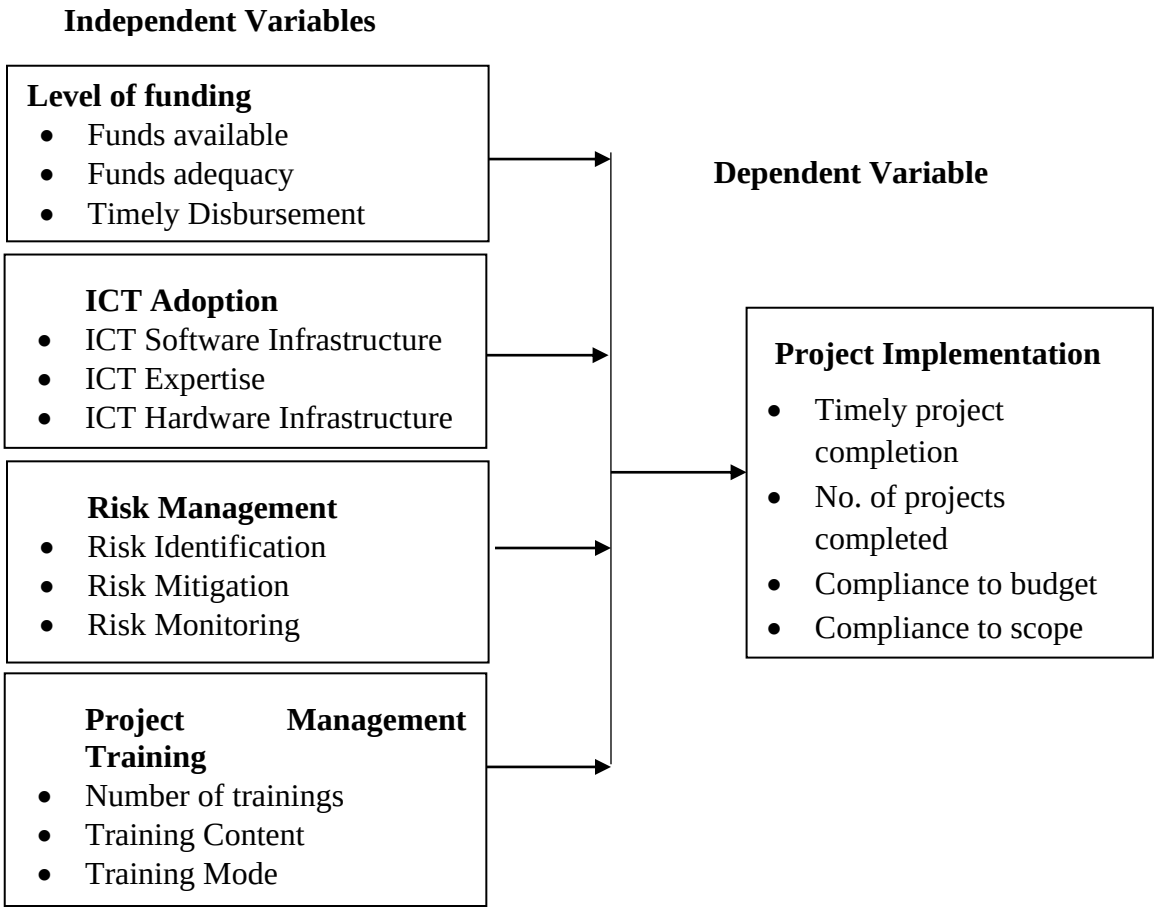

Figure 2.1: Conceptual Framework

Source: Author (2022)

The conceptual framework indicates that successful implementation of projects is intricately linked to several key factors, including the level of project funding, ICT adoption, project risk management, and project team training. Adequate project funding is essential as it provides the necessary resources for project activities, ensuring that teams have the financial support needed to achieve project goals. Additionally, the adoption of Information and Communication Technology (ICT) in projects enhances efficiency, communication, and collaboration among team members, contributing to smoother project implementation.

Effective project risk management is crucial to identify, assess, and mitigate potential challenges that could derail the project. Finally, continuous project team training is vital to keep the team equipped with the latest skills and knowledge, fostering adaptability and resilience in the face of unforeseen circumstances. Collectively, these elements create a well-rounded approach to project implementation, enhancing the likelihood of success by addressing financial, technological, and human factors throughout the project lifecycle.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This part describes different techniques employed within the research. Also help in defining different data used as well as sources and the study's sampling size and technique, target population. It also explained how to comply, interpret and present information.

3.2 Research Design

The study adopted an explanatory research design. This is justified based on the argument by Creswell (2014) who indicated that an explanatory research design supports quantitative research in unearthing the causal effects between variables was adopted. It also used descriptive research design which suited the description of the current state of affairs in regard to the study issue. Osoo (2016) and Sekaran and Bougie (2010) similarly argued that it was an important design in finding out how variables related. Mangeni (2018) argued that it is suitable in establishing a cause-effect relationship between concepts and based on these points of view, it was suitable for the study.

3.3 Target Population

Based on their definition, Mugenda and Mugenda (2003) stated that population refers to the entire units of analysis where a sample is obtained to participate in a study. The research was primarily focused on project management team from the 87 projects being implemented by the 16 NGOs in Kakamega County, Kenya. According to NGO Council (2018), there were 87 projects which were active between 2014 and 2018 from which the following was targeted.

Table 3.1: Target Population

Project staff	Population	Percentage
Project Managers	56	13%
Project Administrators	87	20%
Project Coordinators	64	15%
Project Technical Support Team	71	17%
Community Representatives (Project Beneficiaries)	147	35%
Total	**425**	**100%**

Source: NGO Council (2022)

3.4 Sample Size and Sampling Procedure

Sampling according to Orodho and Kombo (2002) is selecting a smaller unit from an entire frame with the same characteristics to represent the entire population. Through purposive approach, the study sampled respondents per project, that is, project managers, project administrators, project coordinators, project technical support and community representatives from the 87 projects. These respondents were selected since they are the team that is involved directly in implementation of the project processes. Yamane (1957) formula for calculating sample size is given as:

$$\mathbf{n} = N / 1 + N(\varepsilon)^2$$

Where:

N = Target Population (425)

n = Sample Size

ε = Sampling error set at 5% as recommended by Mohajan (2018), Pandey and Pandey (2021) and Snyder (2019). Replacing the values gave a sample size of 206 which was stratified according to Table 3.2.

Table 3.2: Sample Size

Project staff	Population	Sample Size	Percentage
Project Managers	56	27	13%
Project Administrators	87	41	20%
Project Coordinators	64	31	15%
Project Technical Support Team	71	35	17%
Community Representatives (Project Beneficiaries)	147	72	35%
Total	**425**	**206**	**100%**

Source: Author (2022)

3.5 Data Collection Methods and Procedures

Most appropriate type of data used to answer the research questions was quantitative obtainable through structured questionnaires in form of a 5-point scale. A period of 2 weeks was allocated to the process of collecting data where questionnaires got dropped and for some cases, google forms used through emails.

Those respondents who had not filled the questionnaires were allocated an extra week to do so. Sakwa et al. (2014) supported the use of a self-administered questionnaire by arguing that it ensures that close relationships are developed between the respondents and the researcher. The data collection process commenced after an introduction letter as well as NACOSTI permit obtained.

3.7 Pilot Test

A pilot is important in structuring a research instrument having corrected for inconsistencies, ensured validity as well as consistency (Coolican, 2013). Therefore, this study conducted a pilot study on 30 randomly sampled respondents in NGOs in Kisumu. Hill (1998) argued that less than 30 respondents are suitable in a pilot.

3.7.1 Validity of the Research Instruments

Mugenda and Mugenda (2009) stated that it is the ability of an instrument to capture its intended purpose. In this study, content validity was checked through grounding the measurement of the

constructs in literature. Additionally, the supervisor went through the instrument and assess it in line with accuracy. Any comments were addressed accordingly before the main process.

3.7.2 Reliability of Research Instruments

It is the internal evenness in repeated trials to ensure that an instrument captures meaningful data. The internal consistency was captured through Cronbach Alpha suggested by Cronbach in (1951) which ranges between 0 and 1. A threshold of 0.7 recommended by Tavakol (2011) was adopted by this study.

3.8 Data Analysis and Presentation

This study collected quantitative data which was coded, then edited in excel and then imported to SPSS version 24. The data was then analyzed through quantitative data analysis procedures involving descriptive and inferential approaches. The specific descriptive statistics were mean, percentages and standard deviation while the specific inferential statistics were regression and correlation analysis which were used to establish relationships between the study variables. Tables and figures were used to present the results in order to ease visualization and interpretation. The model adopted is as shown.

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

Where:

Y= Project Implementation

β_0 - constant

ε – error term

X_1 – Level of funding

X_2– Adoption of ICT

X_3–Risk management

X_4–Training on Project management

β_1 to β_4 = Regression coefficients

3.9 Diagnostic Tests

Since an ordinary least square regression model was used, the assumptions were tested. This section gives a summary of them.

3.9.1 Normality

This refers to the fact that the data forms a bell shape (Mangeni & Mike, 2018). Normality of the variables was tested using Kolmogorov – Smirnov tests whereby, an insignificant value demonstrates normality.

3.9.3 Multicollinearity

Multi-collinearity refers to the situation where the predictor variables show high relationships between themselves (Mang'eni, 2019). The presence of multicollinearity leads to spurious results (William *et al.,* 2013). It is hence important to diagnose and correct in case of its presence and thus, the study will use Variance Inflation Factor (VIF) method (Leech *et al.,* 2011), to establish presence of multicollinearity. A VIF value ranging between 1 and 10 shows lack of this problem.

3.9.4 Heteroscedasticity

Heteroscedasticity shows a situation whereby the error term in a regression model demonstrates varied variance (Mang'eni, 2019). Similarly, this problem leads to spurious results and it's important to diagnose it and correct. This was tested through Breusch Pagan method whereby, a p-value less than 0.05 shows its absence.

3.9.5 Autocorrelation

Serial correlation shows a situation where the error terms are correlated (Mang'eni, 2019). Similarly, this problem leads to spurious results and it's important to diagnose it and correct. This was tested through Breusch Goddfrey method whereby, a p-value less than 0.05 shows its absence (Hair *et al.,* 2010).

3.10 Ethical Considerations

Ethical considerations for conducting the study were adhered to. Regarding the respondents, the researcher sought their consent, ensured that their privacy is ensured, their confidentiality is respected, and their names are not revealed. As for the process, the researcher ensured that the necessary permits and introduction letters are obtained prior. The need for these letters was to ensure that introductions were made to the relevant authorities before the process.

A university letter was obtained then used to apply for NACOSTI permit. Using the two documents, introductions were made to the management of the NGOs before commencing the data collection after permission is granted. Additionally, the project acknowledged other researchers work by referencing them accordingly as well as editing their work for plagiarism.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The chapter provides demographics responses as well as the pilot feedback is also presented and explained. There is also a presentation of the descriptive results as well as correlation and regression results. In the chapter, besides explanation, the findings have also been aligned with existing literature.

4.2 Response Rate

A total of 206 project managers, administrators, coordinators, technical support and community representatives were targeted to give information regarding the status of the projects. Figure 4.1 gives the feedback.

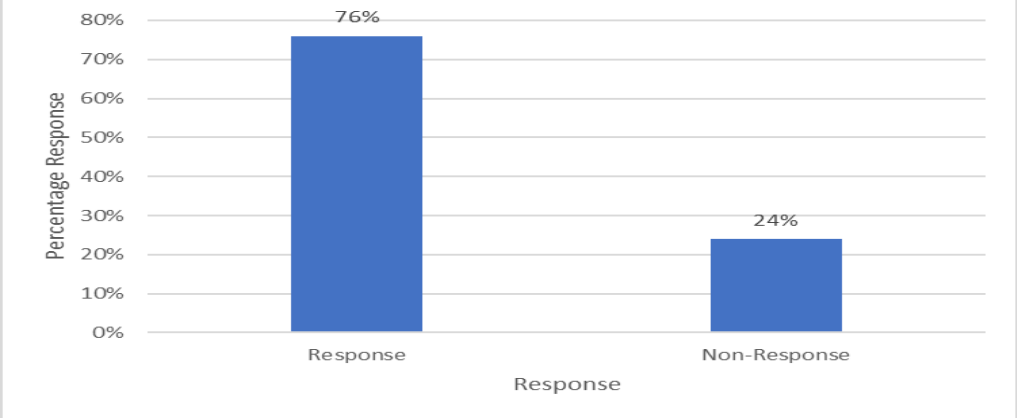

Figure 4.1 Response Rate

Source: Survey Data (2022)

It was established that out of the issued questionnaires, 157 were properly filled with no blanks which gave a response rate of 76 percent that is satisfactory as argued by Mugenda and Mugenda (2003).

4.3 Reliability Analysis

A pilot study was also conducted on 30 randomly sampled respondents involved in NGO projects in the neighboring Kisumu County.

Table 4.1 Reliability Test Results

Variable	Number of Items	Cronbach Alpha	Decision
Level of Funding	8	0.784	> 0.7 hence reliable
Adoption of ICT	6	0.814	> 0.7 hence reliable
Risk Management	6	0.823	> 0.7 hence reliable
Training	6	0.798	> 0.7 hence reliable
Implementation of NGOs Projects	7	0.769	> 0.7 hence reliable

Source: Survey Data (2022)

The pilot study results shown in Table 4.1 demonstrate that all the variables exceeded 0.7 to mean that they were reliable in line with the suggestion by Cronbach (1951).

4.4. Demographic Characteristics

Respondent's demographic characteristics that is age, work experience in NGO projects, the specific projects they deal with, and educational qualification was interrogated.

4.4.1. Respondent's Age Bracket

The inclusion of age diversity in projects can be a key contributor to their success, as it allows for a variety of perspectives, ideas, and skillsets to be applied to the project. This can enhance problem-solving, creativity, and productivity, as well as lead to better customer service due to understanding the needs of different generations. Additionally, age diversity can help to create an inclusive and respectful work environment.

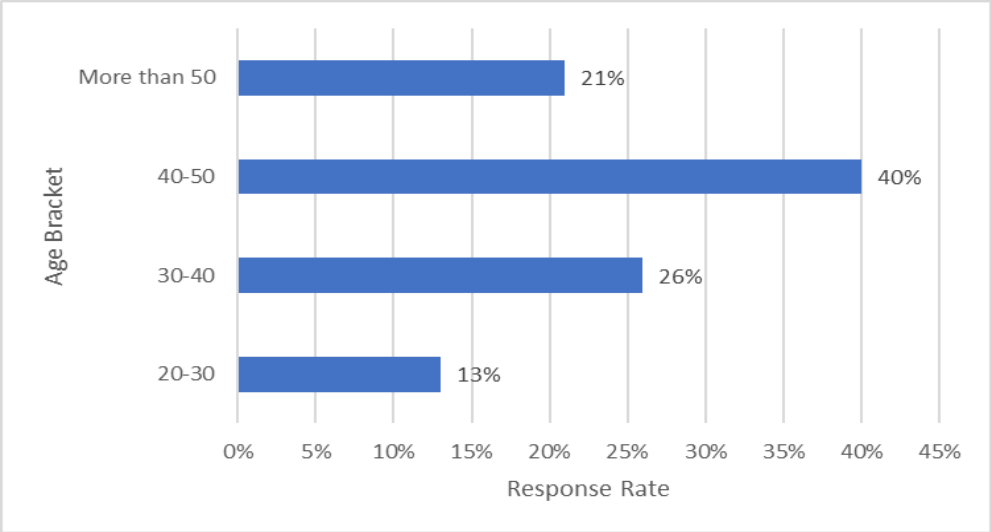

Figure 4.3: Respondent's Age Bracket

Source: Survey Data (2022)

The results indicate that 40 percent of the respondents were aged between 40 and 50 years and 39 percent were aged below 40 years. This implies age diversity among the respondents.

4.4.2. Respondent's Level of Education

The importance of having a varied educational background in projects is essential for creating an atmosphere of inclusivity and respect. The differences in viewpoints and ideas that come with a varied educational background can create more effective solutions. Moreover, it encourages collaboration, creativity and innovation among team members. Additionally, it ensures that all voices are heard and that each individual has an equal chance to contribute.

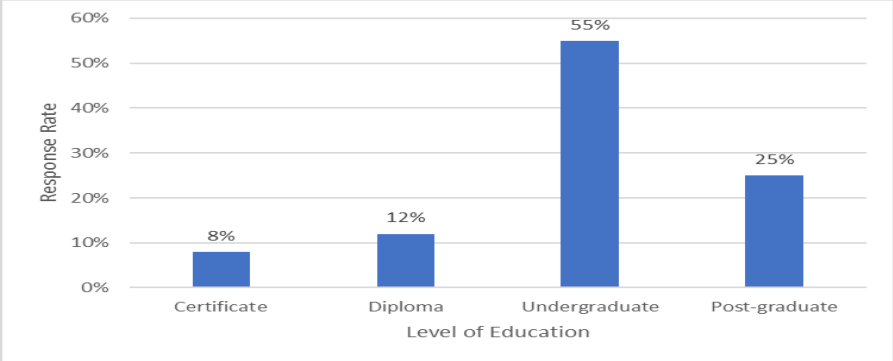

Figure 4.4: Respondent's Level of Education

Source: Survey Data (2022)

It was established that 55 percent had an undergraduate which implies that they were literate hence aligning to the approach of self-administration of the questionnaire.

4.4.3. Type of Project

The study targeted varied projects. The types of projects from which the respondents came from was established.

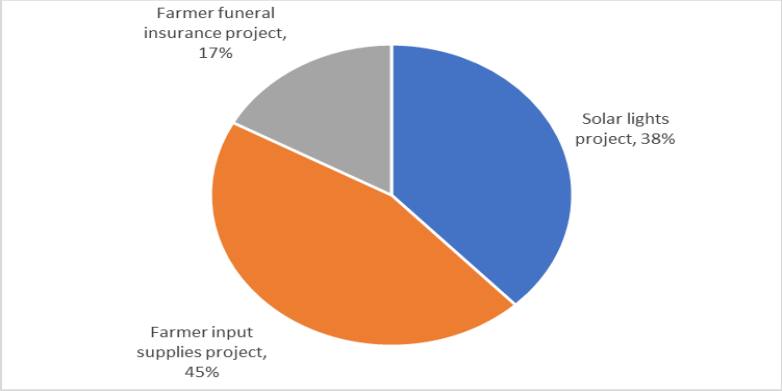

Figure 4.5: Type of Project

Source: Survey Data (2022)

The results imply that 45% of those who participated in the study were from the farmer input projects and 38 percent of them were dealing with solar light projects. The rest came from farmer funeral insurance projects.

4.5 Descriptive Statistics

The respondents rated statements of variables of the study on the Likert scale and descriptive analysis of the statements has been conducted in this section.

4.5.1 Descriptive Statistics of Level of Funding

The descriptive findings of the statements on the level of funding have been analysed, presented and explained in this section.

Table 4.2 Descriptive Statistics of Level of Funding

Statement	N	Mean	Standard Deviation
The NGO projects have sufficient funding	157	4.10	0.93
Funds are diligently utilized in the organization	157	4.34	1.12
Every employee is accountable to every expenditure	157	4.16	1.00
More funding agencies are willing to fund NGO projects	157	3.98	1.21
There are adequate funds for every project	157	3.72	1.11
Funds are used for the intended project	157	3.99	0.96
Donors get value for their funds and resources	157	4.15	1.04
Projects are funded on all the phases and period	157	3.92	1.24
Average		**4.05**	**1.08**

Source: Survey Data (2022)

Based on the findings, NGO projects have sufficient funding, and the funds are efficiently utilized. In addition, there is accountability for the funds, proper resource mobilization mechanisms and that projects are funded well across phases (Mean > 3.60). Similarly, Chukwuma and Uchenna (2020), Kumar (2020) and Wibowo and Alfen (2013) emphasized the importance of funding for project success.

4.5.2 Descriptive Statistics of ICT Adoption

The descriptive findings of the statements on the ICT adoption have been analysed, presented and explained as below.

Table 4.3: Descriptive Statistics of ICT Adoption

Statement	N	Mean	Standard Deviation
The organization has invested heavily on modern technology	157	3.68	1.36
There are sufficient ICT equipment and infrastructure in the organization	157	4.12	0.98
Most of the NGO correspondences are done via email	157	4.39	0.68
Each member of staff has a modern lab top and accessories	157	4.32	0.95
There is internet connectivity for every office and mobile devices	157	3.92	1.18
The organization trains staff on use of modern ICT programs and equipment	157	4.04	1.13
Average		**4.08**	**1.05**

Source: Survey Data (2022)

As per the findings, NGOs have invested in modern technology to ensure that there is sufficient ICT infrastructure such as internet connectivity, modern computer labs and other accessories (Mean > 3.60). This is in recognition of the changing technological need and the importance of aligning to modern technology s as to have success as argued by Chadee and Pang (2018). The study findings further indicated that most of the NGO correspondences are done via email and that each member of staff has a modern lab top and accessories. This mirrors Mohapatra *et al*. (2019) that technology was being adopted by NGOs as a way of enhancing efficiency in projects.

Overall, based on the overall mean of 4.08, it can be argued that ICT has been adopted among the NGOs to a high extent. This was an indication of adequacy of ICT adoption among the organizations funding the projects. This is consistent with Adilah and Mohd Suki (2020) who recommended ICT adoption for enhanced project implementation success.

4.5.3 Descriptive Statistics of Risk Management

Descriptive findings related to the statements on risk management have been analysed, presented, and explained in this section.

Table 4.4: Descriptive Statistics of Risk Management

Statement	N	Mean	Standard Deviation
The projects face various types of risks	157	4.30	0.74
Every project has a risk management team	157	4.47	0.92
Every staff is trained on how to detect, mitigate and manage risks	157	3.98	1.30
Risks are handled at every project phase	157	3.84	1.11
All risks are anticipated and prepared for during project planning	157	4.39	0.86
Sufficient funds are set aside to manage and mitigate risks	157	4.12	0.85
Average		**4.12**	**0.85**

Source: Survey Data (2022)

Based on the findings, the projects face various types of risks but every project has a risk management team to handle the risks at every stage. In agreement with Tang et al. (2017), there is a need for projects to shift from risk transfer to risk reduction by putting in place adequate risk management systems to manage project risks. In view of that, NGOs have put in place project risk management practices.

In addition, the findings indicated that every staff is trained on how to detect, mitigate and manage risks because sufficient funds have been allocated towards that (Mean > 3.60). In their discussion, a study by Adamek and Richardson (2019) lauded the importance of resource allocation towards risk management in projects. In addition, the scholars argued that training employees to be aware of risk management practices in projects was an important step.

Overall, a mean of 4.12 demonstrated that risk management strategies have been taken seriously by employees through adoption to a high extent. Tis led to the agreement that the NGOs have put in place risk management measures which is consistent with the findings by Rea (2019) who similarly recommended adoption of risk management practices to ensure success in project implementation.

4.5.4 Descriptive Statistics of Training

Descriptive findings of the statements in regards to training have been analysed, presented, and explained below.

Table 4.5: Descriptive Statistics of Training

Statement	N	Mean	Standard Deviation
There are regular trainings for every department on project management	157	4.25	0.80
NGO outsources training experts on project management	157	4.36	0.82
The organization has a vibrant training and development department	157	4.44	0.86
The organization builds capacity internally	157	4.24	0.96
Mentorship and buddying are key strategies on capacity building	157	3.56	1.32
The organization commits more funds to training and development	157	4.13	1.07
Average		**4.16**	**0.97**

Source: Survey Data (2022)

The results confirmed presence of regular trainings in every department and where possible, there is outsourcing of training experts. It was also agreed that there is internal capacity building because the organization had committed funds towards the same (Mean > 3.60). Capacity building to enhance project delivery has been suggested by Wang and Zhou (2020). The researchers noted that capacity building builds necessary technical and soft skills which increase the chances of project ownership.

Overall, an average mean score of 4.16 demonstrate an agreement that training methods have were implemented by NGOs extensively. The importance of training for successful project implementation was also recommended by Jones (2020) who stated that training imparts necessary project management skills for project success.

4.5.5 Descriptive Statistics of Project Implementation

The descriptive findings of the statements on implementation of the projects have been analysed, presented, and explained in the below section.

Table 4.6: Descriptive Statistics of Project Implementation

Statement	N	Mean	Standard Deviation
All projects are accomplished within the set scope	157	4.14	0.81
The organization projects are all efficiently implemented	157	4.48	0.50
The projects comply with timelines set	157	4.66	0.56
Projects are implemented within budget	157	4.07	1.09
All projects are completed as planned	157	4.38	0.72
Beneficiaries are satisfied with the projects	157	3.74	1.46
Value for the donor resources has been enhanced	157	3.86	1.09
Average		**4.19**	**0.89**

Source: Survey Data (2022)

The results demonstrated that quality projects were mostly delivered within scope, budget, and time. Furthermore, all the projects were completed as planned to meet the stakeholder's quality specifications as well as value (Mean > 3.60). This demonstrates that putting in place steps to enhance training, technology adoption, training and resource allocation in projects greatly affects the performance of projects.

Overall, an overall mean of 419 implied that projects were well implemented among the NGOs interrogated in the study. This is inconsistent with Haugan (2012) who stated that NGO projects experienced low implementation success because of challenges such as limited funding, poor ICT infrastructure and high risks.

4.6 Diagnostic Tests

Normality of the variables was tested using Kolmogorov-Sminorv test.

Table 4.7: Normality Test

	Kolmogorov-Smirnova		
	Statistic	**df**	**Sig.**
Level of Funding	1.080	157	0.064
Risk Management	1.178	157	0.102
Adoption of ICT	1.168	157	0.098
Training	1.189	157	0.104
Project implementation	1.156	157	0.106
Lilliefors Significance Correction			

Source: Survey Data (2022)

The results indicate that the values of Kolmogorov Sminorv were not significant (greater than 0.05) hence the conclusion that the data was normally distributed. VIF was used to test for multicollinearity.

Table 4.8: Multicollinearity Test

	Collinearity Statistics	
Independent Variables	**Tolerance**	**VIF**
Level of Funding	0.732	1.366
Risk Management	0.623	1.605
Adoption of ICT	0.866	1.155
Training	0.570	1.754
Dependent Variable: Project Implementation		

Source: Survey Data (2022)

A VIF value above 10 indicates presence of multicollinearity. Since no variable had a VIF value above 10, there was absence of multicollinearity. The study also used Breusch Pagan test to establish whether there was a problem of Heteroscedasticity in the error term.

Table 4.9: Homoscedasticity Test

Ho: Constant Variance
Chi2 (3) = 7.780
Prob > Chi^2 = 0.142

Source: Survey Data (2022)

The results demonstrated that Prob > Chi2 > 0.05 implying absence of Heteroscedasticity. This indicates that the error term did not have the problem of Heteroscedasticity hence it was suitable to use OLS. Autocorrelation was also conducted to establish whether the error term was correlated. The study used Breusch Goddfrey test.

Table 4.10: Autocorrelation Test

Ho: Constant variance
Chi2(3) = 8.679
Prob > Chi^2 = 0.264

Source: Survey Data (2022)

The results demonstrated that Prob > Chi2 > 0.05 implying absence of serial autocorrelation. This indicates that the error term did not have the problem of autocorrelation hence it was suitable to use OLS.

4.7. Correlation Analysis

Table 4.11: Pearson Correlation

		Level of Funding	Risk Management	Adoption of ICT	Training	Project Implementation
Level of Funding	r	1				
	Sig. (2-tailed)					
Risk Management	r	.446**	1			
	Sig. (2-tailed)	0.000				
Adoption of ICT	r	.183*	.268**	1		
	Sig. (2-tailed)	0.022	0.001			
Training	r	.472**	.579**	.359**	1	
	Sig. (2-tailed)	0.000	0.000	0.000		
Project Implementation	r	.541**	.646**	.439**	.703**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	157	157	157	157	157

Source: Survey Data (2022)

It was demonstrated that the predictor variables had a positive relationship with project implementation to imply a linear relationship. In addition, the level of association of funding with project implementation was strong ($r = 0.541$; $P < 0.05$). This shows that higher project funding levels are associated with higher project implementation rate. This agreed with Kariuki (2013) who also established that effective financing mechanism are significantly associated with project implementation.

It was also showed that an increase in project risk management practices is associated with a strong, positive and significant improvement in project implementation ($r = 0.646$; $P < 0.05$). Hayford and Sarfraz (2013) also indicated that as a result of risk aversion practices, Ghanaian SMEs recorded better performance. The findings also indicated that ICT adoption had a moderate positive and significant relationship with project implementation ($r = 0.439$; $P < 0.05$). This shows that an increase in ICT adoption is associated with an improvement in project implementation. The findings of the study are consistent with that of Spriano (2013) who indicated that the major reason for failure of implementation of e-government projects was lack of existing ICT infrastructure.

The findings consequently showed that training had a strong positive and significant relationship with project implementation ($r = 0.703$; $P < 0.05$). This shows that an increase in training practices is associated with an improvement in project implementation. Rajkumar (2013) also revealed that training was an important project management factor in implementation of infrastructure development projects.

4.8. Regression Analysis

A regression model was established o find out the magnitude and nature of the effect of the predictor variable son project implementation. The model summary results are presented in Table 4.12.

Table 4.12: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.801	0.641	0.632	0.2257
Predictors: (Constant), Training, Adoption of ICT, Level of Funding, Risk Management			

Source: Survey Data (2022)

The results indicated that up to 63.2 percent of the variation in project implementation is accounted for by the four factors that is Training, Adoption of ICT, Level of Funding and Risk Management (Adjusted R-Square = 0.632). Other factors account for the remaining 36.8 percent of the variation in project implementation among NGOs in Kakamega County.

Table 4.13: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	13.827	4	3.457	67.857	.000
Residual	7.743	152	0.051		
Total	21.571	156			
Dependent Variable: Project Implementation					
Predictors: (Constant), Training, Adoption of ICT, Level of Funding, Risk Management					

Source: Survey Data (2022)

The model estimated was a good fit (P-Value < 0.05). The model is therefore considered a good fit to predict any other similar outcomes in different scenarios. The beta coefficients were also established and presented.

Table 4.14: Model Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	0.641	0.224		2.863	0.005
Level of Funding	0.152	0.043	0.201	3.545	0.001
Risk Management	0.246	0.052	0.291	4.723	0.000
Adoption of ICT	0.156	0.043	0.191	3.655	0.000
Training	0.301	0.052	0.371	5.761	0.000
Dependent Variable: Project Implementation					

Source: Survey Data (2022)

Resultant Regression Equation

Project Implementation = 0.641 + 0.201 (Level of Funding) + 0.291 (Risk Management) + 0.191 (Adoption of ICT) + 0.371 (Training)

The result indicate that level of funding has a positive and significant influence on project implementation ($\beta = 0.201$; $P < 0.05$). This implies that higher project funding levels are associated with significant project implementation rate. The findings are consistent with Orellana (2013) who found evidence that the availability of financial resources had a positive influence on the implementation of PPPs health projects undertaken by regional governments in Peru. In addition, a study by Kumar (2020) which explored the connection between the amount of funding and the successful execution of a project demonstrated that there is a direct correlation between the level of funding and the project's implementation, as inadequate funds can cause delays in implementation or result in project failure.

The result also showed that risk management has a positive and significant influence on project implementation ($\beta = 0.291$; $P < 0.05$). This implies that adoption of project risk management practices is associated with a significant improvement in project implementation. The findings are consistent with the findings of a study by Musyoka (2012) which indicated that project risk management has a positive significant influence on project implementation. The findings also agree with that of Rea (2019) who examined the relationship between risk management and project implementation and found that risk management strategies are often underutilized, leading to unnecessary delays and cost overruns.

In addition, it was established that adoption of ICT has a positive and significant influence on project implementation ($\beta = 0.191$; $P < 0.05$). This implies that ICT adoption is associated with a significant improvement in project implementation. This implies that a unit increase in ICT adoption leads to a significant improvement in project implementation by 0.156 units. The findings are consistent with that of a study by Lin and Lee (2005) who revealed that implementation of IT projects need development of ICT infrastructure. Similarly, a study by Samiul and Kabir (2020) established that adoption of ICT (Information and Communication Technology) was a significant move in enhancing efficiency in project implementation in developing countries.

Similar results also showed that training has a positive and significant influence on project implementation ($\beta = 0.371$; $P < 0.05$). This shows that adoption of training practices is associated with a significant improvement in project implementation. This implies that a unit increase in training leads to a significant improvement in project implementation by 0.301 units. The findings are consistent with Adongo (2012) who indicated that some of the factors affecting implementation of projects established under PPPs was inadequacy of well trained and experienced staff in the implementation process. The findings are consistent with that of a study by Jones (2020) who sought to explore the effect of training on project implementation and established that training was essential for project implementation, as it developed employees' knowledge and skills, encouraged them to work more productively, and raised their involvement in the project.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The chapter gives a presentation of the conclusions and recommendations as well as areas for further interrogation.

5.2 Summary

The examined how project management practices such as funding, information and communication technology adoption, risk management, and training affect the implementation of NGO projects. This study was anchored on the Agile Project Management, Systemic Approach Theory, Novelty, Complexity, Technology and Pace "Diamond" Theory as well as the Uncertainty Reduction Theory. The research used a descriptive and an explanatory research design given the nature. It targeted a total of 87 projects by the organizations based in Kakamega where project management personnel at the NGO head offices in Kakamega Town, with a sample size of 206 determined using the Yamane formula and sampled through stratified simple procedures. The study collected quantitative data through structured questionnaires and analyzed through inferential and descriptive methods and the summary is presented in this section.

The first objective of the study was to find out the influence of level of funding on implementation of non-governmental organization projects in Kakamega county. The descriptive findings indicated an agreement that funds are available, adequate and the period of funding is short among the NGOs in Kakamega County. The inferential statistics regarding correlation indicated that level of funding had a positive and strong association with implementation of non-governmental organization projects in Kakamega county. Additionally, regression findings established that level of funding also significantly affects project implementation.

The second objective of the study was to establish the effect of ICT adoption on implementation of non-governmental organization projects in Kakamega County. The descriptive findings indicated an agreement that the level of ICT adoption among the NGOs is high whereby they

have high ICT skills, invested in hardware and software development. The inferential statistics regarding correlation indicated that ICT adoption had a positive but weak association with implementation of non-governmental organization projects in Kakamega county. However, regression findings established that ICT played a significant role in project implementation.

The third objective of the study was to assess the influence of risk management on implementation of non-governmental organization projects in Kakamega County. The descriptive findings indicated that the NGOs have implemented training practices such as regular trainings, outsourcing of trainings as well as internal capacity building. The correlation inferential statistics indicated that risk management had a positive and strong association with implementation of non-governmental organization projects in Kakamega county. This was confirmed by regression findings which established that risk management significantly improved project implementation.

The fourth objective of the study was to assess the influence of training on implementation of non-governmental organization projects in Kakamega county. The descriptive findings showed that the NGOs have put in place risk management measures such as analysis, identification and mitigation. Correlation findings indicated that training had a positive and strong association with implementation of non-governmental organization projects in Kakamega county. The findings further revealed that training was a significant determinant of project implementation.

5.3 Conclusion

The study concludes funds availability, adequacy and consistent disbursement is associated with a significant improvement in project implementation among NGOs in Kakamega county. The study also concludes that iinvestment in improvement of ICT through development of ICT skills, hardware and software development is associated with a significant improvement in project implementation among NGOs in Kakamega county.

Another conclusion is that implementation of training practices such as regular trainings, outsourcing of trainings as well as internal capacity building practices is associated with a significant improvement in project implementation among NGOs in Kakamega county. Lastly, it was concluded that implementation of risk management measures such as analysis, identification

and mitigation are also associated with a significant improvement in project implementation among NGOs in Kakamega county.

5.4 Recommendations

The study recommends project managers of the NGOs projects in Kakamega county to implement effective funds management practices to ensure adequacy, diversity, and consistent disbursement. Project managers of the NGOs projects in Kakamega county should also enhance their investment in ICT adoption to improve their ICT skills, hardware, and software development.

The study recommends project managers of the NGOs projects in Kakamega county to invest in training and capacity development by having more regular trainings, outsourcing of trainings as well as internal capacity building practices. Project managers of the NGOs projects in Kakamega county should also enhance implementation of risk management practices such as risk evaluation, analysis, identification, and mitigation.

5.5 Areas for Further Study

The study interrogated four factors that is training, adoption of ICT, level of funding and risk management as the project management practices that affect project implementation among NGOs and these four explain up to 63.2 percent of the variation in project implementation among NGOs. Other factors which explain the remaining 36.8 percent of the variation in project implementation among NGOs in Kakamega County can be established through further research. The study was delimited to NGOs in Kakamega county and thus other future studies can broaden the scope to other counties in order to conduct a comparison.

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APPENDICES

Appendix I: Questionnaire

Please give honest responses to the questions by ticking the most suitable answer.

SECTION A: PERSONAL DETAILS

1. Age;

20-30	
30-40	
40-50	
More than 50	

2. Years worked in the NGO projects.

Less than 5 years	
5-10 years	
11-15yrs	
15+	

3. Which project do you work with?

Solar lights project [ ]
Farmer input supplies project [ ]
Farmer funeral insurance project [ ]
Other (specify) [ ]

4. Educational qualification?

Certificate [ ]
Diploma [ ]
Undergraduate [ ]
Masters [ ]
Post-graduate [ ]

In the following subsections, indicate your level of agreement with each statement in each section using a scale of 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree

SECTION B: Level of funding and project implementation

5. To what extent do you agree on the aspects of the level of project funding of the NGO projects on a Likert scale of 1-5

	1	**2**	**3**	**4**	5
The NGO projects have sufficient funding					
Funds are diligently utilized in the organization					
Every employee is accountable to every expenditure					
More funding agencies are willing to fund NGO projects					
There are adequate funds for every project					
Funds are used for the intended project					
Donors get value for their funds and resources					
Projects are funded on all the phases and period					

SECTION C: Risk management and Project Implementation

6. How do you agree on the influence of risk management of NGO project implementation on a Likert scale of 1-5?

Indicator	**1**	**2**	**3**	**4**	**5**
The projects face various types of risks					
Every project has a risk management team					
Every staff is trained on how to detect, mitigate and manage risks					
Risks are handled at every project phase					
All risks are anticipated and prepared for during project planning					
Sufficient funds are set aside to manage and mitigate risks					

SECTION D: ICT adoption and Project Implementation

7. What is the extent of your agreement on the ICT adoption aspects in the NGO project implementation on a Likert scale 0f 1-5?

Indicator	**1**	**2**	**3**	**4**	5
The organization has invested heavily on modern technology					
There are sufficient ICT equipment and infrastructure in the organization					
Most of the NGO correspondences are done via email					
Each member of staff has a modern lab top and accessories					
There is internet connectivity for every office and mobile devices					
The organization trains staff on use of modern ICT programs and equipment					

SECTION E: Training on project management and project implementation

8. To what extent do you agree on these aspects level of training on project management among the NGO project teams using a Likert Scale

Indicator	**1**	**2**	**3**	**4**	5
There are regular trainings for every department on project management					
NGO outsources training experts on project management					
The organization has a vibrant training and development department					
The organization builds capacity internally					
Mentorship and buddying are key strategies on capacity building					
The organization commits more funds to training and development					

SECTION F: Project Implementation at NGO projects

9. What is the extent of your agreement on following statements regarding project implementation at NGO projects on a Likert scale of 1-5?

Indicator	**1**	**2**	**3**	**4**	**5**
All projects are accomplished within the set scope					
The organization projects are all efficiently implemented					
The projects comply with timelines set					

Projects are implemented within budget					
All projects are completed as planned					
Beneficiaries are satisfied with the projects					
Value for the donor resources has been enhanced					

Appendix II: University Approval of Research

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
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P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 11th April, 2022

TO: Phidelia Wekesa
C/o Management Science Dept.

REF: D53/OL/CTY/32102/2016

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

We acknowledge receipt of your revised Research Proposal as per our recommendations raised by the Graduate School Board of 2nd March, 2022 entitled "Success Factors and Implementation on Non-Governmental Organization Projects in Kakamega County, Kenya."

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and Progress Report Forms per semester. The forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

PANNBELL MWANIKI
FOR: DEAN, GRADUATE SCHOOL

C.c. Chairman, Department of Management Science

Supervisors:

1. Ms. Gladys Kimutai
C/o Department of Management Science
Kenyatta University

Appendix III: University Research Authorization

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: D53/OL/CTY/32102/2016

DATE: 11th April, 2022

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR PHIDELIA WEKESA – REG. NO., D53/OL/CTY/32102/2016

I write to introduce Phidelia Wekesa who is a Postgraduate Student of this University. The student is registered for M.B.A degree programme in the Department of Management Science.

Phidelia intends to conduct research for a M.B.A Project Proposal entitled, "Success Factors and Implementation on Non-Governmental Organization Projects in Kakamega County, Kenya."

Any assistance given will be highly appreciated.

Yours faithfully,

PROF. ELISHIBA KIMANI
DEAN, GRADUATE SCHOOL

AM/ms

Appendix IV: NACOSTI

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **687526**

Date of Issue: **26/August/2022**

RESEARCH LICENSE

This is to Certify that Mr. Phidelia Wekesa of Kenyatta University, has been licensed to conduct research in Kakamega County on the topic: Critical Success Factors and Implementation of Non-Governmental Organization Projects in Kakamega County, Kenya for the period ending : 26/August/2023.

License No: **NACOSTI/P/22/16045**

687526

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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Appendix V: List of NGOs with Projects in Kakamega county

1. One Acre Fund
2. Aphia II Western, Kakamega
3. Kenya Alliance for Rural Empowerment (KARE), Kakamega
4. Western HIV/AIDS Network, Kakamega
5. Serve Education Medical and Relief Programme, Kakamega
6. Refugee Initiative Service Organization (RISO), Kakamega
7. Ready to Learn, Kakamega
8. Kenya Aids Refrain Team (KART), Kakamega
9. Kenya Aids Intervention Prevention Project Group, Kakamega
10. Kazi Mashambani Development Programme (KAMADEP, Kakamega
11. Development Promotion and Technical Services, Kakamega
12. Development Partners, Kakamega
13. Care for the Needy Organization, Kakamega
14. Agape in Action, Kakamega
15. African Canadian Continuing Education, Kakamega
16. Abashele Nende Ababukha Support Services (ANASS), Kakamega