

**IT GOVERNANCE, BUSINESS-IT ALIGNMENT AND STRATEGY
DELIVERY IN MICROFINANCE INSTITUTIONS IN**

NAIROBI COUNTY

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DECLARATION

The research is my original work and has not been submitted for a degree in this or any other University for examination.

Signed _____ Date _____

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This Research Project has been submitted for presentation with my approval as University of Nairobi supervisor.

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DEDICATION

I dedicate this project to God for been with me up to this far as well to my entire family for the support they have accorded me throughout the MBA course.

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LIST OF ABBREVIATIONS

AMFI	Association of Microfinance Institutions
BSC	Balance Score Card
CEO	Chief Executive Officer
CIO	Chief Information Officer
COBIT	Control Objectives for Information and related Technology
DTM	Deposit Taking Microfinance
ICT	Information and communications technology
IS	Information System
ISACA	Information Systems Audit and Control Association
IT	Information Technology
ITGI	Information Technology Governance Institute
ITIL	Information Technology Infrastructure Library
MDGs	Millennium Development Goals
MFI s	Microfinance Institutions
SAM	Strategic Alignment Model
USD	US Dollar

ABSTRACT

The aim of this paper was to research on the relationship of IT Governance, Business Alignment and Strategy delivery in Microfinance Institutions in Nairobi County. The research looked at the relationship between IT Governance and Business Alignment as well as Relationship between Business IT Alignment and Strategy delivery. The specific objectives of the research were to establish the extent to which Microfinance institutions in Nairobi County are using IT governance frameworks, to assess how the current IT Governance frameworks are related to Business IT alignment of Microfinance institutions in Nairobi County and to establish the relationship between Business IT alignment and Strategy delivery in Microfinance institutions in Nairobi County. A census of the population was taken where data was collected in 18 Microfinances that are in Nairobi County. This was followed by a descriptive analysis of data collected. The research concluded that most microfinance institution in Nairobi County had not implemented IT Governance and that there was a strong positive correlation between Business IT Alignment and Strategy Delivery. However the research was not able to determine the relationship between IT Governance and Business IT Alignment as the regression analysis results were insignificant.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

There has been rapid technological invention and innovations over the last few years. Information and Communication Technologies (ICT) has become an influential tool that the Microfinance sector are relying upon to reduce operating cost and interconnecting branches making it possible for them to expand to rural areas where majority of the population were previously unbanked. ICT innovations such as MPESA have proven overtime to be less expensive to establish and has become more convenient for customer (Ivatury, 2005). In many organizations Today, ICT is plays a critical role thus necessitating the need for IT Governance, as it has proven to be very crucial in growth, sustainability and support of the organization. IT governance is defined as capacity of Board of directors and senior management to design the IT strategy that compliments the Business Strategy (ITGI, 2005).

IT governance plays a vital role in enabling organizations to maximize the business value they derive from IT investments by helping them align their businesses and ensuring that risk associated with IT investments are mitigated. In addition, it ensures IT supports organization goals and objectives and that organization maximize on benefits accrued from IT investments. The IT solutions that underpin the delivery of business services are changing, with increasing reliance on external service providers to supplement the capabilities of the in-house IT function. This is a trend that looks set to continue, as the

growing interest in cloud computing services emerge. Organizations are recognizing the advantages of such services and naturally want to get the benefits of using them. Effective IT governance ensures organization ICT supports its goals and objectives, Maximize on IT investment and appropriately manage IT related risks. (Callahan, Bastos & Keyes, 2004).

Much emphasis is on how Microfinance empower their management and the IT staff in terms of ICT investments to carry their responsibilities in terms of IT Governance and Business IT Alignment so as to create value from investments of IT. Microfinance institutions offer credit to the poor and the financially excluded especially to those in remote areas. Microfinance has been experiencing impressive growth and has reached 150 million of the world's poor in four decades. It's present in more than 100 developing countries and has reached an aggregate outstanding loan portfolio of about 45 to 60 billion USD (Adler & Waldschmidt, 2013).

As the Microfinance industry grows and becomes more complex, governance plays a progressively important role in managing sound institutions and preventing crises. The Microfinance industry have recognized the importance of good governance and the critical role it plays in making the industry successful, but only few research have been done on governance in the Microfinance sector and closer look at the role of Governance in Microfinance is very crucial as the sector serve a large population. (Campion, 1998; McGuire, 1999). IT governance applies to both large and small organization as it enables organization align their business so as to achieve their strategic objective.

1.1.1 IT Governance

IT governance involves the drafting and implementation of organization structure with clear responsibilities of information, processes, and infrastructure with the aim of ensuring that IT investment generate business value and mitigate risk (Weill & Ross, 2004). Van Grembergen, (2003), defines IT governance as capacity of Board of directors and senior management to design the IT strategy that compliments the Business Strategy. It involves formulating IT strategy of the organization, assigning responsibilities and ensuring that the strategy is executed and the progress monitored so as to ensure organization achieve the goals set.

The main goal of IT governance is to align Business and IT so as to ensure that the company achieve its strategic objectives in terms of reduced cost, profitability as well as efficiency. (Van Grembergen, 2003). Accordingly, (Carroll, Ridley & Young, 2004) recognizes COBIT & ITIL as the widely used IT Governance Framework worldwide. ITIL focuses more on the processes whereas COBIT focus more on goal setting and objectives and can be used to measure if organization has achieved its strategic goals and objectives.

1.1.2 Business-IT Alignment

The concept was introduced by Fonstad & Robertson, (2006) to describe the system of mechanism that assist the Strategy level and operational level managers in decision making so as to integrate the operations of the business in terms of Business strategy and IT strategy. According to De Haes & Van Grembergen, (2009), Business-IT alignment is

the integration of IT strategy, Business strategy and the infrastructure both IT infrastructure and Business Infrastructure. Failure to align IT to business can have a dramatic effect on the organization in terms of performance and competitiveness and may also result to IT investment losses due to IT failing to deliver.

1.1.3 Strategy Delivery

The IT Governance Institute (2005), defines strategy delivery as ensuring that that IT delivers expected benefits against the strategy that is set by the executive management. Strategy delivery can be in terms of optimizing cost, enhancing business flexibility, penetrating new markets, product innovation, improving efficiency and providing value to the shareholders (Sambamurthy et al. 2003).

The role of IT governance is to ensure that IT investments helps in strategy delivery by helping the organization realize value from the investments through alignment. One way of realizing the strategy delivery is ensuring business takes a leading role by managing IT as an asset to enable organization realise the strategic benefits rather that looking at IT as a cost (Van Grembergen, 2010).

1.1.4 Microfinance institutions in Kenya

According to Githinji, (2009) World Bank defines Microfinance Institutions as organizations that engage in small financial transactions using various channels to serve low income households, small businesses and other who cannot access the Bank services especially in the rural areas.

In recent years Kenya has been experiencing financial revolution. The Microfinance sector has been part of this revolution more so in availing financial services to the unbanked and underbanked people. The Microfinance industry in Kenya is the most advanced in East and Central Africa and this has been aided by the introduction of mobile banking as well as the credit information system making it possible to reach people in remote areas of the country. Its projected that Microfinance in Kenya serve an estimated 23% of the population (AMFI, 2014).

According Association of Microfinance Institutions (AMFI), (2014) the number of Microfinance institutions participating grew to 21 Credit Only MFIs, 9 DTMs and 4 Banks, a total of 34 participants. The Microfinance Act 2008, authorized Central Bank of Kenya to regulate, license and supervise the deposit taking Microfinance. Development of Microfinance sector is essential as it play an important part in solving unemployment issues in country, alleviate poverty as well as empowering Kenyans who live in rural and remote areas where they are not able to access Banking services due to lack of collateral (Githinji, 2009).

1.2 Research Problem

There has been increased research on the operational benefits of Information Technology Governance structures and their alignment to business processes around the world. De Haes & Van Grembergen, (2009) found that there was a strong relationship between the use of IT governance practices and Business IT alignment and that highly aligned organizations do have more enhanced IT governance practices compared to organization

that are not aligned. Gu, Xue and Ray, (2008) argued that the ability of an organization to generate value from IT investments was dependent on alignment between IT governance structure, organizational structure as well as organization strategies.

The objective of IT governance is to achieve strategic alignment between the business and IT and to ensure that money spent on IT is delivering value for the business. Various studies (Luftman and Brier, 1999; Teo and Ang, 1999) have emphasized on how strategic alignment impacts on the corporate strategy. However, Peterson, (2004) acknowledged a gap in literature that outlines the degree to which IT governance structures impacts on organizational Business IT alignment. The researcher recommended further study into Business IT Alignment and governance structure so as equip managers with knowledge that will enable them strategize on Business IT alignment and IT Governance in an effort to align the organizations business with IT.

In Kenya today, very few microfinance institutions have adopted clear IT governance policies with most operating without (Madiavale, 2014). This means there is no standard way of data management, security and generation of reports which makes IT audit a very tedious procedure. This can partly be blamed on the fact that majority of MFIs in Kenya are not regulated by Central Bank and hence not obliged to follow the ICT governance structures stipulated by the regulator of bankers. Some of the operational inefficiencies in MFIs can be directly linked to poor IT governance and this supported by MFI studies that point out poor implementation of corporate governance leads to organization failure to meet their targets or achieve their objectives (Aboagye and Otioku, 2010; Bassem, 2009). IT Governance plays an important role to the success of MFIs, but only few research

study have been done on governance in the Microfinance sector and closer look of the role of Governance in Microfinance is very crucial as the sector serve a large population (McGuire, 1999).

Munene (2012), clearly shows the importance of IT governance on the commercial bank in Kenya. The researcher found that many respondents felt there was room for improvement on the implementation of IT governance in both commercial banks and other organizations both public and private, especially when it comes to automating the record keeping and reporting of the various related operations. Many respondents also thought that they would be more effective if they applied IT governance to achieve the desired business alignment. The researcher recommended that each of the five IT governance domains could form a basis for other researches that will even lead to better IT Governance practices in all sectors of the economy. This study therefore seeks to find out the extent of IT governance implementation in Microfinance as well as the relationship between IT governance, Business IT alignment and Strategy Delivery in Microfinance institutions in Nairobi County.

1.3 Research Objectives

- i. To establish the extent to which Microfinance institutions in Nairobi County are using IT governance frameworks.
- ii. To assess how the current IT Governance frameworks are related to Business IT alignment of Microfinance institutions in Nairobi County.

- iii. To establish the relationship between Business IT alignment and Strategy delivery in Microfinance institutions in Nairobi County.

1.4 Value of the Study

This study will be beneficial to future researchers and academicians as it will add to the body of knowledge on ICT and Microfinance in Kenya.

The study will also be beneficial to policy makers like the government and central bank in their quest to regulate the Microfinance sector in Kenya. This study will bring into light the various dynamics of the sector and hence help the policy makers come up with relevant policies and procedures to regulate the sector.

The study will also be useful to Microfinance institutions especially on Governance and Alignment and the impact it has on the sector.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews past literature on IT governance and Business IT alignment in Microfinance institutions in a bid to understand the vast body of knowledge. This chapter also reviews theories on IT governance and Business IT Alignment.

2.1.1 IT Governance in Microfinance

Good corporate governance in Microfinance Institutions occurs when board offer guidance on the strategic direction the organization will move and they carry this function on behalf of shareholders who they represent. They also set policy and strategies which should be consistent with the MFIs vision and mission and it's their mandate to ensure the Microfinance Institution are always solvent. In addition the Board ensures it hires competent managers who will implement the organization strategy so as to drive the company towards realizing it goals and objectives. This is through setting targets and monitoring consistently if they are achieving the set targets (Otero and Chu, 2002).

The key to success of IT Governance in MFIs is a well-crafted IT strategy that is aligned to the organization strategy against which the success of the organization will be measured as well as performance of individuals. It also includes risk management, IT code of conduct and adequate internal control to mitigate on any risk. (Van Greuning et al, 2003).

Madiavale, (2014) established that most MFIs in Nairobi had implemented the most basic form of ISM practices and that most MFIs had not put much effort in Implementing IT Governance framework as the adoption rate was low with ISO been the framework used by majority of the MFIs. The researcher also found that a larger percent of the Microfinance practitioner had little knowledge on IT Governance framework and that the IT Governance had minimal impact on organization goals.

2.1.2 IT Governance Frameworks

The IT Governance Frameworks are regarded as useful guides for the implementation of the IT governance. However, there are various IT governance framework that govern IT effectively within organizations which are designed to improve the effectiveness of IT (Barton, 2004). The main aim of all IT Governance frameworks is to maximize on the benefits of IT so that organizations can get value from their IT investments.

The most common IT governance framework are COBIT, ITIL and ISO. COBIT focuses on general decisions in management of IT and does not focus on the technical issues. It best solution for IT managers when they are looking for an integrated framework and its major drawback is that it does not give guidelines on how to achieve the set objectives. ISO on the other hand is a standalone framework that does not integrate with other IT Governance framework. It outlines detailed methods and procedures of implementing the framework in an organization and helpful to managers who might not have a framework in place. ITIL focusses more on the IT processes so as to achieve effectiveness and

efficiency in an organization. It focuses more on alignment especially in aligning business needs and IT services but it's limited on security (Arora, 2010).

The major dilemma senior management are facing is choosing the right framework to achieve the desired alignment in the organization in order to realise the strategic benefits. The choice of framework is determined by goals and objectives of the organization, how much they are willing to spend and security framework that best suit their organization (Arora, 2010).

2.2 Theories of Business IT Alignment & Governance

The theoretical review explores the various theories developed by past scholars in an attempt to explain the contribution of IT governance, Business IT alignment towards the achievement of the strategic goal.

2.2.1 Strategic Alignment Model (SAM)

Henderson and Venkatraman (1993), developed one of the best Business IT Alignment model known as the SAM model. The model identified four areas namely Business Strategy, IT strategy, Business infrastructure and IT infrastructure on which organization should seek alignment. (De Haes, Haest and Van Grembergen, 2010).

The model provides a tool that can be used to measure the current situation in terms of Business IT Alignment in organization as well identify area an organization can improve on to achieve the alignment. In addition, the model can also be used to formulate strategy depending on what organization want to achieve in terms of performance, alignment or Competitive advantage (De Haes, Haest and Van Grembergen, 2010).

There are four dominant perspective namely strategy execution, competitive potential, technology potential and service level. The strategy execution Business strategy drives the organization infrastructure and IT infrastructure the IT manager is just an implementer, Technology potential Business articulates the vision of the company and the IT manager designs the architecture so as to drive the Business strategy, competitive potential the IT strategy informs Business strategy that will be adopted the role of IT manager is that of Business visionary and driver of the organization strategy and finally the service level where Business strategy has no role and the role of IT Manager is that of business leadership so as to ensure effective use of IT resources to drive growth and innovation (Henderson and Venkatraman, 1993).

2.2.2 The IT Balanced Score Card Model

The Balanced scorecard Model was introduced in 1992. They argued that the evaluation of organization should not be based on traditional method of financial performance but other methods that would assure organization of sustainability and guarantee of future performance. The model can be used for both Strategy formulation as goals and objectives are set as well as Strategy implementation through continuous monitoring of progress. In addition, the model is used as a performance measurement tool to evaluate on the key goals of the organization which may include improved financial performance, streamlining of the internal business processes, customer satisfaction rating and finally learning and growth of employees within the organization (Kaplan and Norton, 1992).

The IT balanced score card is a generic model that was introduced in the late nineties as a result of deficiency of measuring models that would measure the performance of IT in organizations. Martinsons, Davison, and Tse (1999) proposed modification to the Balanced score card for it to effectively and efficiently measure the impact of IT. They reasoned that IT is more of an internal service provider and project initiated by IT are carried out for the benefit of organization as well as the end users. In addition, they proposed four perspective that would be used to measure IT namely operational perspective which basically measure operational staff view of organization in terms of effectiveness and efficiency, Business contribution perspective which measures management view of organization in terms of reputation, IT cost and performance, User orientation which is the end user view of the system in terms of how the system will complement their work and finally future orientation which looks at new products and innovation. The IT balanced scorecard is a good model of measuring impact of IT to Business as well as measuring the relationship between IT and business.

2.3 IT Governance and Business IT alignment

The goal of IT governance is to realize a better alignment between the business and IT. Prior findings have ascertained that IT governance influences Business IT alignment and that it's an enabler of Business Alignment (De Haes & Van Grembergen, 2009). This findings are supported by (Peterson, 2004) who identifies IT Governance as integral in achieving Business IT Alignment.

De Haes & Van Grembergen, (2009) study on IT governance and Business IT alignment in SMEs in the Netherlands concurred with the prior research, the findings indicated that organizations with a better IT governance practices are likely to score better in terms of Business IT alignment and vice versa and that organization that are highly aligned do have advanced IT governance practices compared to other organizations that are not aligned. The researcher recommended further studies in the field of SMEs are required to better understand Business-IT alignment in this environment and how IT governance can help in improving alignment. Gu, Xue and Ray, (2008) argued that the ability of an organization to generate value from IT investments was dependent on alignment between IT governance structure, organizational structure as well as organization strategies.

However, Peterson, (2004) acknowledged a gap in literature that outlines the degree to which IT governance structures impacts on organizational Business IT alignment. The researcher recommended further study into Business IT Alignment and governance structure so as equip managers with knowledge that will enable them strategize on Business IT alignment and IT Governance in an effort to drive the organizations business with IT. This was supported by Munene, (2012) who recommended that each of the five IT governance domains could form a basis for other researches that will even lead to better IT Governance practices in all sectors of the economy.

2.4 Business IT Alignment and Strategy Delivery

Business IT Alignment has become a top concern for senior management for a long time (Luftman et al., 2005). IT strategy and Business Alignment is very critical to executive

management as IT managers are been tasked not only to formulate the IT strategy of the organization but also participate in formulation of Business Strategy to enhance the fusion between IT and Business (Tam, 2007). Additionally, Carroll, Ridley and Young (2004) describes the role of IT governance is realizing alignment at a strategic level between IT and business and making sure that the money spent on IT is creating business value.

Furthermore, failure by organizations to align their Business has led to poor IT return on investment and inefficiency especially in operations leading to poor performance that affects the organizations competitive advantage (Luftman et al., 2005). Luftman and Brier, (1999) further asserts that organization that align their Businesses to IT have the capability to transform, have high growth and improve performance.

2.5 IT Governance, Business IT Alignment and Strategy Delivery

According to Weill and Ross, (2004) organizations with better IT governance structures have higher returns than organizations with low or no Governance implementations given the same strategic goals. The role of IT governance is to ensure alignment with organization's strategy and goals and support the creation of business value. A Research carried out by PricewaterhouseCoopers on behalf of ITGI in 2003 indicated that one of the top ten IT issues facing senior management was the apparent disconnect between IT strategy and Business strategy which was perceived to make organization not to realize their full potential, experience higher cost and inability to maximize on business potential (ITGI, 2005).

The main goal of IT governance is achieving Business IT Alignment so as to make sure organizations get return on their IT investment and also to maximize value and achieve their strategic objectives.

2.6 Summary of Empirical Studies and the Research Gap

Studies reviewed have clearly shown a relationship between IT governance, Business IT alignment and Strategy delivery. The role of IT governance is to ensure alignment with organization strategy and goals so as to create business value (ITGI, 2005). From the literature review, IT governance has been highlighted as very essential to an organization as it enhance the achievement Business IT Alignment. In addition, the literature consistently underlines the critical role of Business IT Alignment if organizational goals are to be achieved and that some of the operational inefficiencies in MFIs can be directly linked to poor IT governance.

Although there many studies that have been carried out on the relationship of IT Governance and Business Alignment very few researches have looked at the impact of the two in terms of strategy delivery. Furthermore, from the literature review it's clear that only a few studies on IT Governance and Business IT Alignment have been carried out in Kenya and there is need for research in this area.

2.7 Conceptual Model

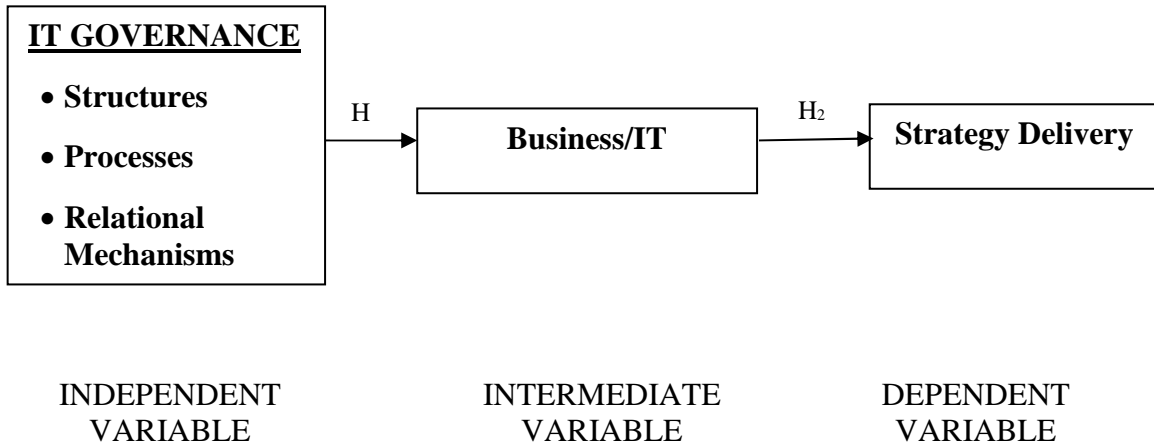


Figure 2.1 Conceptual model

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology used in the study. In this chapter the research identified the research design, target population, data collection procedures and finally data analysis.

3.2 Research Design

The research problem was studied using a descriptive research design. In this case the researcher was interested in exploring the relationship between IT governance, Business IT Alignment and Strategy delivery in Microfinance institutions in Nairobi County.

3.3 Population & Sampling

A population is the group that the research focuses on (Cooper and Schindler, 2006). For the purposes of this study, the various Microfinance institutions registered under AMFI were to act as the research population (AMFI, 2014). The study adopted a census approach where 18 Microfinance institutions in Nairobi County were the subject of the study.

3.4 Data Collection

The study relied on primary data collected from the respondents using a questionnaire. In order to ensure uniformity in response and to encourage participation, the questionnaire consisted of closed and open questions as well as Linkert scale method. The questions

were divided into four sections. Section 1 contained general information about the Microfinance Institutions, Section 2 focused on IT governance structures, Section 3 focused on Business IT Alignment whereas Section 4 focused on Strategy delivery. The target groups for the questionnaires were the senior IT personnel of the Microfinance institutions in Nairobi County. The researcher used online questionnaire as well as drop and pick later method to collect data.

3.5 Data Analysis and Presentation

Quantitative method of data analysis was used. The completed questionnaires from the field were counted, edited, checked for completeness and consistency and then sorted accordingly for coding and data entry. Objective 1 was analyzed using descriptive statistical tools (SPSS) and presented using tables and figures, Objective 2 was analyzed using correlation/regression analysis to establish the relationship between the IT governance and Business IT alignment. Objective 3 was achieved by carrying out regression analysis using the regression models below;

Model 1: IT Governance and Business IT Alignment

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where;

Y = Business IT Alignment

β_0 = Constant Term

β_1 , = Coefficient

X₁ = IT Governance

ε = error term

Model 2: Business IT Alignment and Strategy Delivery

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where;

Y = Strategy Delivery

β_0 = Constant Term

β_1 = Coefficient

X_1 = Business IT Alignment

ε = error term

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings of the study in a way of data analysis. The analysis involved an in-depth examination of the findings in line with the study objectives

4.2 Response Rate

The researcher distributed the research instruments to the potential respondents and the response rate is shown in Table 4.1 below

Table 4. 1 Response Rate

	Number	Percentage
Responded	18	72%
Did not respond	7	28%
Total	25	100%

From the findings presented in table 4.1, 72% of the questionnaires sent out for the study were returned fully filled meaning that only 28% of the targeted sample did not respond. This response rate was considered adequate to represent the population. The data was collected through questionnaire which were filled online as well as using the drop and pick later method.

4.3 General Information

The study enquired some general information about the nature of Microfinance Institution, duration the Microfinance has been in Business as well as the number of branches the Microfinance have so as to ascertain the size of the Microfinance Institutions. The general information helped eliminate research bias and ensuring that the research findings were not skewed to the views of one of the research cluster. The findings are presented below;

Table 4.2 General Information of Microfinance Institutions

Duration of Operation	Frequency	Percentage
Below 5 Years	2	11%
5 - 10 Years	6	33%
Above 10 Years	10	56%
Total	18	100%
Nature of Microfinance Institution		
Bank	3	17%
Deposit Taking Micro Finance Institution	9	50%
Credit Only Microfinance Institution	6	33%
Total	18	100%
Number of Branches		
Less Than 5	1	6%
Between 5 – 10	2	11%
Between 11 – 20	5	28%
Above 20	10	56%
Total	18	100%

The study sought to establish how long the Microfinance Institutions had existed. The study felt that enquiring the length of operation of the Microfinance was important so as to correlate the length of operation and policy formulation and structures. The study had theorized that institutions which have been in business for a longer have more solid IT governance structures than recent start-ups.

From the findings presented in Table 4.2 above, only 2 (11%) Microfinance institutions have been operating for less than 5 years. 6 institutions (33%) reported having been in operation for between 5 and 10 years while 10 institutions (56%) reported having been in operation for more than 10 years. This shows that majority of the Microfinance Institutions have been in operation for more than 10 years. However, the population represents institutions that have been in operation for a long time and recent startups. This therefore makes the researcher conclude that the findings of the study are not biased on the length of operation of a Microfinance institution.

The study also sought to establish the nature of the Microfinance Institution in order to make sure that the findings of the study are not skewed to the views of one of the research sampling strata (Banks, deposit taking microfinance institutions or credit only micro finance institutions).

From the findings presented in Table 4.2 above, 3 respondents (17%) indicated being employed by a Microfinance Banks, 9 respondents (50%) indicating working for Deposit Taking Microfinance Institution while only 6 respondents (33%) indicated that they work for a Credit only Microfinance Institution. This shows that respondents from Credit Only

Institutions were less willing to respond to the research as compared to the other sample groups. However, the researcher got a representative sample from the three groups of respondents and hence can conclude that the findings of this study are not biased to the working environment of the respondents.

The study further sought to establish the current branch network of the Microfinance Institutions selected for the study. This was important because organizations with large branch networks tend to have functional IT governance structures to limit employee behavior and ensure system lapses are minimized at all cost.

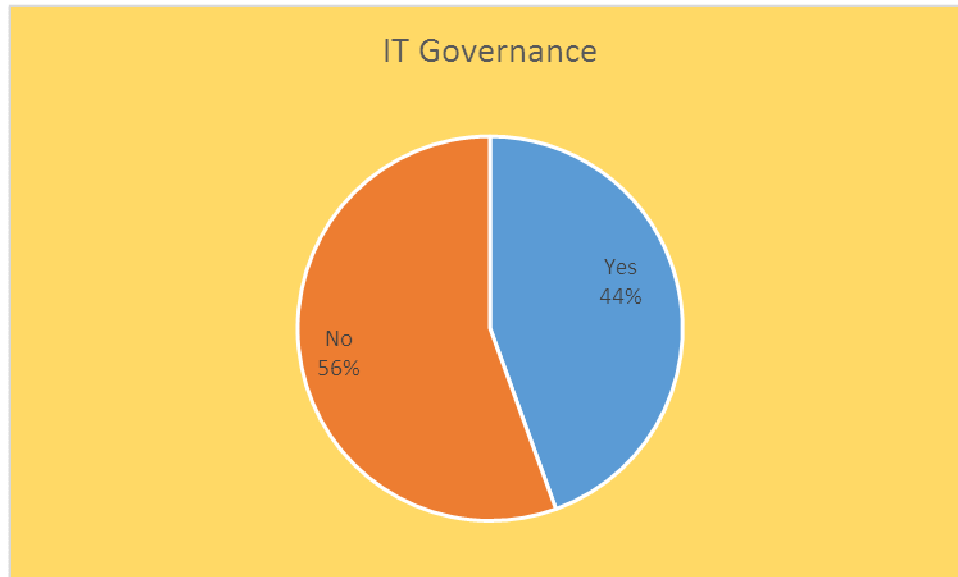
The findings presented in Table 4.2 above, only one respondent (6%) indicated that the workplace has less than five branches. 2 respondents (11%) indicated having between 5 – 10 branches while 5 (28%) respondents indicated the workplace has between 11 and 20 branches. 10 respondents however indicated that the organization they work for has more than 20 branches. The current branch network was meant to gauge the size of the Microfinance institutions. From the findings of the study, the researcher can conclude that IT governance, Business IT Alignment to business is not dependent on the size of the organization.

4.4 IT Governance Frameworks

The study sought to find out whether the Microfinance Institutions in Nairobi County have existing IT governance frameworks. This was important in order to ascertain the extent of IT Governance Framework implementation in the Microfinance Institutions.

The study findings are presented below;

Figure 4.2 IT Governance



The findings presented in Figure 4.1 above, 56% of the respondents indicated that there were no existing IT governance frameworks at their work places. However, 44% of the respondents indicated that there have IT governance frameworks in place at their work places. The study went further to enquire which IT governance framework was more popular and the findings are presented below.

Table 4.3 Governance Frameworks Adopted

IT Framework	Frequency	Percentage
COBIT	3	17%
ITIL	3	17%
ISO	2	11%
NONE	10	56%
Total	18	100%

From the findings presented above, 3 respondents (17%) reported using COBIT while 3 respondents (17%) indicated using ITIL framework of IT Governance and 2 responded (11%) indicated using ISO. This means that COBIT & ITIL are the most popular IT Governance framework in Microfinance institutions. It is however a matter of concern that 56% of the respondents were not aware of IT governance frameworks in their work places. This is an indication that IT governance structures are not aligned to the business operations of the Microfinance Institutions.

The study went further to examine the length of time the institutions had aligned their IT Governance to their day to day business operations. The findings are presented below

Table 4.4 Length of using IT governance

	Frequency	Percentage
Zero	10	56%
1-2 Years	1	6%
3 - 5 Years	3	17%
Above 5 Years	4	22%
Total	18	100%

The study found out that 22% of the respondents had been using the IT Governance for over 5 years. 3 respondents (17%) indicated having used IT governance frameworks for between 3 and 5 years with only one respondent (6%) indicated having used IT governance for less than 2 years. This shows that IT Governance is not a new concept since some of the institutions had used these frameworks for more than 5 years.

The study also sought to assess the departmental impact of implementation of IT Governance frameworks among Microfinance Institutions. In order to carry out this assessment, the researcher assumed that in all the organizations there were the standard five departments (Finance, ICT, HR and Administration, Operations and Audit). The findings are presented below.

Table 4. 5 Departmental Impact of IT Governance

Department	N	Mean	Standard Deviation
Finance	18	2.44	3.40
IT	18	4.17	4.10
Operations	18	1.89	4.02
HR & Admin	18	1.28	4.98
Audit	18	1.44	4.71

The findings presented above indicate that IT Governance has the biggest impact on the IT department as compared to other departments. The finance department comes in second with operations ranking third. From the findings of the study, usage of IT Governance has the least impact on the Audit and Human resource department.

The study finally checked the existence of IT Governance structures, processes and relationship mechanisms in Microfinance Institutions in Nairobi County.

Table 4. 6 Structures, Processes and Relationship Mechanisms

IT Governance Framework	N	Mean	Standard Deviation
IT representation at Board level	18	2.89	3.17
Senior executive in-charge of IT governance	18	4.44	4.52
IT steering committee	18	3.11	3.17
There are IT performance measures	18	2.61	3.28
There is an IT governance Framework	18	3.39	3.28
A budget for IT projects	18	3.89	3.74
Business managers understand IT.	18	2.33	3.50
IT managers take part in Strategy formulation.	18	2.00	3.87
Strategic meetings between IT and business	18	1.72	4.26
Total		3.00	3.56

The findings presented in table 4.6 above, shows that majority of the respondent agreed that there are frequent strategic meeting between IT and Business in their organization.

This affirmation has the greatest impact towards ensuring the IT governance framework implemented will align smoothly with the business organization of the firm. On the other hand having a senior executive in charge of IT was rated the most inefficient way to ensure business IT alignment. These findings point out that if the implementers of a policy are not knowledgeable in IT and are not involved in its formulation the policy is likely not to be efficiently implemented. The research can therefore conclude that even if there is IT Governance which is up and running when the end users, the business and IT managers are not for the idea the desired benefits will not be achieved.

4.5 Business IT Alignment

The study sought to establish how the current IT Governance frameworks have been aligned to the business operations. The alignment of IT governance frameworks to business is theorized to have a positive impact on the corporate strategy implementation. The findings are presented below.

Table 4. 7 Business IT Alignment

Business Alignment	N	Mean	Standard Deviation
IT strategy are in harmony with Business strategy	18	1.83	4.10
Business management has a good understanding of IT	18	1.83	4.10
There is a shared vision about the role of IT in driving organization strategies	18	2.89	3.17
Business and IT planning are closely integrated and aligned	18	3.00	3.16
Business managers are involved in design of security, privacy and risk management policy	18	2.00	3.87
Business end users contribute in the design and implementation of new IT systems.	18	3.22	3.20
IT projects are aligned to Corporate Business Strategies	18	1.78	4.18
Business are aware about IT performance	18	1.61	4.43
Technology has evolved to become more than just business support	18	1.67	4.35
Total		2.20	3.84

Basing on the findings presented in table 4.7, majority of the respondents strongly agree that the communication to the business managers about the performance of IT services had the greatest impact on Business IT Alignment in Microfinance Institutions in Nairobi County. These findings indicate that business and IT planning being tightly interconnected has the least effect on Business IT alignment. These results compare with findings in table 4.6 which indicate that the involvement of the implementing officers in

the alignment of business to the IT strategy has the biggest impact on the smooth implementation of the corporate strategy.

4.6 Business Strategy Delivery

The study sought to establish how Business IT alignment had contributed to the corporate strategy delivery in Microfinance institutions. The study theorized that aligning the IT strategy to the Business strategy had a positive impact on the Strategy Delivery. The findings are presented below.

Table 4. 8 Business Strategy Delivery

Strategy Delivery	N	Mean	Standard Deviation
Shareholders Satisfaction	18	2.22	3.61
The Customer Satisfaction	18	2.39	3.44
Efficiency And Effectiveness	18	2.22	3.61
Meeting Future Needs	18	2.61	3.28
Increased Business Productivity	18	1.89	4.02
Positive Financial Performance	18	2.67	3.25
Mitigation of IT Risks	18	1.50	4.61
Added Competitive Edge	18	1.56	4.52
Encouraged Innovation	18	1.89	4.02
Total		2.10	3.82

The findings presented in Table 4.8 above show that the alignment of IT to business enabled Microfinance Institutions in Nairobi County to mitigate IT related risks, gave them a competitive advantage over their competitors as well as encouraging innovation among staff which had a positive impact on the business productivity. The increased

efficiency and effectiveness caused by the automation of key operational activities had increased customer and shareholder satisfaction. However, since technology is dynamic, it doesn't guarantee that the current technological improvements will meet the needs of the future. Lastly, the continuous improvement of technology as well as adopting new technologies in a bid to remain competitive does not come cheaply and in the short run result to reduced financial performance. However, in the long run the benefits will be evident.

4.7 Regression between IT Governance frameworks and Business IT Alignment

The study sought to find out the relationship between IT Governance frameworks and Business IT Alignment. This was done using a uni-variate regression model where IT governance frameworks were used to determine the level of alignment. The results are presented in table 4.7 to table 4.11 below.

Table 4. 9 Model Summary

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.367	0.135	0.011	0.636	9.000

Predictors: (Constant, IT governance Framework)

Dependent Variable: Business IT Alignment

Table 4. 10 ANOVA

	Df	SS	MS	F	Significance F
Regression	1	0.442	0.442	1.092	0.331
Residual	7	2.835	0.405		
Total	8	3.278			

Predictors: (Constant, IT governance Framework)

Dependent Variable: Business IT Alignment

The significance level measures the accuracy of the model in predicting the dependent variable. Based on the findings presented in table 4.10 the significance level is 0.331 shows that there is a possibility of 33% that the results of the model are false. Therefore, the result of the regression analysis are insignificant and as a result not possible to determine the relationship between the two variables.

4.8 Regression between Business IT alignment and Strategy Delivery

The study further conducted a regression analysis to establish the relationship between Business IT Alignment and Business Strategy Delivery. The results are presented in table 4.12 to table 4.14 below.

Table 4.11 Model Summary

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.759	0.577	0.516	0.295	9.000

a) Predictors (Constant, Business IT alignment)

b) Dependent Variable: Business Strategy Delivery

The study relied on the coefficient of determination (Adjusted R Square) to show us the causal effect of Business IT Alignment on the Strategy Delivery. The models shows us that 51.6% of the success in Strategy Delivery can be traced to Business IT Alignment. This means that 48.4% of the success rate is determined by factors outside the model

Table 4. 12 ANOVA

	Df	SS	MS	F	Significance F
Regression	1	0.831	0.831	9.530	0.018
Residual	7	0.610	0.087		
Total	8	1.441			

a) Predictors (Constant, Business IT alignment)

b) Dependent Variable: Business Strategy Delivery

The ANOVA analysis enabled the researcher establish the reliability of the research model when predicting the degree of Strategy Delivery. The model was found to have a significance of 0.018 meaning that there was only a 1.8% chance that the model would give a wrong prediction. This is statistically acceptable and hence the researcher concluded that the model is reliable to make conclusions on.

Table 4. 13 Coefficients between Business IT Alignment and Strategy Delivery

	Coefficients	Standard Error	t Stat	P-value
Intercept	0.995	0.373	2.672	0.032
X Variable 1	0.503	0.163	3.087	0.018

a) Predictors (Constant, Business IT alignment)

b) Dependent Variable: Business Strategy Delivery

From the findings presented in table 4.14 above, the success of implementation of corporate strategy would be 0.995 if all factors were held constant. However, if there was Business IT Alignment, the success rate would increase by 0.5 per every unit of Business IT Alignment. As shown in table 4.12 above, there is a strong positive correlation between Business IT alignment and Business strategy delivery. The resultant model from the findings therefore would be;

$$Y = 0.995 + 0.503X$$

4.9 Discussions

The study found out that most of the Microfinance institutions sampled for this study have more than 10 branches and have been in operation for more than 10 years. A bigger percentage of those who responded either worked in a bank or in a DTM showing that potential respondents from credit only institutions were less willing to respond to the research as compared to the other sample groups. This is an indication that IT governance may not be popular in credit only Microfinance institutions.

Majority of the respondents indicated that there were no existing IT governance frameworks at their work places. However, a close to half of respondents indicated that there are IT governance frameworks in place at their work places. This means that IT governance is not widespread in Microfinance Institutions. Similarly, the usage of IT Governance was perceived to be useful to the staff in IT department only and had the

least impact on the Audit and Human resource department. This is an indication that there is a mismatch between the usage of IT Governance frameworks and the departmental perception of the possible benefits to the organization. This shows that the other departments are not aware of the contribution of using IT governance towards the actualization of the corporate strategy. However, frequent meetings between the business managers as the consumers of the IT frameworks and IT managers as the support team will always work to the benefit of the organization at large. This findings are consistent with the findings of Madiavale, (2014), who found that adoption rate of IT Governance framework in Microfinance was low and that majority of respondent in Microfinance Institution in Nairobi had little awareness on IT Governance practices.

From the responses given, COBIT & ITIL were the most popular IT Governance framework in Microfinance Institutions. Furthermore, majority of respondents who worked in institutions which had adopted IT governance indicated having used these frameworks for more than 3 years. This shows that IT Governance is not a new concept since some of the institutions had used these frameworks for more than 5 years. However, it is clear that aligning these structures to business seemed to be the real issue.

In terms of the relationship between IT Governance and Business IT Alignment the result of the regression analysis were insignificant and as a result not possible to determine the relationship between the two variables.

Finally on the relationship between Business IT alignment and Strategy delivery in Microfinance institutions in Nairobi, the findings shows a strong positive correlation

between Business IT alignment and Strategy delivery. In addition, the findings show that the alignment of IT to business enabled Microfinance institutions mitigate IT related risks. This gave them a competitive advantage over their competitors as well as encouraging innovation among staff which had a positive impact on the business productivity. The increased efficiency and effectiveness caused by the automation of key operational activities had increased customer and shareholder satisfaction. However, since technology is dynamic, it doesn't guarantee that the current technological improvements will meet the needs of the future. Lastly, the continuous improvement of technology as well as adopting new technologies in a bid to remain competitive does not come cheaply and in the short run result to reduced financial performance. The findings are consistent with findings Luftman and Brier, (1999) who concluded that organization that align their Businesses to IT have the capability to transform, have high growth and improve performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, the conclusions, the recommendations and areas of further research in the quest to establish the relationship between IT governance, Business IT Alignment and Strategy Delivery in Microfinance Institutions in Nairobi County.

5.2 Summary of Findings

The study found out that most of the Microfinance institutions sampled for this study have more than 10 branches and have been in operation for more than 10 years. A bigger percentage of those who responded either worked in a bank or in a DTM showing that potential respondents from credit only institutions were less willing to respond to the research as compared to the other sample groups. This is an indication that IT governance may not be popular in credit only Microfinance institutions.

Based on the first objective of the study which was to establish the extent to which Microfinance institutions in Nairobi County are using IT governance frameworks, the study findings show that majority of the respondents indicated that there were no existing IT governance frameworks at their work places. However, a close to half number of respondents indicated that there are IT governance frameworks in place at their work places. This means that IT governance is not widespread in Microfinance Institutions.

On the second objective of assessing how the current IT Governance frameworks are related to Business IT alignment of Microfinance institutions in Nairobi County the results of the regression analysis were not conclusive and that could not determine the relationship of the two variables.

On the final objective of exploring the relationship between Business IT alignment and Strategy delivery in Microfinance institutions in Nairobi County, the study found out that there was a strong positive correlation between Business IT alignment and Strategy delivery and that majority of the success in Business Strategy Delivery can be traced to Business IT Alignment.

5.3 Conclusions

The study found out that majority of the respondents sampled were not aware of the existence of IT governance frameworks in their work places. The findings further show that majority of the respondents worked for DTM. The study can conclude majority of Microfinance in Nairobi County have not implemented IT governance but close to half of institutions have implemented IT governance frameworks but they have not aligned these structures to their business operations.

The study finally concludes that Business IT Alignment has a positive impact on the Strategy delivery. The study found that there is a strong positive correlation between Business IT alignment and Strategy delivery. The findings show that the alignment of IT to business has enabled Microfinance Institutions mitigate IT related risks giving them a competitive advantage over their competitors as well as encouraging innovation among

staff which had a positive impact on the business productivity. The study can therefore conclude that alignment of IT to business has a positive impact on the corporate strategy delivery.

5.4 Recommendations

The study concluded that majority of Microfinance in Nairobi county have not implemented IT governance frameworks and therefore the study recommends regulation especially credit only Microfinance which are not regulated to enable them to implement corporate governance practices especially ensuring IT representation at the board level as well as in senior management who will be in charge of IT Governance. For DTM and Microfinance Bank it compulsory for them to have governance structure as they are regulated by CBK and they should ensure they have IT representation at the top level of Board to encourage IT governance.

The researcher noted that there was a mismatch between the various departmental staff regarding the usefulness of IT governance and Business IT Alignment to business and recommends that the IT managers should sensitize the other departments that the policy is not just meant to benefit the IT department staff but the organization at large. The study further recommends that there be constant communication between the IT and Business managers to ensure unity of purpose.

The researcher found a positive correlation between Business IT alignment and Strategy delivery. This means that if the IT strategy is aligned to the business strategy of an organization, the organization's corporate strategy is likely to be achieved within the

stipulated period. The study therefore recommends that there be harmony between IT managers and Business managers towards delivering the corporate strategy through ensuring alignment.

5.5 Limitations of the study

The study focused on Microfinance Institutions in Nairobi County and so the research did not provide a generalization of all Microfinance institutions in Kenya. In addition, the population size was small which could have led to inconclusive results on the relationship between IT governance and Business Alignment and therefore a larger population should be considered in future.

5.6 Suggestions for Further Research

The study found out that a sizeable number of Microfinance institutions had not implemented IT governance frameworks despite their potential benefits. This study therefore recommends a further study to establish the factors that affect the implementation of IT governance in Microfinance institutions in Kenya.

There is also a need to carry research on the relationship between IT Governance and Strategy Delivery.

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APPENDIX 1:

QUESTIONNAIRE

My name is Raphael Njehu and I am conducting a research on IT governance, business IT alignment and strategy delivery in microfinance institutions in Kenya for my post graduate studies in the University of Nairobi. The information you provide will remain confidential and will be used only for the purposes of academic purposes. Kindly take a few minutes to complete this questionnaire

SECTION 1: General Information

1) Name of Institution(Optional)

2) How long has your Institution been in business?

- i) Below 5 years
- ii) 5 – 10 Years
- iii) Above 10 Years

3) Nature of Microfinance Institution

- i) Bank
- ii) Deposit Taking Microfinance Institution
- iii) Credit Only Microfinance Institution

4) How many branches does the bank have in Kenya?

- i) Less than 5
- ii) Between 5 - 10
- iii) Between 11 - 20
- iv) Above 20

SECTION 2: IT Governance Frameworks.

- 1) Are there any IT Governance initiatives in your organization?
 - i) Yes
 - ii) No

- 2) If Yes in 1. Above, Which IT governance framework do you use?
 - i) COBIT
 - ii) ITIL
 - iii) ISO
 - iv) NONE
 - v) Other(Specify)

- 3) If Yes in 1. Above, how long have you been using the IT Governance Frameworks?
 - i) 1-2 years
 - ii) 2-5years
 - iii) Above 5 years

4) Extent of IT Governance Framework implementation in the following departments.

Departments	To a very large extent (5)	To a large extent (4)	To a moderate extent (3)	To a less extent (2)	Not at all (1)
Finance					
IT					
Operations					
HR & ADMIN					
Audit					
Other(Kindly Indicate)					

5) Kindly indicate the degree to which you agree with each of the items as they apply to your organization?

	Strong Agree	Agree	Neutral	Disagree	Strongly Disagree
There is IT expertise at the level of board of directors					
There is a senior executive who is in-charge of IT governance e.g CIO					
There is an IT steering committee at executive level					
There are IT performance measures for example organization contribution, future orientations					
There is an governance and control Framework e.g COBIT that is used to govern IT					
There is a budget set up for IT projects or processes					
Business managers have a good understanding of IT.					
IT managers take part in the formulation of corporate strategy.					
Frequent Strategic meetings between IT and business					

SECTION 3: Business IT Alignment

Kindly indicate the degree to which you agree with each of the items as they apply to your organization?

	Strong agree	Agree	Neutral	Disagree	Strongly Disagree
IT strategy are in harmony with Business strategies, goals and needs established by executive management					
Business management has a good understanding of the impact of IT on the Business.					
Business and IT management have a shared vision of the role of IT in enabling business strategies					
Business and IT planning and management processes are tightly connected and integrated					
There is adequate involvement of the Business in security and privacy matters					
Business key-users participate in the design and development of new IT systems.					
IT projects are aligned to Corporate Business Strategies					
Your organization fosters transparency and communication to the Business of the performance of IT services.					
Technology has evolved to become more than just business support					

SECTION 4: Strategy Delivery

1. Kindly indicate the degree to which your institution has achieved the following strategic objectives as a result of Business IT Alignment.

Benefits	Strong agree (1)	Agree (2)	Disagree (3)	Neutral (4)	Strongly Disagree (5)
Shareholders satisfaction					
The customer satisfaction					
Efficiency and effectiveness					
Meeting future needs					
Increased business productivity					
Positive financial performance					
Mitigation of IT Risks					
Added competitive edge					
Encouraged innovation					

THE END

APPENDIX 2:

LIST OF MICROFINANCE INSTITUTIONS IN NAIROBI

1. Faulu Microfinance Bank Ltd
2. Kenya Women Microfinance Bank Ltd
3. SMEP Microfinance Bank Ltd
4. Remu Microfinance Bank Ltd
5. Rafiki Microfinance Bank Ltd
6. Uwezo Microfinance Bank Ltd
7. Century Microfinance Bank Ltd
8. Sumac Microfinance Bank Ltd
9. Musoni Kenya Ltd
10. U&I Microfinance Bank Ltd
11. Jamii Bora Bank
12. Caritas Microfinance Bank Ltd
13. Maisha Microfinance Bank Limited
14. BIMAS
15. ECLOF Kenya

16. Jitegemea Credit Scheme

17. Platinum Credit

18. Premier Credit

