# PROJECT PORTFOLIO MANAGEMENT PRACTICES ON PERFORMANCE OF COUNTY GOVERNMENTS: THE CASE OF NAIROBI COUNTY, KENYA

BY

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# **DECLARATION**

I declare that this project is my original work a	-
university or any institution of higher learning for e	xamination.
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This research project has been submitted for example of the submitted for	mination with my approval as University
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# **DEDICATION**

This project is dedicated to my parents Salome Karimi and John Gitonga who encouraged me during the study.

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#### LIST OF ABBREVIATIONS

BOCR Benefits, Opportunities, Costs and Risks

GOK Government of Kenya

NCC Nairobi City County

NCG Nairobi County Government

PMI Project Management Institute

PPM Project Portfolio Management

R&D Research and Development

RoK Republic of Kenya

SPSS Statistical Package for Social Sciences

UN United Nations

UNDP United Nations Development Programme

UNESCO United Nations Scientific and Cultural Organization

UNICEF United Nations Children's Fund

UNIDO United Nations Industrial Development Organization

#### **ABSTRACT**

Project portfolio management is becoming established in both practice and the literature as a tool for prioritizing and managing multiple projects at the enterprise level. Despite the quantifiable benefits of portfolio management, relatively few public organizations have perfected the practice. In today's environment of tight budgets, rapid change and high risk, it is very astonishing that Nairobi County Government continues to waste resources and efforts by delivering or by getting involved in the wrong projects and programs. This is where portfolio management comes in handy in assisting the county Government in ensuring that the right programs and projects are begun and the wrong ones are not and if they are already ongoing it ensures that they are stopped. Statistics have shown that more than 50% of projects initiated by Nairobi County Government in Kenya are unsuccessfully implemented a situation if it persists it will lead to low services quality. This study therefore sought to establish the effect of project portfolio management practices on performance of County Governments in Kenya, the case of Nairobi County. The design of this research was a descriptive survey research. The population for this study composed of 13 top level managers, 41 middle level managers and 102 low level managers of Nairobi county government. Stratified proportionate random sampling technique was used to select the sample of 111 respondents. The study used a semi structured self-administered questionnaire to collect data from the respondents. Quantitative data was analyzed by descriptive analysis and presented in form of tables. Content analysis was used for the qualitative data and then presented in prose. The study also conducted a Pearson's correlation analysis to establish the relationship between the variables. According to the findings of the study conclude that portfolio inventory significantly affects performance of county government of Nairobi. Component identification was in regard to proposed, delayed and ongoing projects. the study further concludes that portfolio analysis affect performance of Nairobi County Government. Portfolio analysis ensures good portfolio balance that enables the organisation to achieve both growth and profit objectives. The study further concludes that portfolio planning affects the performance of County of Nairobi. It was evident that Portfolio planning facilitates time planning; it is also a key to organizational stability and flexibility. The research finally concludes that portfolio review affect performance of Nairobi County Government. The study therefore recommends that the management team of County Government of Nairobi should consider portfolio inventory in their projects. The study recommends that the management team of Nairobi County should always perform Portfolio analysis to ensure good portfolio balance that will enable the county to achieve both growth and profit objectives. The study further recommends that in order to facilitate time planning management team of Nairobi County should establish proper portfolio planning. This will result in to organizational stability and flexibility. The study finally recommends that Review process in the project evaluation should ensure that the portfolio contains projects that support the achievement of strategic goals.

#### **CHAPTER ONE**

#### INTRODUCTION

### 1.1 Background of the Study

All organizations, whether public sector, private sector or 'not for profit' undertake projects to support their operations; meet strategic objectives; respond to a need; solve a problem; develop an idea; or realize investment opportunities. It is critical for the project director to comprehend why his or her project was chosen for speculation. Notwithstanding, these projects can be chosen in a specially appointed way, at the impulse of a Government official, because of a need or open weight, or as a 'hallowed cow' (Meredith and Mantel, 2009). These activities draw on assets that different tasks, which should experience a great deal more investigation, should vie for. It has likewise been remarked that "there are typically a larger number of undertakings accessible for choice than can be attempted inside the physical and money related requirements of a firm, so decisions must be made in making up a reasonable project portfolio (Archer and Ghasemzadeh 2015).

Organizations today confront an exceedingly environment defined by quick changes, expanding multifaceted nature, and dangers from worldwide rivalry. In their endeavors to secure their own particular position and all the more basically to enhance their intensity, satisfactory systems must be produced and executed in the organizations (Blichfeldt and Eskerod, 2008). From the corporate level, system can be delivered by project portfolio management utilizing projects and tasks of various sorts and sizes as effective instruments. All the more critically, firms are finclined to assess their tasks from a portfolio's point of view in which a set or a sub-set of the projects are assessed together, in connection to each other. Portfolio management strategies (techniques) can help key chiefs in assessing whether an arrangement of project is satisfactory from the point of view of long haul achievement (Killen et al., 2008).

Portfolio Management is meant for making the best hierarchical adjust by having an organized group of key procedures and choices. The portfolio management standards are the establishment whereupon fruitful portfolio management is assembled; they give a favorable authoritative environment in which there is powerful standards operation of portfolio definition and conveyance. The organization of these standards ought to be custom fitted in a way that suits the predominant conditions of the firm while likewise guaranteeing that the

hidden reason is kept up. Portfolio Management depends on five adaptable standards which offer the establishment for fruitful portfolio management (Jardine, 2009).

Extend Portfolio Management's primary point is to boost aggregate estimation of projects through accomplishing their most extreme adjust of cost, returns and the dangers inside the organization assets restricted in this way deciding the ideal asset for conveyance and to timetable exercises to best accomplish an organization's operational and budgetary objectives. An ideal project portfolio is a composed accumulation of activities that accomplish a higher esteem to the organizations than the aggregate whole of commitments of the people (Fernsten, 2005).

Having a formal portfolio management handle helps officials figure out which extends most nearly adjust to the organization's key objectives, permits the organizations to stage activities to dodge asset bottlenecks, and enhances the checking of proposed project asks for that can be formally affirmed (Martinsuo, 2014). Advantages of a formal project management handle incorporate better correspondence among project partners, enhanced data sharing over all levels of the organizations through status reporting, and upgraded basic leadership (extend supervisors can better respond and conform to changes that effect their activities). A very much characterized work process controlling a project through the project management life cycle empowers extend supervisors to concentrate on the projects and have certainty that management and partners know about the project's status (Project Management Institute, 2013).

Extend portfolio management can be characterized as the management of numerous undertakings with an attention on single project commitment to the achievement of the endeavor (Dye and Pennypacker, 2011). The Project Management Institute (PMI) characterizes a project, as "a transitory attempt embraced to make an extraordinary item, management or result" (Project Management Institute, 2008a) underscoring the brief way of the endeavor (implying that each project has a distinct start and end) and its non-tedious nature (i.e. a project makes interesting deliverables). Then again, portfolio is an accumulation of projects held by a speculation organization, flexible investments, budgetary establishment or person. Portfolios incorporate the measurements of market freshness and specialized creativity. Facilitate, extend portfolio is a gathering of activities that are done under the sponsorship and additionally management of a specific organizations (Archer and Ghasemzadeh, 2011).

Project portfolio management has for some time been the most used principle for managing the development of organizations (De Reyck, 2015), as organizations increasingly become multi-project environments more work is organized by projects. Now, organizations experience that effective management of single projects do not fulfill organizational objectives sufficiently. Thus, today project portfolio management is considered to be one of the most important areas for organizational development. However, research reveals that a large number of organizations are gaining below their potential in terms of creating value from their project portfolio and that insufficient management of the project portfolio is a significant reason. Furthermore, Jeffery and Leliveld (2014) show how organizations' lack of a centralized overview of the portfolio results in bad investments and the development of redundant applications.

Frigenti and Comninos (2012) contended that if public managers of state institutions are to prevail in what they do, they should distinguish needs, deal with the matter of project management and be watchful towards the organizations vision keeping in mind the end goal to stay away from low creation, dissatisfaction and an absence of inspiration in their representatives. In like manner, the journalists kept up that, in any event, it is not inaccurate to trust that the battles of open hirelings to effectively actualize and apply management culture and practice, obviously demonstrates how activities are seen and comprehended by project chiefs in broad daylight establishments. Be that as it may, these essayists were resolved to see more "firm, steadfast devoted units working, for example, those with right part character, those that can spur specialists to participate and interface well with each other. They guarantee that project management hones have advanced with time, and keeping in mind the end goal to enhance execution, a great deal of center is required in the nature of management practice itself. Today, extends in broad daylight foundations are increasingly being consolidated into the organization's business structure as a major aspect of a general objective or mission and along these lines, state organizations and offices are relied upon to receive great project administration culture and practices, which will prompt to effective results. However, many still translate extends as recognizing undertakings that are exceptionally organized, and the sort that inherently includes a building approach. This is not generally genuine (Frigenti and Comninos, 2012).

The Governments of many creating nations essentially are not effectively overseeing admirably their rare assets. The nations are still confronted with much "insufficiency issues" that are clear and all around settled in numerous open segments, Government organizations and offices (NPO, 2008). Nations that are best have been found to have a ceaseless stream of activities in which thoughts are produced, assessed and executed. These different undertakings, when combined and incorporated for investigation and basic leadership turn out to be a piece of the nation's project portfolio.

In South Africa, project intensive organizations depend on delivering every project successfully and profitably, but many public institutions have no standardized project management practices and have no enterprise level project management system in place (Leonore & Werner, 2013). Nowadays many Africa nations are confronting some of the four greatest widespread issues, for example, excessively numerous dynamic projects, frequently twofold what an organizations ought to have; a number of these aren't right tasks that won't give esteem to the organizations; undertakings are not connected with the key objectives of an organizations and along these lines they don't meet the objectives of the organizations; besides, regardless of the possibility that each dynamic project is a positive one, there is a general unevenness in asset use both in short and long haul projects (Archer and Ghasemzadeh, 2011).

In Kenya devolution has been underway since March 2013; this is when the county Government were formed under the 2010 constitution. The County Government have so far completed the first full budget cycle (2013 – 2014 (RoK, 2015). The new constitution (2010) came up with a devolution structure which ensured power is taken to the people; in return the people would exercise the given power for development of their own good. Process of devolution has faced a number of challenges. Counties are entitled to 15% of the total National Revenue Collected. Though Counties are currently getting enough funding, still there is a desire to increase the budgetary allocations; the central Government is reluctant to do this. The constitution has given the National Government administrative power to reduce Counties financial control, by ensuring counties spend money in a certain way. The World Bank has urged Kenyan Government to come up with proper mechanism of sharing national resources between future Counties and the National Government so as to ensure the devolution promise is achieved. Different levels of Government shift blame for service delivery when it comes to decentralization of systems. It is important for the Government to have broad discussion on how all resources flowing from the National Government to

Counties should be organized so as to ensure the inequality is eliminated not exacerbated by devolution (Odhiambo & Kamau, 2013).

As a result of the rapidly expanding population, devolution into the 47 Counties and Kenya's quest for Vision 2030, project management demand is expected to grow further as different counties rush to meet the needs of its citizens through a myriad of different projects (RoK, 2015). Programs and projects by Nairobi County Government have hit the headlines in the past few years due to poor management some stalling while others undertaken below the customers' expectations (World Bank, 2015). There are three vital questions that the management of the region ought to ask itself. As a matter of first importance the management ought to ask itself regardless of whether it is conveying the right projects and activities. Furthermore, it ought to ask itself regardless of whether senior management addresses client issues and whether there is conveyance of the vital targets. Finally, the management ought to ask itself whether the Government offices' vision and targets are accomplished by the different activities they embrace. This must be accomplished through great project portfolio management (RoK, 2015).

Due to Nairobi County's huge population, it got an allocation of Sh15.1 billion given to the County Governments (Odhiambo & Kamau, 2013). The mandate of County Government is to execute development activities in collaboration with the National Government through its employees. Despite the development in technology, most objectives of Nairobi County Governments have remained unmet due to lack of a proper project portfolio management practice. Regardless of the commitment and engagement, it is evident that the County Governments is inefficient and ineffective based on competency of its employee (GOK, 2013).

#### 1.2 Statement of the Problem

Project portfolio management is getting to be set up in both practice and the writing as an instrument for dealing with different undertakings at the endeavor level and organizations are progressively perceiving that portfolio management can help them settle on the choices that will separate them from their rivals. Be that as it may, notwithstanding the quantifiable advantages of portfolio management, generally couple of open organizations have consummated the practice (Mateen, 2015). In today's surroundings of tight spending plans, quick change and high hazard, it is extremely astounding that some NCG keeps on squandering assets and endeavors by conveying or by getting included in the wrong activities and projects. This is the place portfolio management proves to be useful in helping the region Government in guaranteeing that the right projects and tasks are started and the wrong ones are not and in the event that they are as of now progressing it guarantees that they are ceased. The right undertakings and projects are those that together give the top level augmentation to and organization's vital objectives, goals and targets.

Insights have demonstrated that more than half of activities started by NCG are unsuccessfully executed (World Bank, 2015), a circumstance on the off chance that it holds on it will prompt to low managements quality. Open supported tasks in the province are additionally infamous for coming in over spending plan, missing due dates, and neglecting to live up to clients' desires (Abagi and Okumbe, 2014; GOK, 2015). The issue of precisely assessing time and cost deteriorates when numerous projects are being performed in the meantime. At times, this impact can be a sort of Butterfly Effect where all parameters begin carrying on riotously. Disordered parameters are exponentially difficult to appraise. Every project in the portfolio has an arrangement of assignments to be finished. Every one of these errands has a cost and time allotment in light of its temperament. Poor management hone and the absence of a sound management culture and hardworking attitude in NCG, is frequently reprimanded for the separate in the province's ability to convey open merchandise and projects to its nationals. Performance culture and great practice by open directors utilized in the district to handle projects have relapsed, and therefore, activities are viewed as neglecting to meet the objectives and goals of the province. In region Governments especially, project portfolio management is obligatory keeping in mind the end goal to acquire changes the activities because of the progressions occurring in nature and also to enhance the aggressiveness and performance of the sector. This study therefore sought to establish the practices that the NCG adopt and the influence of these practices on their performance.

#### 1.3 Purpose of the Study

The study sought to explore the effect of project portfolio management practices on performance of County Governments in Kenya, the case of Nairobi County.

## 1.4 Objectives of the Study

This study sought to achieve the following objectives;

- 1. To assess how portfolio inventory influence performance of Nairobi County Government
- 2. To establish how portfolio analysis influence the performance of Nairobi County Government
- 3. To determine how portfolio planning influence performance of Nairobi County Government
- 4. To identify the influence of portfolio tracking on performance of Nairobi County Government
- 5. To explore how portfolio review influence the performance of Nairobi County Government

#### 1.5 Research Questions

To achieve the research objectives the study sought answers to the following questions;

- 1. What is the influence of portfolio inventory on performance of Nairobi County Government?
- 2. How does portfolio analysis influence the performance of Nairobi County Government?
- 3. To what extent does portfolio planning influence performance of Nairobi County Government?
- 4. What is the influence of portfolio tracking on performance of Nairobi County Government?
- 5. How does portfolio review influence the performance of Nairobi County Government?

#### 1.6 Significance of the study

This study may contribute value in a number of ways. First, it could be useful in practice as it will create knowledge about project portfolio management practices on performance of County Governments in Kenya. The first beneficiary would be Nairobi County government management as the findings of the study would enable policy makers to seriously address the need for project portfolio management. Any framework that complements delivery of public goods and services, and which guarantees to incorporate the differing roles performed, by line chiefs in broad daylight office, is deserving of interest. An enquiry into the limitations identifying with project administration culture typically confronted by the project staff individuals is essential for this situation; keeping in mind the end goal to help us acknowledge how these requirements restrain the capacity of project staff to convey what they view as effective results.

The current turbulent financial conditions seem to have brought on expanding reception of project portfolio management (PPM) by organizations. The Government and other policy makers might rely on the outcome of this study to address ways upon which it can improve project success by advocating for public sector managers to advance their project portfolio management competences.

To researchers, the result of the study may serve as literature to throw more light on the theoretical underpinning of the effect of project portfolio management practices on performance. The outcome could further serve as secondary data for future research on the topic.

## 1.7 Delimitation of the Study

The study focused on the influence of project portfolio management practices on performance of county Governments in Kenya. The study was undertaken in Nairobi County, which is home to most of the big Government projects from all fields with varied backgrounds and differing size.

#### 1.8 Limitations of the Study

This study encountered some challenges. The major limitations of this study are that it was not possible to control the attitudes of respondents as they give their responses which may affect the validity of the responses. The researcher, therefore, assured the respondents that

their responses were used only for the purposes of the study, and that their identities would be treated with utmost confidentiality.

The study suffered from generalization of findings. This is because the study was confined in the Nairobi County. Kenya is a big country with geographical, economic and cultural differences within the country. Thus, the situation in the NCG could not be generalized to other parts of the country.

#### 1.9 Basic Assumptions of the Study

The researcher assumed that the respondents would be cooperative enough to give the required information of the study. The researcher also assumed that all information collected from respondents would be true to give a clear and true picture. The researcher further assumed that external factors like conflict would not arise as this would affect the process of data collection and hence the completion of the project. Finally, the researcher assumed that the respondents would have adequate knowledge on the variable of the study.

#### 1.10 Definition of Significant Terms

**Investment Strategy** – This is a set of rules, behaviors or procedures, designed to guide an investor's selection of an investment portfolio. Individuals have different profit objectives, and their individual skills make different tactics and strategies appropriate.

**Portfolio Analysis** –This is An analysis of elements of a company's product mix to determine the optimum allocation of its resources. Two most common measures used in a portfolio analysis are market growth rate and relative market share. Specifically, securities basically analysis of an investment portfolio relative to an idealized balance of holdings, used as means of optimizing allocation.

**Portfolio Inventory** – In the context of this study, portfolio inventory refers to an entire group of financial investments vehicles that MFIs would choose to construct a set of instruments to invest in that would be deemed to maximize retours.

**Portfolio Planning -** This is an investment strategy applied to a personal or corporate portfolio that determines its general purpose and constraints. Once a portfolio plan has been determined, investments adhering to the plan are bought and sold accordingly.

**Portfolio Review -** Portfolio review analyses the composition of the microfinance portfolio and the performance of individual projects across the portfolio to assess whether a funder

delivers on its microfinance strategy. It involves preparation phase, portfolio snapshot, scoring project performance and stakeholder consultation.

**Portfolio Tracking** – This is a follow up of how the portfolio inventories that have been invested in. This is done on either daily, weekly monthly, quarterly, semi- quarterly and annually. This is meant to keep reports of the performing portfolios and the none-performing ones since the economic conditions spell different returns to different portfolio inventories.

**Project portfolio** - is a group of projects that are carried out under the sponsorship and/or management of a particular organization

**Project portfolio management** - Is the management of multiple projects with a focus on single project contribution to the success of the enterprise

## 1.11 Organization of the Study

This study is organized into five chapters. Chapter one contains the introduction to the study. It presents background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the Study, delimitations of the study, limitations of the Study and the definition of significant terms. On the other hand, chapter two reviews the literature based on the objectives of the study. It further looks at the conceptual framework and finally the summary. Chapter three covers the research methodology of the study. The chapter describes the research design, target population, sampling procedure, tools and techniques of data collection, pre-testing, data analysis, ethical considerations and finally the operational definition of variables. Chapter four will present analysis and findings of the study as set out in the research methodology. The study will close with chapter five which will present the discussion, conclusion, and recommendations for action and further research.

# CHAPTER TWO LITERATURE REVIEW

#### 2.1 Introduction

In this second chapter, relevant literature information that is related and consistent with the objectives of the study is reviewed. Important issues and practical problems are brought out and critically examined so as to determine the current facts. This section is vital as it determines the information that link the current study with past studies and what future studies will still need to explore so as to improve knowledge.

#### 2.2 Portfolio Inventory and Organizational Performance

The initial project proposals enter the project stock, where data and information are gathered about the project and sorted out for the portfolio investigation. The projects in the stock incorporate proposed, on-going and deferred projects. ID is the beginning stage of any PPM procedure. In spite of the fact that the way toward making an entire rundown of all progressing and proposed extends in an association sounds straightforward, this is the main vital test in huge companies actualizing PPM. De Reick (2005) discusses portfolio stock as getting a brought together perspective of the project portfolio while Rajegopal (2007), utilizes the term extend registry to allude to a rundown of undertakings including attributes, for example, length, sort, item or management bolstered, degree of profitability, and client.

Project classification was among the primary instruments utilized as a part of PPM. Crawford et al. (2005) in an examination on project grouping and order distinguish two primary motivations to arrange projects: the fitting of project management assets to the project selection and the classification of tasks to organize and select them. Ghasemzadeh (2008) describes portfolio selection as a simultaneous project comparison on particular dimensions with the outcome of a ranking, which allows for the selection of the top-ranked projects, subject to resource constraints. Ghasemzadeh further distinguishes portfolio selection methods and techniques in a more narrow sense from strategic techniques, which support the strategic alignment of projects in the portfolio, and from benefits measurement techniques, which allow the evaluation of projects (Ghasemzadeh, 2008). The most vital qualities of portfolio investment inventory on which bases the general assortment of project drivers can be different are the approach on project and the hazard which is characterized as the vulnerability about the real give back that will be earned on a speculation. In spite of the fact that every diverse sort of portfolio speculation inventories can be thought about utilizing

attributes of hazard and return and the most dangerous and additionally less hazardous project inventories can be characterized. However the hazard and quantifiable profit are close related and just utilizing both essential qualities we can truly comprehend the distinctions in speculation vehicles. The fundamental sorts of money related portfolio project inventories are transient project vehicles, settled wage securities, regular stock and theoretical speculation vehicles while short - term portfolio speculation inventories are every one of those which have a development of one year or less (Dietrich, 2006).

A few studies underline the significance of procedure adjust extend determination for portfolio achievement (Killen, 2008). Toxophilite and Ghasemzadeh (2004) diagram portfolio determination as 'the occasional action required in selecting a portfolio, from accessible project recommendations and activities right now in progress that meets the association's expressed goals in an alluring way without surpassing accessible assets or damaging different limitations.' They recognize the influence of high scores in project assessment, in this way picking the tasks that have the most elevated esteem until all assets are expended. Be that as it may, this approach does not create the ideal portfolio. A choice to begin a project ought to be grounded in an investigation of the system of tasks as opposed to considering projects in confinement. This view is shared by Chien (2012) who contends that selecting of individual solid project does no prompt to an ideal portfolio blend. In addition the general goals of the portfolio must be considered in the determination procedure. The creator advance notes that current choice apparatuses don't address the issue of interrelationships among projects and are lacking to assess nonmonetary factors like project differences. Chien (2012) separates between four sorts of interrelation: result or specialized, cost and asset usage, effect and advantage, and serial. His examination is constrained to R&D ventures.

Müller, Martinsuo and Blomquist (2008) check a positive relationship of portfolio choice with accomplishing portfolio comes about and accomplishing undertaking and program reason. Along these lines, portfolio determination is about adjusting projects to system and organizing them. Associations distinguished as best entertainers have a tendency to depend on methodology when selecting projects as opposed to on simple budgetary strategies (Cooper etal. 2006, Killen et al., 2008). This approach incorporates allotting assets to various sorts of tasks and prompts to expanded portfolio execution.

Associations have as a rule two choices when choosing which undertakings to begin. Firstly, treating all tasks similarly the choice can be adjusted to a scoring grid. Furthermore, making classifications and grouping projects. Associations may apportion an alter rate of their yearly assets to every class and choice process would happen inside a classification. The second alternative is bolstered by Archer and Ghasemzadeh (2004), who propose more elevated amount management to apportion assets to certain project classifications in a perfect world before choice of activities. Mikkola (2011) prescribes five criteria to rank R&D projects: key fit, capacity to build income, capacity to make piece of the pie, level of item separation, and innovation progression. There is no relationship between reason for the classes and the ascribes used to depict the undertakings in it (Crawford et al., 2006). The creators characterize qualities as 'the basic trademark that is being utilized to sort projects'. Their outcomes demonstrate that associations have three fundamental purposes: arrangement with technique, ability specialization and advance the project approach.

## 2.3 Portfolio Analysis and Organizational Performance

The projects are then examined utilizing the instruments and techniques. At the point when the most appropriate activities have been chosen and started, they enter the project planning stage (Killen, 2008). Asset, time and cost arrangements are built and incorporated with the portfolio arranging process where the asset assignment and calendar choices are made, considering the entire arrangement of undertakings. Portfolio Analysis guarantees that that there is great project portfolio adjusting. A project portfolio is all around adjusted in the event that that it 'empowers an organization to accomplish the development and benefit targets connected with its corporate system, without presenting the organization to undue dangers' (Mikkola, 2011). High performing portfolios comprise of the right blend of projects (Cooper et al., 2000) while the objective of significant worth augmentation is subordinate. This viewpoint concentrates on non-fiscal factors identified with project choice and choice to adjust the portfolio as to project sort, hazard level, and asset sufficiency (Killen et al., 2008).

The pertinence of the measurements project size and transient versus long haul project is included by Archerand Ghasemzadeh (2008). Meskendahl (2010) expounds that these measurements may be shared ward e.g. long haul tasks are related with substantial project estimate though a higher degree in advancement includes more dangers. An adjusted portfolio would restrain the quantity of tasks genuinely, so that the asset bottleneck jars be maintained a strategic distance from.

Adjusting is the procedure where the associations requirements must be contemplated and as indicated by Kendall and Rollins (2003): each association has two imperatives that utmost what number of tasks can be dynamic anytime. One is the measure of cash the association has or will put resources into change. The other is the association's vital assets – the one most sought after crosswise over many tasks or the most vigorously stacked asset crosswise over generally extends. This decides what number of tasks can be dynamic anytime. Asset adjusting is an extremely complex operation which may mull over an expansive number of factors.

Portfolio investigation includes measuring the operational and budgetary effect of the portfolio. It is imperative to assess the exhibitions of project speculations and timing the profits successfully. The examination of a portfolio reaches out to all classes of project (Levine, 2005). Portfolio examination picks up significance on the grounds that every advantage class has impossible to miss hazard components and returns connected with it. Subsequently, the sythesis of a portfolio influences the rate of return of the general project speculation. Portfolio examination is extensively completed for every benefit at two levels: Risk abhorrence which is the technique breaks down the portfolio piece while considering the hazard craving of a financial specialist. A few financial specialists may want to play safe and acknowledge low benefits as opposed to put resources into hazardous resources that can create significant yields and Analyzing returns: While performing portfolio examination, imminent returns are ascertained through the normal and compound return strategies. A normal return is just the number juggling normal of profits from individual resources. Nonetheless, compound return is the number juggling imply that considers the combined impact on general returns (Muller, 2009).

Risk management was not canvassed in the main version of the PMI Standard for Portfolio management. Three sub-forms identified with dangers were included the 2008 release: recognize dangers, break down dangers, and create portfolio hazard reactions. Dangers are deteriorated into basic dangers, part dangers and general dangers. The sub-forms expand on learning and procedures which have been created for project management, for example, likelihood/affect evaluation and the advancement of hazard reaction arranges. Comparative models have additionally been proposed by Sanchez et al (2008).

The writing represent considerable authority in the field of project, projects, and portfolios was as of late evaluated to survey how hazard management is tended to at these three levels (Sanchez, et al, 2008). They found that "project chance management is a very much created space in contrast with the program hazard management and portfolio chance management fields, for which particularly composed approachs are hard to discover. The audit likewise shows the need to incorporate better apparatuses to play out a consistent control and observing procedure.

Danilovic and Sandkull (2005) likewise examined the relationship amongst vulnerability and conditions in numerous project circumstances. They assert that the wellsprings of instability in new item advancement are the authoritative settings, the item engineering and the project management. In a comparable investigation of 29 web programming advancement projects MacCormack and Verganti (2003) likewise found that activities did in various situations are probably going to require very unique improvement forms on the off chance that they are to be effective. Expressed all the more formally, an unexpected view infers that the execution effect of various improvement practices is probably going to be intervened by the setting in which those practices work.

## 2.4 Portfolio Planning and Organizational Performance

Portfolio maps are one of the most commonly used visual tools for balancing portfolios. More widely known as bubble charts (Cooper et al., 2006), they are typically used as a graphical representation of the balance of portfolios in regard to mostly two-dimensional trade-off relationships. Balancing decisions and simulations are further supported by the ability of such charts to display additional characteristics.

The project management community is confronted with the double requirement for security and adaptability. As indicated by Andersen (2008) firms look for dependability on the grounds that the expenses of changing are too high or the soundness offers some preferred standpoint while then again they require adaptability keeping in mind the end goal to adjust to the world outside, look for circumstances and beat the opposition. However Thomke and Reinertsen (2008) guarantee that improvement adaptability gives a capable other option to precise determining and is a decent technique for lessening advancement chance.

A project investments system connected to an individual or corporate portfolio that decides its broadly useful and requirements. Once a portfolio arrange has been resolved, extend projects holding fast to the arrangement are purchased and sold appropriately. Portfolio management is about settling on choices about the future and placing them without hesitation. As portfolio chiefs you will be included in the usage of system through the acknowledgment of project and program conveyance. Consequently portfolio chiefs need to build up their business abilities and a key component of this is about comprehension the segments and procedures connected with vital and administration. In creating portfolio targets and objectives it is imperative that these are adjusted to the general key course of the association (Meredith and Mantel, 2009).

On the premise of the needs and limits set by administration, the portfolio- management group (extend pioneers and division heads) builds up an attainable arrangement for the (re)allocation of assets and means over various projects. The contributions for this portfolio plan are the individual project plans as created by project groups, and the asset availabilities of the divisions. At the point when the portfolio targets (needs) are possible inside the limits, management approves the portfolio arrange for, which gives the premise to the approval of individual project arrangements and office plans (Archer and Ghasemzadeh 2015). At the point when the needs set by management can't be met, an iterative procedure of transaction and replaning ought to happen. In this procedure, the part of management is to arrange the requirements and needs of various project proprietors (reset needs), and the asset limits. The part of the portfolio- management group in the iterative procedure is to create elective practical portfolios (replanning). The individuals from the portfolio- management group promoting writings as of now backer portfolio arranging techniques. Advisors keep on applying portfolio techniques (Killen et al., 2008).

Chiefs claim to utilize different portfolio framework order plans for breaking down project investment. Portfolio network techniques are generally instructed. Portfolio arranging techniques have been utilized for vital basic leadership for more than 20 years. ~They are displayed as indicative guides and as prescriptive aides for selecting key choices. The general thought is to order places of items along two measurements: engaging quality of the market and capacity of the item to contend inside that market. Fernsten (2005) give an audit of framework techniques. A few specialists have called attention to shortcomings in the premises behind portfolio strategies. Specifically, they have tended to issues for the Boston Consulting Group (BCG). The BCG framework measures advertise appeal by market development rate and it surveys the association's capacity to contend by its relative piece of the overall industry. The BCG framework expect a causal relationship between piece of the overall industry and productivity. Color and Pennypacker (2011) contends that the BCG lattice needs inward consistency; he additionally asserts that there is minimal observational confirmation to bolster a causal relationship between market development and benefits.

As indicated by Archer and Ghasemzadeh (2011), the utilization of the BCG grid is repressed by challenges in estimation of market development rates and relative pieces of the pie. One purpose behind this is market limits are regularly hard to alter. Subsequently, unique lattice techniques are probably going to yield diverse proposals for a similar circumstance. Wind et al. (1983) exhibited that choices in view of the BCG network are touchy to decision of the strategies for measuring piece of the overall industry and development rates. Jeffery and Leliveld (2014) assert that the extent of the BCG framework disregards other pertinent key issues. Despite the fact that the BCG framework and other lattice strategies have minimal hypothetical or observational support, one can discover contentions to support them. One contention is that administrators frequently disregard to utilize a discerning monetary approach. Rather; they utilize unstructured judgmental procedures that might be conflicting with benefit expansion. They may construct their choices with respect to control or enthusiastic components, for example, incorporation of sunk expenses. Thus, huge numbers of their choices are silly from the perspective of benefit boost (Frigenti and Comninos, 2012).

Olsson (2006) ponders the management of adaptability in project management which he characterizes as the ability to change the project to forthcoming outcomes of dubious conditions inside the setting of the project. Olsson considers adaptability to be a method for settling on irreversible choice more reversible or delaying irreversible choices until more data is accessible. He recognizes two general classes of way to deal with incorporate adaptability with tasks: adaptability all the while (e.g. late bolting, progressive responsibilities, possibility arranging) and adaptability in the items (e.g. capacity to meet option requests with a similar item).

Verganti (2013) concentrates all the more particularly the adaptability in the process in an exact investigation of 18 Italian and Swedish firms. He proposes instruments called arranged adaptability in view of an adjust of receptive and suspicion capacities, each of these abilities being most proficient at various periods of the project. Prioritization is the way toward positioning the chose parts in light of their assessment scores and other management contemplations. (Extend Management Institute, 2008b). This is a procedure which has gotten little consideration in the writing in contrast with the determination and adjusting strategies. The prioritization strategies are frequently basic, for instance weighted positioning, scoring systems or master judgment.

The primary accentuation of program management is productivity and viability through better prioritization, arranging, and coordination in the management of projects. In a program, tasks can be disintegrated into subprojects and exercises are sensibly sequenced to encourage the administration, which is then unified and composed. Like portfolios projects grasp a vital feature. Through projects associations can get a business center by adjusting project destinations to their necessities. Thiry (2004) notices two principle components of a program, cyclic procedures and between reliability that make a program a perfect apparatus to connection project to business destinations. The cyclic procedure includes stable periods in which advantages can be reaped and choices to lessen equivocalness are made. The second trademark permits key arrangement. The program environment confronts high vulnerability and multifaceted nature. It includes numerous partners with clashing needs, is subjected to rising changes and requires incorporation of learning crosswise over different orders. A fruitful usage of procedure is guaranteed as program management is an approach that can respond to these progression. Despite the fact that projects are on-going and involve a long haul angle, their life cycle is incidentally restricted (Dietrich, 2006).

Lycett et al., (2004) constitute program management needs to address social, political and hierarchical difficulties. Pellegrinelli (2013) proposes that the sane for and the advantages produced from projects will enormously affect the program structure. He in this way separates between three sorts: portfolio program, objective arranged program, and pulse program. In the principal case, the primary issue is to oversee projects with proficient asset usage and to upgrade learning and abilities. Projects are moderately free from each other. An objective situated program is started to adapt to a high level of instability and includes learning inside the procedure. It makes an interpretation of ambiguous business system into unmistakable activities and new improvements. At last, pulse programs manage incremental change. They add usefulness to or enhance existing foundation, frameworks, or business forms.

#### 2.5 Portfolio Tracking and Organizational Performance

In the portfolio following, measurements can be caught through earned esteem examination or entryways and they are utilized to assess every project. In the event that these measurements don't satisfy particular criteria, a choice with respect to the fate of the project must be taken. This procedure delivers the need to impart changes on the project portfolio to partners once they are chosen inside the adjusting procedure assemble. This entirely concentrates on the correspondence perspectives once the progressions have been recognized and affirmed. The alterations specified by PMI may be because of past procedures, for example, organize parts, adjust portfolio, and approve segments. This procedure is additionally part of the criticism circle when the portfolio performance is audited and the portfolios should be balanced. In spite of the fact that this acquaints the idea of modification with portfolios it doesn't cover how changes to portfolios ought to be recognized, investigated and arranged (Killen, 2008).

The approval procedure formalizes the choice made by the administrators with respect to the spending, needs and asset distribution. This choice procedure must be unmistakably adjusted to the individual project choice process (for instance the doors or go choices) and incorporates imparting the data about the portfolio to the association. Despite the fact that Authorization comes after Communicate Portfolio Adjustment in the PMI procedure, it is likely that the succession of these two sub-procedures would be traded by and by (Gareis, 2011).

Utilizing the portfolio returns as instruments for future financial factors significantly raises the assessed affectability of benefit costs to news about future monetary factors. Out-of-test results demonstrate that following portfolios are helpful in estimating macroeconomic factors and supporting financial hazard Blomquist and Müller (2006) found that there is a relationship between an association's situation and its management style particularly in complex situations. The management structure and standards set up by associations to deal with their project portfolios and their tasks change significantly between associations. High performing associations demonstrate more adaptability in adjusting their management to the necessities of their surroundings.

Dietrich (2006) uncovers exact confirmation that project and in addition program and portfolio management are vital gadgets of the hierarchical procedure prepare. Associations fruitful in executing vital ideas tend to survey extend performance connected to procedure detailing while program and portfolio performance assessment are a part of the methodology follow up process. Be that as it may, their study is constrained to item advancement and interior improvement projects.

List Tracking is a strategy for uninvolved portfolio management. It endeavors to coordinate the performance of a hypothetical portfolio as nearly as would be prudent. This approach is utilized by store administrators when they don't learn about sufficiently sure of playing out the market, and are substance to take after the normal performance. Coordinating the performance of a record can be performed two ways (Archer and Ghasemzadeh, 2011). The first is full replication, in which a project speculation is made in each constituent of the file, corresponding to its piece of the pie. This accomplishes a flawless match, however brings about high beginning exchanges costs, and is hard to rebalance when changes are made to the list, for instance, the issue of another arrangement of shares. The other approach is fractional replication, in which a project speculation is made in a little extent of the shares, while endeavoring to coordinate the performance of the whole record. This causes bring down starting exchange costs, and is less demanding to rebalance. It likewise permits the financial specialist to compel the decision of speculation that is made, by demanding the consideration or rejection of a few organizations or by setting the extent of the capital that will be put resources into others (World Bank, 2015).

Bengtsson (2007) ponder coordination components (rather than the control instruments examined by Dahlgren and Söderlund) in connection with the action setting (mind boggling or straightforward) and the uncertainty of the undertakings (clear or vague). The four quadrants characterized by these two factors and after that further disintegrated to distinguish the coordination exercises from a fleeting and spatial point of view. In light of the fleeting perspective the coordination exercises are arranged time, persistent time, predesigned or adaptable while the coordination exercises from a spatial point of view are organizing, virtualizing, sequencing and errand driving. Albeit more advanced, Bengtsson's discoveries contain numerous likenesses with those of Dahlgren and Söderlund. A later study by Muller (2009) demonstrated the relationship of the project portfolio control strategies and portfolio management performance in various settings. In light of a quantitative study they discovered connections between project portfolio control systems and portfolio performance.

## 2.6 Portfolio Review and Organizational Performance

The survey of the portfolio includes a re-confirmation of the portfolios' basic achievement elements. Portfolio audit investigations the creation of the microfinance portfolio and the per-formance of individual projects over the portfolio to survey whether a funder conveys on its methodology. Consolidating these two points of view gives a far reaching examination of whether a funder is progressing nicely to accomplish the general goals it has set for its microfinance operations. Above all else, portfolio surveys are a learning instrument for funders who need to comprehend what works, what doesn't, and why. Breaking down performance over a funder's portfolio can yield significant learning and can advise future program plan and key reorientations. Utilizing an efficient way to deal with look at the fundamental drivers of project performance all through the portfolio distinguishes regular examples of suc—cess and disappointment. Instead of individual project assessments for which lessons might be harder to extrapolate, portfolio surveys create lessons in view of the whole portfolio. These lessons are probably going to have more extensive legitimacy and help funders settle on proof based choices (Mateen, 2015).

There may be a move in the asset accessibility, legitimacy of the business case, the corporate technique or in the business, innovation or economic situation. This can prompt to realignment of the project portfolio and re-arranging in asset designation and booking. The PPM procedure is dynamic and iterative, which implies that the project portfolio management needs to always hop starting with one stage then onto the next keeping in mind the end goal to have the capacity to achieve the principle objectives (Levine, 2005).

Portfolio reporting and audit is the occasional evaluation of the portfolio to decide its performance along key markers and measurements, for example, development towards comes about, spending, dangers and conditions. This is a chance to assemble the essential data about the portfolio to have the capacity to re-adjust the projects. This is not performed at the individual project level but instead at the portfolio level: to assemble and report performance markers and audit the portfolio at a suitable foreordained recurrence. This guarantees both arrangements with the authoritative procedure and powerful asset use (Cooper et al., 2006).

Eventually, the motivation behind the audit procedure is to guarantee that the portfolio contains just segments that bolster accomplishment of the key objectives (Project Management Institute, 2006). This may bring about the expansion, reprioritization or prohibition of a few activities notwithstanding new orders and rebalancing of the portfolio. The acquaintance of new undertakings with the portfolio is said by Kendall and Rollins and Dye and Pennypacker however is not shrouded unequivocally in the PMI standard.

McDonough and Spital (2003) found that portfolios being explored quarterly performed superior to those surveyed semi-every year. In spite of the fact that they speculate that the ideal recurrence of survey may rely on the kind of projects and the dynamism of the business they didn't have adequate information to test these connections. They additionally watch that project end is regularly a more troublesome administrative choice than project endorsement, which validates comparative discoveries by Cooper et al (2006).

As per the PMI standard the main huge changes to the portfolio are vital changes i.e. significant changes influencing the procedure which has a falling impact on the portfolio. The Monitor Business Strategy Changes takes after nearly the Review and Report Portfolio Performance and empowers the portfolio management procedure to react to changes in business technique. Incremental changes to the key arrangement by and large don't oblige changes to the portfolio. Be that as it may, critical changes in the business environment regularly brings about another vital heading, in this way affecting the portfolio. A noteworthy alter in the vital course will affect segment order or prioritization and this will require rebalancing the portfolio (Dietrich, 2006).

Dahlgren and Söderlund (2009) inquired about the project portfolio control components in four Swedish endeavors and found that diverse sorts of firms have distinctive control systems relying upon the level of instability and the level of conditions between undertakings. In light of starting discoveries from a subjective examination in four firms (Saab Aerospace Future Products, Ericsson BSC, Ericsson SRF, and Telia Mobile) and utilizing a model which had been created by Thompson (1967), they proposed four sorts of control instruments: schedule based control, asset based control, arranging based control, and program-construct control depending in light of the level of instability and the level of conditions between activities. In settings with high vulnerability, arrangements can never again be depended on as the primary control component since arrangements require a specific level of dependability.

#### 2.7 Theoretical Review

This study is anchored on the systemic theory by Hagel (1991). The systems theory tries to explain the dynamics of complex and dynamic systems. Systems Theory leads onto Systems Thinking that teaches us to look at the total system performance and the relationships between systems. Project management systems are plagued with misunderstanding of interdependence versus independence, finite versus limited capacity and strategic versus individual safety (Mikkola, 2011). Every project is a 'system' in that it consists of many interrelated and interconnected parts or elements which must function together as a 'whole'. Project Managers need to be concerned with the 'big picture', and as such, they must be systems thinkers and allocate adequate attention to every part of the project management system (Jim, Shankar & Tim 2012).

Projects are complex and dynamic in nature. There are many parts and each part can have different states. There can be a great number of connections because of this fact. Each part of the system does influence the whole system in its unique way (Archer & Ghasemzadeh, 2004). This is why, when you change one element there are always side effects. It is necessary to understand how each element fits in the whole scheme of things and how it will impact if we change it. This is what risk management is all about (Müller, Martinsuo & Blomquist, 2008).

The systems theory postulates that the complex system tries to reach a state of equilibrium and then resists any significant change. This is due to the fact that the parts are connected and their connections define the system properties. But when the change occurs, it can be sudden and dramatic. With complex systems the effect may not be proportional to the cause. Many a times a small change in key part introduces a dramatic effect in the whole system (Dinsmore & Cooke-Davies, 2006).

#### 2.8 Conceptual Framework

The research relates portfolio inventory, portfolio analysis, portfolio planning, portfolio tracking and portfolio review and re-planning (Independent variables) with performance of County Governments in Kenya (dependent variable).

### **Independent Variables**

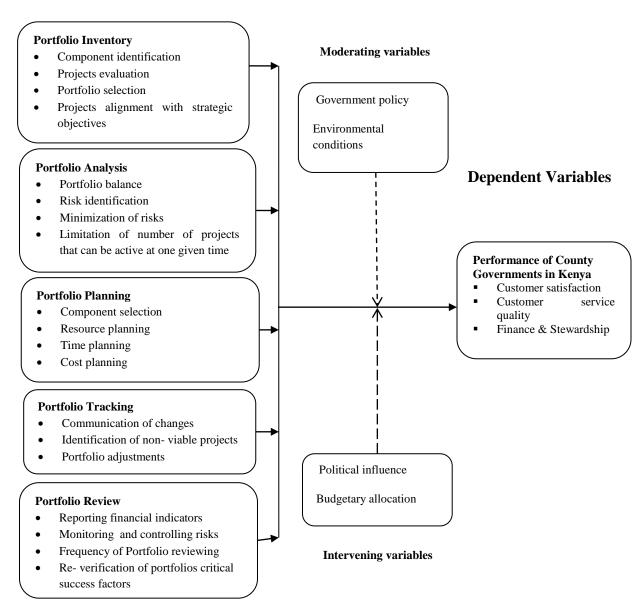


Figure 1: Conceptual Framework

### 2.9 Summary and Research Gap

The assertion that no single PPM method is appropriate for all situations and that organizations need to customize their process to suit their environment is also reinforced by findings throughout the empirical literature dedicated to PPM. Portfolio management is accomplished through processes, applying knowledge, skills, tools and techniques (methods) based on received inputs and generating outputs. The standard presumes that the organization has a strategic plan, along with mission and vision statements as well as strategic goals and objectives. According to Levine, there are five distinct phases in the project portfolio process, as portfolio inventory, portfolio analysis, planning, tracking and review and re-planning.

Other authors have used similar divisions of the processes. Nevertheless of the divisions and names of the phases or processes, they are agreed on that the project portfolio process is dynamic, iterative, and ongoing and must be managed artfully depending on project life cycles as well as organizational issues, like budget cycle.

Success of portfolio management is the portfolio's contribution to the strategic measures of the organization. Project portfolio management as a managerial activity relates to the initial screening, selection and prioritization of proposals, the concurrent reprioritization of projects in the portfolio, and the allocation and reallocation of resources to the projects according to priority. The process is dynamic and involves a continuous scanning of active and new entry projects. In doing so, a framework for decision making might be establish to do the right projects and to commit resources to them. The previous studies reviewed have focused on PPM in profit making institutions and not the public sector. Further, majority have been conducted in developed countries whose strategic approach and financial footing is different from that of Kenya. This study therefore sought to fill this literature gap by looking at the effect of project portfolio management practices on performance of County Governments in Kenya.

Table 2. 1: Knowledge gap

Author	Title	Findings	Gaps
Wheeler, D. (2013).	Contributing factors to optimal project portfolio selection.	- The factors that contribute to the optimal selection of projects include: culture, process, knowledge of the business, knowledge of the work, education, experience,	The study generally looked at factors affecting optimal project portfolio selection which is
		governance, risk awareness, selection of players, preconceptions, and time pressures - organizations that do not give due consideration to the underlying drivers of organisation culture and leadership, will continue to make sub-optimal decisions on the billions of dollars they invest in projects each year.	an aspect in PPM

Kaule, R. D.	Analysing project	-For substantial capacity	Although the
(2008).	management	building programmes to be	study is based in
(2000).	culture and	designed and conducted	the public sector
	practice of public	around 'programme and	projects, it does
	managers in	project management' roles in	not cover how the
	Papua New	state institutions and agencies	PPM is carried
		in PNG, as the way to improve	out
	Guinea: a case study of the	· · · · · · · · · · · · · · · · · · ·	Out
	National AIDS	staff capabilities so as to	
		enable project managers and their staff to efficiently	
	Council Secretariat	-	
		implement projects	The study only
D 10 11 D	Applying	-the government's Earned	The study only
Bradford L. B.	Financial	Value Management System	focuses on the
(2007).	Portfolio	(EVMS) metrics may be used	financial aspect
	Analysis To	to generate a suitable proxy	of the PPM and
	Government	with which financial portfolio	not the process
	Program	analysis can be conducted.	itself
	Portfolios	From this analysis, risk and	
		return trade-offs can be	
		quantified and used when	
		making portfolio decisions.	
Bert D., Yael, G.,	The impact of	-there is a correspondence	Not only does the
& Sergio, C.	project portfolio	between the use of PPM	study focus on
(2005).	management on	processes and techniques, and	technology
	information	improvements in the	projects but also
	technology	performance of projects and	does not link up
	projects	portfolios of projects	the PPM with
			performance
Killen C P and	Dynamic	-Findings suggest a positive	-The study is in
Hunt R A (2010)	capability	relationship between	service and
	through project	structured PPM capabilities	manufacturing
	portfolio	and improved outcomes. The	industries and not
	management in	research compared	public sector
	service and	service and manufacturing	projects
	manufacturing	environments; future	-The focus is also
	industries	challenges are likely to result	on PPM and
		from the increasing blurring of	Dynamic
		the boundaries between	capability and not
		service and manufacturing	performance
		industries.	
Rahayu S. A., &	Dynamic project	-System Dynamics approach	The study is on
Edhi T. (2015).	interdependencies	has the ability to challenge an	interdependencies
	(PI) in optimizing	organization's perception of	between projects
	project Portfolio	their project portfolio	in a given
	management	interdependencies and to	portfolio
	(PPM).	enhance strategic decision	
		making capabilities	
		-Project Interdependencies	
		research is driven by project	
		outcomes	
	1	i	i

Miller, L. A.	A Model for	Organizations that achieve	The model looks
(2014).	Project	higher maturity in IT project	at Project
	Prioritization in	portfolio management	Prioritization
	Higher Education	consistently show both	only and not the
	Information	increased performance and	entire PPM
	Technology	tighter alignment between IT	process
		and business goals	
		-The tool gives institutions a	
		framework for scoring a	
		project's expected effort and	
		impact, setting the stage for	
		informed discussions among	
		stakeholders and governing	
		bodies.	

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter presents the methodology that was adopted in the operationalization of the research and achievement of the study objectives. It involves a blueprint for the collection, measurement and analysis of data. In this section the research identifies the procedures and techniques that were used in the collection, processing and analysis of data. This chapter covers research design, target population, sampling, data collection instruments, piloting, data collection procedures, data analysis, ethical issues and finally the operationalization of variables.

### 3.2 Research Design

Cooper and Schindler (2003) summarizes the basics of research design as a time based plan; constantly in light of the exploration address; directs the choice of sources and sorts of data; a structure for determining the relationship among the study factors and diagrams the techniques for each research method. The outline of this exploration was an unmistakable review examine. This plan alludes to an arrangement of strategies and methods that depict factors. It includes gathering information that portray occasions and afterward sorts out, arranges, delineates, and depicts the information. Clear studies depict the factors by noting who, what, and how addresses (Babbie, 2012). The descriptive research design is selected because the study is a survey involving collection of data at one point in time. In addition, the design is preferred because it enabled assessing relationships between variables and it provides opportunity to identify moderators between variables (Tashakkori & Teddlie, 2011). Singleton (2009) describes a descriptive survey as a comprehensive design that enables large and diverse amounts of data to be collected within a short time frame and analyzed quantitatively, giving a credible presentation of results.

### 3.3 Target Population

Frankfort-Nachmias and Nachmias (2006) portrayed populace, as the whole gathering of people or things under thought in any field of request and have a typical characteristic. The populace for this study formed of the Nairobi county government staff. The study was on 13 top level managers, 41middle level managers and 102 low level managers in the Nairobi county government.

**Table 3. 1 Target Population** 

Category	Frequency	Percentage
Senior level management	13	8.3
('P' and above)		
Middle level management	41	26.3
('M' and 'N')		
Low level management	102	65.4
('A' - 'L')		
Total	156	100.0

Source: County Government of Nairobi Registry, 2015

### 3.4 Sampling Design and Sample Size

Churchill and Iacobucci (2012) underscore the significance of selecting a representative sample through making an sampling frame. From the populace outline the required number of subjects, respondents, components or firms were chosen with a specific end goal to make an example. Stratified random strategy was utilized to choose the specimen. The objective of stratified irregular inspecting is to accomplish the wanted representation from different subbunches in the populace. In stratified random sampling subjects are chosen in a manner that the current sub-amasses in the populace are pretty much spoken to in the example (Kothari, 2004). As per Pole and Lampard (2012), stratified irregular inspecting oftentimes minimizes the examining mistake in the populace. This thusly expands the accuracy of any estimation techniques utilized. As indicated by Mugenda and Mugenda (1999), from ordinary circulation the population extent can be assessed to be

$$n = Z^2 P Q$$

$$\frac{\alpha^2}{\alpha^2}$$

Where: Z is the Z – value = 1.96

P Population proportion 0.50

Q = 1-P  

$$\alpha = level \ of \ significance = 5\%$$

$$n=1.96^{2} \times 0.5 \times 0.5$$

$$0.5^{2}$$

$$n=384$$

Adjusted sample size

n.'=384/[1+(384/156)]

Approx. = 111 respondents

**Table 3. 2: Sampling Frame** 

Category	Frequency	Ratio	Sample size
Senior level management			
('P' and above)	13	0.7	10
Middle level management			
('M' and 'N')	41	0.7	29
Low level management			
('A' - 'L')	102	0.7	72
Total	156		111

Source: Author, 2015

#### 3.5 Research Instruments

The study used a semi structured self-administered questionnaire to gather information from the area chiefs. Jankowicz (2012) watched that, the pre-imperative to poll configuration is meaning of the issue and the particular study goals. Polls things were shut finished or open finished sort. As respects to the previous, the inquiries just permitted particular sorts of reactions while regarding the open finished sort, the respondents expressed reactions as they wish. Kothari (2004) watched that surveys are exceptionally efficient as far as time, vitality and accounts. Likewise, it yields, quantitative information which are anything but difficult to gather and examine.

# 3.6 Validity of Research Instruments

Validity is how much results got from the investigation of the information really speaks to the marvel under study. Legitimacy was guaranteed by having target questions incorporated into the poll and by pre-testing the instrument to be utilized to distinguish and change any uncertain, unbalanced, or hostile inquiries and system as accentuated by Joppe (2009). Master sentiment was asked for to remark on the representativeness and reasonableness of inquiries and give proposals of revisions to be made to the structure of the examination apparatuses. This enhanced the substance legitimacy of the information that was gathered.

### 3.7 Reliability of Research Instruments

Reliability further alludes to a measure of how much research instruments yield predictable results (Sekaran and Bougie, 2010). The pre-testing went for deciding the unwavering quality of the exploration apparatuses including the wording, structure and grouping of the inquiries. The exploration instrument was subjected to general unwavering quality investigation utilizing the split half technique. This was finished by gathering information from a given number of respondents into two parts (regularly odd-even). The two parts were connected utilizing Pearson's relationship. A coefficient of at least 0.7 suggested that there is a high level of information unwavering quality (Trochim, 2005).

#### 3.8 Data Collection Procedure

Information gathering is an extremely significant and time including action. In this association, because of the bustling calendar of the analyst, the surveys were administered to the respondents and gathered by research partner. A strategy for hand conveyance and accumulation around the same time was attempted however where it was impractical, the technique for hand conveyance and gathering on the next day was utilized.

#### 3.9 Data Analysis

Information from survey was coded and signed in the PC utilizing Statistical Package for Social Science (SPSS V 21.0). The gathered information was broke down utilizing both quantitative and subjective information examination techniques. Quantitative strategy included elucidating examination, for example, frequencies, rates, mean scores and standard deviation. Recurrence tables were utilized to show the information for simple correlation. Content examination was utilized for the subjective information and after that introduced in composition. The concentrate additionally led a Pearson's connection investigation to set up the relationship between the factors.

### 3.10 Ethical Considerations

As per Kerridge, Lowe and McPhee (2005), ethics includes making a judgment about good and bad conduct. Morals as noted by Minja (2009) is alluded to, as standards representing human direct which significantly affect human welfare. In fact as saw by Devettere (2000), morals is about decision amongst great and terrible. In this study, classification was of worry as the data applicable to the study is of vital significance. In such manner, the names of the respondents were not revealed. Furthermore, where a reaction can be credited to particular people the said data was kept up in strict certainty.

# **3.11 Operationalization of Variables**

The operationalization of variables is shown in Table 3.3.

**Table 3. 3: Operationalization of variables** 

Objective	Variable	Indicators	Measureme	Tools of	Type of data
			nt scale	analysis	analysis
To assess the effect of	Independent	Component identification	Nominal	Mean	Descriptive
portfolio inventory on	Portfolio	Projects evaluation	Ordinal		
performance of Nairobi	Inventory	Portfolio selection		Percentage	Correlation
County Government		• Projects alignment with strategic			
		objectives			
To establish the effect of	Portfolio	Portfolio balance	Nominal	Mean	Descriptive
portfolio analysis on the	Analysis	Risk identification			
performance of Nairobi		Minimization of risks	Ordinal	Percentage	Correlation
County Government		• Limitation of number of projects that	Interval		
		can be active at one given time			
To determine the effect of	Portfolio	Component selection	Nominal	Mean	Descriptive
portfolio planning on	Planning	Resource planning			
performance of Nairobi		Time planning	Ordinal	Percentage	Correlation
County Government		Cost planning	Interval		

To identify the effect of	Portfolio	Communication of changes	Nominal	Mean	Descriptive
portfolio tracking on	Tracking	Identification of non- viable projects			
performance of Nairobi		Portfolio adjustments	Ordinal	Percentage	Correlation
County Government			Interval		
To explore the effect of	Portfolio	Reporting financial indicators	Ratio	Mean	Descriptive
portfolio review on the	Review	Monitoring and controlling risks	Nominal		
performance of Nairobi		Frequency of Portfolio reviewing	Ordinal	Percentage	Correlation
County Government		Re- verification of portfolios critical			
		success factors			
Dependent	Performance	Customer satisfaction	Nominal		Descriptive
	of County	Customer service quality	Ordinal		
	Governments	Finance & Stewardship	Interval		Correlation
	in Kenya	Quality of the projects			

#### **CHAPTER FOUR**

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter presents analysis of the data on effect of project portfolio management practices on performance of County Governments in Kenya, the case of Nairobi County. The chapter also provides the major findings and results of the study. Finally, the chapter presents a discussion on the findings.

#### **4.2 Response Rate**

The study targeted 111respondents from which 83 filled in and returned the questionnaires making a response rate of 74.77%. This response rate was good and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good.

#### 4.3 Reliability Analysis

Overall reliability analysis was done using the split half method. This was done by collecting data from a given number of respondents into two halves (often odd-even). A coefficient of 0.7 or more implied that there was a high degree of data reliability (Trochim, 2012). Thus formed the study's benchmark. A coefficient of 0.7 and more was established for every objective which formed a scale. This illustrates that all the four scales were reliable as their reliability values exceeded the prescribed threshold of 0.7. This therefore depicts that the research instrument was reliable and therefore required no amendments.

**Table 4. 1: Reliability Analysis** 

Coefficient
.829
.733
.751
.865
.789

### 4.4 Demographic Information of Respondents

The study sought to enquire on the respondents' general information including gender, age bracket and the highest academic qualification.

### 4.4.1 Gender of the Respondents

The researcher sought to know the types of gender of the respondents. The results were as shown in the table 4.2.

**Table 4. 2: Gender of Respondents** 

	Frequency	Percent
Male	48	57.8
Female	35	42.2
Total	83	100.0

From the findings, 57.1% of the respondents were male while 42.2% were female. This shows that the researcher was not biased since he catered for all gender in his study.

### 4.4.2 Age of the Respondents

The study sought to establish the age of the respondents. The ages of the respondents are as presented in table 4.3.

Table 4. 3: Age of the Respondents

	Frequency	Percent
18-25 years	5	6.0
26-36 years	12	14.5
37-45 years	36	43.4
46-55 years	22	26.5
Over 56 years	8	9.6
Total	83	100

The findings revealed that majority of the respondents were aged between 37 and 45 as represented by 43.4%, 26.5% of the respondents were between 46 and 55 and 14.5% were between 26 and 36 ages, 9.6% were over 56 years whereas only 8.9% of the respondents

were between 18 and 25 ages. From the findings it is evident that majority of the employees were over 26 years of age.

### 4.4.3 Highest Academic Qualification of the Respondents

The respondents were further requested to indicate their highest level of education. The results are as shown in the table 4.4.

**Table 4. 4: Highest Academic Qualification of the Respondents** 

	Frequency	Percent
Diploma	5	6.0
Bachelor's degree	65	78.3
Post graduate	13	15.7
Total	83	100

From the findings 78.3% of the respondents indicated that have bachelor's degree, 15.7% indicated post graduate, whereas 6.0% indicated the diploma. This finding implies that respondents were literate enough to interpret the topic of the study.

### 4.5 Organizational Performance

The study sought to know whether the respondent were aware of the existence of project portfolio management. The results are as shown in the table 4.5.

Table 4. 5: Awareness of project portfolio management

	Frequency	Percent
Yes	75	96.8
No	8	3.2
Total	83	100

The analysis showed that 96.8% of the respondents were aware of project portfolio management while only 3.2% were not portfolio management. This findings implies that majority of the organization have portfolio management in their organization.

Table 4. 6: Contribution of project portfolio management practice to the performance of projects in Nairobi county government

	Frequency	Percent
Yes	67	93.0
No	16	7.0
Total	83	100

The highest percent of the respondents agrees that management practice contributes significantly to the performance of projects in Nairobi county government as was denoted by 93% while 7% who were not in agreement that management practice contributes significantly to the performance of projects in Nairobi county government.

The study sought to establish performance of Nairobi County Government. The findings are shown in Table 4.7.

**Table 4. 7: Performance rate** 

	Mean	Std. Deviation
Customer satisfaction	3.9439	1.10622
Customer service quality	4.4878	.75758
Finance & Stewardship	4.5000	.90608
Quality of the projects	3.2927	1.25204

From the findings, Finance & Stewardship was rated to be very good in Nairobi County, Customer service quality and Customer satisfaction were rated to be good in the County as was showed by means of 4.4878 and 3.9439 respectively. Quality of the project was average in the county as noted with a mean of 3.2927.

#### 4.5.1 Portfolio Inventory

The study sought to assess how portfolio inventory influence performance of Nairobi County Government. The findings are shown in Table 4.8.

Table 4. 8: Extent portfolio inventory affect performance of Nairobi County Government

	Frequency	Percent
Little extent	9	10.8
Moderate extent	17	20.5
Great extent	27	32.5
Very great extent	30	36.1
Total	83	100

According to the findings in table 4.8, 68.6% (57) of the respondents indicated that portfolio inventory greatly affect performance of Nairobi County Government. Those considered portfolio inventory to have moderate or little impact on performance of Nairobi County Government were 31.3% only. Most of the respondents (36.1%) considered portfolio inventory have a very great effects on performance of county of Nairobi while 32.5% considered portfolio inventory to have a great influence. These results indicate that portfolio inventory significantly affects performance of county government of Nairobi.

The study sought to assess how statement on how portfolio inventory influence performance of Nairobi County Government were rated. The findings are shown in Table 4.9.

**Table 4. 9: Statement on Portfolio Inventory** 

	Mean	Std. Deviation
Component identification is in regard to proposed, delayed and	4.1556	.95240
ongoing projects		
Projects are evaluated to come up with an optimal mix	3.8778	1.11373
There is a positive correlation of portfolio selection with	3.6222	1.23009
achieving portfolio results and project purpose		
Project categorization is tailored to match organizational	4.1006	.83666
resources		
projects selected in a portfolio are always aligned with the	3.0444	.99899
strategic objective of the organization		

The respondents agreed with a mean of 4.1556 that component identification was in regard to proposed, delayed and ongoing projects. They further agreed that project categorization is tailored to match organizational resources as illustrated by a mean of 4.1006, projects are

evaluated to come up with an optimal mix as illustrated by a mean of 3.8778, there is a positive correlation of portfolio selection with achieving portfolio results and project purpose as illustrated by a mean of 3.6222. However, the respondents were neutral with a mean of 3.0444 that projects selected in a portfolio are always aligned with the strategic objective of the organization.

### 4.4.2 Portfolio Analysis

The study sought to assess how portfolio analysis influence performance of Nairobi County Government. The findings are shown in Table 4.10.

Table 4. 10:Extent portfolio analysis affect performance of Nairobi County Government

	Frequency	Percent
Little extent	4	4.8
Moderate extent	12	14.5
Great extent	36	43.4
Very great extent	31	37.3
Total	83	100

The analysis showed that portfolio analysis affect performance of Nairobi County Government to very great extent as was shown by 43.4% whereas 4.8% of the respondents said that portfolio analysis affect performance of Nairobi County Government to a little extent. This implies that portfolio analysis affect performance of Nairobi County Government to very great extent.

**Table 4. 11: Statement on Portfolio Analysis** 

	Mean	Std. Deviation
Portfolio analysis process limits the number of projects that	3.6486	1.13569
can be active at one given time		
Portfolio analysis ensures good portfolio balance that	4.1351	1.13437
enables the County to achieve growth objectives		
In portfolio analysis risks are identified, analyzed and	3.0541	1.10418
responses developed		
Portfolio analysis seeks to minimize risk for a given level of	3.3784	.92350
expected return		

According to the results of analysis in table 4.11 portfolio analysis ensures good portfolio balance that enables the County to achieve growth objectives as was noted by a mean of 4.1351. However, the analysis was neutral that Portfolio analysis sought to minimize risk for a given level of expected return.

### 4.5.3 Portfolio Planning

The study sought to assess how portfolio planning influence performance of Nairobi County Government. The findings are shown in Table 4.12.

Table 4. 12: Extent portfolio planning affect performance of Nairobi County Government

	Frequency	Percent
Little extent	6	7.2
Moderate extent	15	18.1
Great extent	37	44.6
Very great extent	27	32.5
Total	85	100

The findings showed that 44.6% of the respondents indicated that portfolio planning affects the performance of County of Nairobi to a great extent, 32.5% indicated a very great etent, 18.1% noted that portfolio planning affects the performance of Nairobi County to a moderate extent whereas 7.2% indicated little extent. The findings imply that portfolio planning affect the performance of Nairobi County to a great extent.

**Table 4. 13: Statement on Portfolio Planning** 

	Mean	Std. Deviation
Portfolio planning enables component selection	3.3293	1.50763
Selected components in a portfolio are prioritized based on evaluation scores	2.5244	1.04498
Portfolio planning is key to organizational stability and flexibility	3.9878	1.07145
Portfolio planning facilitates resource planning	3.2561	1.16334
Portfolio planning facilitates time planning	4.0366	1.10493
Portfolio planning facilitates cost planning	3.1098	.94289

Table 4.13 presents the analysis of the findings in relation to portfolio planning. Respondents agreed with a mean of 4.0366 that Portfolio planning facilitates time planning; they also agreed with a mean of 3.9878 that Portfolio planning is a key to organizational stability and flexibility. However, the respondents were neutral that selected components in a portfolio are prioritized based on evaluation scores as was shown by a mean of 2.5244.

### 4.5.4 Portfolio Tracking

The study also sought to assess how portfolio tracking influence performance of Nairobi County Government. The findings are shown in Table 4.14.

Table 4. 14: Extent Portfolio Tracking affects performance of Nairobi County Government

Frequency	Percent
8	9.6
11	13.3
43	51.8
21	25.3
83	100
	8 11 43 21

The analysis show that 51.8% of the respondents indicated that portfolio tracking affects the performance of County of Nairobi to a great extent, 25.3% indicated a very great extent, 13.3% noted that portfolio tracking affects the performance of Nairobi County to a moderate extent whereas 9.6% indicated little extent. The findings imply that portfolio tracking affect the performance of Nairobi County to a great extent

**Table 4. 15: Statement on Portfolio Tracking** 

	Mean	Std. Deviation
Portfolio tracking is an important process of communicating	4.3171	1.05266
changes once they are identified and approved	4.5171	1.03200
Through portfolio tracking adjustments are made to		
portfolios in regard to spending, priorities and resource	3.2927	1.11652
allocations		
Through portfolio tracking non-viable projects are identified	2.7420	1 10475
and removed from the portfolio	3.7439	1.19475

Respondents were in agreement with the statement that Portfolio tracking is an important process of communicating changes once they are identified and approved. They again agreed with a mean of 3.7439 that through portfolio tracking non-viable projects are identified and removed from the portfolio. However they were neutral with a mean of 3.2927 that through portfolio tracking adjustments are made to portfolios in regard to spending, priorities and resource allocations.

#### 4.5.5 Portfolio Review

The study further sought to assess how portfolio review influence performance of Nairobi County Government. The findings are shown in Table 4.16.

Table 4. 16: Extent portfolio review affect performance of Nairobi County Government

Frequency	Percent
5	6.0
11	13.3
43	51.8
24	28.9
83	100
	5 11 43 24

The respondents noted with 51.8% that portfolio review affect performance of Nairobi County Government to a great extent.28.9% indicated very great extent, 13.3% noted moderate effect of portfolio review on performance of Nairobi County Government whereas 6.0% showed little extent. These findings deduce that portfolio review significantly affects performance of Nairobi County Government

Table 4, 17: Statement on Portfolio Review

Portfolio Review	Mean	Std. Deviation
Portfolio review aims at gathering and reporting		
performance indicators at an appropriate predetermined	2.4756	1.30739
frequency		
Portfolio review and re-planning ensures risks are	3.2195	1.23752
monitored and controlled		
Frequency of reviewing portfolios determines the	3.5122	1.33559

performance of projects in the portfolio		
Review process ensures that the portfolio contains projects	3.9634	1.14875
that support the achievement of strategic goals	3.9034 1.1	
Portfolio review and re-planning aims at re-verification of	3.6098	.99077
the portfolios critical success factors	5.0096	.99077

The analysis showed that respondents agreed with a mean of 3.9634 that Review process ensures that the portfolio contains projects that support the achievement of strategic goals. They further agreed with a mean of 3.6098 that portfolio review and re-planning aims at reverification of the portfolios critical success factors. They were neutral with a mean of 2.4756 Portfolio review aims at gathering and reporting performance indicators at an appropriate predetermined frequency.

# 4.6 Pearson Correlation Analysis

Pearson correlation coefficient was used to determine the strength and the direction of the relationship between the dependent variable and the independent variables targeted during this study. The correlation coefficient matrix between the dependent variable (organizational performance) and independent variables (portfolio inventory, portfolio analysis, portfolio planning, portfolio tracking and portfolio review) is shown in Table 4.18.

 Table 4. 18: Pearson Correlation Analysis

		performance of County Government s	Portfolio inventor y	Portfoli o analysis	Portfoli o planning	Portfoli o tracking	Portfoli o review
performance of County Government s	Pearson Correlatio n Sig. (2- tailed)	1					
Portfolio inventory	Pearson Correlatio n Sig. (2- tailed)	786 .039	1				
Portfolio analysis	Pearson Correlatio n Sig. (2- tailed)	.031	.701	1			
Portfolio planning	Pearson Correlatio n Sig. (2- tailed)	.670 .038	034 .763	191 .086	1		
Portfolio tracking	Pearson Correlatio n Sig. (2- tailed)	.678 .004	270 .014	270 .014	.430	1	
Portfolio review	Pearson Correlatio n	.654	670	-430	.830	.701	1
	Sig. (2-tailed)	.007	.014	.064	.600	.000	

The results indicate that performance of County Governments was significantly correlated with Portfolio inventory (r = 786, p = 0.039, Table 4.13). This shows that Portfolio inventory positively and significantly affect performance of County Governments in Kenya.

Similarly it was also significantly and positively correlated with Portfolio analysis (r = 860, p =0.031, Table 4.13). This implies that there is a strong, positive and significant relationship between Portfolio analysis and performance of County Governments in Kenya.

Results of the correlation test matrix show that Portfolio planning have a positive correlation with performance of County Governments (r = 0.675, p = .038). This shows that Portfolio planning positively and significantly affect performance of County Governments in Kenya.

Portfolio tracking had a positive correlation with performance of County Governments. (r = 0.678, p = 0.004). This implies that there is a strong, positive and significant relationship between Portfolio tracking and performance of County Governments in Kenya.

Portfolio review have a positive correlation with performance of County Governments (r= 654, p= 0.007). It is therefore deduced that there is a strong, positive and significant relationship between Portfolio review and performance of County Governments in Kenya.

#### **CHAPTER FIVE**

#### SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presented the discussion of key data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn were focused on addressing the objective of the study

### **5.2 Summary of Findings**

The study sought to explore the effect of project portfolio management practices on performance of County Governments in Kenya, the case of Nairobi County. These results indicate that portfolio inventory significantly affects performance of county government of Nairobi. The study further showed that component identification was in regard to proposed, delayed and ongoing projects. Furthermore, it was evident project categorization is tailored to match organizational resources, projects are evaluated to come up with an optimal mix. However, the study was neutral that projects selected in a portfolio are always aligned with the strategic objective of the organization.

The analysis showed that portfolio analysis affect performance of Nairobi County Government to very great extent. According to the results of analysis portfolio analysis ensures good portfolio balance that enables the County to achieve growth objectives. However, the analysis was neutral that Portfolio analysis sought to reduce the risk for a certain range of returns.

The findings indicated that portfolio planning affects the performance of County of Nairobi to a great extent. The results of the analysis in relation to portfolio planning revealed that Portfolio planning facilitates time planning; it is also a key to organizational stability and flexibility. However, the study was neutral that selected components in a portfolio are prioritized based on evaluation scores.

The study deduced that portfolio tracking affects the performance of County of Nairobi to a huge extent. The study also found that Portfolio tracking is an important process of communicating changes once they are identified and approved. The results of the findings indicated that through portfolio tracking non-viable projects are identified and removed from

the portfolio. However the study was neutral that through portfolio tracking adjustments are made to portfolios in regard to spending, priorities and resource allocations.

The research established that portfolio review affect performance of Nairobi County Government to a great extent. It also deduced that portfolio review and re-planning aims at re-verification of the portfolios critical success factors. Portfolio review aims at gathering and reporting performance indicators at an appropriate predetermined frequency.

#### 5.3 Discussion

This section sought to discuss the effect of portfolio inventory, portfolio analysis, portfolio planning, portfolio tracking and portfolio review on performance of County Governments in Kenya, the case of Nairobi County.

#### **5.3.1 Portfolio Inventory**

The study found that portfolio inventory significantly affects performance of county government of Nairobi. This is in conjunction with Müller, Martinsuo and Blomquist (2008) who verify a positive relationship of portfolio choice with accomplishing portfolio comes about and accomplishing project and program reason. Subsequently, portfolio determination is about adjusting projects to system and organizing them. The study was likewise apparent that project classification is custom-made to coordinate authoritative assets, tasks are assessed to think of an ideal blend, there is a positive relationship of portfolio determination with accomplishing portfolio results and project purpose. The discoveries are in concurrence with Crawford et al. (2005) who demonstrated that in an examination on project order and arrangement recognize two fundamental motivations to characterize projects: the fitting of project management assets to the project sort and the classification of tasks to organize and select them. In any case, the study was nonpartisan that undertakings chose in a portfolio are constantly adjusted to the vital goal of the association as indicated by the Chien (2012) who contends that selecting of individual solid project does no prompt to an ideal portfolio blend.

#### **5.3.2 Portfolio Analysis**

The analysis showed that portfolio analysis affect performance of Nairobi County Government to very great extent. According to Killen (2008) when the most suitable projects have been selected and initiated, they enter the project planning phase. According to the results of analysis portfolio analysis ensures good portfolio balance that enables the County to achieve growth objectives. High performing portfolios consist of the right mix of projects (Cooper et al., 2000) This angle concentrates on non-money related factors identified with

project choice and choice to adjust the portfolio as to project sort, hazard level, and asset sufficiency (Killen et al., 2008). In any case, the examination was impartial that Portfolio investigation looked to minimize hazard for a given level of expected return. This finding agree with investigation of Meskendahl (2010) who expounds that these measurements may be shared ward e.g. long haul undertakings are corresponded with expansive project estimate though a higher degree in development includes more dangers

### 5.3.3 Portfolio Planning

The findings showed that portfolio planning affects the performance of County of Nairobi to a great extent. According to Cooper et al (2006) Portfolio maps are one of the most commonly used visual tools for balancing portfolios. The results of the analysis in relation to portfolio planning revealed that Portfolio planning facilitates time planning; it is also a key to organizational stability and flexibility. This is in concurrence with Andersen (2008) that organizations look for solidness in light of the fact that the expenses of changing are too high or the soundness offers some preferred standpoint while then again they require adaptability keeping in mind the end goal to adjust to the world outside, look for circumstances and beat the opposition. Olsson (2006) additionally included that management of adaptability in project management which he characterizes as the capacity to conform the project to imminent outcomes of unverifiable conditions inside the setting of the project. In any case, the study was nonpartisan that chose parts in a portfolio are organized in view of assessment scores. Pellegrinelli (2013) recommends that the balanced for and the advantages created from projects will extraordinarily affect the program structure

### **5.3.4 Portfolio Tracking**

The researcher showed that portfolio tracking affects the performance of County of Nairobi to a great extent. Muller (2009) showed that Portfolio tracking is an important process of communicating changes once they are identified and approved. The results of the findings indicated that through portfolio tracking non-viable projects are identified and removed from the portfolio. This analysis support the study of Killen (2008) that portfolio neutral that through portfolio tracking adjustments are made to portfolios in regard to spending, priorities and resource allocations.

#### **5.3.5 Portfolio Review**

The research set up that portfolio audit influence execution of Nairobi County Government as it were. Dietrich (2006) uncovers observational proof that project and additionally program and portfolio management are vital gadgets of the authoritative system prepare. Associations fruitful in actualizing vital ideas tend to survey extend execution connected to technique plan while program and portfolio execution assessment are a part of the methodology follow up process. The study uncovered that Review procedure guarantees that the portfolio contains projects that bolster the accomplishment of vital objectives. It likewise concluded that portfolio audit and re-arranging goes for re-confirmation of the portfolios basic achievement components. Portfolio survey goes for social event and reporting execution markers at a proper foreordained recurrence. McDonough and Spital (2003) found that portfolios being investigated quarterly performed superior to those surveyed semi-every year

#### **5.4 Conclusions**

According to the findings of the study conclude that portfolio inventory significantly affects performance of county government of Nairobi. Component identification was in regard to proposed, delayed and ongoing projects. Furthermore, it was evident in the study that project categorization is tailored to match organizational resources; projects are evaluated to come up with an optimal mix. The study deduces that projects selected in a portfolio are not aligned with the strategic objective of the organization.

The study further concludes that portfolio analysis affect performance of Nairobi County Government. Portfolio analysis ensures good portfolio balance that enables the County to achieve growth objectives.

The study further concludes that portfolio planning affects the performance of County of Nairobi. It was evident that Portfolio planning facilitates time planning; it is also a key to organizational stability and flexibility. However, selected components in a portfolio are not well prioritized based on evaluation scores.

The research again concludes that portfolio tracking significantly affects the performance of County of Nairobi. The study deduce that Portfolio tracking is an important process of communicating changes once they are identified and approved. The researcher came to understand that through portfolio tracking non-viable projects are identified and removed from the portfolio. However, through portfolio tracking adjustments are made to portfolios in regard to spending, priorities and resource allocations.

The research finally concludes that portfolio review affect performance of Nairobi County Government. It also deduced that portfolio review and re-planning aims at re-verification of the portfolios critical success factors. Portfolio review aims at gathering and reporting performance indicators at an appropriate predetermined frequency.

#### 5.5 Recommendations

The management team of County Government of Nairobi should consider portfolio inventory in their projects. Component identification should take a lead in regard to proposed, delayed and ongoing projects. The management team should also establish strong project categorization which is used to match organizational resources. In addition projects evaluation should be done to determine optimal mix as well as to determine resource required for the project.

In relation to portfolio analysis the study recommends that the management team of Nairobi County should always perform Portfolio analysis to ensure good portfolio balance that will enable the County to achieve growth objectives.

The study further recommends that in order to facilitate time planning management team of Nairobi County should establish proper portfolio planning. This will result in to organizational stability and flexibility. The study also recommends that the management team of Nairobi County should prioritize components selection based on evaluation scores.

The study also recommends that County Government of Nairobi should aim to have a strong portfolio tracking which will enhance process of communicating changes once they are identified and approved. Portfolio tracking implemented in the institution should ensure that non-viable projects are identified and removed from the portfolio.

The study finally recommends that Review process in the project evaluation should ensure that the portfolio contains projects that support the achievement of strategic goals. Replanning and re-verification should be aimed in order to gather and report performance indicators at an appropriate predetermined frequency.

#### **5.6 Suggestion for Further Studies**

Following this study, another study should be done to explore the effect of project portfolio management practices on performance of County Governments in Kenya in other county rather than Nairobi county.

From the above findings, conclusion and recommendation the study suggests that an in-depth study should be carried out to determine the challenges faced by County Governments in implementing the portfolio management practices. A further study should also be carried out to establish the effects of portfolio management practices on performance of County governments in Kenya.

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**APPENDICES** 

**Appendix I: Letter of Transmittal of Data Collection Instruments** 

Fridah Kinanu

P.O Box 41512-00100

Nairobi.

Dear Sir /Madam,

**RE:** Letter To The respondents

I am currently a student at The University of Nairobi pursuing a Masters degree in Project Planning and Management. To meet the requirements of the programme I am undertaking a study on project portfolio management practices on performance of County Governments in

Kenya. Case of Nairobi County

Kindly provide data which I require for this study through the provided study instruments.

The data you provide will be used for research purpose only and your identity will be held confidential.

Thank you.

Yours Faithfully,

Fridah Kinanu

L50/73537/2014

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# Appendix II: Research Questionnaire for Nairobi County Government Staff

This questionnaire is to collect data for purely academic purposes. The study seeks to explore the influence of automation of revenue collection processes on organizational performance in Kenya. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire.

Answer all questions as indicated by either filling in the blank or ticking the option that applies.

PA	ART A: GENERAL IN	FORMATION	I			
1.	Gender					
	Male		Female			
2.	Age Bracket					
	18-25 years		26-36 years	3	36-45 years	
	46-55 years		over 56 years			
3.	Academic Qualification	ns				
	PhD		First Degree		Diploma	
	Masters		KCSE			
SE	CTION B: EFFECT (	OF PROJECT	PORTFOLI	O MANAGE	EMENT PRA	ACTICES ON
PE	RFORMANCE					
OF	RGANIZATIONAL PE	ERFORMANC	CE			
	1. Have you heard abo	out project port	folio managem	ent? Y	es ( )	No()
	2. Do you think pro	ject portfolio	management p	oractice contr	ributes signif	ficantly to the
	performance of pro	jects in Nairobi	i county govern	nment? Y	es ()	No ()
	3. How would you rat	e the performa	nce of your cou	anty in refere	nce to the foll	lowing:
		Very good	Good	Average	poor	Very Poor
Cu	stomer satisfaction					
Cu	stomer service quality					
Fin	ance & Stewardship					
On	ality of the projects					

# PORTFOLIO INVENTORY

4. To what extent does portfolio inventory	affect	performan	ce of	Nairobi	County
Government?					
Not at all [ ]					
Low extent [ ]					
Moderate extent [ ]					
Great extent [ ]					
Very great extent [ ]					
5. On a likert scale, how would you rate the succes	ss of th	e projects	you un	dertake in	Nairobi
county government?					
Rate your opinion against the scheduled statements by	ticking	$[\sqrt{\ }]$ on aga	inst co	lumn.	
SD = Strongly Disagree (1), D = Disagree (2), N = N	Jeutral	(3), A = A	gree (	4), SA =	strongly
agree					
Portfolio Inventory	SD	D	N	A	SA
Component identification is in regard to proposed,					
delayed and ongoing projects					
Projects are evaluated to come up with an optimal					
mix					
There is a positive correlation of portfolio selection					
with achieving portfolio results and project purpose					
projects selected in a portfolio are always aligned					
with the strategic objective of the organization					
	<u> </u>		ı	<u> </u>	.1
PORTFOLIO ANALYSIS					
6. To what extent does portfolio analysis a	iffect j	performano	ce of	Nairobi	County
Government?					
Not at all [ ]					
Low extent [ ]					
Moderate extent [ ]					
Great extent [ ]					
Very great extent [ ]					

7. In your opinion, how would you rate the following portfolio analysis statements as influencing the project outcomes in Nairobi county government?

Portfolio Analysis	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
Portfolio analysis process limits the					
number of projects that can be active at one					
given time					
Portfolio analysis ensures good portfolio					
balance that enables the County to achieve					
growth objectives					
In portfolio analysis risks are identified,					
analyzed and responses developed					
Portfolio analysis seeks to minimize risk					
for a given level of expected return					

# PORTFOLIO PLANNING

8.	To	what	extent	does	portfolio	planning	affect	perforn	nance	of	Nairobi	County
	Gov	ernme	ent?									
		No	t at all		[ ]	Low exte	ent	[	]			
		Mo	oderate e	extent	[ ]	Great ex	tent	[	] Ve	ry gi	reat exten	t[]
9.	Plea	se tell	whethe	r you s	strongly ag	ree, Agree	, Disagr	ee, stron	gly di	sagr	ee or neu	tral with
	the	follow	ing state	ments								

Portfolio Planning	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
Portfolio planning enables component					
selection					
Portfolio planning facilitates resource					
planning					
Portfolio planning facilitates time planning					
Portfolio planning facilitates cost planning					

# PORTFOLIO TRACKING

	10. To what extent does portfolio track	king affect	perforn	nance of	Nairobi	County
	Government?					
	Not at all [ ]					
	Low extent [ ]					
	Moderate extent [ ]					
	Great extent [ ]					
	Very great extent [ ]					
	11. Please tell whether you strongly agree, A	gree, Disag	ree, stroi	ngly disag	ree or neut	ral with
	the following statements					
	Portfolio Tracking	Strongly	Agree	Neutral	Disagree	Strongly
		Agree				Disagre
	Portfolio tracking is an important process					
	of communicating changes once they are					
	identified and approved					
	Through portfolio tracking adjustments are					
	made to portfolios in regard to spending,					
	priorities and resource allocations					
	Through portfolio tracking non-viable					
	projects are identified and removed from					
	the portfolio					
		1	•		1	-1
PC	ORTFOLIO REVIEW					
	12. To what extent does portfolio review affe	ect performa	nce of N	airobi Cou	ınty Gover	nment?
	Not at all [ ]					
	Low extent [ ]					
	Moderate extent [ ]					
	Great extent [ ]					
	Very great extent [ ]					

13. Rate your opinion on the following statements by ticking [√] against column.

SD = Strongly Disagree (1), D = Disagree (2), N = Neutral (3), A = Agree (4), SA = Strongly Agree (5)

Portfolio Review	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
Portfolio review aims at gathering and					
reporting performance indicators at an					
appropriate predetermined frequency					
Portfolio review and re-planning ensures					
risks are monitored and controlled					
Frequency of reviewing portfolios					
determines the performance of projects in					
the portfolio					
Portfolio review and re-planning aims at					
re-verification of the portfolios critical					
success factors					

14.	What are some of the key challenges and difficulties are you facing in project portfolio
	management?

Thank you for your time