

**INFLUENCE OF MANAGEMENT PRACTICES ON PERFORMANCE OF  
MICROFINANCE INSTITUTIONS IN EMBU COUNTY, KENYA**

**BY**

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NAIROBI**

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## **DECLARATION**

This research project report is my original work and has not been presented for any academic purposes in the University of Nairobi or any other university or institution of higher learning.

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

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**UNIVERSITY OF NAIROBI**

## **DEDICATION**

I dedicate this research project report to my husband John Mark Kariuki and our dear children Joy Wawira, Victor Munene and Emmanuel Mutua. My family has been a great support system till the completion of this course.

## **ACKNOWLEDGEMENTS**

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## **ABBREVIATIONS AND ACRONYMS**

- AMFI** - Association of Microfinance Institutions of Kenya
- BCG** - Boston Consulting Group
- CGAP** - Consultative Group to Assist the Poor
- CVA** - Credit Value Adjustment
- DAC** - Development Assistance Committee
- EPMO** - Enterprise Project Management Offices
- FCA**-Farm Credit Administration
- IACPM** - International Association of Credit Portfolio Managers
- ICT**- Information Communication Technology
- KBA** – Kenya Bankers Association
- KPIs** - Key Performance Indicators
- M&E** - Monitoring and Evaluation
- MFI** - Microfinance Institution
- OECD** - Organization for Economic Cooperation and Development
- PMO** – Project Management Officer
- PPM** – Project Portfolio Management
- PwC** – Price Waterhouse Coopers
- ROI** – Return of Investments
- SCP**-The Structure Conduct Performance
- VaR** - Value at Risk

## ABSTRACT

The anchor Vision 2030 is to transform Kenya into an industrialized middle-income country that provides high quality of life to its citizenry. Vision 2030 defines the financial sector as vibrant and globally competitive that will promote high level of savings to finance Kenya's investment needs. Giving Microfinance sector muscle will spur Kenya towards vision 2030. The government through vision 2030 has identified the financial sector as one of the six priority sectors in realising this vision. The management of project portfolio involves effective allocation of resource when selecting projects that have high potential for the development of future products and leaders. In Kenya, MFIs are in advanced phase of adopting the project portfolio management practices. Many of them face a challenge of deploying qualified project portfolio managers who can provide leadership and direction to how appropriately PPM are supposed to be overseen. The purpose of this study was to establish how project portfolio management practices affect the performance of MFIs in Embu County in Kenya. The specific objectives was to assess the influence of portfolio inventory on performance of MFIs in Embu County in Kenya, to establish the influence of portfolio analysis on performance of MFIs in Embu County in Kenya, to determine the influence of portfolio planning on performance of MFIs in Embu County in Kenya, to assess the influence of portfolio tracking on performance of MFIs in Embu County in Kenya, to identify the influence of portfolio review on performance of MFIs in Embu County in Kenya. The study was grounded on the control theory and decision theory. The study adopted a descriptive research design targeting senior and middle level management staff of the MFIs in Embu County in Kenya. The respondents were drawn from finance, marketing, operations, risk and compliance and ICT departments since all their functions are centralized. The target population therefore comprised of 357 management employees of the MFIs in Embu County. The study selected 114 respondents using stratified proportionate random sampling technique by adopting Kothari's (2004) formula. Primary data was obtained using self-administered questionnaires. The pilot testing was conducted using the questionnaires through drop and pick method. The study data was analyzed using the SPSS (version 25.p). The output was presented using descriptive statistics such as frequencies, percentages, mean and standard deviation on tables, charts and prose for interpretation and making conclusions. The qualitative data was analyzed using content method of analysis. Inferential data analysis was done using multiple regression analysis to establish the relationships between the dependent and independent variables. The level of significance of the analysis is at 0.05. The study found that fixed income investments have increased the financial stability that real estate investment has enhanced our outreach and that mortgage investment has boosted MFIs profitability and the study found that risk sensitivity analysis has enhanced financial stability and that stress testing analysis has minimized profitability risk. The study concluded that portfolio inventory had the greatest influence on performance of MFIs followed by Portfolio planning, then Portfolio review then portfolio analysis while Portfolio tracking had the least influence on the performance of MFIs. The results also show that there is a positive association between portfolio planning and performance of MFIs ( $r= 0.718$ ) The study recommends that Portfolio managers should be required to periodically verify that investment performance reports are accurate and that investment policy compliance statements are updated whenever a material change occurs and that MFIs should train staff on the use of project portfolio management practices in order to enhance the implementation of project portfolio management practices.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Managing project portfolio is a process which involves maximization of projects impact on the actual success of a micro finance institution. It ensures that the MFI programmes, investments and human resources are properly aligned to the strategic objectives. As a continuous process, it synchronizes organizations schedules, resources and strategies together. These strategies lies in ensuring a strong methodology at the beginning of the project which then minimizes the challenges encountered during implementation. These methodologies are a requirement to an effective bench marking plan or best practices laid in conjunction with excellent execution of the projects and enhanced return on investment. Though this is a typical structure for project portfolio administration, some fundamentals form the basis of any effective project portfolio management plan. Portfolios that perform highly need a plan which recognizes the need for assortment, ranking, approval, administration and regulation of the portfolio of the project. It is expected to raise the return on investment at the enterprise level (Martinsuo & Aalto, 2010).

A lot of microfinances draw their project management plan in line with their strategic goals. Although the strategies offer an acceptable picture of the full portfolio management of the project, the approach may mean that all MFIs have diverse requirements as well as goals (Artto & Elonen, 2013). Therefore, they will all require a tailored group of requirements, procedures including plans to aid in understanding which of the portfolio are active in the market. The structure needs to regulate the charges for each of the portfolios and align all the plans, implementation and outcomes appropriately. Each MFI therefore must come up with one project portfolio management plan that ensures an exceptional intricacy and interdependency. This can be done by excluding the organizational resources and its budget during project planning process as well as the failing to put them in the corporate policy. During project execution, the project team may fail to do a cross-functional coordination which may lead to dissimilar programmes with identical objectives which may lead to misuse of corporate resources (Archer & Ghasemzadeh, 2014).

Those leading the portfolio process need to know these mutually exclusive inter-relationships while also assessing the main drivers which compose an extensive project portfolio management plan is vital for the organization. This also entails clear understanding of the

portfolio maturity process. Although most MFIs would want to engage more people and resources to come up with an Enterprise Project Management Offices (EPMOs), they often do not take time to come up with a comprehensive budget to push their intentions using effective methodologies for project delivery. Notwithstanding an indeterminate business atmosphere, these MFIs today continue underneath compression to revolutionize and develop by effectively performing their corporate plans. Whereas there is no specific resolution, most MFIs appreciate they can enhance routine, reduce charges and danger and make a better profit on investments (ROI) over improved project portfolio organization. An effective project portfolio administration approach is comprised of an endwise structure that systematically directs these MFIs from project selection through implementation. The gains can be considerable to MFIs that outshine at project portfolio management which typically are able to finish projects as scheduled and within the costs while improving on ROI according to Bryman and Bell (2013). Research has shown that, a well thought out project portfolio administration platform can lead MFIs to apprehend up to 25% additional income from new products when linked with less effective opponents (Aberdeen, 2010).

Globally, many MFIs come up with a rigorous process to assessment and admit projects based on monetary standards and business cases that have the potential for improved performance and saving costs. However most of projects do not follow through by keenly examining and assessing the value of the projects after implementation (Chien, 2012). Therefore, a well-planned examination can help stop failing – and unproductive – projects portfolio management in time. This phase is important because, once a project or program has been accepted, the unanticipated which has to do with resource difficulties, unexpected technology problems, and fluctuating strategies can (very often does) happen. Such obstacles are usually discovered late in the project implementation process and EPMOs mostly are never willing to stop the projects portfolio management in progress (Cooper, Edgett & Kleinschmidt, 2015).

This is where the achievement matrix demonstrates their value. EPMOs that constantly trail and accomplish the progress of achievement can most certainly identify non-performing projects at a very early stage during the implementation process (Cordero, 2010) which makes it easy to manage risks or even stop project in order to save the resources from further wastage. Therefore, a well thought out results-realization plan must be adopted throughout the life-cycle of each project portfolio management. It is crucial that the MFIs execute a results-realization process with consistent evaluations before acceptance of the project (Corso & Pavesi, 2015).

Thereafter, it is important to uphold a solid focus on the realization of the goals of the projects regardless of whether the frameworks are based on ROI, revenue collection, cutting costs, excellence, user satisfaction or some other value. Also important is a steady and inclusive context for project portfolio management recording. The prediction for business remains indefinite, but many MFIs are organizing for innovation and development especially for developing markets. These varying urgencies and progressively complex projects have overblown the risk of projects failing to be achieved / accomplished and business effectiveness (Dooley, Lupton & O'Sullivan, 2015).

Currently most MFIs are reacting by trying to enhance the effectiveness of portfolio management because a structure that promotes end-to-end portfolio management from initial proposal to the realization of the actual objective is necessary as a startup at the beginning. Effective project portfolio management needs a renewed emphasis on control and financial discipline (Drucker, 2015). However, working on these added complications is not a one-size-fits-all plan because all the businesses needs tools which are specifically made, procedures and approaches to help achieve the best portfolio managing tool. The sad news is that most organizations lack the skills required to take a step back and keenly examine their project portfolio management approach for proper management and financial duties. The PwC (2014) has been developed to help project leadership to find out their PM risks and requirements, and then come up with a project management plan that covers the multifaceted concerns of management and financial restraint. The skilled portfolio management staff provides the tools, strategies and human resources to guarantee accurate valuation, design, and delivery of a realistic PPM strategy (Dye & Pennypacker, 2010).

A changed attention on real portfolio management can bring competitive rewards; cut costs, and reduce the dangers for the contemporary uncertain economic situation to make the MFI a top performer. Healthy portfolio management is unavoidable at the beginning. At the same time, a strict management matrix is very important for promoting accountability on the part of the stakeholders and putting adequate pressure on the critical issues for effective decision making. By putting in place such a strong mode of governance will also aid in barking the means of communication, schedules and plans within the business segments, (Levine, 2005). Apart from good governance, the firm must put in place effective measures that promote integrity in the management of its finances and also ensures constant evaluation of the portfolio performance. This initiative will enhance self-control among its staff and promote uniform

methods of accounting processes and necessitate PPM requirements and procedures that are built upon a comprehensive groundwork of governance and financial discipline (Gardiner & Carden, 2004).

According to Lievens and Moenaert (2010), a portfolio is a group of programs with many projects. A typical MFI will have hundreds, if not thousands, of projects and initiatives in their portfolio. Project portfolio management takes a more regional view of managing dependencies across multiple initiatives (Mikkola, 2011). A project manager never lets resources go because [he] will not get them back. A portfolio manager will let resources go, because [he] will not be successful until the dependencies are fixed. A typical portfolio might be separated into different groups. The application portfolio includes existing applications and the resources required to maintain and refresh them. A project portfolio might include technologies and initiatives to roll out new business capabilities (Montes, Moreno & Molina, 2013). For the MFIs to achieve their intended goals in Portfolio management, they must ask five important questions of which they must find answers too. The five questions are understanding the clients motives, reasons for buying from the MFIs, the costs and returns involved, how efficient they are in distributing their products and the strengths, weakness, risks involved and the priorities involved. These questions are answered by the project managers who are very important in ensuring their services and products are well managed throughout the project implementation process (Morris & Jamielson, 2015).

Project analysis, approval/rejection and review are the three main stages that define project portfolio management. The first step is meant to show the impact of the project and their influence on the organization's economic well-being (Müller & Jugdev, 2015). The second step involved submission of the projects and having it approved for implementation by the accounting departments while the last step re-evaluate the plan for the project implementation and make adjustments where necessary. All these stages are all considered objectively during portfolio planning by the project managers in consultation with the funders and the beneficiaries (Sloper, 2015).

Though there have been occasions when company managers who have not had an involvement as a project portfolio manager have played the role, it has not at all times been the suitable step for MFIs to have their PMO led by unskilled experts (Roberts & Gardiner, 2011). However most of the time, organization because they are in business just settle for resource administrators. The fact is that there is an additional role of a PMO than just knowledge in

resource administration can offer. A PMO leader who has a decent trail record in project portfolio management duties, is believed to have an acceptable knowledge of the overall flow of work in the subdivisions in a given organization. Although they do not micro-manage the projects, they are highly involved in the management of the PMO resources. This is because they set up and manage the PPM software plan and impose the practices that have been identified as the best in the market by ensuring effective project delivery for the MFIs (Webb, 2010).

Though project portfolio management may appear challenging, it is always easier than it looks. However the MFIs always face numerous challenges in the course of effectively managing their project portfolios. This is because most of the time, the MFIs fail to identify the challenges they are facing with project portfolio management and put control measures in time. These challenges could be due to the fact the managers are dealing with too many aspects of the projects which leads to confusion and bottlenecks during the project implementation process (Aballey, 2011). Therefore, the project portfolio management leaders should be proactive in identifying these challenges early enough and ensuring proper remedies are put in place to address them.

An acceptance criterion for a project programme which has been well-planned has a great impact in many facets of the project. These are monetary, organizational strategy, the associated risks and the technical expertise, time taken to implement the project, the human resource investment and the resources required for the implementation process. Therefore, it is important for the project portfolio management team especially the lead team to ensure that the programmes are properly aligned with the organization's strategic plan, financial bounds and the steps made in the process of acceptance. The key areas of focus are the risks involved, architectural dynamics and ensuring appropriate weighting for each area of interest taking note each business case is unique (Ongeri, Mandere, & Moronge, 2013). Research has shown that it's crucial for organization to use acceptable financial standards in the process of adopting the acceptance criteria when reviewing the business cases. This ensures effective financial discipline at the onset of the project portfolio adoption process which also pays off in the long run. The MFIs have the advantages for evaluating the ability of the project to generate revenues or return on investment at 35% because of their best-in-class expertise in project management review process especially when handling new projects. (Unari & Okoth, 2010).



In comparison with various financial organizations, the ones that get portfolio management in the right way have the tendency to examine the past performance in order to focus on their future performance. Closer alignment of goals and responsibilities, effectively managed expectations and improved consistency of the project across the organization are some of the benefits that have been standardized as KPIs among the MFIs. These metrics have been found to help in ensuring that effective levels of consistency and objectivity are employed by decision makers on the MFIs portfolios (Maina, 2010; Mugambi & Ongechi, 2013). These standardized KPIs also help in ensuring that underperforming projects have proactive strategies for effective management and takes the right action for implementation. Therefore, the project managers are able to assist the top leadership in the organization in formulating the overall and long term direction for project portfolio management.

However, most organizations face a lot of challenges to blend their strategies and calculate standardized KPIs for project portfolio management. Though most organization do not have set KPIs for measuring project management therefore they do not reach a consensus for action which complicates effective portfolio management especially for MFIs. However, studies have demonstrated that organizations should invest enough time in standardizing KPIs if they are to stay in business for long and also address any challenges facing them. In fact, 67% of the best-in-class EPMOs have standardized their metrics to examine their portfolio health and value in comparison with the current average in the industry of 39% (PWC, 2015).

Embu County is in the eastern part of Kenya and borders with Machakos, Tharaka Nithi and Kirinyaga Counties to each side, has a Population of 516,212 and covers 2,818 Km<sup>2</sup>. Its electoral constituencies are Manyatta, Runyenjes, Gachoka, and Siakago. Its major Towns are Embu, Runyenjes, Siakago, Kiritiri, Ishiara, Kanyuambora. The Main Features of Embu county included; Seven Forks Dams, Coffee and Tea Farms, Mt. Kenya (Kariuki, 2012). MFIs in Embu county include Eclof Kenya Limited, SMEP Microfinance Bank Limited, Faulu Microfinance Bank, Premier Credit Ltd, Platinum Credit Ltd, BIMAS, Sisdo, Kenya Women Microfinance Bank (KWFT), Women Enterprise Solutions Ltd (WESO) and Letshego Kenya LTD. These microfinance institutions provide financial and related non-financial services to micro, small and medium entrepreneurs, women, youth and groups. They also offer banking services, asset financing and related services. The study will establish the influence of portfolio inventory, portfolio analysis, portfolio planning, portfolio tracking and portfolio review on performance of MFIs in Embu County in Kenya.

## **1.2 Statement of the Problem**

The management of project portfolio involves effective allocation of resource when selecting projects that have high potential for the development of future products and leaders. This has been found to aid in ensuring effective practise for development of relevant literature for prioritising and managing numerous projects at the organizational level. The enterprises have also recognised that effective management of portfolio could aid on making decisions that set them apart in the market. The PMI's (2012) shows the report for more than 1000 projects, programmes and portfolio manager which was anchored on the annual global study of MFIs

According to Archer and Ghasemzadeh (2013), the shorter life spans and changes in consumer taste facing most MFIs have forced them to re-examine their products and introduce new ones in the financial arena. Earlier, projects were used by organizations to react to these unexpected changes and increase the competitive advantage but now they have been forced to redesign and execute strategies that lead to innovative products and services. Cleland (2013) supports this by saying that in today's world, the appearance of unknown, uncertain and oblivious financial products and services have characterized competition in the contemporary business environment which calls for strategic planning based on the project needs/requirements (Blomquist & Müller, 2013).

In Embu County, MFIs are in advanced phase of adopting the project portfolio management practices. Many of them face a challenge of deploying qualified project portfolio managers who can provide leadership and direction to how appropriately PPM are supposed to be overseen. Because of this MFIs have not been able to record and post strong financial performance (Mungai & Okumu, 2012). Also, the management of these MFIs are understaffed. The management would not like to employ many employees in bid to cut down operational expenses. Along with this, unqualified and inexperienced college student are entrusted with critical roles in portfolio management which will see the mismanagement hence poor performance where disagreement at the senior level about priorities equates to middle managers and project team members not seeing the project as a priority (Ayora, Mung'ari & Wesonga, 2010).

The MFIs in Embu are performing poorly and have received a lot of complains from the customers due to dissatisfaction with the quality of services being offered. There are communication breakdown among stakeholders, pulling project team in multiple directions. The efficiency in achieving the objectives with effective measures has been poor (Otengho,

2016). Employees lack real commitment to their job give one this being a key reason for that lack of understanding of their expectation in the re-structured system. Also, the MFIs have been poor in timeliness and a lot of delays have been experienced and an execution that was expected to take shortest time possible is taking days and others even weeks to be processed (Mugo, 2017).

Locally, several studies on project portfolio management impact on the MFIs performance have been done. For instance, Wamalwa (2012) carried out a study to investigate the project portfolio management strategies on commercial banks in Kenya. The pioneer empirical study on project management strategies effects on Kenya's MFIs was done by Muriu (2011). Mungai and Muhenge (2015) carried out a study on the effects of project portfolio management on the financial performance of MFI in Kenya while Ng'ang'a (2015) studied the impact of project management strategies on financial performance on investment banks in Kenya. The finding shows that MFI profitability is non-negligibly driven by MFI specific factors and the institutional environment of the host country. Therefore, this research work aimed at filling this research gap by answering the question; what influence project portfolio management practices have on performance of MFIS in Embu County in Kenya?

### **1.3 Purpose of the Study**

The main objective of this study was to establish the influence of management practices on performance of MFIS in Embu County in Kenya.

### **1.4 Research Objectives**

The study was guided by the following objectives;

- i. To assess the influence of portfolio inventory on performance of MFIs in Embu County in Kenya.
- ii. To establish the influence of portfolio analysis on performance of MFIs in Embu County in Kenya
- iii. To determine the influence of portfolio planning on performance of MFIs in Embu County in Kenya.
- iv. To assess the influence of portfolio tracking on performance of MFIs in Embu County in Kenya.
- v. To identify the influence of portfolio review on performance of MFIs in Embu County in Kenya.

## **1.5 Research Questions**

The following were the research questions;

- i. How does portfolio analysis influence performance of MFIs in Embu County in Kenya?
- ii. What is the influence of portfolio inventory on performance of MFIs in Embu County in Kenya?
- iii. To what extent does portfolio planning influence performance of MFIs in Embu County in Kenya?
- iv. How does portfolio tracking influence performance of MFIs in Embu County in Kenya?
- v. What influence does portfolio review play on performance of MFIs in Embu County in Kenya?

## **1.6 Significance of the Study**

Portfolio Managers would find this study useful to them. This is because, this study would look at the portfolio inventories both long and short-term instrument that they can successfully incorporate in their portfolio as they try to maximize returns. They would gain useful insights as to how well they can construct a portfolio at any given point in time in a financial year regardless of the economic climate. The practices of project portfolio management that would be highlighted by this study would be of benefit to the managers too.

Kenya Bankers Association would benefit. Many times, this institution finds itself in tight position when the financial sector underperforms owing to mismanagement of the MFIs. Therefore, this study takes credit since it would serve as an instrument of guide to be used by the KBA to issue assistance to the managers of the microfinances whose management is weak on the project portfolio management practices to enable them gain knowledge through in-depth discussions of the practices highlighted in this study during their seminars.

Researchers and academicians would also benefit. This research adds knowledge about project portfolio management practices that are desirable to managers to realize returns. Therefore, researchers would use it for their further research work to improve and add to the existing body of knowledge on PPM. Academicians in the field of finance would benefit too. Those specializing on money and capital markets would have useful insights on the various instruments/inventories that can be incorporated in the portfolio and realize good returns that would translate into desirable performance since the scholars would have known various characteristics of various portfolio inventories and how they behave according to their characteristics.

### **1.7 Delimitation of the Study**

The purpose of this study was to establish the influence of project portfolio management practices on performance of MFIs in Embu County in Kenya. The respondents were therefore the managers, their assistants and key employees in the various departments of the MFIs in Embu County. These MFIs included Eclof Kenya Limited, SMEP Microfinance Bank Limited, Faulu Microfinance Bank, Premier Credit Ltd, Platinum Credit Ltd, BIMAS, Sisdo, Kenya Women Microfinance Bank (KWFT), Women Enterprise Solutions Ltd (WESO) and Letshego Kenya LTD. The study was conducted in Sept 2018.

### **1.8 Limitation of the Study**

The following challenges arose during the study. The data collected was highly dependent of the respondents' attitude and the way they perceive the study. This means that the researcher had to create adequate rapport with the respondents and ensure they understood their influence in the study, why it is important and clarify on any unclear issues before the commencement of the data collection process.

The study suffered from generalization of findings. This is because the study was confined in Embu County. The findings of this study were therefore applicable to Embu County only and any other county with similar characteristics. Kenya is a big country with geographical, economic and cultural differences within the country. Thus, the situation in one County was generalized to other parts of the country.

The respondents targeted in this study were reluctant in giving accurate information. The study sought information, which is very sensitive, and so the respondents were not willing to disclose all the true information. To address this, anonymity was assured as no individual names were used in the data collection document. At the same time, the researcher used reference letter from the University of Nairobi to help create confidence among the respondents.

### **1.9 Assumptions of the Study**

The study was carried out under the following assumptions. The respondents were willing to take part in the study, the staff of the MFIs are bound by their duties to perform and deliver on their duties, the respondents appreciated the relevance of the study to their professions and assigned duties and that the respondents are literate and able to answer the questions accordingly.

### **1.10 Definition of Significant Terms**

**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 returns.

**Portfolio Analysis** – this is the process of examining the products by an organization to assess the threshold allocation of its resources. It is measured based on the market growth rate and their relative share.

**Portfolio Planning** – this is a form of investing on personal or organization portfolio to determine its purpose from a general point of view and the constraints around it.

**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.

**Portfolio Review** – this is the analysis of the components of microfinance portfolio and the individual performance of projects in the portfolio arena to find out whether the financiers are able to deliver on the strategy of the micro-finance. The process consists of the preparation phase, snapshot of the portfolio, project scoring on performance and consultation with the stakeholders.

**Investment Strategy** – there are the rules, performance or processes that have been developed to assist investors in the selection of a portfolio to invest in. It takes into consideration the fact that investors have individual objectives based on the firm profits and employ different skills while executing their strategies.

**Microfinance institution**-A financial institution specializing in banking services for low-income groups or individuals.

### **1.11 Organization of the Study**

This study is organized into five chapters. Chapter One is the introduction which focuses mainly on the background, statement of the problem, objectives, significance of the study, limitation and delimitation of the study, assumption, definition of significant terms. Review of the theories, conceptual framework, summary and research gap as presented in Chapter two. Chapter three describes the research methodology that includes a brief description of research design, population of study, sample size and sampling procedure, research instruments pretesting of instrument validity and reliability, data collection procedures, data analysis method, ethical consideration and operationalization of variables. Chapter four presents the results of the study along with discussions. Finally, chapter five covers summary of the major findings, conclusion, recommendation and suggestions for further research have also been presented

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents the literature relevant for this study. The literature has been reviewed on portfolio inventory and organizational performance, portfolio analysis and organizational performance, portfolio planning and organizational performance, portfolio tracking and organizational performance and portfolio review and organizational performance. The section further presents the control theory, decision theory, and mathematical theory of games as the theoretical framework, the research gap and summary of the literature review and winds up with the researcher's conceptualization of the relationship between the study variables.

#### 2.2 Project Portfolio Management Practices

Project 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 2 hidden reason is kept up. Project Portfolio Management depends on five adaptable standards which offer the establishment for fruitful portfolio management (Jardine, 2009).

Mungai and Muhenge (2015) carried out a study on the effects of project portfolio management on the financial performance of MFI in Kenya .Project 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). Ng'ang'a (2015) studied the impact of project management strategies on financial performance on investment banks in Kenya. 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).

### **2.3 Portfolio Inventory and Organizational Performance**

The return on investment and risks associated with portfolio management defines the ambiguity of the actual return earned on the investment is the most important characteristic of portfolio investment inventory. This is the basis upon which cumulative variety of investment drivers can be assessed. This strategy can also be used to measure also the most and less risky inventories because risk and return on investments are closely related which provides an understanding of the different investment avenues for effect project management. This includes all the long-term inventories avenues (fixed-income securities, common stock and speculative investment) and the short term inventories avenues, i.e. those that mature within one year or less. The marketable financial assets define the short-term investment of the project inventories in the financial market such as certificate of deposit, treasury bills, re-purchase agreements, banker's acceptances and commercial papers. This term may be up to one-year period for maturity where the shares are traded with very low risks and returns compared with other portfolios (Cooper, Edgett & Kleinschmidt, 2011).

Wamalwa (2012) carried out a study to investigate the project portfolio management strategies on commercial banks in Kenya. Certificate of deposit is portfolio inventory in form of a debt tool given by banks which shows a specific amount of money deposited by a customer at depository financial institution which shows the date when deposit matures, the amount of interest charged which is issued in any acceptable denomination. They are not for sale to another person except for large financial institutions whose face – value of the certificate shows big amounts of money which are allowed to trade at negotiable certificates of deposits. At the same time, they are penalized for early withdrawal just in case somebody presents them to the MFIs (Levine, 2015).

Mungai and Muhenge (2015) carried out a study on the effects of project portfolio management on the financial performance of MFI in Kenya Treasury bills (T-bills) are a form of financial security provided by the government as portfolio inventory which matures before the end of the year they are bought issued on discount. Only the difference between the nominal and discount is paid when they mature whereas the interest is accrued to the client. This feature makes it very unique in the financial sector and very competitive in the market. They are also taken as risk-free T-bills which deviates inflation and defaults by the government because they pay the fixed stated yield without default though very rare in developed countries. However it is not all smooth rides for T-bills as they are affected by the dynamic macro-economic situation in a given country. Furthermore T-bills are issued on auction where bidders with the highest prices are allocated. They are also offered on non-competitive bids for prices equal to the average competitive bid and can be sold before they are mature though they are subject to changes in the interest rates. The sale of T-bills before maturity attracts a large interest rate because changes causes the prices to rise up which makes the T-bills very high in terms of liquidity (Sloper, 2015).

Commercial paper these are promissory notes issued by corporations as a short-term unsecured portfolio inventory or means through which corporations borrow on short term basis. These corporations have realized that it is easier to borrow directly from investors using commercial papers than working only with their banks for credit facilities. The transaction is carried directly between the investor and corporation or brokers on discounts just like T-bills which takes a period of 30 to 60 days or less. Their risk level is very high because of the likely high levels of defaults by the borrowers and is not very liquid because they are not easy to buy or sell (Sloper, 2015).

Banker's acceptances these are portfolio list used to aid business transactions between different organizations. These tools are also referred to as bankers' acceptance because the banks take the responsibility to pay back loans to debtors incase the customer does not pay back. They are short term and fixed on customers income as a security but are guaranteed by the bank. Their interest rates are very high so as to compensate for the high default risk compared to other short-term securities in the market though there no active trading for them due to lack of standardization (Eastern Caribbean Central Bank, 2010).

Repurchase agreement this is a form of portfolio inventory where a seller sells securities to the buyer and commits to buy them back at a specified price on a specific date in the future. They

are also known as repo where collateral is the security which could be treasury security or other money – market security, (Srivastava, 2013). The buyer charges the interest cost of the loan (calculated as the repo rate) which is the difference between the purchase price and the sale price. They operate under very short terms due to the default risk where a one day repo is called an overnight repo while more than one day is known as the term repo. In a reverse repo, an organization buys securities from a buyer with a promise to sell them back at a specified amount on a particular date. This form of business funding helps to increase the liquidity of money in the market (Farm Credit Administration, 2010).

Fixed-income securities in this form of portfolio, the return is fixed based on a set date or it can also be indefinite stated in terms of money or tied to some measure of price level of a certain item. It could be long – term debt inventory of preferred stocks. The long term portfolio is a form of debt product baring the issuer’s contractual obligation which matures for more than one year. The investor lends money to the issuer who commits to periodically pay interest on the loan and the finally repay the principal amount on the maturity date (Ongeri, Mandere & Moronge, 2013). This form of inventory is provided in the capital markets and the investor is trusted based on his/her experience in the market and the trends. At the same time the issuer’s default risk is the determinant factor on investment on fixed income inventories such as bonds provided by bodies such as (governments, municipals, companies and agencies) (Haas, Ferreira & Taci, 2010).

Preferred stocks these are unclear life and payment of dividends which is fixed on a given amount of money and it known in advance. Their flow of income is the same as those provided by bonds (Imeokpararia, 2013) except for the fact that the flows are continuous unlike bonds which are scalable. They are paid after the debt inventory holders but earlier than the common stock holders during payments and liquidation of the company. Also if they default in the payment of dividends, they are paid cumulatively during liquidation although non-cumulative dividends don’t have to be paid. At the same time, the stockholders do not have the same rights to vote or may be suspended and are known as the hybrid inventory due to having both equity and fixed-income inventories. Also there are cases where a most preferred stock is given as non-cumulative and callable with increased proliferation of convertible preferred stock to common stocks (Kaggwa, 2013).

Speculative investment inventories – this is an investment with very high risks and return on investment but is mainly based on markets speculations. The high risks and returns are based

on market fluctuations where investors buy shares when they are low and sell soon as they rise through anticipation. The profits are sometimes very high due to the unexpected market fluctuations (Magali & Lang'at, 2014). These stocks are mainly preferred by investors for short-term investments due to their high risks based on the level of uncertainty (Magali, 2013).

Options are the derivative financial instruments. This kind of stock gives the bearer, the right to buy or sell financial assets at a specific price from another party having the asset but retains the obligation. The buyer is expected to pay a commitment fee called option price to the seller. It depends on the changes in other markets where financial assets are traded alongside demand and supply in the options markets (Magali & Qiong, 2014).

Futures are among other group of derivatives where two people agree to trade a specified financial asset at a future date (buyer and seller). It commits both parties to carry out the trade as agreed on the material date and no extra fee is charged for the transaction, (Masinde & Mugenda, 2012). This form of trade is mainly carried out by speculators and hedgers whose sole role is to make profits by buying the financial assets at a price better than the initial price. They do not use the assets for any other purpose other than trading it as a financial asset and therefore other commodities like coffee, grain, precious metals, and other commodities) are not involved in this form of trade (Mwakajumilo, 2011).

## **2.4 Portfolio Analysis and Organizational Performance**

Portfolio analysis is the process of measuring the operation and financial investments of a given firm to examine how investments and effective timing of returns perform from bonds, equities, indexes, commodities, funds, options and securities (Ofuoku & Urang, 2012). In this form of analysis, each class has unique risks and returns affecting the rate of return for the total investment. At the same time, prospective returns are calculated using the average and compound return methods when performing portfolio analysis. Therefore, the average returns is calculated from individual assets while compound return of the actual mean is calculated from the total returns (Nawai & Shariff, 2010).

Determination of dispersion of returns is the next level of portfolio analysis which measures the volatility or standard deviation of a given asset or the difference between the real interest rate and the amount of calculated average on returns. It is used in making decisions on allocation of assets, attaining investment goals and calculating associated risks, (Rashid & Samad, 2011).

Portfolio analysis is very essential for managing derivatives of a given portfolio. These common types are; total value – one of the easiest classes of portfolio combination. The process involves perusing through the position of the portfolio, giving them values and getting their sum totals i.e the value of the portfolio,  $f(P)$ , equals the sum of the individual trades,  $f(T_i)$ . However, the results are not always true when the  $f(T_i)$  results is the analysis of an individual trade in a given portfolio, (The International Association of Credit Portfolio Managers IACPM 2015). Aggregated cash flows are the future cash flows of a portfolio arranged in a chronological order which involves marshaling the data using a sort algorithm. They are very easy to do when cash flows from all trade transactions are given. Whereas most types of analysis require more information such as the risk factors common to multiple positions within the portfolio, the total value and aggregated cash flows are very simple and do not involve complex calculations because they are calculated at the trade level.

Risk sensitivity – this is the rate at which the value of the portfolio changes in relation to the data in a given market. It is used to calculate the risk system as a first order sensitivity, for instance the DV01 sensitivity which calculates any small change in interest rates and shows an equivalent shift in the whole yield arc. It is also applied in calculating the hedge factors – a position in liquid vanilla tools used to add to the portfolio a sudden hedge from all markets and credit risks. Stress Testing – this is the process of re-valuing the portfolio from varied scenarios using the market data to examine the exposure to a lot of extreme market movements compared to the ones captured from the first order risk sensitivity.

Credit Value Adjustment and Potential Future Exposure are calculated from a set of trades in the same counter party where CVA is an adjustment of the portfolio value to demonstrate credit risks associated with the counter party while PFE calculate the highest amount of loss that would be shown if the counterparty fail to pay back at 95% confidence level. Value at Risk (VaR) measures the highest loss in a given period of time experienced by traders as a result of changes in the markets at a specific confidence level. The difference between VaR and PFE is that VaR measures the market risks while the latter measures the counterparty credit risk.

## **2.5 Portfolio Planning and Organizational Performance**

This is an investment plan employed to an individual or corporate portfolio to determine the overall goal and restrictions. The process involves identification of a plan and buying or selling the available investments. It is important to know that the management of portfolio involves making decisions for the future and taking action to accomplish them. In project management,

the managers accomplish the projects and deliver the programmes through implementation of the project strategies because they need to adopt skills and the core elements of the components and processes related with the strategic management of the project. Morrison and Wensley (2010) advice that these be should be aligned to the overall goals and objectives of the organization.

Arkes and Bulmer (2013) did a study on the team of management of the portfolio which includes the project leaders and departmental heads draws a draft strategy for the re-allocation of resources and the number of project based on the priorities and boundaries developed by the management. The individual projects are the projects' inputs for the portfolio drawn by the project team and the available resources. The management is meant to authorize the plan for the portfolio and the departmental schedules once the portfolio goals are clear based on the boundaries. This enables the foundation upon authorization of individual plans for the projects and the departmental plan (Kotler, 2010). This process ensures that when the goals set by the management fails, an iterative procedure of evaluation and planning it put in place.

The parties involved in making decisions employ varied portfolio framework segmentation schemes for examining their investment prospects. These methods are taught widely on the academic field and have been used widely for making strategic decisions for more than 20 years. They are used for diagnosing and providing specific guidelines for choosing specified strategies for investment in portfolios. This involves the classification of the position based on the angles anchored on the appealing market and the capability of the product to participate in the market. According to Wind and Mahajan (2011) there are several reviews of the methods of framework for portfolio management while other researchers have criticized the basis upon which the portfolios are based. For instance, they have pointed out the problem by the Boston Consulting Group (BCG). The BCG model is meant to measure the market appeal on the basis of the growth rate and assess the firms' capacity to take part on the basis of the relative market share. This mode assumes a low connection between market share and the profit margins. Wensley (2009) opines that the BCG model does not have internal consistency and adds that empirical evidence supporting the low relationship is quite limited based on the market growth and profits. This is also supported by Jacobson and Aaker (1985) in his presentation of the loose relationship in the BCG model.

Morrison and Wensley (2014) argue that market growth measurement and the relativity in the market shares possess difficulties for the effective use of the BCG model because the market

difficulties are challenging to fix. Therefore the variations on the model for the same situation lead to different recommendations.

According to Wind et al (1983) the choices methods of measuring market share and growth rates determines the decisions based on the BCG matrix which however is ignored by other strategies based on the BCG scope as observed by the Morrison and Wensley (2010). However one can still find arguments in favor of the BCG matrix together with other models regardless of the fact they have very little theoretical and empirical support mechanisms. These researchers argue that the while using the BCG matrix most managers don't take into consideration the rational economic line but use unplanned procedures which are based on their judgments though may be contradict their profit expectations which may involve basing their decision on power or emotional aspects like including sunk costs leading to irrational decisions from the point of maximizing on profits (Haspeslagh, 2011).

Therefore, planning for portfolio management with matrices such as the BCG could make managers take decisions which are less irrational compared to the ones the make without aided judgment. For instance, when a strong manager in a corporate organization uses the BCG matrix for analyzing her portfolios, the ability to assist a collapsing department unwisely may be overcome. Those who developed the model hinted at a caution on the misuse of matrix to aid certain perspectives, (Morrison and Wesley, 2011). Therefore is the matrix is misused or excessively exposed in today's world, it is a very helpful tool though may mislead its users. Regardless of the cautions given, most of the literature e.g (McKiernan, 1992) have continued to support the fact that the matrix helps as a useful point for beginning calculated analysis though only one empirical study exists to that effect. This study shows that the organizations using the BCG matrix have low return on investment than those which do not use them. Though there is a point for the fact that there are other arguments for lower returns like firms which do not make good profits for salvation (Capon, 2011).

## **2.6 Portfolio Tracking and Organizational Performance**

A portfolio of assets which tract an economic variable is referred to as an economic tracking portfolio. In the US, the model has been used to track monthly reports of the post war variables such as output, consumption, labour incomes, inflation, return on stocks, return on bonds and return on treasury bills. These methods of forecasting relationships help in defining the portfolios that demonstrate the market expectations on the future variables in the economy.

Macroeconomic variables and hedging economic risks have been shown to be useful tools in portfolio tracking as shown in an out-of-sample results (Agene, 2011).

Index tracking such as the FTSE-100 index is a method of passive portfolio management which helps in tracking the match between the performances of the theoretical portfolio as closely as possible. The approach is applied by finance managers in a given organization who are not confident enough in out-performing the market but can easily follow the average market performance. The matching of the performances could be done in two different ways (Armendariz, Aghion & Morduch, 2011) one is through reflection on the investment on every constituent index based on the market share. This one is hard to re-balance when making changes to the index because it incurs high initial transactions costs but achieved a perfect match especially when issuing a new set of shares. The second approach is the partial replication where investment is done in small proportions while trying to match performance of the whole index of the shares which incurs low costs at the beginning and balances easily thereafter (Baklouti, Ibtissem, Abdelfettah & Bouri, 2013).

The measure of the deviation of the chosen portfolio from the index is the error introduced by partial replication from the index which the managers aim at reducing. According to (Besley & Coate, 2011), this is expressed as a quadratic programming problem i.e the expected squared deviation of the return from the index from a sub-set of constituent shares of the index of the tracking error. Each company's proportion of capital invested is calculated as part of the problem from the covariance matrix which defines the relationship for all the companies and the capitalization weights in the index.

When two companies follow the same direction during portfolio management, the end results are large positive values while a negative value with a very small margin takes place when the two companies follow opposing directions which are a bit rough. The normalized return on the index is the capitalization weights obtained by considering the returns for each of the companies and dividing it by the total number of the returns of all the companies considered in the model. However the challenge is in choosing a group of all the shares in a given index which highly matches performance of the market as a whole. This process is algorithmically obstinate and very stochastic in searching as suggested by the algorithms themselves (Britannica, 2010).

The tracking index and evaluation of the performance of each of the subset uses the genetics algorithm to select the shares and the quadratic programming. According to John Holland



(2011) genetic algorithms are tools for optimizing stochastic techniques in portfolio measurement using thoughts from biology to direct the search for an optimal or near optimal resolution. This means that one needs to use a mock ecology comprising of a group of chromosomes (Brownbridge, 2009).

The chromosomes signify a likely answer to the overall challenge which in this case they represent a specific sub-group of shares in the index. Each of the chromosomes is attached to a fitness value which shows how good the resolution the chromosomes represents is in the ecosystem. This process works by applying mutation, breeding and the natural method of selection within the population to assemble at one point where there is only the chromosome of a good fitness. The purpose of the search is to find the chromosome with the highest level of fitness values and the subset's tracking error which given the fitness function. There are some many factors that come up during the formation of a given genetic algorithm all of which affect its performance at the end of it. Therefore chromosome in the crossover operators which combine them to produce a child must be carefully planned to enable the movement of the most important parent to the child. On the other hand, mutation helps to avert points of search areas left out although too much mutation level may prevent the expected conjunction between the chromosomes (Brownbridge, 2009).

## **2.7 Portfolio Review and Organizational Performance**

Portfolio review is concerned with the configuration of the MFI portfolio and performance of the specific projects to find out if the funder is able to deliver on the strategies of the MFI. This combination helps the funders to assess whether they are on the right direction in achieving the MFI's strategic objective by adopting the given portfolio. It is defined as a learning tool for the project funders to know what works or doesn't, why and how to fix it. This helps the funders in assessing portfolio performance and yields understandable learning by informing future designing of the programmes and strategies re-organization. This systematic style of comparing the main drivers of performance of projects throughout the portfolio assists in identifying the similar patterns of achievement of project failure. They generate lessons on the basis of the entire portfolio unlike the use of personalised project assessment where lessons are hard to extract which are likely to have broad validity and assist the funders to have evidence for their decisions (Wenner, 2010).

According to CGAP's understanding, using various financiers for portfolio reviews have been shown to lead to increased performance in operation in comparison to specific project

evaluations. Portfolio evaluation also achieves a responsibility function because they are able to examine if the funders are getting their results and if the results are applicable in the contemporary market situation (Acquah, 2011). At the same time, the readers beginning from the civil organizations, beneficiaries and the head of the organization are able to assess whether the funders have been able to deliver on the institution's strategies and whether the funders have any value addition in the project portfolio (Wenner, 2010).

This process helps the project financiers to follow on the projects' performance over a long time and show if the strategies for re-organization of the institution lead to the expected results when they are done on regular basis of three to five years. Therefore these reviews are useful tools for the project funders to design and revise the microfinance strategies and re-orient themselves accordingly. They however can serve as a trade-off between learning and promoting accountability in the institutions regardless of the fact they serve all the above roles. According to IACPM (2015), accountability during portfolio reviews needs to be done by independent bodies without any involvement of the staff working on the portfolio being evaluated. However, staff participation in portfolio management has been found to increase the chances for the staff to know, embrace and use the lessons learned from the portfolio review process as seen from the learning perspective of the funders. Therefore the project financiers need to take this view into consideration so that the methods they apply in funding the projects and selecting the portfolio review process is consistent with their priorities during implementation of the projects (Qin & Ndiege, 2013).

Reviewing of the portfolio is just one of the tools available for the funders during monitoring and evaluation process alongside other data collections tools like the ones used for routine monitoring. These tools are not substitutes for others used for periodic evaluations like project/programme/country evaluations but they serve to add onto other existing tools. Funders are therefore advised to carefully consider the driving factor for the evaluation, the likely limitations to be encountered and the various questions to answer when planning to carry out the evaluation process. This consideration helps in determining the method best suitable for their needs and requirements during the process. However the funders should understand the difference between the effects of the evaluations because the reviews are focused on the initial parts of the output (inputs, outcome and outputs). Furthermore they give only the estimated data from the impact of the projects to the users (Schwaiger & Winkler, 2011).

Financiers with interest in the measurement of the Microfinance programmes based on clientele must consider the various effects of examining the methods coming up on the MFI sector, (CGAP 2011). However the main question is a portfolio evaluation process which aims to find answers to the fact that a funder is able to deliver based on the MFIs strategic plan. The answer here is that the portfolio must be able to examine the configuration of the financiers' capability and performance of the project throughout the portfolio. This implies that the people who fund the project must fund the correct project and the projects must be able to deliver at the end of it. Therefore a portfolio evaluation which systematically examines these two dynamics is required due to the fact that they are not obviously related to one another. The process of assessment for the MFI portfolio helps to confirm if a funder backs projects that are in connection with the MFI strategy. It checks whether the funding tools, project types, regional distribution and levels of intervention are in line with the funder's intention and direction (Nawai & Shariff, 2010).

The performance of projects is based on varied aspects some from the funders while others are beyond the funders' scope of control. These are funder support, recipient performance, country context, beneficiary needs and external factors. Therefore it is important to examine two main aspects of the recipient performance factors such as for retail financial service providers, pointers include portfolio quality, financial and working sustainability, outreach and the quality of the funder's support staff and resource allocation, selection of recipients, monitoring, responsiveness to changes in the project environment (Magali, 2014).

Sustainability of the institution as a recipient performance sponsored by the funders is very important for the success of the project which helps it to continue past the implementation phase. The funders of the project have the discrete capacity to influence the quality of the projects throughout the portfolio period. Standard evaluation criteria such as relevance, effectiveness, efficiency, impact and sustainability are systematically used to assess and compare the performance of the project throughout the implementation stage, (Nawai & Shariff, 2010). The standardized and planned approach ensure exhaustiveness by answering the questions from funders and also present any unexpected issues in the project, ability to make comparisons with other projects in a given time and other funders and the ability to use indicators such as the Development Assistance Committee (DAC) Principles for Evaluation of Development Assistance. This criteria is well-known by evaluation professionals and advisers

and mostly applied in internal M&E systems in most organizations (Lagat, Mugo & Otuya, 2013).

## **2.8 Theoretical framework**

A theoretical framework is a collection of interrelated ideas or a general set of assumptions based on theories or a reasoned set of prepositions, which are derived from and are supported by data or evidence and accounts for or explains phenomena (Kombo & Tromp, 2010). The study was grounded on the control theory and decision theory.

### **2.8.1 Control Theory**

Control theory is used in the top project management activities as an influential theoretical perspective for ensuring a good understanding of the concept of project management. It is a theory applied by organizations to ensure that their workers' actions and operations remain coherent with the overall goals and objectives of the organization (Kirsch, 1997). The current study shows that the interests of the control theory are related to the definition of PPM which is defined as a group of projects carried out under the support and/or management of a given organization (Archer & Ghasemzadeh, 2004). In the same way, the concepts behind the control theory stresses on the methods of joining individual actions with the support and/or management of a given organization.

Control theory was invented by Eisenhardt (1989) who originally developed this widely recognized theory to apply to the field of management science. Control theory has proven useful to describe the mechanisms of managing complex tasks in organizations. Later the theory has been adopted by PPM research to investigate: control of projects (Kirsch, 1997); control of outsourced projects; control of virtual development teams; control of development projects in a global contexts (Kirsch, 2004); control of off-shoring; control of geographically distributed projects performing risk management (Persson, et al, 2009).

According to Kirsch (1997) control enables the integration of all participants in the projects because it is anchored on the understanding that the one who is controlling and the one who is being controlling have different interests. These interests are the ones determining the mode of the controller and are meant to differentiate between formal and informal methods. Behavior and outcome control are the formal modes of control where behavior control comprises of well-planned duties and processes and the method of rewarding the behavior whereas outcome control means to assign rewards based on the expected objectives and consequences. On the

other hand the informal modes of control are conducted by clans and self in which clans are seen as the strategies where groups of people share their values, problems, beliefs and they work by hiring and training of staff and socializing among others. The self-mode of control is based on a person's defined goals/objectives and is carried out through self-empowerment, individual determination and setting of personal goals etc, (Kirsch, 2004). It is the expectation from the perspective of control theory that the strategies one/groups adopts for achievements must be able to deliver the expected outcome. Therefore, this theory is relevant to the current study as it shows that the interests of the control theory are related to the definition of PPM which is defined as a group of projects carried out under the support and/or management of a given organization

### **2.8.2 Decision Theory**

The decision theory is applied in the rational behavior decision making model to demonstrate the assumption for perfect knowledge and rationality by individuals. In the context of the current study, the researcher argues that literature on PPM is mostly based on the mechanisms for the PPM process and presents a number of strategies for portfolio selection which however cannot replace the actual decisions and steps when making rational decisions. According to Tichy and Bennis (2007) a "leader's most important role in any organizations is making good judgments" and the judgments are essential elements of decision making. The scientific aspect of decision theory is that it enables the pertinent frame for making reference during problem solving process in portfolio decisions.

The aspect of PPM as a decision making model involves proper selection, control and monitoring and is important for understanding the challenges associated with the ideal portfolio choice. It does not assume rational behavior of the parties involved or the available information for making decision and preventing poor information. While its limits are considered in the process of making sure that there is irrational behaviors and taking care of improper information. Though much of the literature on PPM presents rational decision making process some writers have identified some aspects of irrationality, (Eskerod, Blichfeldt & Toft, 2004).

This theory also helps in giving instructions on the strategies to acquire beneficial and useful criteria for controlling the systems, provision of guidance on its benefits, costs, opportunities and the associated risks (BOCR). Though each of the four metrics BOCR can be used by decisions makers to identify, utilize and expound of the control criteria and sub-criteria, (Saaty, 2004). Thereafter the people involved in making the decisions are expected to develop the

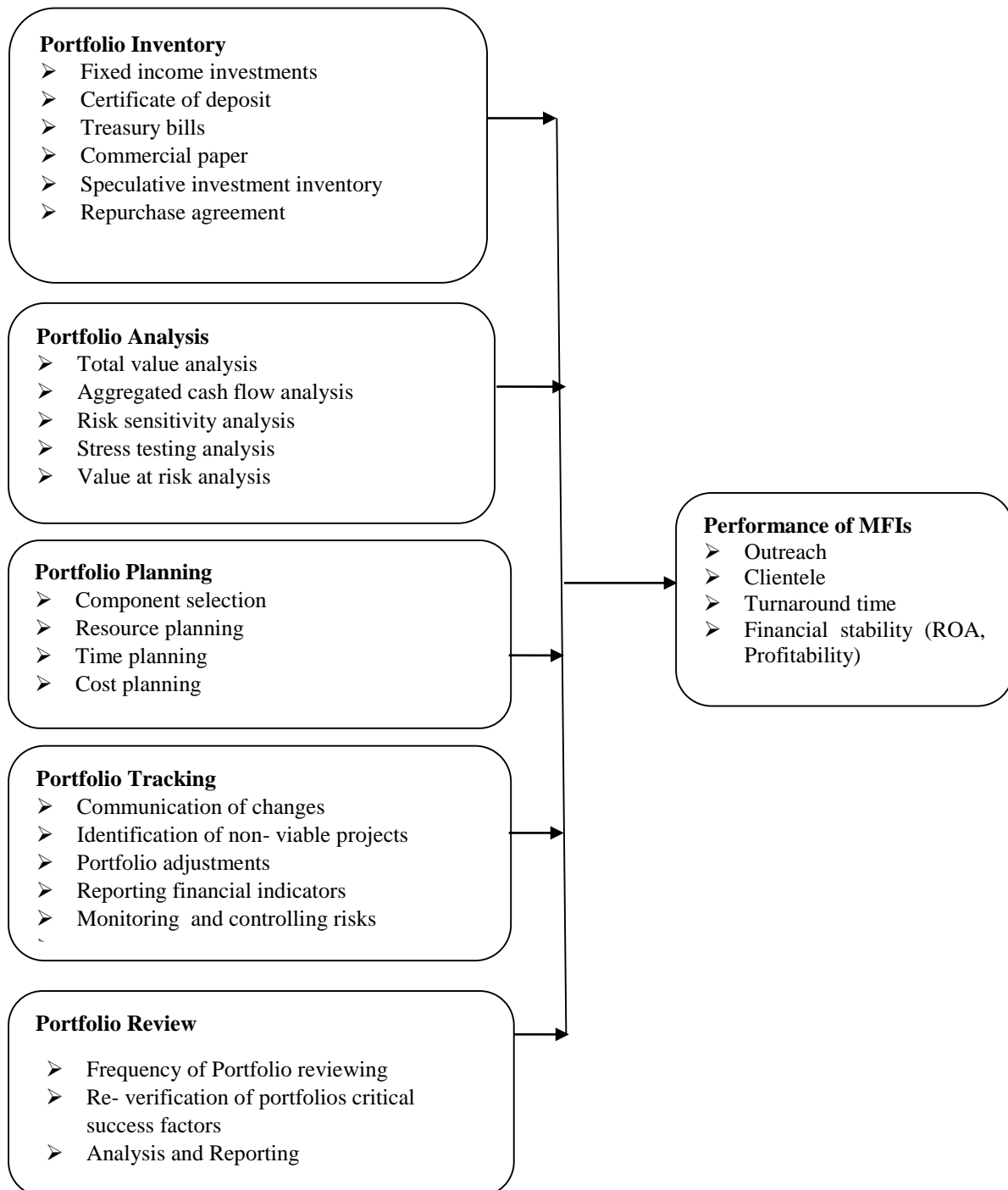
model for networking of the key elements such as stakeholders, alternatives, objectives of the decision, scenarios, environmental factors etc for each of the four BOCR metrics.

## **2.9 Conceptual Framework**

A conceptual framework is a figure that shows the relationship between the dependent variable and the independent variables. In this study the dependent variable is the performance of MFIs while the independent variables include; portfolio inventory, portfolio analysis, portfolio planning, portfolio tracking and portfolio review.

## Independent Variables

## Dependent Variable



**Figure 1: Conceptual Framework**

In this study the dependent variable is the performance of MFIs while the independent variables include; portfolio inventory will be measured using fixed income investments, certificate of deposit, treasury bills, commercial paper, speculative investment inventory and repurchase agreement. Portfolio analysis will be measured using; total value analysis, aggregated cash flow analysis, risk sensitivity analysis, stress testing analysis, value at risk analysis. Portfolio

planning will be measured using; component selection, resource planning, time planning and cost planning

Portfolio tracking will be measured using; communication of changes, identification of non-viable projects, portfolio adjustments, reporting financial indicators, monitoring and controlling risks. Portfolio review will be measured using; frequency of portfolio reviewing, re-verification of portfolios critical success factors and analysis and reporting. The dependent variable is the performance of MFIs that will be measured using; outreach, clientele, turnaround time and financial stability (ROA, profitability)

## **2.10 Summary and Research Gap**

Most microfinances develop a framework that is in line with their strategic goals. It is important for all to develop one project portfolio management plan which takes into consideration the special complications and inter-relations. For example, the budget and organizational resources to implement project could be excluded in the process of planning or may failed to be integrated with the corporate strategy. As much as there are limited solutions, most MFIs appreciate that they can enhance performance, cut costs, decrease risks and increase their return on investments by employing effective project portfolio management. Studies recommend that an acceptable project portfolio management approach consists of an end-to-end structure that directs the MFIs from project assortment during execution. Delivering services in a financially suitable business environment is the ultimate measure of performance in MFIs which the critics of high performance portfolio management practices and its relationship with high interest rates base their analysis on (Mix Market, 2011).

The previous studies left a gap on project portfolio management practices as indicated in the research gap Table.



<b>Researcher</b>	<b>The study</b>	<b>Methodology</b>	<b>Research Findings</b>	<b>Research Gap</b>
Kinanu (2016)	Project portfolio management practices on performance of county governments: the case of Nairobi County, Kenya	The design of this research was a descriptive survey research.	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	The current study will focus on effects of project portfolio management practices on performance of MFIS in Embu County in Kenya.
Mwangi (2014)	socially responsible investment, portfolio management, institutional characteristics and performance of Mutual Funds in Kenya	A positivistic research philosophy and correlation descriptive research designs were adopted in the study.	The findings are shows there is a statistically significant relationship between SRI and portfolio management	This research will use a descriptive survey to assess the project portfolio management practices on performance of MFIs in Embu County in Kenya
Magali (2014)	Effectiveness of loan portfolio management in rural SACCOS: evidence from Tanzania	The data analysis was done by using the multivariate regression, descriptive and qualitative methods	The findings show loans were aged into 4 classes and the loans aging was not very effective because loans of different ages were classified in a single class. The results from the regression analysis reveal that the quality of loan portfolio was positively influenced by the loan size while the influence of gender and location of the borrowers were not significant.	The analysis will then be carried out using descriptive statistics.
Micheni (2013)	The effects of portfolio	The study used	The findings also showed that that	Research assistants will

	management strategies on financial performance of investments companies in Kenya: a case study of Centum Investments	secondary data. The secondary data was collected from the financial statements of Centum and books to collect information on annual earnings of the Centum.	Individual security selection strategies were not positively correlated to the Leverage strategies and Yield spread strategies with -0.695 and -0.639 respectively.	be trained on interviewing skills including developing rapport, convincing respondents to provide relevant data and seeking clarifications whenever necessary.
Lindahl (2017)	Project portfolio management and project management offices in local government	The qualitative case study includes a literature review and semi-structured interviews.	The empirical findings show numerous challenges to the practice of effective project management, implementation of project portfolio management and project management offices that indicate low project management maturity levels in the organizations.	The main objective of this study is to establish the effects of portfolio inventory, portfolio analysis, portfolio planning, portfolio tracking and portfolio review on performance of MFIs in Embu County in Kenya.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter presents the research methodology, actions and methods that was used to carry out the study. It presents the research design, target population, sample size, data collection tools, and analysis of data, ethical considerations and operationalization of the research variables.

#### 3.2 Research Design

The research design is the blue print that directs the research method, and subsequent analysis of the acquired data (Bryman & Bell, 2007). This research used a descriptive survey to assess the project portfolio management practices on performance of MFIs in Embu County in Kenya which as observed by Creswell 2002, is used where collected data is for describing persons or organizations. The design has been selected because it enabled the researcher to be able to collect a body of qualitative or quantitative data in relation to more than one variable to be used in detecting the pattern of association (Bryman, 2012). The research procedures involved identifying target population, developing questionnaires and piloting them, selecting of relevant sample, administration of questionnaires and analyzing the field data after the main data collection process.

#### 3.3 Target Population

Pole and Lampard (2002) define target population as all the members related to a given investigation during research work. It differs from accessible population in that accessible population is the accessible elements in a target population. From this definition, the target population for this study was the senior and middle level management staff of the MFIs in Embu County. The respondents were drawn from the following departments: finance, marketing, operations, risk and compliance and ICT since all their functions are centralized. The target population therefore comprised of 357 management employees of the MFIs as shown in Table 3.1.

**Table 3. 1: Target Population**

<b>Department</b>	<b>Total Number</b>	<b>Percentage</b>
Finance	123	34.45
Marketing	54	15.13
Operations	55	15.41
Risk and Compliance	42	11.79
ICT	83	23.25
<b>Total</b>	<b>357</b>	<b>100.0</b>

## Source: MFIs in Embu County

### 3.4 Sample Size and Sampling Procedure

A sample is described by Kombo and Tromp (2009) as a group of components selected from the world to represent it. The sample size for the study was obtained using Kothari's (2004) sampling formula as follows.

$$n = \frac{z^2 \cdot N \cdot \sigma_p^2}{(N - 1)e^2 + z^2 \sigma_p^2}$$

Where; n = Size of the sample,

N = Size of the population and given as 357,

e = Acceptable error and given as 0.05,

$\sigma_p$  = The standard deviation of the population and given as 0.5 where not known,

Z = Standard variate at a confidence level given as 1.96 at 95% confidence level.

From this formula the sample size for this study was 114 respondents who were selected using stratified sampling technique. According to Kothari (2004), stratified method of sampling enables one to select the respondents in a way that the existing sub-groups within the target population are all represented. The sample was then distributed as shown in Table 3.2.

**Table 3. 2: Sampling Frame**

Department	Population	Ratio	Sample
Finance	123	0.32	39
Marketing	54	0.32	17
Operations	55	0.32	18
Risk and Compliance	42	0.32	13
ICT	83	0.32	27
<b>Total</b>	<b>357</b>		<b>114</b>

### 3.5 Methods of Data Collection

The study used primary data collected using questionnaires. The questionnaires were used because they are easy to understand and interpret and took less time for the researcher and the respondents. Further it enabled reaching a representative number of respondents with ease (Owens, 2002). According to Bachman (2002), a questionnaire has the advantage that it can be used to collect information from a large sample and diverse regions within a short time.

### 3.6 Pilot Testing

Pilot testing refers to putting of the research questions into test using a different study population but with similar characteristics to that of the population to be studied (Kumar,

2014). Pilot testing of the research instrument was conducted using the questionnaire using 11 respondents representing 10% of the sample size was conducted in Kirinyaga County. The purpose of the pilot testing was to establish the validity and reliability of the research instrumentation and to enhance face validity. From the pilot results, reliability and validity was tested. Sekaran and Bougie (2010) recommend that the questionnaire pre-tests to done by personal interviews in order to observe the respondent's reactions and attitudes. All aspects of the questionnaire were pre-tested including question content, wording, sequence, form and layout, question difficulty and instructions. The feedback obtained was used to revise the questionnaire before administering it to the study respondents.

### **3.6.1 Validity of Research Instruments**

According to Saunders, Lewi and Thornhill (2009), validity is the accuracy and meaningfulness of inferences, based on the research results. One of the main reasons for conducting the pilot study is to ascertain the validity of the questionnaire. The study used construct, face and content validity to ascertain the validity of the questionnaires. Construct validity was concerned on how vague or clear the questions are phrased in the questionnaire. Focus on guideline/instruction given to fill questionnaires supervisors to validate. Face validity checked organization of the document. The study used content validity which draws an inference from test scores to a large domain of items similar to those on the test. Content validity is concerned with sample-population representativeness. Gillham (2008) stated that the knowledge and skills covered by the test items should be representative to the larger domain of knowledge and skills. Expert opinion was requested to comment on the representativeness and suitability of questions and give suggestions of corrections to be made to the structure of the research tools. This helped to improve the content validity of the data that was collected. Content validity was obtained by asking for the opinion of the supervisor, lecturers and other professionals on whether the questionnaire was adequate.

### **3.6.2 Reliability of Research Instruments**

Instrument reliability is the extent to which a research instrument produces similar results on different occasions under similar conditions. It is the degree of consistency with which it measures whatever it is meant to measure. Reliability is concerned with the question of whether the results of a study are repeatable. A construct composite reliability co-efficient (Cronbach's alpha ( $\alpha$ )) of 0.7 or above is generally acceptable (Silverman, 2016). A co-efficient of 0.7 or

above for all the constructs were considered adequate in this study. Reliability coefficient of the research instrument was assessed using Cronbach's alpha ( $\alpha$ ) which is computed as follows:

$$\alpha = \frac{k}{k-1} \times [1 - \frac{\sum (S^2)}{\sum S^2_{sum}}]$$

Where:

A = Cronbach's alpha

k = Number of responses

$\sum (S^2)$  = Variance of individual items summed up

$\sum S^2_{sum}$  = Variance of summed up scores

The results of the reliability analysis are presented in the Table 3.3.

**Table 3.3: Reliability of Measurement Scales**

	<b>Cronbach's Alpha</b>	<b>Decision</b>
Portfolio inventory	.708	Reliable
Portfolio analysis	.792	Reliable
Portfolio planning	.852	Reliable
Portfolio tracking	.892	Reliable
Portfolio review	.716	Reliable

From the findings, all the variables had their Cronbach alpha coefficients above 0.7 with Portfolio tracking having the highest and Portfolio review having the lowest. Thus, the variables were considered reliable as the results showed that the Cronbach Alpha associated with the variables of the study were above 0.70 threshold as recommended by Bell and Bryman (2007) where it is asserted that Cronbach Alpha's should be in excess of 0.70 for the measurement intervals.

### **3.7 The Data Collection Process**

After the proposal had been approved, the researcher got a reference letter from the university which was presented to each manager in the target MFIs so as to be allowed to collect the necessary data from the respondents. The drop and pick method were preferred for questionnaire administration so as to give respondents enough time to give well thought out responses. Research assistants were trained on interviewing skills including developing rapport, convincing respondents to provide relevant data and seeking clarifications whenever necessary. Research assistants booked appointment with the respondents' organizations at least two days before visiting to administer questionnaires. Finally, they personally administered the research instruments to the respondents. This enables the researcher to create a working relationship, discuss the reason why he is doing the study and clarify all items that may appear unclear to the respondents as observed by Best and Khan (1987).

### 3.8 Data Analysis Methods

Data analysis involved collection of the research instruments and checking through to ensure that only those filled up to a half was considered for analysis. After that the questionnaires were coded and the data entered into a computer using SPSS or Excel. The analysis was then be carried out using descriptive statistics. Thereafter, the output was presented in form of tables using frequencies, means and standard deviations. Then interpretation was done and presented based on the research objectives. This was done based on Rosenthal (2016) recommendation on the analysis of qualitative data, where he advises that collected data organized, sorted out, coded and thematically analyzed, searching for meaning, interpreting and drawing of conclusions on the basis of the research concepts. To crown it all, the relationship between the variables were tested using the multiple regression model below. This was also tested the correlation between the dependent and independent variables, coefficient of determination and the level of significance between the variables.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where:-

Y= represents the dependent variable, microfinance institutions performance

$\beta_0$ =constant

$\beta_1 - \beta_5$  are the coefficients of the independent variables

$X_1$ = portfolio inventory

$X_2$ = portfolio analysis

$X_3$ = portfolio planning

$X_4$ = portfolio tracking

$X_5$ = portfolio review

$\epsilon$ =Error Term

The level of significance of the analysis was at 0.05.

### 3.9 Ethical Considerations

The researcher observed the following standards of behaviour in relation to the rights of those who become subject of the study or are affected by it: First, in dealing with the participants, they were informed of the objective of the study and the confidentiality of obtained information, through a letter to enable them give informed consent. Once consent was granted, the participants maintained their right, which entails but is not limited to withdraw or decline to take part in some aspect of the research including rights not to answer any question or set of questions and/or not to provide any data requested; and possibly to withdraw data they have

provided. Caution was observed to ensure that no participant was coerced into taking part in the study and, the researcher seeks to use minimum time and resources in acquiring the information required. Secondly, the study adopted quantitative research methods for reliability, objectivity and independence of the researcher. While conducting the study, the researcher ensured that research ethics are observed. Participation in the study was voluntary. Privacy and confidentiality were also observed. The objectives of the study was explained to the respondents with an assurance that the data provided was used for academic purpose only.

### **3.10 Operationalization of Variables**

The operationalization of variables is shown in Table 3.4.



**Table 3. 4: Operationalization of Variables**

<b>Objectives</b>	<b>Variable</b>	<b>Measurements</b>	<b>Scale of measurement</b>	<b>Data analysis Technique</b>	<b>Tools of data analysis</b>
To assess the influence of portfolio inventory on performance of MFIs in Embu County in Kenya.	Portfolio Inventory	Fixed income investments Certificate of deposit Treasury bills Commercial paper Speculative investment inventory Repurchase agreement	Interval  Interval  Nominal Interval Ordinal Interval	Descriptive statistics Regression analysis	Percentages
To establish the influence of portfolio analysis on performance of MFIs in Embu County in Kenya	Portfolio Analysis	Total value analysis Aggregated cash flow analysis Risk sensitivity analysis Stress testing analysis Value at risk analysis	Interval Ordinal  Interval  Interval	Descriptive statistics Regression analysis	Mean score
To determine the influence of portfolio planning on performance of MFIs in Embu County in Kenya.	Portfolio Planning	Component selection Resource planning Time planning Cost planning	Ordinal Ratio Interval Ordinal Ordinal	Descriptive statistics Regression analysis	Percentages
To assess the influence of portfolio tracking on performance of MFIs in Embu County in Kenya.	Portfolio Tracking	Communication of changes Identification of non-viable projects Portfolio adjustments	Ordinal Ordinal Ordinal Ordinal	Descriptive statistics Regression analysis	Mean score

		Reporting financial indicators Monitoring and controlling risks			
To identify the influence of portfolio review on performance of MFIs in Embu County in Kenya.	Portfolio Review	Frequency of Portfolio reviewing Re- verification of portfolios critical success factors Analysis and Reporting	Interval Ordinal Ordinal Interval Interval Interval	Descriptive statistics Regression analysis	Percentages
	Performance of MFIs	Outreach Clientele Turnaround time Financial stability (ROA, Profitability)	Ordinal Ordinal Interval Interval	Descriptive statistics Regression analysis	Mean score

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

#### 4.1 Introduction

This chapter has covered the presentation, interpretation and analysis of the data collected on the influence of management practices on performance of microfinance institutions in Embu County in Kenya. The researcher made use of frequency tables and percentages to present data.

#### 4.2 Response Rate

The researcher distributed one hundred and fourteen questionnaires. However only eighty-eight questionnaires were received back. This gave a response rate of 77%. The response rate is as shown Table 4.1.

**Table 4. 1: Response Rate**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Response	88	77
No response	26	23
<b>Total</b>	<b>114</b>	<b>100.0</b>

#### 4.3 General Information

In this study, data was collected from different groups of respondents based on their gender, age, highest level of educational qualification, their working experience in the current company, whether they have ever worked in another similar company, department in their current job, number of employees in their department and terms of employment This was important for the researcher to assess how eligible the respondents are to participate in the study.

##### 4.3.1 Gender of the Respondent

The respondents were requested to indicate their gender. Their responses were as shown in Table 4.2.

**Table 4. 2: Respondents Gender**

	<b>Frequency</b>	<b>Percent</b>
Male	62	70.5
Female	26	29.5
<b>Total</b>	<b>88</b>	<b>100.0</b>

From the findings, majority of the respondents were male as shown by 70.5% while female respondents were 29.5%. This shows that the researcher was not gender biased in collection of data since all the respondents were considered irrespective of their gender.

### 4.3.2 Age of the Respondent

The respondents were further asked to indicate the age bracket to which they belong. Their responses were as shown in Table 4.3.

**Table 4. 3: Age of the Respondent**

	<b>Frequency</b>	<b>Percent</b>
18-30 years	40	45.5
31-40 years	31	35.2
41-50 years	17	19.3
<b>Total</b>	<b>88</b>	<b>100.0</b>

The study results show that majority of the respondents were aged between 18 and 30 years as shown by 45.5%, between 31 and 40 years as shown by 35.2% and between 41 and 50 years as shown by 19.3%. This shows that majority of the respondents were mature enough which made them to have diverse information on the subject under study and also cooperative in giving it.

### 4.3.3 Highest level of Education

The respondents were asked to indicate their highest level of education. Their responses were presented in Table 4.4.

Table 4. 4: Highest level of Education

	<b>Frequency</b>	<b>Percent</b>
Diploma	10	11.4
Bachelor's Degree	42	47.7
Master's Degree	25	28.4
PhD	11	12.5
<b>Total</b>	<b>88</b>	<b>100.0</b>

From the findings the study found that 47.7% of the respondents had a bachelor's degree and 28.4% of the respondents had master's degree and 12.5% had a PhD while 11.4% of the respondents had a diploma. This represents a pool of learnt respondents who could comprehend and give reliable information about the subject under study.

### 4.3.4 Period Respondent has been Working in Institution

The respondents were also requested to indicate how long they have been working in the institution. Their responses were as shown in Table 4.5.

**Table 4. 5: Period Respondent has been Working in Institution**

	<b>Frequency</b>	<b>Percent</b>
Less than 3 years	34	38.6
3 to 5 years	29	33
More than 5 years	25	28.4
<b>Total</b>	<b>88</b>	<b>100</b>

From the study findings, 31.8% of the respondents had been working in the institution for 3 years, 33% for 3 to 5 years and 28.4% for more than 5 years. This shows that majority had worked in the institution for long enough to comprehend and give reliable and accurate information on the subject under study.

#### **4.3.5 Whether Respondent Have Ever worked in another similar company**

The researcher also asked the respondents to indicate whether they have ever worked in another similar company. Their replies were as shown in Table 4.6.

**Table 4. 6: Whether Respondent worked in another similar company**

	<b>Frequency</b>	<b>Percent</b>
Yes	54	61.4
No	34	38.6
<b>Total</b>	<b>88</b>	<b>100.0</b>

As per the findings, the respondents indicated that have ever worked in another similar company as expressed by 61.4% while 38.6% indicated that have never worked in another similar company. This shows that in most of the respondents have ever worked in another similar company.

Those who indicated that they have ever worked in another similar company, were asked to indicate the duration they worked. Their replies were as shown in Table 4.7.

**Table 4. 7: Working Experience in Another Similar Company**

	<b>Frequency</b>	<b>Percent</b>
0-5 years	18	33.3
6-10 years	23	42.6
Above 10 years	13	24.1
<b>Total</b>	<b>54</b>	<b>100</b>

From the findings, the respondents indicated that they had worked in another similar company for 6 to 10 years as shown by 42.6%, less than 5 years as shown by 33.3% and more than 10 years as shown by 24.1%. This indication that most of the respondents had enough experience to be relied upon for data collection.

#### 4.3.6 Respondents Department in their Current Job

The respondents were also asked to indicate the Department to which their Current Job belong to. Their replies were as shown in Table 4.8.

**Table 4. 8: Respondents Department in their Current Job**

	<b>Frequency</b>	<b>Percent</b>
Finance	36	40.9
Marketing	13	14.8
Operations	16	18.2
ICT	23	26.1
<b>Total</b>	<b>88</b>	<b>100</b>

From the findings, the respondents indicated that they belong to Finance department (40.9%), ICT department (26.1%), operations department (18.2%) and marketing (14.8%). This implies that the information obtained was accurate and reliable since it was obtained from respondents across all the departments.

The respondents were also asked to indicate how many employees work in their department. Their replies were as shown in Table 4.9.

**Table 4. 9: Number of Employees in their Department**

	<b>Frequency</b>	<b>Percent</b>
Less than 10	54	61.4
Above 10	34	38.6
<b>Total</b>	<b>88</b>	<b>100</b>

From the findings, the respondents indicated that the number of their employees in their department were less than 10 as shown by 61.4% and others indicate more than 10 as shown by 38.6%.

#### 4.3.7 Terms of Employment

The respondents were also asked to indicate their terms of employment. Their replies were as shown in Table 4.10.

**Table 4. 10: Terms of Employment**

	<b>Frequency</b>	<b>Percent</b>
Permanent	66	75
Contractual	22	25
<b>Total</b>	<b>88</b>	<b>100</b>

From the findings, the respondents indicated that they were permanently employed as shown by 75% while others were under contract as shown by 25%.

#### 4.4 Influence of Project Portfolio Management Practices

The study sought to establish the influence of project portfolio management practices on performance of micro finance institutions. The project portfolio management practices covered in this study were portfolio inventory, portfolio analysis, portfolio planning, portfolio tracking and portfolio review.

##### 4.4.1 Portfolio Inventory

The respondents were asked to indicate their level of agreement with the influence of various portfolio inventory practices on the performance in the microfinance institutions in Kenya Embu County. Their replies were as shown in Table 4.11.

**Table 4. 11: Influence of Various Portfolio Inventory Practices on MFIs Performance**

	<b>Mean</b>	<b>Std. Dev.</b>
Fixed income investments have increased the financial stability	4.125	0.832
Mortgage investment has boosted MFIs profitability	3.846	0.810
Private placement investment has supported our clientele	3.471	0.574
Public equity investment has increased our return on assets	2.567	0.571
Real estate investment has enhanced our outreach	4.115	0.816

From the findings, the respondents agreed that fixed income investments have increased the financial stability as shown by a mean of 4.125, that real estate investment has enhanced our outreach as illustrated by a mean of 4.115 and that mortgage investment has boosted MFIs profitability as expressed by a mean score of 3.846. However, the respondents were neutral that private placement investment has supported our clientele as illustrated by a mean of 3.471 and that public equity investment has increased our return on assets as illustrated by a mean of 2.567.

##### 4.4.2 Portfolio Analysis

The researcher also required the respondents to indicate their level of agreement on the influence of various portfolio analysis practices on the performance in the microfinance institutions in Kenya Embu County. The findings were as shown in Table 4.12.

**Table 4. 12: Influence of Various Portfolio Analysis Practices on MFIs Performance**

	<b>Mean</b>	<b>Std. Dev.</b>
Performance has been enhanced through total value analysis	4.077	0.867
Aggregated cash flows analysis has boosted effectiveness	3.990	0.887
Risk sensitivity analysis has enhanced financial stability	2.548	0.573
Stress testing analysis has minimized profitability risk	2.404	0.493
Value at Risk (VAR) analysis has boosted the return on investment	4.000	0.870

As per the findings, the respondents agreed that performance has been enhanced through total value analysis as shown by a mean of 4.077, that Value at Risk (VAR) analysis has boosted the return on investment as illustrated by a mean of 4.000 and that aggregated cash flows analysis has boosted effectiveness as shown by a mean of 3.990. However, the respondents were neutral that risk sensitivity analysis has enhanced financial stability as illustrated by a mean of 2.548 and that stress testing analysis has minimized profitability risk as shown by a mean of 2.404.

#### 4.4.3 Portfolio Planning

The respondents were also requested to indicate their level of agreement on the influence of various portfolio planning practices on the performance in the microfinance institutions in Kenya Embu County. The results were as illustrated in Table 4.13.

**Table 4. 13: Influence of Various Portfolio Planning Practices on MFIs Performance**

	Mean	Std. Dev.
Selecting portfolio type has decreased operating expenses	4.077	0.867
Planning for portfolio assessment has boosted personnel productivity	4.192	0.871
Checking aggregate progress has increased average number of borrowers	3.692	0.860
Setting objective priorities has enhanced financial self-sufficiency	3.817	0.868

As per the findings, the respondents agreed that planning for portfolio assessment has boosted personnel productivity as shown by a mean of 4.192, that selecting portfolio type has decreased operating expenses as illustrated by a mean of 4.077, that setting objective priorities has enhanced financial self-sufficiency as shown by a mean of 3.817 and that checking aggregate progress has increased average number of borrowers as illustrated by a mean of 3.692.

#### 4.4.4 Portfolio Tracking

The respondents were asked to indicate their level of agreement on the influence of various portfolio tracking practices on the performance in the microfinance institutions in Kenya Embu County. The study findings were shown in Table 4.14.

**Table 4. 14: Influence of Various Portfolio Tracking Practices on MFIs Performance**

	Mean	Std. Dev.
Returns monitoring enhances efficiency and productivity	4.096	0.819
Capital gains tracking encourages the clientele	3.731	0.850
Yields evaluation helps in outreach	2.308	0.484
Bid and ask spread tracking has enhanced profitability	3.856	0.960



As per the findings in Table 4.15, the respondents agreed that returns monitoring enhances efficiency and productivity as illustrated by a mean of 4.096, that bid and ask spread tracking has enhanced profitability as shown by a mean of 3.856 and that capital gains tracking encourages the clientele as illustrated by a mean of 3.731. The respondents however disagreed that yields evaluation helps in outreach as illustrated by a mean of 2.308.

#### 4.4.5 Portfolio Review

The respondents were asked to indicate their level of agreement with the influence of various portfolio review practices on the performance in the microfinance institutions in Kenya Embu County. The findings were as presented in Table 4.15.

**Table 4. 15: Influence of Various Portfolio Review Practices on MFIs Performance**

	<b>Mean</b>	<b>Std. Dev.</b>
Preparation phase enables MFIs financial stability	4.173	0.781
Portfolio snapshot enhances turnaround time	2.452	0.573
Scoring project performance boost clientele satisfaction	3.683	0.596

From the findings, the respondents agreed that preparation phase enables MFIs financial stability as shown by a mean of 4.173, that scoring project performance boost clientele satisfaction as illustrated by a mean of 3.683 and that portfolio snapshot enhances turnaround time as shown by a mean of 2.452.

#### 4.4.6 Performance of MFIs

The respondents were also asked to indicate the trend of various aspects of performance in their MFI for the last five years. Their findings were as shown in Table 4.16.

**Table 4. 16: Trend of Performance of MFIs**

	<b>Mean</b>	<b>Std. Dev.</b>
Outreach	4.192	0.848
Clientele	4.144	0.806
Efficiency	2.827	0.598
Financial stability (ROA, Profitability)	3.962	0.858

As per the findings, the respondents indicated that outreach as shown by a mean of 4.192, clientele as illustrated by a mean of 4.144 and financial stability (ROA, Profitability) as shown by a mean of 3.962 have improved while efficiency as illustrated by a mean of 2.827 have been constant over the last five years.

## 4.5 Inferential Statistics

The inferential statistics conducted were multiple regression analysis and Pearson correlation. The relationship between the variables were tested using the multiple regression model. This was also tested the correlation between the dependent and independent variables, coefficient of determination and the level of significance between the variables.

### 4.5.1 Correlation Results

A correlation is a number between -1 and +1 that measures the degree of association between two variables. A positive value for the correlation implies a positive association while a negative value for the correlation implies a negative or inverse association.

**Table 4. 17: Correlation Coefficients**

		Performance of MFIs	Portfolio inventory	Portfolio analysis	Portfolio planning	Portfolio tracking	Portfolio review
Performance of MFIs	Pearson Correlation	1					
	Sig. (2-tailed)	.					
Portfolio inventory	Pearson Correlation	.786	1				
	Sig. (2-tailed)	.020	.				
Portfolio analysis	Pearson Correlation	.664	.223	1			
	Sig. (2-tailed)	.027	.006	.			
Portfolio planning	Pearson Correlation	.718	.243	.497	1		
	Sig. (2-tailed)	.025	.002	.000	.		
Portfolio tracking	Pearson Correlation	.529	.333	.420	.531	1	
	Sig. (2-tailed)	.017	.000	.000	.000	.	
Portfolio review	Pearson Correlation	.636	.312	.140	.121	0.161	1
	Sig. (2-tailed)	.001	.000	.000	.000	.000	-

The analysis of correlation results between the Performance of MFIs and portfolio inventory shows a positive coefficient 0.786, with p-value of 0.020. It indicates that the result is significant at  $\alpha = 5\%$  and that if the portfolio inventory increases it will have a positive impact on the Performance of MFIs. The correlation results between portfolio analysis and Performance of MFIs also indicates the same type of result where the correlation coefficient is 0.664 and a p-value of 0.027 which significant at  $\alpha = 5\%$ .

The results also show that there is a positive association between portfolio planning and Performance of MFIs where the correlation coefficient is 0.718, with a p-value of 0.025. Further, the result shows that there is a positive association between portfolio tracking and Performance of MFIs where the correlation coefficient is 0.529, with a p-value of 0.017. Further, there is a positive association between portfolio planning and Performance of MFIs where the correlation coefficient is 0.636, with a p-value of 0.001. Nevertheless, the positive relationship indicates that when the practice of the afore-mentioned factors is in place the levels of Performance of MFIs increases

#### 4.5.2 Multiple Regression Analysis

The multiple regression analysis was used to test the relationship between the variables where it shows how the dependent variable is influenced by the independent variables. The findings were as shown in Table 4.18.

**Table 4. 18: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	0.906	0.820	0.809	0.960

From the results, the adjusted R square was 0.809. This implies model highly fits the data since the Adjusted R square was more than 0.7 and that portfolio inventory, portfolio analysis, portfolio planning, portfolio tracking and portfolio review explains 80.9% of the variation in performance of MFIs. The remaining 19.1% accounted for the factors influencing performance of MFIs that are not covered in this study.

**Table 4. 19: ANOVA Test**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	361.187	5	72.237	74.680	.000
	Residual	79.318	82	0.967		
<b>Total</b>		<b>440.505</b>	<b>87</b>			

From the ANOVA Table, the p-value was 0.000 and the calculated F-value was 74.680. This shows that the overall regression model was significant in predicting the outcome of Performance of MFIs based on the values of portfolio inventory, portfolio analysis, portfolio planning, portfolio tracking and portfolio review since p-value was less than 0.05 and F-calculated was greater than F-critical (2.3258).

**Table 4. 20: Coefficients of Determination**

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	0.782	0.105		7.448	.000
Portfolio inventory	0.826	0.273	0.786	3.026	.003
Portfolio analysis	0.719	0.144	0.664	4.993	.000
Portfolio planning	0.781	0.239	0.718	3.268	.002
Portfolio tracking	0.673	0.278	0.529	2.421	.018
Portfolio review	0.776	0.289	0.636	7.462	.008

The established model for the study was:

$$Y = 0.782 + 0.826X_1 + 0.719X_2 + 0.781X_3 + 0.673X_4 + 0.776X_5$$

Where: -

Y= Performance of MFIs

$\beta_0$ =constant

X<sub>1</sub>= Portfolio inventory

X<sub>2</sub>= Portfolio analysis

X<sub>3</sub>= Portfolio planning

X<sub>4</sub>= Portfolio tracking

X<sub>5</sub>= Portfolio tracking

The regression equation above has established that taking (Portfolio inventory, Portfolio analysis, Portfolio planning, Portfolio tracking and portfolio review), performance of MFIs will be 0.782. The findings presented also show that taking all other independent variables at zero, a unit increase in the portfolio inventory significantly leads to an increase in increase in the score of performance of MFIs as shown by B=0.826 and p-value of 0.003.

Further the study revealed that a unit change in portfolio analysis would significantly lead to 0.719 increase in the score of performance of MFIs since p-value (0.000) was less than 0.05. Moreover, if all other factors are held constant at zero, a unit increase portfolio planning significantly leads to increase in performance of MFIs as shown by a regression coefficient of 0.781 and p-value of 0.002.

The also study found that holding other factors constant at zero, a change in portfolio tracking leads to a significant 0.673 increase performances of MFIs since p-value (0.018) was less than 0.05. Further the study established that holding other factors constant at zero, a change in portfolio review leads to a significant 0.776 increase performances of MFIs since p-value (0.008) was less than 0.05. Overall, portfolio inventory had the greatest effect on performance of MFIs followed by Portfolio planning, then Portfolio review then portfolio analysis while Portfolio tracking had the least effect on the performance of MFIs.

## CHAPTER FIVE

### SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter gives that summary of the data findings, discussion of the data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn are focused on addressing the objective of the study.

#### 5.2 Summary of the Findings

The study sought to assess the influence of portfolio inventory on performance of MFIs in Embu County in Kenya. The study found that fixed income investments have increased the financial stability, that real estate investment has enhanced our outreach and that mortgage investment has boosted MFIs profitability. The study also revealed that private placement investment has supported our clientele and that public equity investment has increased our return on assets.

The study sought to establish the influence of portfolio analysis on performance of MFIs in Embu County in Kenya. The study found that performance has been enhanced through total value analysis, that Value at Risk (VAR) analysis has boosted the return on investment and that aggregated cash flows analysis has boosted effectiveness. The study found that risk sensitivity analysis has enhanced financial stability and that stress testing analysis has minimized profitability risk.

The study sought to determine the influence of portfolio planning on performance of MFIs in Embu County in Kenya. The study found that planning for portfolio assessment has boosted personnel productivity, that selecting portfolio type has decreased operating expenses, that setting objective priorities has enhanced financial self-sufficiency and that checking aggregate progress has increased average number of borrowers.

The study sought to assess the influence of portfolio tracking on performance of MFIs in Embu County in Kenya. The study found that returns monitoring enhances efficiency and productivity, that bid and ask spread tracking has enhanced profitability and that capital gains tracking encourages the clienteles. The study also found that yields evaluation doesn't helps in outreach.

The study sought to identify the influence of portfolio review on performance of MFIs in Embu County in Kenya. The study found that preparation phase enables MFIs financial stability, that

scoring project performance boost clientele satisfaction and that portfolio snapshot doesn't enhance turnaround time.

### **5.3 Discussion of the Findings**

Under this, the study focused on the key variables discussed in chapter four and links them to the literature and past studies.

#### **5.3.1 Portfolio Inventory**

The study found that fixed income investments have increased the financial stability, that real estate investment has enhanced our outreach and that mortgage investment has boosted MFIs profitability. The study also revealed that private placement investment has supported our clientele and that public equity investment has increased our return on assets. These findings are in line with Sloper, (2015) who argues banker's acceptances these are portfolio list used to aid business transactions between different organizations. These tools are also referred to as bankers' acceptance because the banks take the responsibility to pay back loans to debtors in case the customer does not pay back. They are short term and fixed on customer's income as a security but are guaranteed by the bank. Their interest rates are very high so as to compensate for the high default risk compared to other short-term securities in the market though there is no active trading for them due to lack of standardization.

#### **5.3.2 Portfolio Analysis**

The study found that performance has been enhanced through total value analysis, that Value at Risk (VAR) analysis has boosted the return on investment and that aggregated cash flows analysis has boosted effectiveness. The study found that risk sensitivity analysis has enhanced financial stability and that stress testing analysis has minimized profitability risk. This is in line with Nawai and Shariff (2010) who noted that portfolio analysis is the process of measuring the operation and financial investments of a given firm to examine how investments and effective timing of returns perform from bonds, equities, indexes, commodities, funds, options and securities. In this form of analysis, each class has unique risks and returns affecting the rate of return for the total investment. At the same time, prospective returns are calculated using the average and compound return methods when performing portfolio analysis. Therefore, the average return is calculated from individual assets while compound return of the actual mean is calculated from the total returns.

### **5.3.3 Portfolio Planning**

The study found that planning for portfolio assessment has boosted personnel productivity, that selecting portfolio type has decreased operating expenses, that setting objective priorities has enhanced financial self-sufficiency and that checking aggregate progress has increased average number of borrowers. These findings are in line with Morrison and Wensley (2010) advice that these be should be aligned to the overall goals and objectives of the organization. The team of management of the portfolio which includes the project leaders and departmental heads draws a draft strategy for the re-allocation of resources and the number of projects based on the priorities and boundaries developed by the management. The individual projects are the projects' inputs for the portfolio drawn by the project team and the available resources. The management is meant to authorize the plan for the portfolio and the departmental schedules once the portfolio goals are clear based on the boundaries.

### **5.3.4 Portfolio Tracking**

The study found that returns monitoring enhances efficiency and productivity, that bid and ask spread tracking has enhanced profitability and that capital gains tracking encourages the clientele. The study also found that yields evaluation doesn't helps in outreach. These findings agree with Agene, (2011) who argues that Index tracking such as the FTSE-100 index is a method of passive portfolio management which helps in tracking the match between the performances of the theoretical portfolio as closely as possible. The approach is applied by finance managers in a given organization who are not confident enough in out-performing the market but can easily follow the average market performance.

### **5.3.5 Portfolio Review**

The study found that preparation phase enables MFIs financial stability, that scoring project performance boost clientele satisfaction and that portfolio snapshot doesn't enhances turnaround time. These findings concur with Wenner (2010) who argues that portfolio review is concerned with the configuration of the MFI portfolio and performance of the specific projects to find out if the funder is able to deliver on the strategies of the MFI. This combination helps the funders to assess whether they are on the right direction in achieving the MFI's strategic objective by adopting the given portfolio. This helps the funders in assessing portfolio performance and yields understandable learning by informing future designing of the programmes and strategies re-organization. This systematic style of comparing the main drivers of performance of projects throughout the portfolio assists in identifying the similar patterns of achievement of project failure. They generate lessons on the basis of the entire



portfolio unlike the use of personalised project assessment where lessons are hard to extract which are likely to have broad validity and assist the funders to have evidence for their decisions.

#### **5.4 Conclusions**

The study concluded that portfolio inventory influence performance of MFIs in Embu County in Kenya positively and significantly. It was clear that fixed income investments have increased the financial stability, that real estate investment has enhanced our outreach and that mortgage investment has boosted MFIs profitability, that private placement investment has supported our clientele and that public equity investment has increased our return on assets.

The study concluded that portfolio analysis influence performance of MFIs in Embu County in Kenya significantly. The study revealed that performance has been enhanced through total value analysis, that Value at Risk (VAR) analysis has boosted the return on investment, that aggregated cash flows analysis has boosted effectiveness, that risk sensitivity analysis has enhanced financial stability and that stress testing analysis has minimized profitability risk.

The study sought to determine the influence of portfolio planning on performance of MFIs in Embu County in Kenya. The study found that planning for portfolio assessment has boosted personnel productivity, that selecting portfolio type has decreased operating expenses, that setting objective priorities has enhanced financial self-sufficiency and that checking aggregate progress has increased average number of borrowers.

The study further concluded that portfolio tracking influence performance of MFIs in Embu County in Kenya positively. The study established that returns monitoring enhances efficiency and productivity, that bid and ask spread tracking has enhanced profitability and that capital gains tracking encourages the clienteles and that yields evaluation doesn't helps in outreach.

The study concluded that portfolio review influence performance of MFIs in Embu County in Kenya significantly. The study found that preparation phase enables MFIs financial stability, that scoring project performance boost clientele satisfaction and that portfolio snapshot doesn't enhances turnaround time.

#### **5.5 Recommendations**

Based on the findings, the study makes the following recommendations;

- i. The management team of MFIs should consider portfolio inventory in their firm activities. 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, MFIs 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 should always perform Portfolio analysis to ensure good portfolio balance that will enable the MFIs to achieve growth objectives.

- ii. Portfolio managers should do portfolio analysis and thus are required to periodically carry out portfolio analysis to verify that investment performance reports are accurate and that investment policy compliance statements are updated whenever a material change occurs. This process should be accompanied by random or other internal reviews of investment activity and portfolio holdings to verify compliance with investment policy. Exception policies should also include what corrective actions should be taken and by what date, who will monitor the corrective actions, and who is authorized to make exceptions to the exception policy. A typical escalation procedure requires progressively more senior staff to be notified of unresolved exceptions or exceptions that are increasing. Independent personnel should oversee the exception reporting and follow-up process. If that is not possible or practicable, adequate checks and balances should be established. Management must ensure that all personnel are subject to consistent requirements on performance reporting, exception reporting, and escalation procedure requirements.
- iii. The study further recommends that in order to facilitate time planning management team should establish proper portfolio planning. This will result in to organizational stability and flexibility. The study also recommends that the management team should prioritize components selection based on evaluation scores
- iv. The study also recommends that MFIs 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
- v. The study further recommends that the project managers should carry out review of individual performance of projects in the portfolio arena to find out whether the financiers are able to deliver on the strategy of the microfinance. This will require stake holder involvement and active participation.

## **5.6 Suggestions for Further Studies**

- i. This study was limited to MFIs in Kenya only. This study should be extended to cover all the other firms in Kenya.
- ii. Further research into the causes of the different performance of the MFIs and how that relates to their ethical investment approach.
- iii. An in-depth study should be carried out to determine the challenges faced by MFIs in implementing the portfolio management practices.
- iv. A further study should also be carried out to establish the effects of portfolio management practices on performance of MFIs in Kenya.

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## APPENDICES

### Appendix 1: REQUEST FOR AUTHORIZATION TO COLLECT DATA



UNIVERSITY OF NAIROBI

OPEN DISTANCE AND E-LEARNING CAMPUS

SCHOOL OF OPEN LEARNING PROGRAMMES

DEPARTMENT OF OPEN LEARNING PROGRAMMES

TO WHOM IT MAY CONCERN

**DATE: 1<sup>ST</sup> September, 2018**

**SUBJECT: CECILIA MUMBI MUTUA REG NO: L50/77867/2015**

This is to confirm that the above-named person is a student at the University of Nairobi, Open and E-learning Campus, **Embu Learning Centre**, pursuing Masters of Arts in Project Planning and Management

I kindly request you to allow her to carry out a research in your organization.

Her research topic is: **INFLUENCE OF MANAGEMENT PRACTICES ON PERFORMANCE OF MICROFINANCE INSTITUTION IN EMBU COUNTY, KENYA**

**Please accord her all necessary, assistance.**

**DR. CHANDI.J. RUGENDO  
CO-ORDINATOR  
EMBU LEARNING CENTRE**

## Appendix II: Research Questionnaire

Dear Respondent,

This questionnaire is to collect data for purely academic purposes. All information will be treated with utmost confidence. Do not put your name or identification on this questionnaire. Answer all questions as indicated by either filling in the blank or ticking the options that applies.

### PART A: GENERAL INFORMATION

1. What is your gender?  
Male  Female
2. Your Age (tick one)  
18-30  31-40  41-50  above 51
3. What is your highest level of educational qualification?  
Phd level  Master's degree  First degree  Diploma   
KCSE
4. For how long have you worked in this company?  
Less than 2yrs  3-5yrs  more than 5
5. Had you worked in another similar company?  
Yes  NO
6. IF yes to no.5 above, for how long  
0-5yrs  6-10yrs  above 10yrs
7. What is your department in your current job?  
Finance  Marketing  operations  ICT  other
8. If other in no.7 above explain.  
-----
9. How many employee work in you department?  
None  Less than 10  above 10
10. What is your designation  
-----
11. What are the terms of employment  
Permanent , Contractual  Other

**PART B: INFLUENCE OF MANAGEMENT PRACTICES ON PERFORMANCE OF MICRO FINANCE INSTITUTIONS.**

**Portfolio Inventory**

21) What is your level of agreement with the influence of following portfolio inventory practices on the performance in the microfinance institutions in Kenya Embu County? Use a scale of 1-5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent. Tick as appropriate.

<b>Portfolio Inventory</b>	1	2	3	4	5
Fixed income investments have increased the financial stability					
Mortgage investment has boosted MFIs profitability					
Private placement investment has supported our clientele					
Public equity investment has increased our return on assets					
Real estate investment has enhanced our outreach					

**Portfolio Analysis**

22) What is your level of agreement with the influence of following portfolio analysis practices on the performance in the microfinance institutions in Kenya Embu County? Use a scale of 1-5 where 5= Strongly Agree; 4 Agree; 3= Neutral; 2= Disagree and 1= Strongly disagree. Tick as appropriate.

<b>Portfolio Analysis</b>	1	2	3	4	5
Performance has been enhanced through total value analysis					
Aggregated cash flows analysis has boosted effectiveness					
Risk sensitivity analysis has enhanced financial stability					
Stress testing analysis has minimized profitability risk					
Value at Risk (VAR) analysis has boosted the return on investment					



### Portfolio Planning

23) What is your level of agreement with the influence of following portfolio planning practices on the performance in the microfinance institutions in Kenya Embu County? Use a scale of 1-5 where 5= Strongly Agree; 4 Agree; 3= Neutral; 2= Disagree and 1= Strongly disagree. Tick as appropriate.

<b>Portfolio Planning</b>	1	2	3	4	5
Selecting portfolio type has decreased operating expenses					
Planning for portfolio assessment has boosted personnel productivity					
Checking aggregate progress has increased average number of borrowers					
Setting objective priorities has enhanced financial self-sufficiency					

### Portfolio Tracking

24) What is your level of agreement with the influence of following portfolio tracking practices on the performance in the microfinance institutions in Kenya Embu County? Use a scale of 1-5 where 5= Strongly Agree; 4 Agree; 3= Neutral; 2= Disagree and 1= Strongly disagree. Tick as appropriate.

<b>Portfolio Tracking</b>	1	2	3	4	5
Returns monitoring enhances efficiency and productivity					
Capital gains tracking encourages the clientele					
Yields evaluation helps in outreach					
Bid and ask spread tracking has enhanced profitability					

### Portfolio Review

25) What is your level of agreement with the influence of following portfolio review practices on the performance in the microfinance institutions in Kenya Embu County? Use a scale of 1-5 where 5= Strongly Agree; 4 Agree; 3= Neutral; 2= Disagree and 1= Strongly disagree. Tick as appropriate.

<b>Portfolio Review</b>	1	2	3	4	5
Preparation phase enables MFIs financial stability					
Portfolio snapshot enhances turnaround time					
Scoring project performance boost clientele satisfaction					

**Performance of MFIs**

26) What has been the trend of the following aspects of performance in your MFI for the last five years?

	Greatly Improved	Improved	Constant	Decreasing	Greatly decreased
Outreach					
Clientele					
Efficiency					
Financial stability (ROA, Profitability)					

**THANK YOU**