

**EFFECT OF INNOVATIONS MANAGEMENT ON GROWTH OF  
MICROFINANCE BANKS IN NAIROBI**

**BY**

**DENIS NDOLO MATAYO**

**A RESEARCH PROPOSAL SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE IN  
ENTREPRENEURSHIP AND INNOVATIONS MANAGEMENT  
DEGREE, UNIVERSITY OF NAIROBI**

**OCTOBER, 2016**

## **DECLARATION**

I declare that this is my original work and has not been presented to any other institution or university other than the University of Nairobi for examination.

Signed: ..... Date:.....

DENIS NDOLO MATAYO

D66/72578/2014

This Research project has been submitted for examination with my approval as the University Supervisor;

Signed:..... Date:.....

DR. FLORENCE MUINDI,

Senior Lecturer,

School of Business, Department of Business Administration,

University of Nairobi

## **ABSTRACT**

Today, it has become increasingly unfavorable for companies to tie themselves to the traditionally used methods of production. Due to the highly dynamic and competitive environment, companies have been compelled to be more innovative in order to survive. This study sought to establish the effect of innovations management on the growth of microfinance banks in Kenya. The researcher sought to understand the concepts and context of study by critically evaluations previous studies to understand the research gaps. The study was prompted by the fact that microfinance banks were on the rise in Kenya. Literature was review was done on the key areas of the study which were innovations management and growth of microfinance banks in Kenya. Moreover, a review of previous empirical studies was conducted on the interactions of the two concepts in an attempt be better understand the relationship between the two variables. After critical analysis of previous studies, the researcher identified a number of research gaps that needed further investigation. The impact of innovation management on the growth of microfinance banks in Kenya had not been clearly established. It was this gap that the study endeavored to fill. The study used primary data that was gathered though use of self-administered structured questions. Data collected was sufficient enough to warranty conclusions about the study. The response rate was high enough at 90% and all questions in the questionnaires were filled well. The data was analyzed with the assistance of Statistical Package for Social Sciences software and presented through tables and figures. Regression analysis was also done to establish the relationship between the variables of the study. Interpretations were made on the results of the study and revealed that the microfinance banks were increasingly innovative overtime. Evidence from primary data also revealed that the microfinance banks had achieved significant growth in the past five years as measured through branch network, number of staff, average client deposits and level of assets among other parameters. Finally, recommendations and conclusions were made as well as suggestions for further studies.

## Table of Contents

<b>DECLARATION</b> .....	<b>ii</b>
<b>ABSTRACT</b> .....	<b>iii</b>
<b>LIST OF TABLES</b> .....	<b>vii</b>
<b>LIST OF FIGURES</b> .....	<b>vii</b>
<b>ABBREVIATIONS AND ACRONYMS</b> .....	<b>viii</b>
<b>CHAPTER ONE: INTRODUCTION</b> .....	<b>1</b>
1.1 Background of Study.....	1
1.1.1 Innovations Management .....	2
1.1.2 Business Growth.....	3
1.1.3 Microfinance Banks in Kenya .....	4
1.2 Research Problem.....	5
1.3 Objective of the study .....	6
1.4 Value of the study .....	7
<b>CHAPTER TWO: LITERATURE REVIEW</b> .....	<b>8</b>
2.1 Introduction .....	8
2.2 Theoretical Foundations of the Study .....	8
2.2.1 Schumpeter’s Theory of Creative destruction .....	8
2.2.2 Theory of Planned Behavior.....	10
2.3 Types of Innovations.....	10
2.3.1 Product Innovations.....	11
2.3.2 Process Innovation.....	12
2.3.3 Market Innovation .....	12
2.4 Innovation Management Strategies.....	13
2.5 Growth of Microfinance Institutions.....	14
2.6 Innovations Management and Business Growth.....	16
2.7 Conceptual Framework .....	18
<b>CHAPTER THREE: RESEARCH METHODOLOGY</b> .....	<b>19</b>
3.1 Introduction .....	19
3.2 Research Design.....	19
3.3 Target Population .....	19

3.4 Data Collection.....	19
3.5 Data Reliability and Validity.....	20
3.7 Data analysis .....	20
<b>CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRENTATION .....</b>	<b>22</b>
4.1 Introduction .....	22
4.2 Response Rate .....	22
4.3 Innovations Management .....	24
4.3.1 Innovations Management Team .....	24
4.3.2 Types of Innovation Management .....	24
4.3.4 Investment in Research and Development .....	26
4.4 Product Innovations.....	27
4.4.1 New Products.....	27
4.4.2 Improvements on Existing Products.....	28
4.4.3 Investment in New Product Development (NPD) .....	28
4.4.4 Patents, Trademarks and Copyright Acquired.....	29
4.5 Process Innovations.....	30
4.5.1 New Technology Procedures.....	30
4.5.2 Access to Mobile Banking.....	30
4.5.3 Investment in Information, Communication and Technology.....	31
4.5.4 Queue Management Systems.....	32
4.6 Marketing Innovations .....	32
4.6.1 Marketing Segmentation.....	32
4.6.2 Investment in Corporate Social Responsibility (CSR) .....	34
4.6.4 Investment in Marketing Programs .....	34
4.7 Organizational Innovations .....	35
4.7.1 Performance of Suppliers .....	35
4.7.2 Form of Business Ownership .....	38
4.7.3 Major Partnerships with other Organizations .....	38
4.7.4 Organizational Structure Decisions .....	39
4.8 Growth of Microfinance Banks.....	39

4.8.1 Number of Savings Accounts .....	39
4.8.2 Number of Branches .....	40
4.8.3 Number of Staff .....	41
4.8.4 Growth in Assets .....	42
4.9 Regression Analysis .....	42
4.10 Discussion of Research Findings .....	44
<b>CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>46</b>
5.1 Introduction .....	46
5.2 Summary of Findings and Interpretations .....	46
5.3 Conclusions .....	48
5.4 Recommendations .....	49
5.5 Limitations of the Study .....	49
5.6 Suggestions for Further Research .....	50
<b>REFERENCES.....</b>	<b>51</b>
<b>APPENDICES .....</b>	<b>55</b>
Appendix 1: Questionnaire.....	55
Appendix 2: List of Microfinance Banks in Kenya .....	60

## LIST OF TABLES

Table 4.1: Job Capacity of respondents .....	22
Table 4.2: Age of microfinance banks .....	23
Table 4.3: Investment in Research and Development .....	27
Table 4.4: Investment in New Product Development (NPD) .....	29
Table 4.5: New Technology Procedures .....	30
Table 4.6: Investment in Information, Communication and Technology.....	31
Table 4.7: Queue Management Systems.....	32
Table 4.8: Marketing Segmentation.....	33
Table 4.9: Investment in Corporate Social Responsibility (CSR) .....	34
Table 4.10: Major Partnerships with other Organizations .....	38
Table 4.11: Number of Savings Accounts .....	39
Table 4.12: Number of Branches .....	40
Table 4.13: Number of Staff .....	41
Table 4.14: Total Number of Assets .....	42
Table 4.15: Summary of regression model .....	43
Table 4.16: Regression Coefficients .....	44

## LIST OF FIGURES

Figure 2.1: Conceptual Framework .....	18
Figure 4.2: Job Capacity of respondents.....	23
Figure 4.3: Innovations Management Team .....	24
Figure 4.4: Process Innovations.....	25
Figure 4.5: Market Innovations.....	25
Figure 4.6: Market Innovations.....	26
Figure 4.7: New Products .....	27
Figure 4.8: Improvements on Existing Products.....	28
Figure 4.9: Patents, Trademarks and Copyright Acquired .....	29
Figure 4.10: Access to Mobile Banking .....	31
Figure 4.11: Marketing Segmentation .....	33
Figure 4.12: Investment in Marketing Programs .....	35
Figure 4.13: Competitiveness Suppliers .....	35
Figure 4.14: Reliability of suppliers .....	36
Figure 4.15: Innovativeness of suppliers .....	36
Figure 4.16: Responsiveness of the supplier.....	37
Figure 4.17: Efficiency of suppliers.....	37
Figure 4.18: Number of Savings Accounts.....	40
Figure 4.19: Number of Staff.....	41

## **ABBREVIATIONS AND ACRONYMS**

**CEO**- Chief Executive Officer

**CSR**- Corporate Social Responsibility

**ERP**- Enterprise Resource Planning

**ICT**- Information, Communications and Technology

**KPIs**- Key performance indicators

**MFIs**- Microfinance institutions

**NGOs**- Non-governmental organizations

**PWC** - Price Waterhouse Coppers

**RBV**- Resource based view

**SPSS**- Statistical Package for the Social Sciences

**UN**- United Nations

**UNDP**- United Nations Development Programme

**US**- United States

**USAID**- United States Agency for International Development



## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background of Study**

Innovation has been described as the engine that propels the business to the extent that firms that do not embrace innovations are stagnant. In today's markets, there is absolutely no room for organizations that cannot continually envision, conceptualize and bring innovations that are highly valued by the customers (Bhide, 2010). The environment and markets today are highly dynamic. For instance, a new entrant shows up in the market and doesn't play by the rules. In such cases, it becomes more difficult to even innovate incrementally calling for radical innovations in the market. Proper management of innovations results in improved profit margins increase; Customer satisfaction; improved market share, market development, economies of scale and eventually improved competitive advantage. In organizations that keenly embrace innovations management, there employee participation and achievement recognition which consequently results in employee motivation. Motivated employees serve customers better, especially in the service sector. Innovation is about improving organization and consequently developing growth. Drucker (1988) views innovation as a deliberate effort which is focused in archiving change in an organization's economic or social potential. He also argues that there are a number of ways in which growth can occur such as shorter lead times, better service quality and cost reduction, lower opportunity costs, and increased turnover in profit-focused organizations.

Scholars like Schumpeter (1942), Thomas (2007), and Ajzen (1991) propounded theories and models in an attempt to explain innovations and their impact on growth. Some of the theories that have made significant contributions to this subject include Schumpeter's theory of innovation; theory of creative destruction, resource based view and also the planned behavior theory. Schumpeter argues in his theory that innovation and technological progress of any given economy come from the entrepreneurs. He used the creative destruction theory to describe a situation where through continuous product and process innovation mechanisms, outdated units are replaced by new production. Ajzen (1991) in the theory of planned behaviors holds that the behavior of an individual is

influenced by their behavioral intentions. Another key contribution was resource-based view in whereby organizations can effectively use the resources at their disposal to create innovations.

The significance of microfinance institutions (MFIs) in reaching the majority of the population has gained acceptance in Kenya overtime. In the recent past, banks were perceived as meant for the high economic status individuals. However, over the past two decades, Kenya's microfinance sector has increased its network to reach micro and small scale entrepreneurs. There has been heightened competitive innovations in the MFI sector resulting in some of these MFIs been banks (Mbogo & Ashika, 2011). Moreover, there have been close links between MFIs and entrepreneurial activity in the country. This relationship has been encouraged by the government among other partners in an effort to address the number one challenge of entrepreneurship in Kenya, access to finance. For instance, government funds in support of startups have been channeled through MFIs. There have also been partnerships with various mobile service providers. There is an urgent need for MFIs to foster entrepreneurship, provide opportunities, improve employment and improve living standards among the poor.

### **1.1.1 Innovations Management**

Innovations can be defined as the transformation of processes that eventually result in new offerings both to the internal and external customers of an organization. Lumpkin and Dess (1996), believe that innovation can be defined as "the tendency of a firm to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products or technological processes". Schumpeter (1949) also defined innovation as seen through new markets, new products, new sources of raw materials, methods of production which are new, or even through new ways of organization or structures. Previous research has shown that new ideas for product have emerged and process innovations in the SMEs to entrepreneur. (Lehtimaki, 1991). Consequently, innovations lead to emergence of new ventures as well as growth of existing companies.

According to Luecke and Katz (2003) innovation management results in the introduction of new methods or things. It is the process of managing innovations, or ideas in the organizations through the stages of the innovation cycle. This cycle involves the stages in

which ideas are changed into market offerings. This process involves gathering ideas, find resources required, validating the ideas, getting the necessary patents, designing and developing the product , marketing of the product and generally commercialization of the innovation. In a nutshell, innovation management is the economic exploitation and implementation of brand new discoveries and ideas. It involves fostering innovation culture in organizations and to promote the development of business opportunities and new ideas. For innovative firms, innovations management is included as part of the business strategy (Turrell; Lindow 2003). Deloitte (2005) also observed that innovation management involves the internal processes, organizational structure, and the management techniques. According to Kroy (1995), innovations management also involves determining the optimal product innovation mix. These include incremental innovations, technological substitution, radical innovations and market innovations.

### **1.1.2 Business Growth**

Business growth in financial terms is the increase in business revenues or sales. According to the Gudda (2003), business growth can be seen as the process of improving some significant measure of an enterprise's success. It can be achieved either by boosting the core business or revenue of the business with greater product sales or service income or by increasing the bottom line or profitability of the operation by minimizing costs. It can be measured through jobs created; return on investment; branch network and market share (Ahmed 2005). Two main growth models were developed to elaborate the stages of growth of firms. These models include the evolutionary theory of small firm growth which emphasizes firm history, adaptability, and post-entry learning as main influencers of growth. The other is the entrepreneurial theory of business growth cycle where the stages of growth are seen as sequential but overlapping.

Many scholars and researchers viewed growth as the output of innovation. Most authors agree that innovations involve the introduction of new things which eventually result in improved performance. For instance, according to Levine (1980), innovation is the as departure from the old organization practices. Wilson (1996) also added that innovation involves changes or improvements in fundamental tasks of the organization. According to him, innovation involves change but it is not necessary. Damanpour and Evan (1984) also

defined innovation in organizations as the implementation of internally or externally borrowed ideas which result into a process or a product which is considered new to the organization. According to Penrose (1959) enterprises comprise of resources which are internal or external, the resources help enterprises to achieve competitive advantages. Companies can increase their size continuously by limiting the growth enterprise. The growth of an enterprise can be determined by the growth at which the experienced managerial staff are able to design and implement the innovative strategies.

### **1.1.3 Microfinance Banks in Kenya**

Robinson (2001), microfinance refers to all types of financial intermediation services which including savings, credit funds transfer, and remittance of pension among others which are offered to enterprises in both the rural and urban areas. Employees in the public and private sectors and those who are self-employed are also included. They provide services to both the formal and informal sector. Microfinance has been defined as “the attempt to improve accessibility to the small deposits and loans for poor the households which are neglected by banks.”

According to Schreiner and Colombet (2001), the Key Performance Indicators (KPIs) of microfinance institutions were clearly elaborated by Kereta (2007) using a diagrammatic presentation named the microfinance triangle. Kereta referred to this as the critical microfinance triangle. In this, he argues that the success of microfinance can be measured through the impact it has on the society, the extent to which its services are accessible by the low-income earners, and the financial sustainability. The impact, in this case, can be measured at three main levels namely; individual level, community level, and the regional level. However, it should be noted that MFI performance assessment is multifaceted and cannot, therefore, be studied in isolation. The products of microfinance can be categorized into three broad categories namely; micro credit; micro savings; and other financial and non-financial services. Understanding the client is a critical success factor in MFIs. Their products are essentially designed to target the low-income clients who have limited access to conventional banking.

In Kenya, the activities of MFIs are present in almost every county. These financial institutions have identified the large market composed of the medium and low-income

earners that have been untapped. Kenya is composed of a larger informal sector which presents a bigger opportunity for MFIs. According to the Central Bank of Kenya (CBK) (2016), there are fourteen licensed microfinance institutions in Kenya which are deposit taking. However, there are a number of other non-deposit taking MFIs. The government of Kenya through CBK (2015) has devoted to continuously expand this sector in line with vision 2016.

## **1.2 Research Problem**

Innovations in the financial sector have been identified as of key importance in spurring the growth of microfinance institutions. According to Mohanty and Panda (2007), financial innovation is geared towards the introduction of new products and financial intermediation which is an imperative factor in the growth of microfinance institutions. In proposing this view, Chege (2008) adds that microfinance institutions generate marginal revenues from new products. Surprisingly, a study by Mugo (2012) indicated that more than 50% of the Kenyan population is either banking with the informal sector or unbanked. This is a great opportunity for microfinance institutions which will need to design a different kind of products to target this market. Undoubtedly, the capability to present successful innovations in the market will be key detriment for upcoming businesses. Today, the market is highly dynamic characterized by rapidly changing market needs, globalization and new technologies resulting in hostile moves by organizations in attempt to stand and beat competition (Bhide, 2010). This is more visible in liberal markets where players have no limits to the extent in which they could control the market dynamics. In free market economies, only the strongest players succeed in the market while weak players are suppressed by the unfavorable competition. This has become a great concern especially for the third world capitalistic economies where indigenous productivity has been significantly affected competition from developed economies.

However, this position has been debated by a number of scholars. Research has shown that innovation can be risky and failure can be an outcome of product innovations (Cooper, 2001). West and Farr (1989) argued the benefits of innovation can vary and may

not accrue at all. Other scholars argued that relationship can be U-shaped, with low and high levels of innovation resulting in the highest performance (Cooper & Brentani, 1991).

Previously, MFIs in Kenya have faced many challenges slowing down their growth. However, through innovations, these firms have been able to achieve considerable levels of growth. For instance, four MFIs have become fully registered banks namely Family Bank, Equity Bank, Jamii Bora Bank K-Rep Bank and the while others are seen to be struggling to penetrate the market. However, the collapse of major banks like Imperial bank, Dubai bank and Chase bank has caused unrest in the financial industry. Currently, MFIs have captured the attention of banks and other mobile banking service providers as they have proven to be a viable business with a competitive edge. MFIs have grown immensely in the recent past since they target the majority of the population. Current statistics indicate that in every five Kenyans, one is a member of a MFI or a SACCO. Microfinance banks must innovate and go beyond the micro loans to make sector more profitable and sustainable (Imady & Seibel, 2003).

Studies have been conducted to establish the role of innovations in the growth of microfinance institution, there is no sufficient evidence of similar studies in Kenya. For instance, Imady and Seibel (2003) studies microfinance institutions in Syria. In analyzing the factors of growth of microfinance, studies done in Kenya have not considered the impact of innovations. An example is Chege (2008) who analyzed a case of the common strategies applied by Equity Bank, which did not identify the trend of MFI's innovation over time. Moreover, these studies have been case studies of a few firms rather than a survey to give a more comprehensive description of this relationship. Regardless of the contributions of previous researchers, there is still a great need for a more comprehensive study to explain the role of innovations in microfinance growth. This study is necessary to determine what kinds of innovations have been used in these institutions and what level of growth has resulted from these innovations.

### **1.3 Objective of the study**

The general objective of this study is to determine the effect of innovations in the growth of microfinance banks located in Nairobi.

## **1.4 Value of the study**

Findings of the study contribute to existing innovation theories and more specifically innovations in the growth of Micro Finance Institutions. The study findings will also add to the existing theory of financial innovation the correlation between financial innovation and growth.

This will be a reference point for scholars and future researchers. Its findings shall be used by other researchers on scholars in understanding and describing other phenomena in the area of innovation and financial sector. The study shall also suggest further studies that in this area those researchers can conduct to enhance the body of knowledge.

The recommendations and conclusions of the study will help managers to understand importance of innovations in achieving growth. The study will be very informative for management teams especially in MFIs and will help them in strategy and decision making. It will provide answers to some of the challenges that face this institutions from day to day.

To the regulators, it will assist the government to create favorable policies and contusive environment to encourage innovation at different levels (Llanto & Fukui, 2003). Through this study, policy makers will appreciate and understand the relevance of innovations in transforming societies and the economy as a whole. The information will also guide their choice of policies.

Moreover, the findings of this study will help potential and existing and potential customers the efficiency and convenience that comes with microfinance banks. Innovations enables organizations win the trust and confidence in the market. By providing evidence to support this statement, there will be more confidence in the industry.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter reviews both the theoretical frameworks and empirical studies that been conducted around the major concepts of this study. In the theoretical framework, this chapter discusses Schumpeter's Theory of Creative destruction and Ajzens theory of planned behavior which lay a fundamental background on the role of innovations. On the other hand, in the empirical framework, although some of these studies may have been conducted in a different context or using slightly different concepts, this chapter shall review majority of previous studies in the field of innovations in microfinance to enable clearly understand the research gaps.

### **2.2 Theoretical Foundations of the Study**

The concept of innovations has been described differently by different theorists. One of the earliest proponents of innovations was Schumpeter (1934) who used the concept of innovation to explain entrepreneurship. Lumpkin and Dess (1996) define innovation as "the tendency of a firm to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services or technological processes" Moreover, innovation has been defined as the tendency toward technological leadership resulting in a rigorous and frequent product innovation (Covin & Slevin, 1991).

This study shall adopt two main theories namely; Schumpeter's Theory of Creative destruction and Ajzens theory of planned behavior. Schumpeter's views innovations as interruptions in the market that result in new products, markets, sources of raw materials, methods and markets. On the other hand, theory of planned behavior holds that innovative and entrepreneurial behaviors are influenced by a number of factors as discussed below.

#### **2.2.1 Schumpeter's Theory of Creative destruction**

The study of entrepreneurship owes a lot to the works of Joseph Schumpeter. As such, he has been referred to as the "Prophet of innovation" He propounded the earliest theories of entrepreneurship. This theory was coined by Schumpeter (1942). In this theory, creative



destruction was a term used to describe the continuous product and process innovation mechanisms by which outdated units are replaced by new production. He argued that competition was a major determinant of creative destruction. Other factors linked to this included both microeconomic and macroeconomic factors to the firm. In his first theory, he argues that innovation and technological progress of any given economy come from the entrepreneurs. According to Schumpeter, it is entrepreneurs and not bureaucrats who make things happen in nations. He further argued that larger and established firms are more likely to be innovative since they have the capacity to widely invest in research and development (Thomas, 2007)

In this theory, Schumpeter highlighted innovation as the dominant determinant of economic revolution. His view was that economies revolve around innovation, entrepreneurial activities, and market power. He further sought to confirm that innovation-oriented companies could realize better results than the invisible hand and price competition. According to him, technological innovation eventually creates temporary monopolies, allowing abnormal profits that would soon be competed away by rivals and imitators. However, these temporary monopolies provided the incentive necessary for firms to be more innovative (Carroll, 2006). The theory is therefore criticized as been more applicable only in developed capitalistic economies. Similarly, it is more suited to large-scale production and ignores risk taking and organizing as key elements of entrepreneurs.

Schumpeter sees an entrepreneur as one who seeks to reform or revolutionize the pattern of production by exploiting an innovation. However, Schumpeter viewed innovation along with knowledge as the main catalysts of successful entrepreneurship. He believed that creativity became more necessary if an entrepreneur was to accumulate a lot of profits in a heavily competitive market. He assigns the role of an innovator to an entrepreneur. He further distinguishes innovations from inventors who create a new product in that innovators utilize inventions and discoveries in order to make new combinations.

### **2.2.2 Theory of Planned Behavior**

Key proponents of this theory include Ajzen (1991) who argues that an individual's behavior is greatly influenced by their behavioral intentions. These intentions are determined by three main factors namely; perceived behavioral control, attitude of an individual towards the subjective norm and behavior. The behavioral intention, in this case, refers to the individual's motivation to engage in certain behaviors while the subjective norm is the extent of others belief. The attitude towards the behavior refers to degree of the negative or positive behavior of interest. Theory of planned behavior, predicts an individual's intention in engaging in certain behaviors.

This theory has made a great contribution in defining the concept of innovation. Many researchers have found it extremely resourceful in describing entrepreneurial behaviors that are likely to result in innovations. Ajzen (1985); Hartwick & Barki (1994) and Lee & Kozar (2005) agree that behavioral intentions advance when individuals perceive to own more confidence and resources. This, therefore, implies that medium and large enterprises are likely to be more entrepreneurial than SMEs.

Ajzen (1991) also refers to this theory as the theory of planned action. According to him, our intentions determine our behavior; this behavior is exhibited in terms of actions taken. To increase innovations in organizations, a mechanism for influencing individual's intentions should be put in place. This is because intentions result in innovations. For instance, when people intent to achieve some objectives; they would tend to figure out the most convenient means of achieving those objectives. Positive intentions can be achieved through motivation, recognition of achievements, talents, and abilities among stakeholders.

### **2.3 Types of Innovations**

Innovations can broadly be viewed in terms of the organizational configuration, market offering and customer experience. More specifically, configuration involves the profit model in place, the organizational structures in place, networks and production processes. Market offering basically describes the product offered to the market in terms of its performance and quality. Finally, customer experience can be measure through the

quality of services, distribution and marketing channels, branding and customer engagement.

Organizations can use radical or incremental innovations. Radical innovation is mainly about major changes or shifts that could completely change the organization and eventually altering the market leading to the next great wave (Christensen, 1997; Utterback, 1996). It comes with a major investment for the firm hence higher risk. On the other hand, incremental innovations are low-risk low return improvements in product features and processes. Moreover, innovations can be classified as disruptive if they are triggered by scientific discoveries or new technologies. Disruptive innovations can appear in the niche markets and take time to show their potential in the dominating mainstream markets (Christensen, 1997). Innovations can be grouped into a number of categories to distinguish them. Johne (1999) categorized innovations as mainly: product innovation, process innovation, and market innovation as discussed below.

### **2.3.1 Product Innovations**

A product innovation involves making an improvement to the existing products in terms of its features and quality. This involves activities like product design, new product development and research and development. Each of these activities represents a particular degree of change to products. Wheelwright and Clark (1992), argue that the degree of change can include Incremental improvements, next-generation products, additions to product families, and new core products. Over time, many organizations have admitted that organizational development can only be achieved through improved product offering. According to Cooper (1998), product development achieved through several stages namely: Idea generation, preliminary investigation, detailed investigation, development, testing and validation and market launch and full production. Product development process involve the cycle from the development of ideas through research and development to feasibility studies, product testing and commercialization (Clark 1992).

According Kleinschmidt and Cooper's [(1998), new products can be categorized depending on the extent of newness. They distinguished between 'high moderate' and 'low innovativeness. Highly innovative products are products that are new to the world

and to the firm lines; they are also new to the market. Innovative products consist of less innovative new lines to the firm and new products to the existing product line. Low innovative products include modifications, cost reductions, and repositioning on already existing products.

### **2.3.2 Process Innovation**

In simple terms, product innovation can be defined as the shift or improvement in production and delivery methods resulting in value addition. Davenport (1998) defines a process as a set of interrelated tasks and activities designed to transform inputs into outputs. In the 1970s and 1980s, process innovations were revolutionized. The Japanese industry brought competitiveness in the production of cars and electronics. For instance, the adoption of the Toyota production system and kaizen significantly improved the production of Toyota Company making it the largest motor company in the world. Process innovations are characterized by the creation of value through the transformation of input to output. Due to the complexity of innovations, processes innovations take a relatively long period of time (Billing, 2003).

The most commonly used examples of process innovations include: total quality management (TQM), just-in-time (JIT), supply chain management (SCM), lean manufacturing, and enterprise resource planning (ERP). JIT improves efficiency in large production by ensuring that inventory is available just as when it's needed. TQM entails eliminating defects in the organization to ensure quality and continuous improvements. Lean productions aim at improving efficiency by eliminating all forms of waste. SCM involves building and maintaining relationships with suppliers to ensure high responsiveness, shorter lead times and reduced inventory costs. ERP is a software-based tool that integrates the information within the organization making it easily accessible to the user, making decision making quicker and making it easier to identify bottlenecks and waste.

### **2.3.3 Market Innovation**

Product and process innovation seem to be the most dominant types of innovations (Johne, 1999), marketing is critical in commercializing the output. Market innovation involves improving the marketing mix to ensure that the targeted market is well served. It

involves identifying new markets and finding new ways to serve the existing markets. Tidd *et al.* (2005) highlights that technology and markets are dynamic. Therefore understanding the trends could make a firm innovative. Market innovation strategies involve improvement on the marketing mix through product promotion, pricing models and distribution. It also involves decisions like market targeting, segmentation and channels of distribution (Johne, 1999).

According to Cooper (1983), Yoon & Lilien (1985) and Calantone *et al.* (1993), investment in market research is usually considered a success factor. Inadequate market research is considered as the main factor of failure. Some of the well-known pitfalls are over-estimated forecasts of demand and wrong translation of engineers desires into customer's needs. Firms should adequately understand the market and competition and consequently introduce new ways of gaining competitive advantages.

## **2.4 Innovation Management Strategies**

Innovations can be defined as transformation of processes that eventually result in new offerings both to the internal and external customers of an organization. One of the most significant strategies involves choosing the type of innovation to embrace. According to Lumpkin and Dess (1996) they define innovation as “the tendency of a firm to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products or technological processes”. Schumpeter (1949) also defined innovation as seen through new products, new markets, and new methods of production, new sources of raw materials or even through new ways of organization or structures. Previous research has shown that the emergence of new ideas for product and process innovations in SMEs to entrepreneur (Lehtimaki, 1991). Consequently, innovations lead to emergence of new ventures as well as growth of existing companies. Many authors (Tidd *et al.*, 2005) view innovation as a key factor for a company to survive and grow on the long run. However, the success of these innovations large depends on how the innovations are managed. Pratali (2003) observe that managing innovations is guided by the objectives of competitiveness which involve improving product quality and improving the company's overall technological quality.

There is a wide spectrum of innovation strategies which firms may follow depending on their resources, organizational culture, capabilities, and aspirations. SWOT analysis technique has been found to be a useful to in innovation strategy. However, the four main strategies have been identified by Robinson and Chiang (2002); Tidd et al., (2005); Trot (2005) as; leader strategy, fast follower strategy, cost minimization strategy and market segmentation strategy. Leader strategy is a product innovation strategy that is also referred to as offensive strategy and involves launching products before competition (Trot, 2005). It requires intensive research as well and marketing. It involves strong corporate commitment to creativity and risk taking. Fast follower or defensive strategy is suitable for firms that are very agile in design and development and marketing. This strategy can be used in product and market innovations. The cost minimizer or imitative strategy is a process innovation strategy that uses technology that is borrowed from other and doesn't intent to take the risk associated with innovation and research and development (Trot, 2005). Market segmentation specialist strategies target niche markets with an intention to serve them best.

## **2.5 Growth of Microfinance Institutions**

Business growth occurs through several stages namely; Survival, Growth, Success, expansion and Maturity (Scott & Bruce, 1987). The survival stage is highly informal with the major focus on getting new customers. The major challenge here is accessing niche markets and establishing a competitive advantage. In the growth stage, business has gained some traction in the market and it has a product with a predictable sales cycle. In the success stage, the business has achieved some considerable success (Scott & Bruce, 1987). However, there are challenges of that needs to be ironed out. In the expansion stage, the firm is certain about most aspects of its core business and begins to explore new opportunities for expansion. However, as the organization expands, its systems and structures get more complex (Scott, 1971).

When a firm has matured, poor planning and high uncertainty the business has become stable and predictable; multiple large revenue streams are in place; Margins begin to become a problem as more competitors enter the marketplace and start lowering prices, and acquisitions become a way of life for driving growth (Kathure, 2005). However,

according to Kibas (1995) and King (1996) MFIs do not grow as they would be expected, they remain in their original size categories. Research has been done and it has shown that 50% and 60% modern MFIs in Latin America and Asia grow from low to medium income (Kibas, 1995). According to Gudda (2003) he believes that only few enterprises can grow naturally from micro to small and medium. The situation was worst in Rwanda at 10.75% and 20.7% in Botswana.

While growth is the main goal of any organization, it comes with a number of challenges. Decisions on how to progress a business it takes a strategic plan and a solid understanding of how businesses grow. Based on the level at which growth occurs, there can be four types of growth which are internal business organic business growth, strategic business growth, and partnership/merger/acquisition and usually grows (Mohanty et al., 2007). Organic business growth is the traditional and most basic form of growth where organizations expand by increasing products and space for business. In this, firms expand by opening more business needs to suit the demand and penetrate the market. Although it improves new business, it involves higher risk and uncertainty. Secondly, when firms have exhausted most of their opportunities for organic growth, strategic growth begins to take shape (Mohanty et al., 2007). This form of business growth involves focusing on the long term growth objectives. There is gradual growth in sales as funds are invested in creating future sustainability. The third form of business growth is through partnerships, joint ventures, mergers and acquisitions. These enable the organizations to bring together their unique strengths and opportunities for market expansion. The last but most complex form of business growth is through internal business growth. In this, rather than looking outward to production, this business growth strategy uses current resources and determines how they can be used better. It aims at improving internal processes without significant use of resources. This could be through use of technologies and innovations.

According to Jackelen and Rhyhe (1991) microfinance was an intervention that could lessen poverty, sustain itself and realize profits at the same time. Empowerment for the low income earners occurs by providing material capital to them and improving their sense of dignity (Otero, 1999). The microfinance has played a big part in eradicating poverty, promoting education, improving health and empowering women (Otero, 2003).

## **2.6 Innovations Management and Business Growth**

Innovations management is a major driving force for organizational and economic. According to Calantone et al, (1195), innovations begin from a vision of excellence which is broken to tasks and communicated to proper innovation teams. Flexibility in coordination, configuration and leadership responsibility is necessary in the innovation process. The innovation vision should be guided by the CEO encouraging people's participation towards great performance. Innovations in organizations are manifested through product, process, market and organizational structure improvements that result in improved efficiencies and customer benefits. Regardless of the capital contribution of all these types of innovations, Utterback and Abernathy (1975) recognized product innovations as more significant in ensuring customer benefits. Innovations management is therefore key to competitive advantage especially in highly turbulent environments.

In a critical review of previous studies, various contributions have been highlighted and information gaps have been identified as discussed below. Meyer (2002) conducted a study in 2002 to investigate the relationship between outreach and financial sustainability of the organization. His study revealed that as firm increases its client base, it enjoys economies of scale which consequently results in reduced costs of production and eventually improved sustainability. His study sought to resolve the debate as introduced by Kereta (2007) in the critical microfinance triangle. However, contrary views were raised by Hulme and Mosley (1996) who argued that increased outreach increases the transactional costs making the operations unsustainable.

Overtime, innovations have been linked to significant improvements in business efficiency. For instance, an analysis of profit efficiency of banks in Saudi Arabia between 1987 and 2007 was conducted (Nader, 2011). This study revealed that improved access to banking services through Automated Teller Machines (ATMs) and a branch network coupled with phone banking had a positive impact on profit efficiency. However, it is still in question as to whether success innovations in commercial banks would yield the same level of profit efficiency in MFIs. A related study was conducted by Agboola (2006) on Information and Communication Technology (ICT) in banking operations in Nigeria.



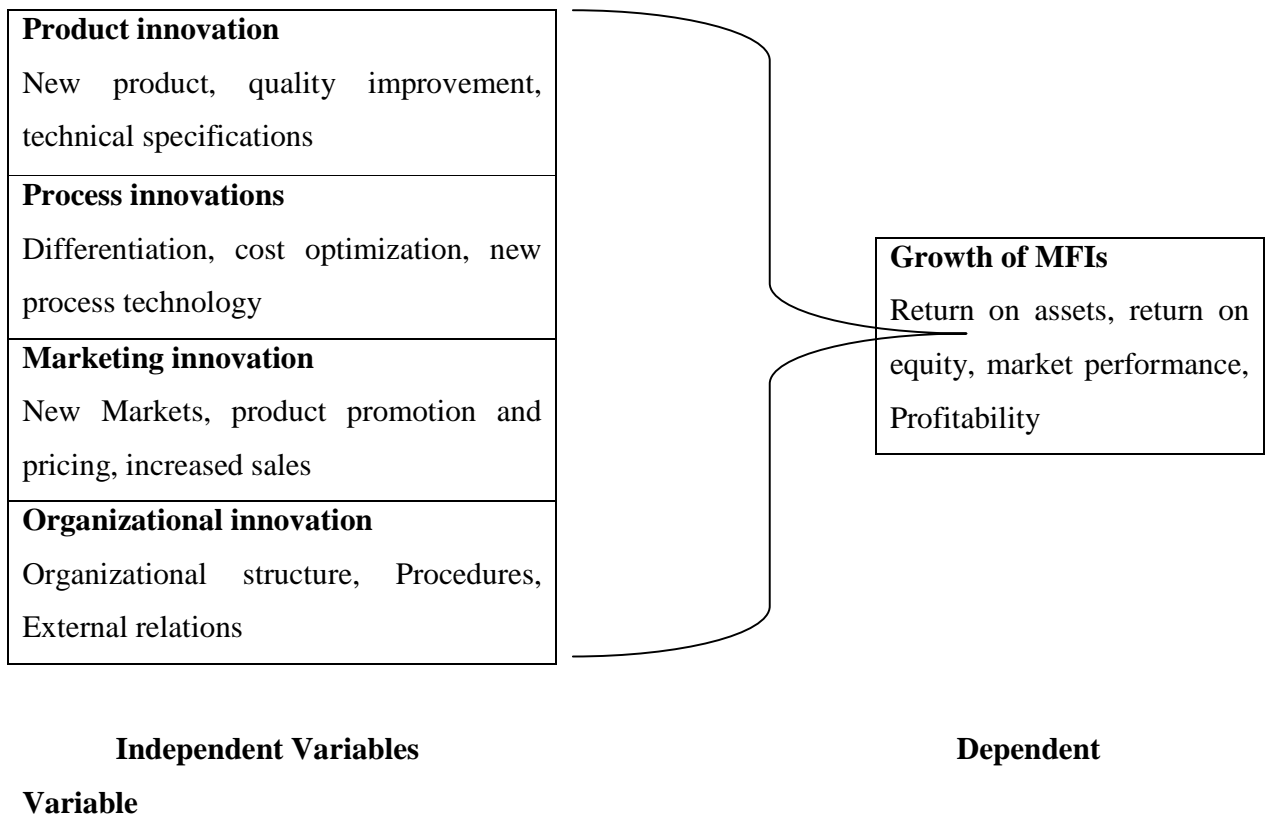
This study looked at ICT both in terms of nature and degree of adoption of innovative technologies; a degree of utilization of the identified technologies; and the impact of the adoption of ICT devices on banks. This study revealed that technology was the main driving force of market leaders in the banking industry. In this study 36 out of the 89 banks in Nigeria were sampled as at December 2005. Data was gathered from employees, customers and Head of Systems Units of each of the subjects. Some of the major innovations he highlighted were; use of ATMs, Electronic Funds Transfer (EFT), smart cards, electronic home and office banking and telephone banking. He observed that ICT oriented companies were perceived as well developed and efficient due to faster, secure, convenient and accurate services. Similar observations were made by Shirley & Sushanta (2006) and Berger (2003) who found that IT expenditures were likely to; reduce payroll expenses, increase market share, and increase revenue and profit.

In Kenya, a related study was conducted by Gakure and Ngumi (2013) on the influence that innovations have in the financial sector. The study used data collected from 320 employees across 20 banks in Kenya. It revealed that innovations have a moderate influence on the profitability of commercial banks in Kenya. Some of the key innovations observed in this study were; mobile banking, internet banking and agency banking introduced in the recent past. Another similar study was conducted by Odhiambo (2008) at Standard Chartered Bank on innovation strategies the findings were that with increased globalization the financial institutions need to improve their ways of conducting their business in order to attract and maintain customers. These innovations need focus on all aspects of business. Another study on innovations and financial performance was conducted in Kenya by Mwangi (2013). He observed that innovation had a significant influence on income, return on assets, profitability and customer deposits. Mobile phones were identified as a stronger moderating factor than internet banking.

## 2.7 Conceptual Framework

Innovations can be broadly grouped into four categories. This study shall seek to understand the contribution of each of these categories to the growth of microfinance. As such, the categories will become the independent variables of the study while the performance of the MFIs will be the dependent variable as illustrated below.

**Figure 2.1: Conceptual Framework**



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

The methods of study are outlined in this chapter which includes the research design, sampling, target population, test of reliability and validity, data collection procedures and data analysis.

### **3.2 Research Design**

This study adopted Cooper and Schindler's (2001) definition who view a research design as the plan and structure of inquiry that is formulated to obtain a solution to a problem through providing answers to research questions. To achieve optimal results of the study, a descriptive research design was adopted in defining some major concepts of this study and consequently set the grounds for further causality analysis. According to Saunders, Lewis and Thornhill (2003), use of multiple designs improves the validity of a study.

### **3.3 Target Population**

According to Mugenda and Mugenda (2003), a target population is viewed as a universal set of the study of all members of a real or hypothetical set of people, events or objects to which an investigator wishes to generalize the result. The population of this study composed all the Microfinance banks in Nairobi that are fully licensed (CBK, 2016). This population was deemed suitable as it was composed of firms that had survived through the challenging environment through innovations. Nairobi was the area of study since all these microfinance banks in the study were based in Nairobi. This study was therefore a census since all the elements of the population were studied. A census increases the validity of data due to the heterogeneity of the population under study (Zikmund, 2003; Cooper & Schindler, 2010).

### **3.4 Data Collection**

Both qualitative and quantitative data was gathered in this study. More focus was put on data relating to the variables and using the parameters identified in the conceptual framework. At least two structured questionnaires were administered to each microfinance bank, one to the financial manager and another to the strategic or operations

manager. As such, data was collected from thirty respondents. This questionnaire had three main sections namely; basic company information, innovation management section and MFI performance and growth section. These questionnaires were then administered to individuals in management. According to Cooper and Schindler (2010), questionnaires are easy to administer and are not bias since the respondents views are not influenced by the researcher's opinions unlike a face to face interview. A Likert scale was widely used guided by a review of the available literature (Bird, 1989; Kantis et al, 2002, Lumpkin & Dess 1986). Due to a large number of respondents involved, researcher assistants were used to enable the researcher to meet the project constraints involved.

### **3.5 Data Reliability and Validity**

Reliability in this study was viewed as the extent to which the measuring instrument(s) provide consistent results (Kothari, 2004). To ensure the reliability of the questionnaire to used, a pilot study involving five respondents was conducted and found highly reliable. On the other hand validity indicated the level to which the proposed instruments measured what they purported to measure (Kothari, 2004). To ensure validity, both the research moderator and supervisor examined the instruments that were used for this study.

### **3.7 Data analysis**

Data was collected was thoroughly cleaned up to eliminate the cases of insufficiently field questionnaires. A code book was then developed to enable entry of the data into statistical software for analysis. Data was then entered into Statistical Package for the Social Sciences for a more objective analysis. The findings were then represented through figures and tables. Data on innovations management was majorly represented through figures to show the growth or increase in innovations over the past five years.

Moreover, measures of central tendency were including mean, mode and median were widely used to analyze the growth of microfinance banks overtime. This data was then presented through graphs to show the growth or decline over the past five years. Interpretations were then made based on the trends observed and empirical relationships were derived from the observations.

Regression analysis will be used where the regression coefficient will represent the strength of the relationship between the independent variables and dependent variable. Other tests that will be done to complement regression include correlation analysis, coefficient of correlation (R) which measures the strength and direction of a linear relationship between variables, coefficient of determination (R-squared) which gives the proportion of the variance of one variable that is predictable from the other variables, and analysis of variance (ANOVA) which is a model to analyze the differences between group means and their associated procedures will be carried out to analyze the effect of working capital management on firm's financial performance. Test of significance will be carried out for all variables using t-test at a 95% level of significance. To examine the relationship among these variables, Pearson correlation coefficients will be calculated.

The model below will be used to show the extent to which the independent variables influence changes in the dependent variable (Y-Growth and development of MFIs).

The following model will be used;

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

Whereby: Y = Growth and development of Microfinance banks;

X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, and X<sub>4</sub> are subsets of innovation management namely;

X<sub>1</sub>- Product innovation,

X<sub>2</sub>- Process innovations,

X<sub>3</sub>- Marketing innovation and

X<sub>4</sub>- Organizational innovation)

B<sub>0</sub>. Constant

β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub>, β<sub>4</sub>= Regression model coefficients.

ε= Error Term.

## **CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRENTATION**

### **4.1 Introduction**

The chapter presents the output of data analysis by reporting of the findings of the study and the interpretation in relation to the effect of innovations management on the growth of microfinance banks in Kenya. Data was carefully analyzed through the stages of data cleaning, data coding and data entry. Data was then entered into Statistical Package for the Social Sciences (SPSS) for actual analysis. The data was then presented by use of tables and figures as discussed in this chapter. Regression analysis was also done to establish the relationship the dependent and independent variables of the study

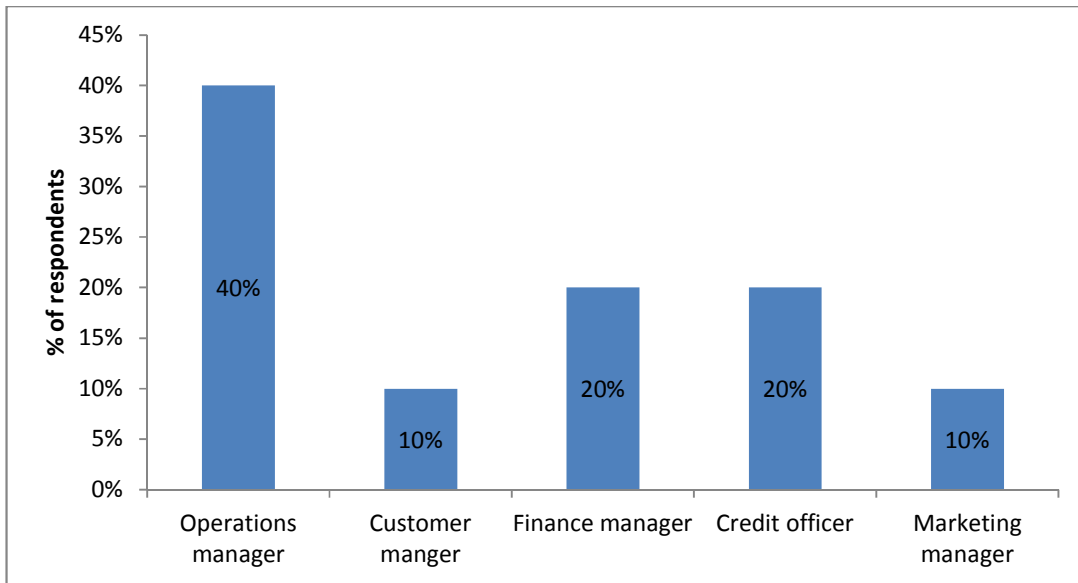
### **4.2 Response Rate**

The response rate was sufficiently high at 90.9% where 30 out of 33 administered questionnaires were adequately filled, indicating a high response rate. Moreover all the questions were answered correctly which consequently meant that the data was highly reliable. The study aimed at collecting data about the effect of innovations management on the growth of microfinance banks in Nairobi. The researcher considered the response rate good enough to provide valid and reliable conclusions about the objectives of the study. In terms of job capacity of respondents, most worked in the capacities of credit officers (20%), operations managers (40%), marketing managers (10%), finance officers (20%) and customer relations officers (10%) as shown in table 4.1 and figure 4.2 below.

**Table 4.1: Job Capacity of respondents**

<b>Job Capacity</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Operations manager	12	40	40	40
Customer manger	3	10	10	50
Finance manager	6	20	20	70
Credit officer	6	20	20	90
Marketing manager	3	10	10	100
Total	30	100	100	

**Figure 4.2: Job Capacity of respondents**



**Source: Primary Data**

**Table 4.2: Age of microfinance banks**

Year	Frequency	Percent	Valid Percent	Cumulative Percent
2006	3	10	10	10
2009	3	10	10	20
2010	9	30	30	50
2011	3	10	10	60
2012	6	20	20	80
2015	3	10	10	90
2016	3	10	10	100
Total	30	100	100	

**Source: Primary Data**

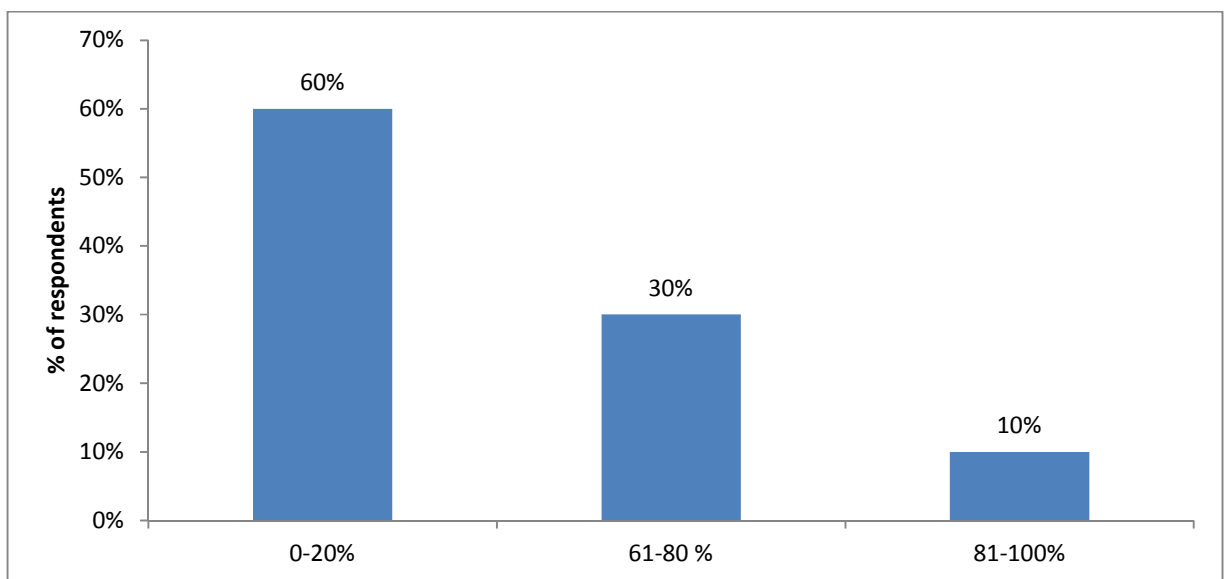
As shown in table 4.2, most of the microfinance banks were licensed in 2010 (30%). Evidence from field data shows that a majority of the firms were licensed in less than 6 years ago (80%).

## 4.3 Innovations Management

### 4.3.1 Innovations Management Team

The study sought to measure the extent of the commitment of the microfinance banks in innovations by inquiring the level of staff participation in innovation. As shown in figure 4.3, most of the respondents (60%) said that only less than 20% of the employees were involved in innovations management. This indicated minimal participation of employees in innovations. 30% of the respondents said that 61 to 80% of their employees were involved in operations management. However, some firms had a very high level of staff participation in innovations management where 10% of the respondents said that more than 80% of their employees were involved in operations management.

**Figure 4.3: Innovations Management Team**



**Source: Primary Data**

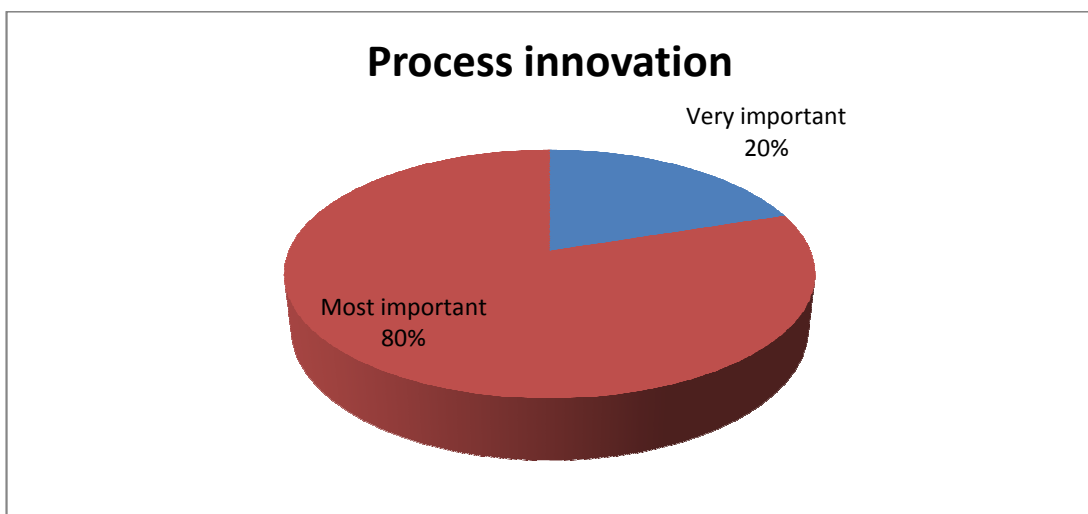
### 4.3.2 Types of Innovation Management

The study also sought to find out evidence of different types of innovation management in the microfinance and the level of importance of each of the innovations to the organization. The find revealed that all the firms under study (100%) were committed and prioritized product innovations. This meant that the banks were actively involved in



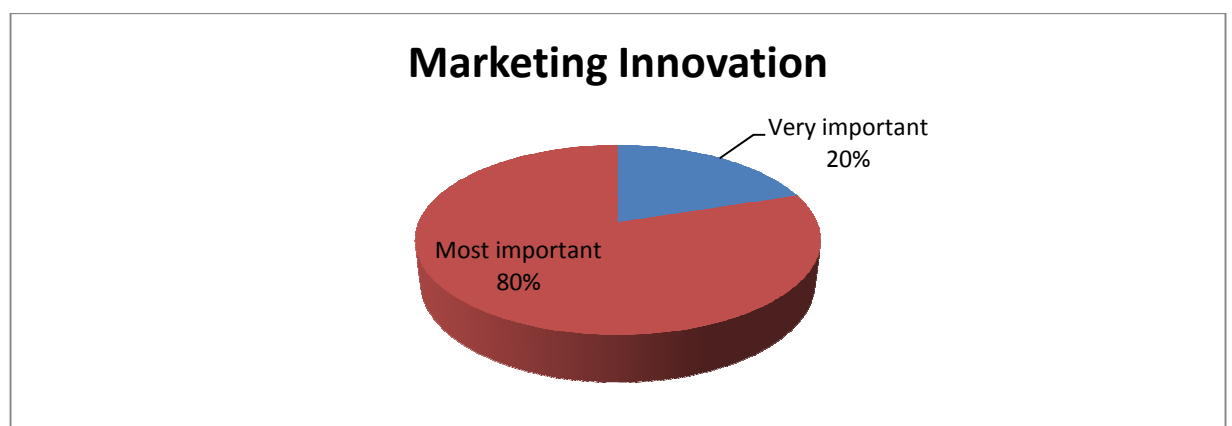
improving existing products as well as new product development. Similarly, as shown in figure 4.4, process innovations were also identified as the most important type of innovation by 80% of the respondents while 20% said that process innovations were very important. Evidently, microfinance banks today are more committed to this kind of innovations. Similar responses were reported for marketing innovation as shown in figure 4.5 showing that marketing and process were given equal attention.

**Figure 4.4: Process Innovations**



**Source: Primary Data**

**Figure 4.5: Market Innovations**



**Source: Primary Data**

In regard to organizational innovations, although it was also important to the firms, it received the least attention. Only 40% of the respondents said that organizational innovations were very important while 60 said that these innovations were most important as shown in figure 4.6.

**Figure 4.6: Market Innovations**



**Source: Primary Data**

#### **4.3.4 Investment in Research and Development**

Based on the literature reviewed, the researcher found research and development as key to success of innovations. The researcher therefore sought to identify the level of resources microfinance banks in Kenya had dedicated to research and development. The results of the study as table 4.3 indicated that 60% of the organizations invested up to 20% of their resources in innovations. Moreover, 30% of microfinance banks invested between 21 and 40% of the resources in innovations management while 10% of the firms dedicated a majority of the assets (61-80%) of their resources to innovations. This indicated that majority of the microfinance banks today acknowledge the importance of dedicating resources to innovation.

**Table 4.3: Investment in Research and Development**

Percentage of Assets	Frequency	Percent	Valid Percent	Cumulative Percent
0-20%	18	0-20%	60	60
21-40%	9	21-40%	30	90
61-80 %	3	61-80 %	10	100
Total	30	100	100	

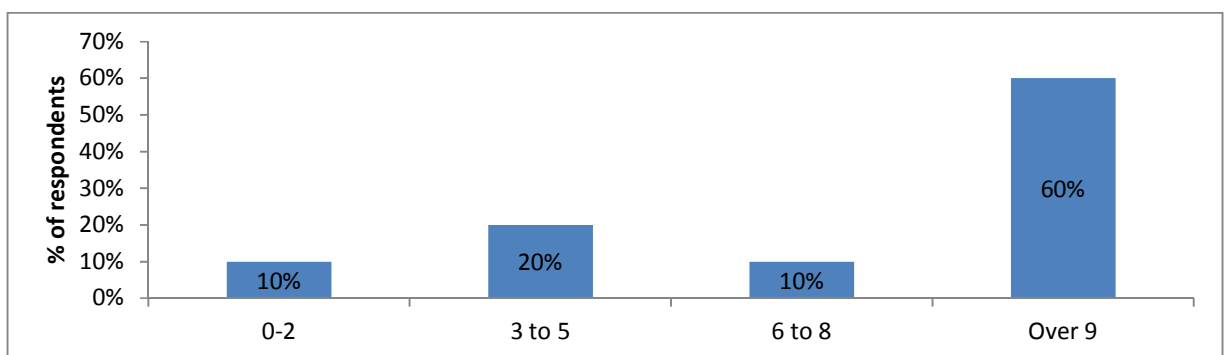
**Source: Primary Data**

## 4.4 Product Innovations

### 4.4.1 New Products

To measure innovations, the study sought to find out the number of the new products that banks had introduced in the past five years. Although some of them were younger than 5 years, findings as shown in figure 4.7 revealed that majority of the organizations (60%) had introduced more than 9 new products while 20% of the firms introduced between 3 and 5 new products in the past five years. A significant 10% of the microfinance banks introduced between 6 and 8 new products while only 10% had introduced less than two products. However, companies that introduced fewer products were relatively new. The results here showed that the microfinance banks were very innovative in through introducing new products.

**Figure 4.7: New Products**

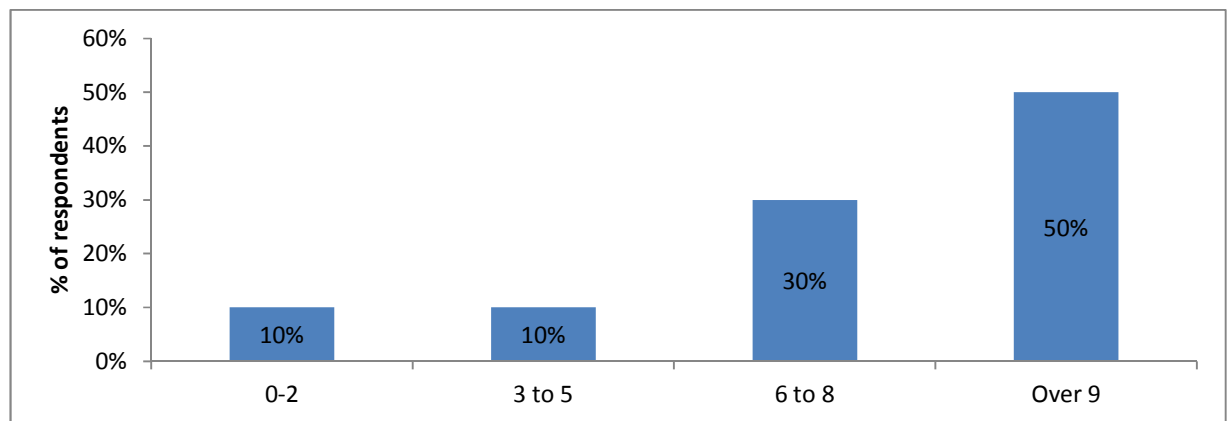


**Source: Primary Data**

#### 4.4.2 Improvements on Existing Products

Similarly, the study also measure product innovations through improvements on existing products. Results presented in figure 4.8 reported that a majority (50%) of the microfinance banks in Kenya had continuously improved on their existing products. This was followed by 30% of the microfinance banks who indicated that they had continuously improved of 6 to 8 of their products. 20% of the respondents said that they had only improved on less than 5 of the products they offered to the market. These results showed that the organizations were very innovative because they improved on almost all the products they offered.

**Figure 4.8: Improvements on Existing Products**



**Source: Primary Data**

#### 4.4.3 Investment in New Product Development (NPD)

Moreover, the researcher measured product innovations through funds investment/ dedicated to NPD. As shown in table 4.4 results indicated that a majority of the microfinance banks invested up to 10% of their assets in NPD while 30% invested between 11 and 20% of their assets in developing new products. 20% of the microfinance banks invested between 21 and 50% of the company assets in introducing new products. Evident, microfinance banks had put aside a considerable budget to introduce new products. This showed that they were adequately committed to innovations through NPD.

**Table 4.4: Investment in New Product Development (NPD)**

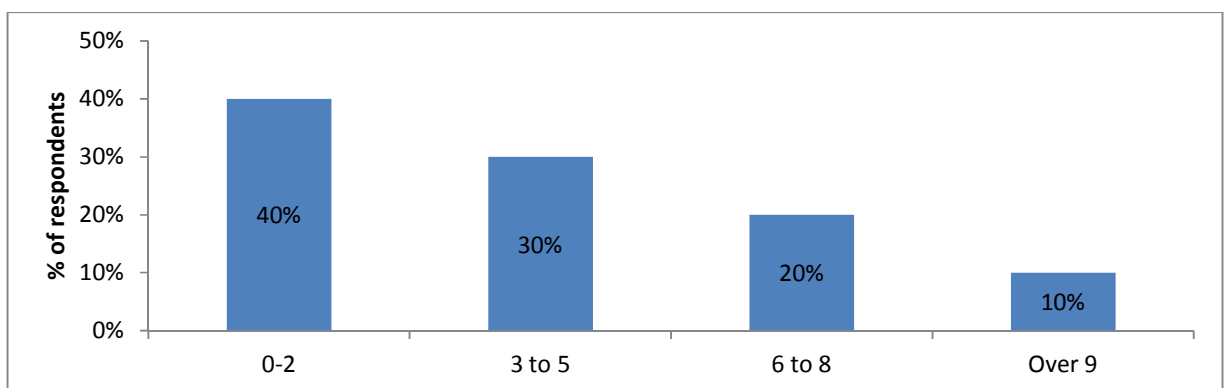
Percentage of Assets	Frequency	Percent	Cumulative Percent
0-10%	15	50	50
11-20%	9	30	80
21 -30%	3	10	90
41-50 %	3	10	100
Total	30	100	

**Source: Primary Data**

#### 4.4.4 Patents, Trademarks and Copyright Acquired

The research sought to find out if the microfinance banks had any form of intellectual properties that could yield competitive advantages. As shown in figure 4.9, majority of the microfinance banks have not clearly protected most of their intellectual properties. A larger percentage of 40% had only less than two intellectual properties while 30% of the institutions only acquired between 3 and 5 properties with the past five years. 20% had acquired between 6 and 8 intellectual properties while only 10% of the banks had acquires more than five in the past five years. Although the patents were not many, almost every firm under study had made efforts to acquire intellectual properties showing a positive orientation toward innovation.

**Figure 4.9: Patents, Trademarks and Copyright Acquired**



**Source: Primary Data**

## 4.5 Process Innovations

### 4.5.1 New Technology Procedures

In measuring process innovations, the study sought to find out the new process technologies that have been adapted by the microfinance banks. Results as shown in table 4.5, on average, more than 92% of microfinance banks were current using Electronic money transfer, Mobile internet banking, CCTV surveillance, Enterprise resource planning and Agency Banking. More specifically, all the microfinance banks (100%) were using Mobile internet banking and CCTV surveillance. Similarly, 90% of the banks were using both agency banking and electronic money transfer. Enterprise resource planning scored lowest but at a high percentage of 80%. This clearly indicated that microfinance banks had highly adopted these new technology procedures.

**Table 4.5: New Technology Procedures**

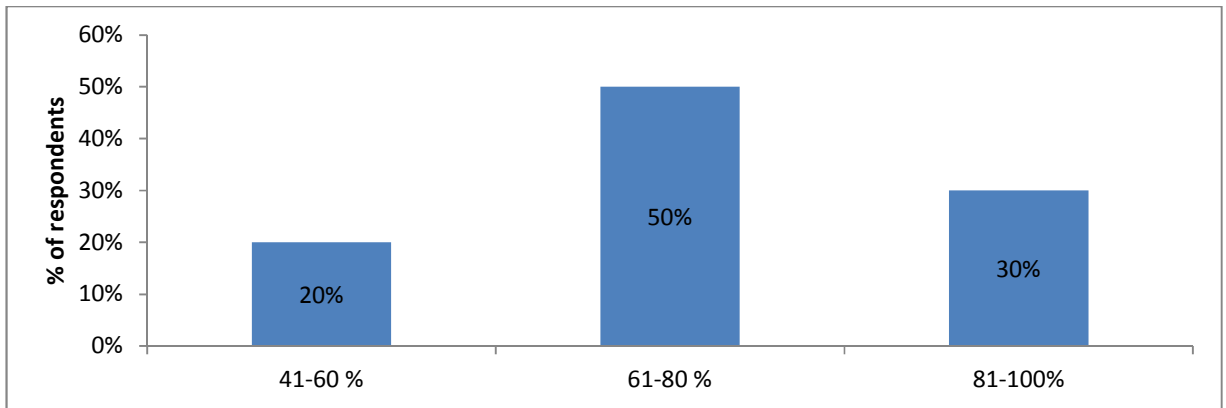
Technology	N	Percent of Cases
Electronic money transfer	27	90.00%
Mobile internet banking	30	100.00%
CCTV surveillance	30	100.00%
Enterprise resource planning	24	80.00%
Agency Banking	27	90.00%
Total	138	460.00%

**Source: Primary Data**

### 4.5.2 Access to Mobile Banking

Data was also gathered about the level of customers able to access mobile banking services. Results as shown in figure 4.10 as indicated by 50% of the respondents revealed that 61 to 80% of their clients were using mobile banking services. According to 30% of the respondents, more than 80% of their clients while only 20% of the respondents said that only 41 to 60% of their clients could access mobile banking services. Evidently, a majority of the clients to microfinance banks were able to access mobile banking implying a higher level of flexibility and innovation.

**Figure 4.10: Access to Mobile Banking**



**Source: Primary Data**

### 4.5.3 Investment in Information, Communication and Technology

The study also asked the percentage of resource the microfinance banks were willing or already investing in ICT projects. Results as shown in table 4.6 indicated that 60% of the respondent firms invested up to 20% of their funds in ICT development while 30% of the respondents invested 21 to 40% in ICT. A small percentage of 10% dedicated between 41 to 60% of their resources to ICT. These were organizations that were probably in the phase of automating their processes. Generally, these responded indicated high commitment to ICT development. From literature review, ICT was identified as one of the key dimensions of innovations in the banking industry. It can therefore be inferred that the microfinance banks in Kenya were very innovative.

**Table 4.6: Investment in Information, Communication and Technology**

Percentage of Assets	Frequency	Percent	Cumulative Percent
0-20%	18	60	60
21-40%	9	30	90
41-60 %	3	10	100
Total	30	100	

**Source: Primary Data**

#### 4.5.4 Queue Management Systems

Recognizing queues as one of the major challenges for customer in operations, the study sought to find out queue management technologies used by banks to address this challenge. The results of the study were as represented in table 4.7 revealed that all microfinance banks in Kenya (100%) used television channels keep clients engage as they queue for services while 90% of the banks used reading materials like magazines, periodicals and newspapers to manage waiting lines. In advance methods of managing queues, half of the banks used electronic queuing systems while only 40% provided free Wi-Fi network in their customer service points. On average, 70% of the microfinance banks in Kenya had a system of managing waiting lines resulting in improved service quality and customer satisfaction.

**Table 4.7: Queue Management Systems**

<b>Queue management technique</b>	<b>N</b>	<b>Percent of Cases</b>
Electronic queuing system	15	50.00%
Television channels	30	100.00%
Reading materials	27	90.00%
Free wireless Network	12	40.00%
Total	84	280.00%

**Source: Primary Data**

#### 4.6 Marketing Innovations

##### 4.6.1 Marketing Segmentation

In regards to marketing the study targeting the, the study sought to find out the number market segment target over years. The results of the findings were as showed in table 4.8 and figure 4.11



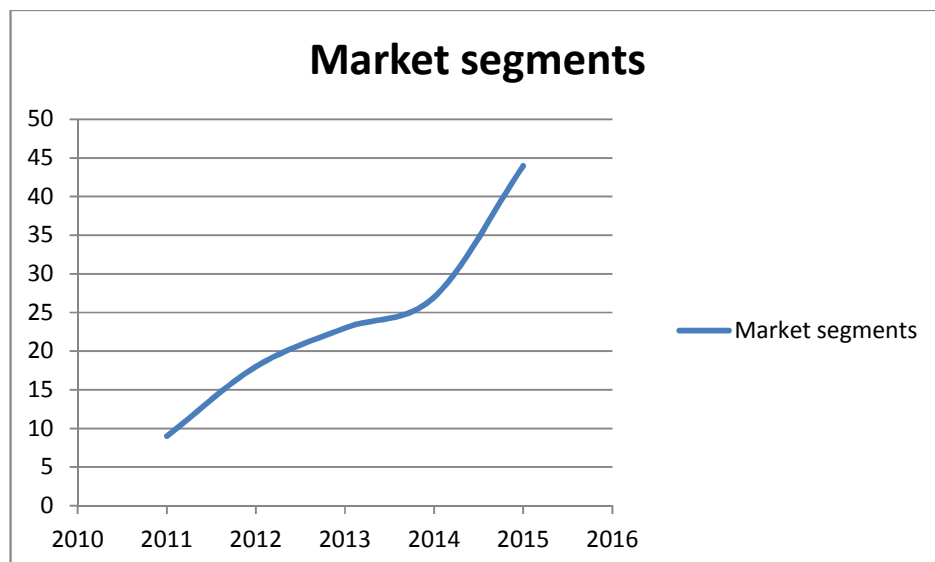
**Table 4.8: Marketing Segmentation**

Year	Market segments	Percentage increase
2011	9	
2012	18	100
2013	23	28
2014	27	17
2015	44	63

**Source: Primary Data**

The percentage of markets targeted overtime has been increasing over the years. For instance, between 2011 and 2012, markets targeted by microfinance banks increased from by 100% from 9 to 18%. Between 2012 and 2013, there was 28% increase in markets from 18 markets targeted in 2012 to 23 in 2013. From 2013 to 2014, the markets targeted increased by 17% from 23 to 27 markets. There was a significantly high increase in markets target between 2014 and 2015 of 63% where markets increased from 27 to 44 as seen in table 4.8

**Figure 4.11: Marketing Segmentation**



**Source: Primary Data**

#### 4.6.2 Investment in Corporate Social Responsibility (CSR)

Recognizing the importance of social marketing in relation to CSR as discussed in the literature review, the researcher sought to find out the percentage of resources dedicated by organizations to CSR programs. As shown in table 4.9, 70% of the respondents said that their organization committed up to 20% of their assets to CSR programs. Moreover, 20% of the microfinance banks focused 21 to 40% of their resources to CSR while a small percentage of 10% invested 61 to 80% of their funds in CSR programs. Institutions that invested high in CSR were probably targeting special groups like women, youth and people with disabilities. However the organizations seemed to be innovative enough to create good relations with the community which has resulted in indirect but faster growth of the firms.

**Table 4.9: Investment in Corporate Social Responsibility (CSR)**

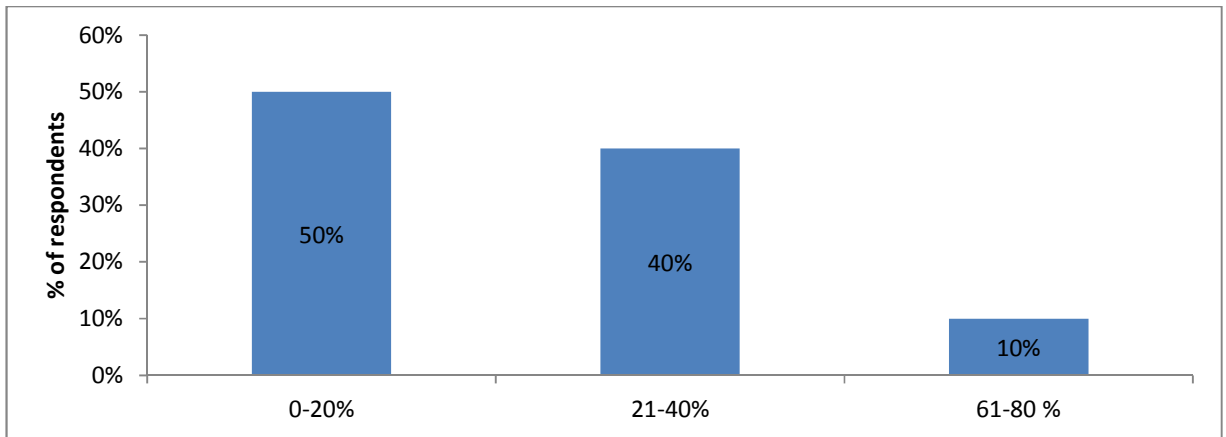
Percentage of Assets	Frequency	Percentage	Cumulative Percentage
0-20%	21	70	70
21-40%	6	20	90
61-80 %	3	10	100
Total	30	100	

**Source: Primary Data**

#### 4.6.4 Investment in Marketing Programs

The study also sought to establish the level of funds invested by microfinance banks on marketing programs. The findings of the study were as reported in figure 4.12. As shown in figure 4.12, half of the banks said that they invested up to 20% of their resources in marketing programs. A significant percentage of 40% indicated that they spend 21 to 40% of their resources in marketing while 10% invested between 61 and 80% of their resources in marketing programs. Organizations that invested heavily in marketing programs were relatively new in the market and trying to penetrate the market.

**Figure 4.12: Investment in Marketing Programs**



**Source: Primary Data**

## **4.7 Organizational Innovations**

### **4.7.1 Performance of Suppliers**

Following from the literature review, suppliers played a key role in ensuring the efficiency and effectiveness of operation of the microfinance banks. As such the researcher sought to understand the performance of the banks' suppliers. In regard to competitiveness, 60% of the respondents said that competitiveness of the supplier was key to the success of their operations while 40% identified it as the most important supplier dimension of to their operations as show in figure 4.13

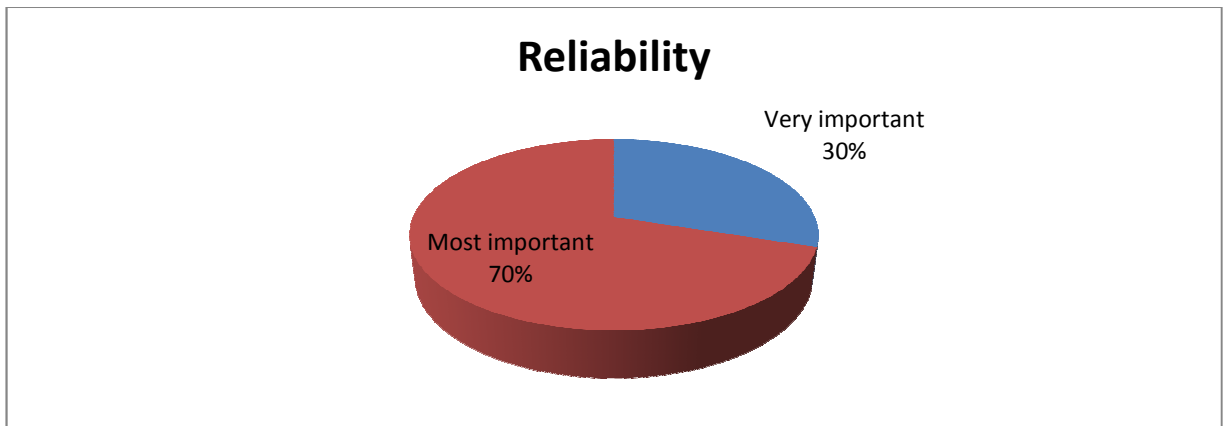
**Figure 4.13: Competitiveness Suppliers**



**Source: Primary Data**

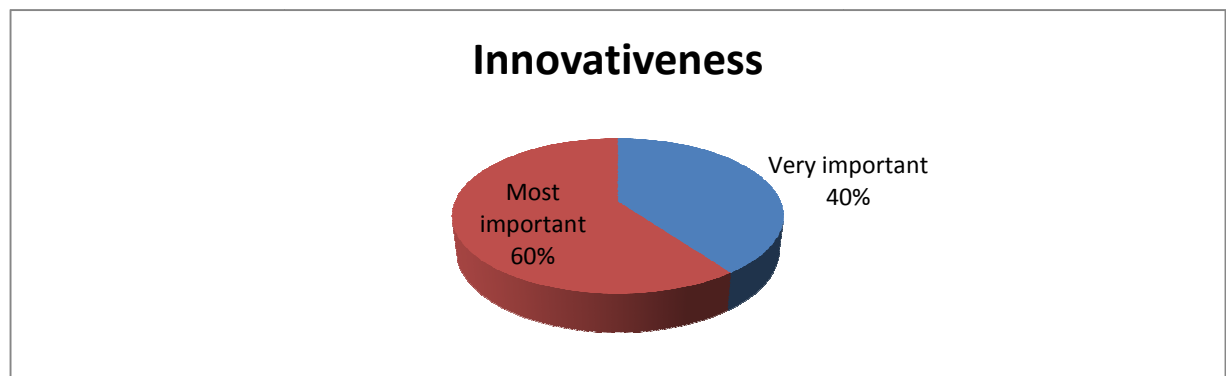
According to 70% of the respondents and as shown in figure 4.14, supplier reliability was the most important dimension of suppliers as it also affected supply of services by the microfinance banks. 30% of the respondents also said that supply reliability was very important in operations.

**Figure 4.14: Reliability of suppliers**



**Source: Primary Data**

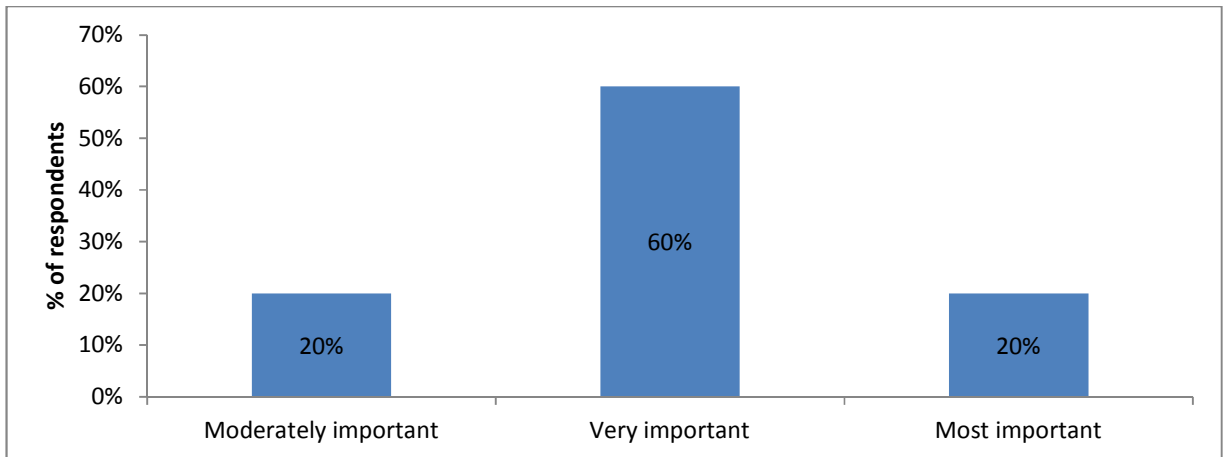
**Figure 4.15: Innovativeness of suppliers**



**Source: Primary Data**

As presented in figure 4.15, 60% of the respondents said that supplier innovativeness was the most important dimension of suppliers as it also affected the innovativeness of the microfinance banks. 40% of the respondents also said that supplier innovativeness was very important in operations.

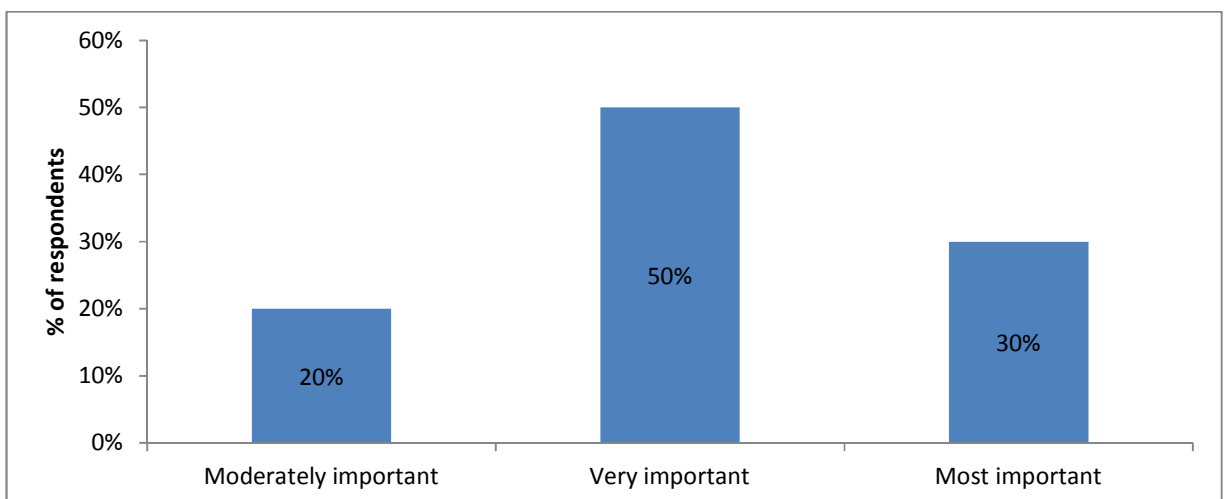
**Figure 4.16: Responsiveness of the supplier**



**Source: Primary Data**

In regard to responsiveness of the supplier and as shown in figure 4.16, 60% of the respondents said that supplier responsiveness was a very important dimension of suppliers as it also affected the ability of microfinance banks to respond to changing demand. 20% of the respondents also said that supplier responsiveness was very important in operation while an equal percentage of 20% said that responsiveness was moderately important.

**Figure 4.17: Efficiency of suppliers**



**Source: Primary Data**

Efficiency of suppliers was also identified as an imperative dimension by respondent as show in figure 4.17, 50% of the respondents said that supplier efficiency was a very important dimension of suppliers as it also affected the costs of services microfinance banks. 30% of the respondents also said that supplier efficiency was very important in improving operations while 20% said that efficiency was moderately important.

#### 4.7.2 Form of Business Ownership

Realizing the importance of ownership in decision making processes and change management, the researcher sought to find out how these micro finance banks were owned. Results revealed that all microfinance banks in Kenya (100%) are corporations and declare financial performance to the public.

#### 4.7.3 Major Partnerships with other Organizations

As in the background of this study, one of the major methods of innovations is through partnerships, acquisitions and mergers. The study there sought to under the number and frequency of partnerships microfinance banks had entered into with other major organizations. As presented in table 4.10, 60% of the microfinance banks had entered into contractual arrangements with between 3 and 5 other companies while 10% had entered into partnerships with less than 2 other companies. However 30% of the respondents said that they had entered into partnerships with more than 6 other companies as shown in table 4.10.

**Table 4.10: Major Partnerships with other Organizations**

Number of partnerships	Frequency	Percentage	Cumulative Percentage
0-2	3	10	10
3 to 5	18	60	70
6 to 8	3	10	80
Over 9	6	20	100
Total	30	100	

**Source: Primary Data**

#### 4.7.4 Organizational Structure Decisions

#### 4.8 Growth of Microfinance Banks

Having established that the microfinance banks in Kenya were increasing becoming innovative, the researcher sought find out whether the organizations were achieving growth overtime and see if there was any relationship between innovations management and level of growth. Growth was measured through a number of parameters as shown below.

##### 4.8.1 Number of Savings Accounts

The researcher sought to establish the number of savings account held by each of the microfinance banks in Kenya as well as observe the trend over the years. Results were as reported in table 4.11 and figure 4.18

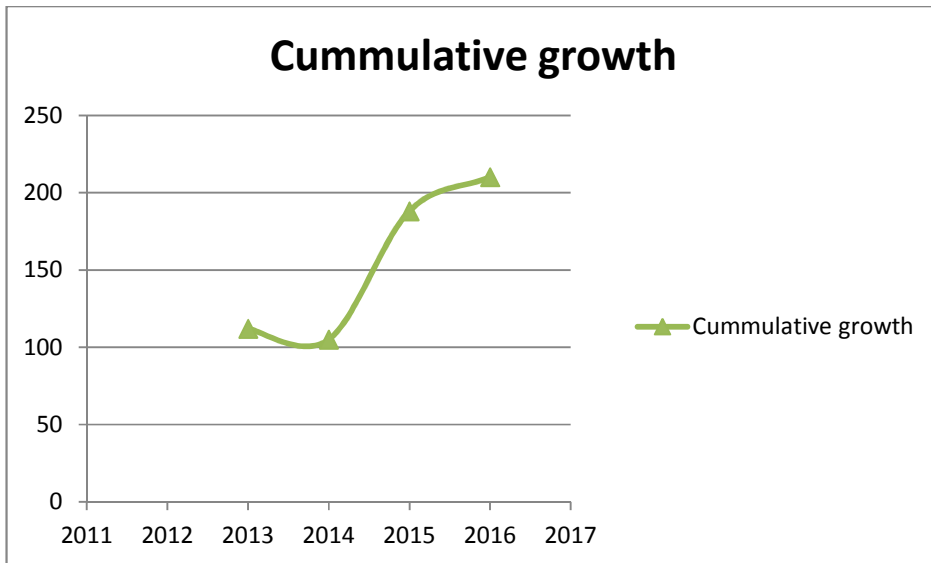
**Table 4.11: Number of Savings Accounts**

Years	Average savings	Percentage Growth	Cumulative growth
2012	109757	0	
2013	232358	112	112
2014	216611	-7	105
2015	395667	83	188
2016	483244	22	210

**Source: Primary Data**

Evidently, the average number of savings accounts has been increasing overtime. Although a 7% decrease was observed between 2013 and 2014, generally there have been positive changes. The number of savings accounts in the industry seems to have growth by 310% in the past 5 years. Considering that some microfinance banks in the study were relatively new in the market, the percentage would be much higher.

**Figure 4.18: Number of Savings Accounts**



**Source: Primary Data**

#### **4.8.2 Number of Branches**

As shown in table 4.12, the average number of branches have continuously increased overtime with the biggest increments been observed between 2012 and 2015. The number of branches has increased by 222% over the last five years. This is a good indicator of rapid growth of the microfinance banks.

**Table 4.12: Number of Branches**

<b>Years</b>	<b>Average number of Branches</b>	<b>Percentage Growth</b>	<b>Cumulative growth</b>
2012	4	0	
2013	6.25	56	56
2014	9.13	46	102
2015	10	10	112
2016	11	10	122

**Source: Primary Data**



### 4.8.3 Number of Staff

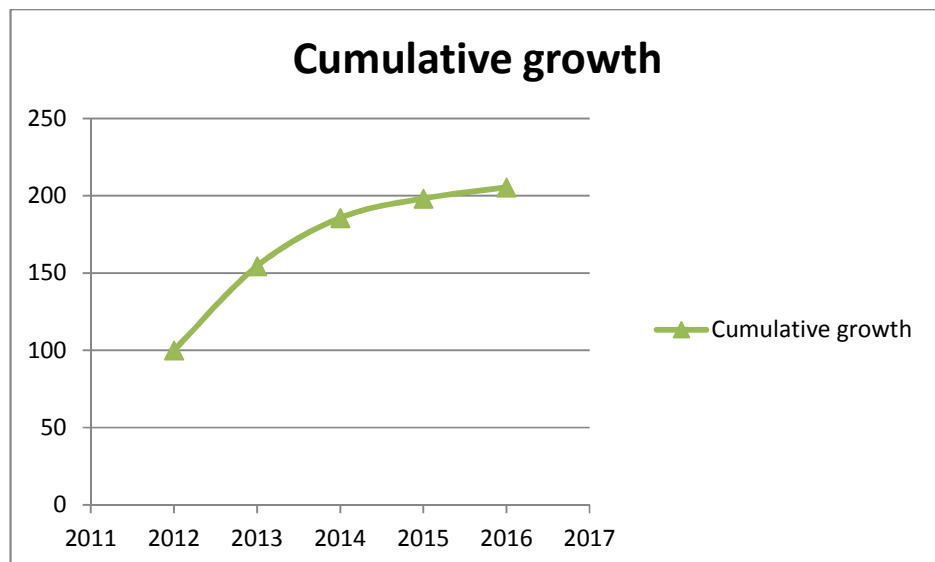
**Table 4.13: Number of Staff**

Years	Average number of staff	Percentage Growth	Cumulative growth
2012	79		100
2013	122	54	154
2014	160	31	186
2015	180	13	198
2016	193	7	205

**Source: Primary Data**

The number of staff in these organizations has been increasing in decreasing rate overtime. The highest increase in average number was observed between 2012 and 2013 when most of these banks were licensed by the central bank of Kenya. On average, the number of staff has grown by 205% in the past five years as shown in table 4.13 and figure 4.19.

**Figure 4.19: Number of Staff**



**Source: Primary Data**

#### 4.8.4 Growth in Assets

The study sought to find out how the assets of the microfinance banks had increased overtime. The findings of the research were as presented in table 4.14

**Table 4. 14: Total Number of Assets**

Years	Average Assets	Percentage Growth	Cumulative growth
2012	321762500	0	
2013	504087500	56.7	56.7
2014	507975000	0.8	57.4
2015	605081111	19.1	76.6
2016	766990000	26.8	103.3

**Source: Primary Data**

Evidently there had been significant growth in the number of assets owned by microfinance banks in the past five years. A tremendous increase in assets of 56.7% was witnessed in the period between 2012 and 2013 when most microfinance banks were licensed by the central bank and favorable policies were passed by the government. Over the past five years, the assets of the microfinance banks have increased by more than 103.3% as shown in the table.

#### 4.9 Regression Analysis

The primary objective of this study was to establish the relationships between innovations management and growth of microfinance banks in Kenya. SPSS was used to analyze the data collected and Regression analysis was done to establish the strength and direction of the relationship of the variables of concern. The overall average on growth of microfinance banks in Kenya was used as the dependent variable while the independent variables were the four types of innovations management. The Coefficient of determination ( $R^2$ ) was used to show how well the data fit in the model. It was also used to illustrate the degree of growth of microfinance banks. A regression analysis was done and the output of the analysis was as tabulated below.

**Dependent Variable:** Growth of Microfinance banks in Kenya

**Independent variables:** Product innovations, Process innovations, marketing innovations and Organizational innovations.

**Table 4.15: Summary of regression model**

Model	R		R <sup>2</sup>		Adjusted R <sup>2</sup>		Std. Error of the Estimate		Change Statistics	
	R Square	Change	F	df1	df2			Sig.	F	Change
1	.737	.405	.450	.48973	.405	48.255	5	339		.000

**Source: Primary Data**

As seen through  $R^2 = 0.543$  and  $p < .001$ ), the model used was statistically significant. Adjusted  $R^2$  value was 0.543 and this illustrated a positive relationship between the independent and dependent variables. The model accounted for 54% of the variances in the dependent variable. In other words, management of the different types of innovations contributed to 54% of the growth of microfinance banks in Kenya.

**Table 4.16: Regression Coefficients**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Beta	Sig.	
	B	Std. Error				
1	(Constant)	.430	.281	2.021	.050	
	Product Innovations	0.205	0.55	0.780	3.372	0.001
	Process innovations	0.483	0.59	0.350	6.102	0.000
	Marketing innovations	0.120	0.51	0.119	2.434	0.025
	Organizational innovations	0.460	0.55	0.109	2.087	0.040

Y (Growth of SMEs) = 0.430 + 0.205(Product innovations) + 0.483(Process Innovations) + 0.120 (Marketing innovations) + 0.460 (Organizational innovations) + €

$$Y = 0.430 + 0.205X_1 + 0.483X_2 + 0.120X_3 + 0.460X_4 + €$$

#### 4.10 Discussion of Research Findings

As shown in the regression model above, the findings of the study are to a greater extent consistent with previous studies and theories. For instance, Schumpeter (1942) in his creative destruction theory states that firms survive in the competitive environment by being continuously innovative. From the findings, regardless of stiff competition from established banks, microfinance banks have survived and surpassed competition through innovation. Similarly, Schumpeter highlighted innovation as the dominant determinant of economic revolution. Evidently, findings indicated that the microfinance had growth by more than 200% in the past five years indicating economic growth. According to Ajzen

(1991) in his theory of planned behavior medium and large enterprises are more likely to be more entrepreneurial than SMEs. The findings of this study were consistent with his view in that microfinance banks which fit in the category of medium firms were highly innovative.

Similarly, Johne's (1999) categorization of the types of innovations is clearly seen in the findings of the study where product innovation, process innovation, organizational and market innovation were evident in all the organizations studied. However, in contrast with other previous studies which identified product innovations as the most important type of innovation, this study found out that process innovations were the most important type of innovations for microfinance banks in Kenya due to the nature of the service.

Moreover, the findings of this study were consistent with majority of previous empirical studies. According to studies by Mwangi (2013), Odhiambo (2008), Agboola (2006), Gakure and Ngumi (2013) innovation had a significant positive influence on income, return on assets, profitability and customer deposits. Similar results were evident in this study where innovations by microfinance banks enabled them to significantly increase their assets, branch network, employee and number of deposits. This study was unique in that it focused on innovation by breaking it down to the four types of innovation and examining the impact of each type of innovation to growth of the firm, something that was missing in previous studies.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter includes the summary of findings, conclusion, recommendations, limitation of the study and suggestions for further studies. Although a number of studies have been conducted on innovations management and growth of firms, there is insufficiency of studies focusing on microfinance banks in Kenya. Therefore, the aim of this paper was to put together all factors from a theoretical perspective, empirical and analytical perspective.

### **5.2 Summary of Findings and Interpretations**

Data collected and analyzed in this research was divided into seven main sections namely general information, innovations management, product innovations, process innovations, marketing innovations, organizational innovations and the growth of microfinance banks. Although not many studies had been done on the innovations and growth of microfinance banks in Kenya, the findings of this study were in line with those of previous studies indicating a positive relationship between innovations management and growth of microfinance banks in Kenya. In the general information section, it was noted that most of the microfinance banks were licensed in 2010 (30%). Evidence from field data showed that a majority of the firms were licensed in less than 6 years ago (80%). Moreover, most of the respondents in the study were operations managers, credit officers, marketing managers and customer relation officers.

In the innovations management sections, several observations were reported and found to be very useful for this study. These organizations had majority of their staff involved in innovation management where more than 60% of the employees were involved. Moreover, all the types of innovations were most important in these organizations where product innovations were practiced by 80%, Process innovations by 80% and organizational innovations by 60%. Moreover, 60% of the organizations invested up to 20% of their assets in research and development.

In regard to product innovations, 60% of the firms had introduced over 9 new products in the past five years while over 50% of the respondents had continuously improved the product features overtime. 80% of the firms invested up to 20% of their assets in new product development. Similarly, about 40% of the firms had acquired some form of intellectual properties. Process innovations were also evident where more than 80% of the microfinance banks had Electronic money transfer, Mobile internet banking, CCTV surveillance, Enterprise resource planning and Agency Banking services. More than 50% of the banks invested up to 20% of their assets in ICT as well as queue management systems. Marketing innovations were also observed through increased market segments, CSR activities and marketing budgets where 50% of the organizations invested up to 50% of their assets in marketing. Organizational innovations were measured through supplier prequalification criteria and banks rated their suppliers above average. These findings clearly revealed that microfinance banks had been very innovative in the past five years.

In measuring the growth of microfinance banks, the findings showed that the number of savings accounts had increased by 310% over the past five years. The number of branches had also increased by 222% over the past five years. Moreover, the number of employees employed by microfinance banks had increased by 205% in the same period. Moreover, findings indicated that over the past five years, the assets of the microfinance banks have increased by more than 103.3% as shown in the table. These indicated that the organization in growth by more than double their sizes five years ago.

A regression analysis was also done to establish the nature and strength of the relationship between innovations management and growth of microfinance institutions. An analysis of primary data resulted into the model below.

$$Y = 0.430 + 0.205X_1 + 0.483X_2 + 0.120X_3 + 0.460X_4 + \epsilon$$

In this model, Y represented the dependent variable which in this case was growth of microfinance banks in Kenya.  $X_1$ ,  $X_2$ ,  $X_3$ , and  $X_4$  represented the types of innovations management. The study found out that 43% of the growth of microfinance resulted from factors not related to innovations. However, the study empirically established that

innovations management was responsible for 54% of the growth of microfinance banks. Otherwise, 20.5% of product innovations directly contributed to growth while 48.3% of process innovations translated to growth. Surprisingly, only 12% of market innovations resulted in company growth while 46% of organizational innovations were linked to growth of the institution. Evidently, process and organizations innovation were very significant in growth of these firms.

### **5.3 Conclusions**

Today, the markets environment is highly dynamic and competitive and the participants are highly hostile and responsive to trends. Similarly, customers' expectations are increasing day by day prompting organizations to increase their market offerings. To survive and success in this environment, organizations are encouraged to be market leaders in pioneering innovations. Customer focus is also important to achieve success where organizations should produce products that are most preferred by the customers. Innovative organizations tend to have competitive advantages which give them an edge over other producers. As seen from the findings of this study, innovation results to regardless of the harsh environment.

From the finding, it can also be empirically concluded that microfinance banks in Kenya have been very innovative in the past five years; this has been occasioned through the introduction of new products, improvements in existing products, adoption of new technologies and improved marketing among others factors. These innovations have enabled them build competitive advantages regardless of the stiff competition from the already established commercial banks. Similarly, these innovations have resulted in accelerated growth of microfinance banks in Kenya as seen from the findings. It also be concluded that a majority of the revenues for these microfinance banks today comes from products they did not produce five years ago.

Evidently, the study gathered and analyzed sufficient data on the variables of concern. Data collected gave strong evident of increase in innovations management and increased growth of microfinance banks over the years. It can therefore be confidently concluded that there was a strong relationships between innovations management and the growth of



microfinance institutions to the extent that companies that were more innovative achieved growth much faster than ones that were not innovative.

#### **5.4 Recommendations**

The findings of this study can be significant in transforming a number of areas. To the microfinance banks, this study established a strong relationship between microfinance banks in Kenya and their growth. As such, microfinance banks are encouraged to adopt all types of innovations management to as a way of achieving continuous growth. Innovations relating to ICT, process innovations, and product innovation are highly recommended for these institutions as they result in more accelerated growth. Also it is recommended for these institutions to expand their operations through acquisitions, mergers and partnerships. Evidently, process and organizations innovation were very significant in growth of these firms. Organizations would therefore realize much growth by focusing on these types of innovations.

Similarly, the findings of this study can also be useful to organizations in different industries. Evidently, innovations have a positive impact on profitability, growth and expansion. The objective of many organizations is to achieve growth and profitability. Innovations management would therefore be recommended as mean of achieving organizational success in competitive environments regardless of the industry in which the firm operates.

To government, this study can be very useful in policy formulation especially in policies relating to economic growth, empowerment of specialized group and promoting entrepreneurship. The MFI sector has be given more attention by the government due the role it plays in development. The government can therefore use the findings of this study to create policies that suit both the development of individual person and MFIs as well as improve accessibility of banking services by Kenyans.

#### **5.5 Limitations of the Study**

There are not many earlier studies on the innovations management and growth of microfinance banks in Kenya and generally across the globe and this posed a challenge in getting empirical literature. Similarly, the microfinance banks are located in Nairobi

hence the findings could not be generalized to the entire country. Moreover, collecting primary data involved major constraints in that it was time consuming and costly due to transport and cost of hiring research assistant as well.

Due the highly competitive status of the financial sector, some of the respondent's hesitated to disclose data resulting in more time for data collection. Moreover, junior staff had to consult with the management before giving some financial information which took more time than expected.

### **5.6 Suggestions for Further Research**

This study only focused on microfinance banks in Kenya. The study may be replicated on other industries as well as other segments within the financial sector like financial banks and Sacco's. Similarly, data was collected on microfinance banks that are located in Nairobi. The study can also be redone using data from other counties to establish whether innovations had the same impact on the growth of institutions outside Nairobi County.

## REFERENCES

- Agboola A (2006). Information and Communication Technology (ICT) in Banking Operations in Nigeria: An Evaluation of Recent Experiences. Retrieved August 12, 2013
- Ahmed, R. 2005. Microfinance under the Microscope. ENTERPRISE, Topic 08. SA Media, University of the Free State. Ref no: 17830. (MFRC).
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50 (2), 179-211.
- B. R. Scott, Stages of corporate development. Part I. unpublished paper, Harvard Business School (1971).
- Berger, A.N. (2003). The Economic Effects of Technological Progress: Evidence from the Banking Industry. *Journal of Money, Credit, and Banking*, 35, (2), 141-176.
- Bhide, A. V. (2010). The Judgment deficit. *Harvard Business Review*, 88(9), 44–53.
- Calvin, R.J. (2002). *Entrepreneurial Management*. New York: McGraw-Hill.
- Carlton, A., Mandorff, H., Obara, A., Reiter, N. & Rhyne, E. 2001. Microfinance in Uganda. Commissioned by the Austrian Ministry of Foreign Affairs, Department for Development Cooperation. 17 December 2001. Available: <http://www.oecd.org>.
- Chandy, R. & Narasimhan, O. (2011). How micro-entrepreneurs could change the world. *Business Strategy Review*, 22(1), 52-55
- Chege, B. K. (2008). *Competitive strategies adopted by Equity Bank Limited*, Unpublished MBA project. University of Nairobi
- Cooper, D. R., & Schindler, P. S. (2001). *Business Research Methods o" ed*. Boston: McGraw-Hill. Saunders, M., Lewis, P., & ThornhillA (2003). *Research Methods for Business Students (3rd ed)*. Harlow: Prentice Hall.
- Cooper, R.G., (1988), *Winning at New Products: Accelerating the Process form Idea to Launch*, 2nd ed., Addison-Wesley, Reading, MA.
- Covin, J.G. veSlevin, D.P. (1991). "A conceptual Model of Entrepreneurship as Firm Behavior," *Entrepreneurship Theory and Practice* 16(1):7-25.

- Daley, J. (2001). The Intangible Economy and Australia. *Australian Journal of Management*, 26(3) Special August Issue.
- Damanpour, F. and Evan, W. M. (1984). *Organization innovation and performance, the problem of organizational lag*. *Administrative Science Quarterly* 29: 392-409.
- Davenport, T.H., and Prusak, L., (1998), *Working Knowledge: How Organizations Manage What They Know*, *Harvard Business School Press*, Boston, MA.
- Drucker, P.F. (1998), *Discipline of innovation*, *Harvard Business Review*, 76(6), 149-57
- Gakure, R. & Ngumi, P. (2013). Do Bank Innovations Influence Profitability of Commercial Banks in Kenya. *Prime Journal of Social Science*, 2 (3), 237-248.
- Hartwick, J., & Barki, H. (1994). Explaining the role of use participation in information system use. *Management Science*, 40 (4), 440–465.
- <https://www.centralbank.go.ke/index.php/bank-supervision/microfinance-institutions/14-bank-supervision/83-list-of-licensed-deposit-taking>
- Imady, O. and Seibel, H. D. (2003). *Sandug: A Microfinance Innovation InJabal Al- Hoss, Syria Newsletter*. Retrieved from <http://www.ruralfinance.org/details/en>
- Johne, A., (1999), Successful market innovation, *European Journal of Innovation*, p 6-10
- Kantis, H., Ishda, M. & Komori, M. (2002). *Entrepreneurship in Emerging Economies. The Creation and Development of New Firms in Latin America and East Asia*. Tokyo: Inter-American Development Bank
- Lee, Y., & Kozar, K. (2005). Investigating factors affecting the anti-spyware system adoption. *Communications of the ACM*, 48 (8), 72–77
- Lehtimaki, A. (1991). Management of the Innovation Process in Small Companies in Finland. *IEEE Transactions on Engineering Management*, 38 (2), 120–6.
- Levine, A. (1980). *Why innovation fails*. Albany: State University of New York Press.
- Llanto, G. and Fukui, R. (2003). *Innovations in Microfinance in Southeast Asia*” Discussion Paper Series No. 2003-11 Philippine Institute for Development
- Luecke, R. and Katz, R. (2003). *Managing creativity and innovation*. Boston, MA: Harvard Business School Press

- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21, (1): 135-172. *Management Review*, 27(1), 17–40.
- Mbogo, M. & Ashika, C. (2011). *Factors Influencing Product Innovation in Micro Finance Institutions in Kenya: A case study of MFIs registered with the association of microfinance institutions* Unpublished MBA project at USIU. [http://www.icsb.org/documents/ICSB\\_web.pdf](http://www.icsb.org/documents/ICSB_web.pdf)
- McCraw, Thomas K. (2007). *Prophet of Innovation: Joseph Schumpeter and Creative Destruction*. Belknap Press. ISBN 9780674025233.
- Mohanty, J. & Panda, D.(2007). *Innovation spurs growth*. Retrieved from <https://www.highbeam.com/doc/1p3-1383142991.html>
- Mugenda, O. M & Mugenda, A. G, (2003). *Research, Qualitative and Quantitative Approaches*. Nairobi: ACTS Press.
- Mugo.G (2012), “The effect of financial innovation on the growth of micro-finance institutions in Kenya” University of Nairobi.
- Mutua, I.M. (2006). *The linkages between MFIs & commercial banks in Kenya*. Unpublished MBA project. University of Nairobi.
- Nader, A. (2011). The Effect of Banking Expansion on Profit Efficiency of Saudi Arabia Commercial Banks, *Journal of Global Business and Economics*, 3 (1), 11-23.
- Odhiambo, G. (2008). *Innovation Strategies at Standard Chartered Bank*. (Unpublished MBA Project), School of Business, University of Nairobi.
- Otieno, R. O. (2006). *Performance of Micro Finance Institutions*. Unpublished MBA project. University of Nairobi.
- Pratali, P., (2003), Strategic management of technological innovations in the small to medium enterprise, *European Journal of Innovation Management*, 6(1), pp. 18-31.
- Pricewaterhousecoppers (2012) “How to drive innovation and business growth” Leveraging emerging technology for sustainable growth, *PwC Advisory Oracle practice 2012*

- Quinn, James B. (1980), *Strategies for Change: Logical Incrementalism*, Richard D. Irwin Inc
- Robinson, M. 2001. *The Microfinance Revolution; Sustainable Finance for the Poor*.Vol.1 Washington.World Bank.
- Schumpeter, J. 1942. *Capitalism, Socialism, and Democracy*. New York: Harper & Bros.
- Schumpeter, J.A. (1934), *The Theory of Economic Development*, Cambridge, Mass.: Harvard
- Scott, M., and R. Bruce (1987), "Five Stages of Growth in Small Business," *Long Range Planning* 20, 45- 52.
- Shirley, J. H. & Sushanta, K. M. (2006). *The Impact of Information Technology on the Banking Industry: Theory and Empirics*. Retrieved August 12, 2013
- The Central Bank of Kenya. "Annual Report 2008." Nairobi: Central Bank of Kenya, 2008. Accessed July 15, 2011.
- Tidd, J., Bessant, J., and Pavitt, K., (2005), *Managing Innovation: Integrating Technological, Market and Organizational Change*, 3rd ed., Wiley, Chichester, UK.
- United Nations. (2005). *Economic and Social Commission for Asia and the Pacific: Trade Finance Infrastructure Development Handbook for Economies in Transition*,.Thailand: United Nations Publications.
- Utterback, J. and Abernathy, W. (1975) 'A Dynamic Model of Process and Product Innovation' *Omega*, 3: 639-656
- Wheelwright, S.C., and Clark, K.B., (1992), *Revolutionizing Product Development – Quantum Leaps in Speed, Efficiency, and Quality*, The Free Press, New York, NY.
- Wilson, J. Q. (1966). *Innovation in organizations: notes toward a theory*. in Thompson, J. D. (Ed.). *Approaches to organizational design*.University of Pittsburgh Press.
- Zikmund, W. G. (2003). *Business Research Methods (7th Ed.)*.Mason, Thomson South-Western.

## APPENDICES

### Appendix 1: Questionnaire

My name is Denis Ndolo Matayo, a Master of Science (Entrepreneurship and Innovations Management) student at the University of Nairobi. As part of the requirement for the award of the degree, I am expected to undertake a research study on “The effect of innovations management on growth of Microfinance Banks in Nairobi”. I am therefore seeking your assistance to fill the questionnaire attached herewith. Kindly complete all the questions. The results of the study will be used purely for academic purposes and data will be treated with confidentiality. Thank you for your cooperation and assistance.

#### SECTION A: GENERAL INFORMATION

Name of Microfinance Bank: \_\_\_\_\_

Contact Information: \_\_\_\_\_

Job title of respondent: \_\_\_\_\_

Year founded: \_\_\_\_\_

#### SECTION B: INNOVATIONS MANAGEMENT

1) What percentage of your staff are in the innovations management function/team?

0 - 20%  21 – 40 %  41 - 60%  61 - 80%  81-100%

2) On a scale of 1 to 5, how much attention do you give to each of the following types of innovation? Where 1 is the least important and 5 being most important.

	1	2	3	4	5
Product innovation					
Process innovations					
Marketing innovation					
Organizational innovation					

3) What is the average percentage of investment in research and development over total Net assets in your organization over the past five years?

0 - 20%  21 – 40 %  41 - 60%  61 - 80%  81-100%

**PRODUCT INNOVATIONS SECTION**

- 4) How many new products have you introduced in the past five years?  
0-2  3-5  6-8  Over 9
- 5) How many of your existing products have you continuously improved to suit market needs in the past five years?  
0-2  3-5  6-8  Over 9
- 6) What percentage of your assets is dedicated to new product development?  
0 - 10%  11 - 20 %  21 - 40%  41 - 50%  Over 50%
- 7) How many patents/ trademarks/ copyrights have you acquired in the previous five years?  
0-2  3-5  6-8  Over 9

**PROCESS INNOVATIONS SECTION**

- 8) Which of the following new procedures/ technologies are present in your organization?

Electronic money transfer	<input type="text"/>
Mobile/ Internet Banking	<input type="text"/>
CCTV surveillance	<input type="text"/>
Enterprise resource planning	<input type="text"/>
Agency Banking	<input type="text"/>
Others (Specify).....	

- 9) What percentages of your clients have access and use mobile banking services?  
0 - 20%  21 - 40 %  41 - 60%  61 - 80%  81-100%



10) What is the average percentage of investment in ICT over total Net assets in your organization over the past five years?

0 - 20%  21 - 40 %  41 - 60%  61 - 80%  81-100

11) Which of the following queue management systems have you used in the past 5 years?

Electronic queuing system

Television channels

Reading materials

Free Wireless Network

Others (Specify).....

**MARKETING INNOVATIONS SECTION**

12) What total number of markets segments did you target in each of the following years?

2011  2012  2013  2014  2015

13) What percentage of your assets have you invested in corporate social responsibility?

0 - 20%  21 - 40 %  41 - 60%  61 - 80%  81-100%

14) On a scale of 1 to 5 with 1 being least important and 5 been most important, rate these dimensions of marketing depending on how important they are in your organization.

	1	2	3	4	5
Promotion and advertising					
Markets segmentation					
Niche marketing					
Pricing decisions					
Delivery channels					
Product features/ Branding					
Marketing teams					

15) What percentage of your assets do you spend on advertising, promotions and marketing programs?

0 - 20%  21 - 40 %  41 - 60%  61 - 80%  81-100%

**ORGANIZATIONAL INNOVATIONS SECTION**

16) On a scale of 1 to 5, with one being the least improved and 5 being the highest, how would you rate your current suppliers in the past 5 years?

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Competitiveness					
Reliability					
Innovativeness					
Responsiveness					
Efficiency					

17) What is the form of business ownership of the organization?

Sole Proprietorship	
Family Business	
Partnership	
Corporation	
Joint Venture	

18) How many partnerships or contractual agreements has your company established with other major organizations/ parties in the past five years?

0-2  3-5  6-8  Over 9

19) How important do you think the following aspects or organization structure are important to determine the success of your institution? On a scale of 1 (least important) to 5 (most important)

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Organizational Restructuring					
Process reengineering					
Rebranding					
Working capital management					
Partnerships/acquisitions/ mergers					

**SECTION 2: GROWTH OF MICROFINANCE BANKS**

20) Kindly indicate the figure against each of the elements below showing the performance across a period of time from when the microfinance bank started to its current status.

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Number of savings accounts					
Number of Branches					
Number of staff					
Number of active borrowers					
Gross Loan Portfolio					
Total client Savings					
Total Assets					
Return on Assets					
Financial Expense Ratio					
Operating Expense Ratio					
Write Off Ratio					
Average loan size					

**THANK YOU FOR YOUR PARTICIPATION**

## **Appendix 2: List of Microfinance Banks in Kenya**

1. Choice Microfinance Bank Limited  
Date Licenced:13th May 2015  
Branches: 1
2. Faulu Microfinance Bank Ltd  
Date Licenced:21st May 2009  
Branches: 32
3. Kenya Women Microfinance Bank Ltd  
Date Licenced:31st March 2010  
Branches: 29
4. SMEP Microfinance Bank Ltd  
Date Licensed:14th December 2010  
Branches: 7
5. Remu Microfinance Bank Ltd  
Date Licensed: 31st December 2010  
Branches: 3
6. Rafiki Microfinance Bank Ltd  
Date Licensed:14th June 2011  
Branches: 17
7. Uwezo Microfinance Bank Ltd  
Date Licensed: 08 November 2010  
Branches: 2
8. Century Microfinance Bank Ltd  
Date Licensed: 17th September 2012  
Branches: 1
9. Sumac Microfinance Bank Ltd  
Date Licensed: 29th October 2012  
Branches: 3
10. U&I Microfinance Bank Ltd  
Date Licensed: 8th April 2013  
Branches: 2
11. Daraja Microfinance Bank Ltd  
Date Licensed: 12th January 2015  
Branches: 1

12. Caritas Microfinance Bank Ltd  
Date Licensed: 2nd June 2015  
Branches: 1
13. Maisha Microfinance Bank Limited  
Date Licensed: 21st May 2016  
Branches: 1