EFFECT OF FINANCIAL INNOVATIONS ON THE GROWTH OF SMALL AND MEDIUM ENTERPRISES

BY:

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DECLARATION

This Project is my original work and has not been presented for award of degree in any other University.

Signed: ____________________________ Date: _______________

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This Project has been submitted for examination with my approval as the University supervisor.

Signed: ____________________________ Date: ____________________

Mr. Joseph Barasa

DEDICATION

To

My dear loving and caring husband

Pius Kioko

(*Your support towards actualizing my success was invaluable*)

To

My lovely daughter

Amelia Nduku

(*May you excel beyond*)

ACKNOWLEDGEMENT

Praise to the Almighty God for being the pillar in my life and for blessing me with knowledge.

I wish to thank Mr. Joseph Barasa, my supervisor, for his valuable guidance, support and dedication throughout the period of study.

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ACRONYMS AND ABBREVIATIONS

EU	-	European Union
KBA	-	Kenya Bankers Association
NCBD	-	Nairobi Central Business District
NCC	-	Nairobi City Council
SME	-	Small and Medium Size Enterprises
UNCTAD	-	United Nations Conference on Trade and Development

ABSTRACT

Commercial Banks in Kenya have tried to develop financial products tailored for Small and medium enterprises in a bid to grow profitability while reducing financial inaccessibility for this enterprises. This has however not been embraced by many enterprises.

This study was carried out to examine the effect of financial innovations on the growth of small and medium enterprises. The study was motivated by challenges faced by SMEs despite their numbers and importance in growth of the economy. The study sought to establish the effect of product innovations, service innovations, new organizational forms as well as new production processes on growth of SMEs.The study adopted a descriptive survey design. The target population for this study was SMEs in Nairobi central business district and major banking institutions in Kenya. The study considered managers of all levels and sales executives who are believed to have adequate knowledge and experience in formulating financial innovations and presenting the ideas to prospective SMEs. This formed a total population of 66 banks and 98608 SMEs. Purposive sampling was used to select 11 banking institutions based on their branch network within Nairobi and other major towns in Kenya. Systematic and random sampling techniques were used to select SMEs to participate in the study. A sample size of 478 SMEs was determined using Krejcie (1970) model and generated by Morgan (1990). Data was gathered using structured questionnaires. Quantitative techniques of data analysis were undertaken to generate descriptive statistics on responses provided. Further, a regression analysis was undertaken to determine the strength of relationships between financial innovations and growth of SMEs.

The study findings indicated that banks had financial innovations such as small-scale business loans, small-scale business accounts, mobile banking, e- banking and direct marketing. Business loans, business account and mobile banking were specific innovation tailored towards SMEs. Most SMEs indicated financial innovations such as business SME business accounts, SME credit facilities and direct marketing strategies improved their customer relations and efficiency in their banking operations. SMEs were found to have been faced by challenges that barred them from growth. A regression analysis revealed that service innovations by financial instructions had the highest influence on growth of SMEs. The study recommended intervention on the side of the government in educating and training SMEs on managerial skills, enhancing accessibility to credit facilities, and increase efficiency in the disbursement of loans to SMEs.

CHAPTER ONE

INTRODUCTION

1.1 Background information

Small and Medium Size Enterprises are being hailed for their supportive role in promoting grassroots economic growth and equitable sustainable development. In the United States and European Union (EU) countries, SMEs are enterprises with employees under 500 while in developing countries any enterprise employing below 100 employees would constitute an SME (UNCTAD, 2001). SMEs have become more important in the economic matrixes in recent years across the globe through increased deliberate government policies and legislation aimed at nurturing SMEs as engines of economic growth and employment creation. It is estimated that SMEs constitute over 90 percent of total enterprises in most economies with a high rate of employment growth. They are also a vehicle for increased industrial production and exports.

In the USA and EU countries, it is estimated that SMEs contribute over 60 percent in employment, 40-60 percent to Gross Domestic Product (GDP) and 30-60 percent to exports. The Asian Tigers such as India, Indonesia, China, Malaysia, Japan, and South Korea also have thriving SMEs sectors contributing between 70-90 percent in employment and an estimated 40 percent contribution to their respective GDPs. In Africa, economic powerhouses such as South Africa, Egypt, Nigeria and Kenya, the SME sector is estimated to contribute over 70 percent in employment and 30-40 percent contribution to GDP but contribute less than four percent to export earnings (United Nations, 2005).

The small and micro enterprises (SMEs) play an important role in the Kenyan Economy. According to the Economic Survey (2006), the sector contributed over 50 percent of new jobs created in the year 2005. Despite their significance, past statistics indicate that three out of five businesses fail within the first few months of operation (Kenya National Bureau of Statistics, 2007). Among the inexhaustible list of factors that could enhance development of SMEs is adequate finances and good financial management among the

SMEs. Finance and financial related services are an important prerequisite in initiation, development and growth of business enterprises.

Finance has been identified in several business surveys as the most important factor determining the survival and growth of small and medium sized enterprises in both developing and developed countries. Access to finance allows SMEs to undertake productive investments to expand their businesses and to acquire the latest technologies, thus ensuring their competitiveness and that of the nation as a whole.

Poorly functioning financial systems can seriously undermine the microeconomic fundamentals of a country, resulting in lower growth in income and employment. Suitable tailored products that ensure a win win situation for both financial institutions and SMEs are therefore important in ensuring profitability and attainment of business goals for both financial institutions and SMEs. Financial innovations are important vehicles though which banking institutions can turn around performance in SMEs and lead to an incredible change in business performance. Financial innovation is the act of creating and popularising fresh monetary instruments as well as fresh monetary technologies, institutions and markets. It encompasses institutional, product and process innovations (Alvarez, 2009). Institutional innovations relate to the creation of new types of financial firms such as internet banks, auto branches and discount broking firms.

Product innovation has to do with new products such as derivatives, securitised asset and mortgages. Process innovations relate to new ways of conducting financial business including online banking, mobile phone banking and new ways of implementing information technology. Despite the potential for financial innovations to facilitate access to finances for SMEs, the extent to which this has affected the overall growth of SMEs is yet to be established. This study focuses on filling in this research gap by examining the extent to which financial innovations have affected growth of SMEs in Kenya.

1.2 Problem statement

Despite their dominant in numbers and importance in the economy, SMEs have traditionally faced several management challenges that in most cases culminate in the closure of the enterprises (UNACTAD, 2001). According to UNACTAD report on improvement of SMEs through finance, it was found that growth among SMEs was faced by among other factors financial challenges that crippled management operations and consequently led to death of SMES.This was commonly as a result of short period within which short maturities of bank loans extended to SMEs, and reserved access to competitive interest rates that only a few selected blue-chip companies could access while loan interest rates offered to SMEs remain high.

Moreover, banks in many developing countries have traditionally lent overwhelmingly to the government, which offered less risk and higher returns. Such practices have crowded outmost private sector borrowers and increased the cost of capital for them. Nevertheless, financial sector has been faced with revolutionary change that has resulted to increased innovations, leading to a shift from traditional ways of doing banking to more innovative and customer focussed process. Revolutionary banking has seen SMEs that were previously regarded as unbankable being a key target market for banking institutions. Among such financial innovations as noted by Nyangosi (2008) mobile banking, branchless banking, and electronic banking and SME tailored credit facilities and bank accounts that were previously non-existent. While many studies have majorly emphasized on the role of SMEs in the economy and the challenges facing SMEs, none of this studies has placed emphasis of managerial perceived impact of financial innovations on growth of SMEs. This study therefore intended to fill in this gap.

The study sought to answer the following research questions:

i. What is the effect of product innovation on growth of SMES?
ii. What is the effect of service innovation on growth of SMEs?
iii. What is the effect of new organisational forms on growth of SMEs?
iv. What is the effect of new production processes on growth of SMEs

1.3 Expected relationship

Financial innovations created by banking institutions are expected to be solutions to the challenges faced by SMEs in their growth and development. Adoption of these innovations by SMEs is likely to have a positive impact on business operations such as financial management, efficiency in service delivery availability of working capital and market networking. The result of positive impact by banking institution is then seen in growth among SMEs shown by increase in annual turnover, opening on new branches and creation of employment opportunities.

1.4 Objectives of the study

This study was based on the following objectives

1.4. 1 General objective

To establish the managerial perceived impact of financial innovation on the growth of Small and Medium Enterprises.

1.4.2 Specific objectives

i. To establish the effect of product innovations on growth of SMEs.
ii. To establish the effect of service innovations on growth of SMEs.
iii. To establish the effect of organizational forms on growth of SMEs.
iv. To establish the effect of new production processes on growth of SMEs.

1.5 Significance of the study

The importance of financial innovations in facilitating growth and sustainability of SMEs is yet to be established through scholarly research. This study sought to fill in this gap through contributing to the already existing knowledge on SMEs, as well as helping unleash the potential for SMEs through financial innovation processes. By providing a critical analysis of various financial innovations towards SMEs, this study acted as a wakeup call for both banking institutions on the products that benefit SMEs as well as for SMEs on the products, services and processes specifically tailored to them by banking institutions. The government plays a key role in policy formulation for both the financial sector and the SME sector. This study highlighted favourable strategic path upon which the government could create for players in the financial sector as well as SMEs so as to create a win win situation for both parties.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter examines the literature on the perceived impact of financial innovation on growth of SMEs. The literature focuses on the theoretical rationale for financial innovations, trends of adopting financial innovations among banking institution, usage of financial innovation among SMEs and empirical review of financial innovations and growth of SMEs.

2.1 Theoretical Review

This section looks into the various theories that seek to explain adoption of innovation as a means of gaining competitive advantage.

2.1.1 Entrepreneurship and innovation theory

The entrepreneurship and innovation theory was introduced and developed by Joseph Schumpeter (1838-1950). The original approach focused on the role of innovation on entrepreneurship, economy and social change. Schumpeter argued that, the economy through static lenses focused on the distribution of given resources across different roads. Schumpeter's view of economic development is seen as a process of qualitative change driven by innovation taking place in historical time. Giving examples of innovation, Schumpeter mentioned new products, new methods of production, new sources of supply, exploitation of new markets, and new ways to organize business. He defined innovation as a new combination of existing resources. Through these combinations, he labelled the entrepreneurial function.

For successful innovations, Schumpeter noted the important role played by entrepreneurs. That is, the prevalence of inertia or resistance to new ways at all levels of society that entrepreneurs had to fight in order to succeed in their aims. Rafinejad, (2007) describes the Schumpeter's theory as the one that emphasizes innovation-ignoring risk taking and organizing abilities of an entrepreneur. The theory of entrepreneurship is important to this study as it describes the relationship between innovation and entrepreneurship. Innovations as seen in the theory bring about economic and social change.

On the other hand, innovation has presented as an opportunity through which entrepreneurs can create new products, new methods of production, new sources of supply, exploitation of new markets and new ways to organize business. In the study context, mobile phone banking presents an opportunity for banking institutions to have new ways of doing business, which are likely to bring economic and social changes within the customer fraternity. This is reflected in the way banks introduced new product and services because of the innovation, trends of adopting the innovations among customers and challenges faced during the adoption.

2.1.2 Diffusion of Innovations Theory

Rogers (1983) cited Mwanko, (2010) defines diffusion as the communication process by which a new idea or new product is accepted by the market. On the other hand, rate of diffusion refers to the speed that the new idea spreads from one consumer to the next. Rogers showed that, a diffusion process in a social system follows an S-Curve in which the adoption of technology begins with slow change then follows rapid change and ends in slow change as the product matures or new technologies emerge. He also held that people adopt new technological innovations at different times and at different rates. This adoption process tracked through a diffusion curve is a decision-making process in which an individual passes from the initial knowledge of an innovation to forming an attitude towards the innovation, to a decision to adopt or reject it, then to its implementation and the use of the new idea and finally to confirmation of this decision. The number of newly 'converted' adopters plotted as a frequency histogram against time follows a bell-shaped Gaussian curve where the number of new adopters rises until halfway the S-curve after which their numbers decrease.

Based on this, Rogers identified five groups of adopters of innovation namely; innovators, early adopters, early majority, late majority and laggards. Innovators are the first 2.5% of adopters. They are venturesome and educated, have multiple sources of information and show greater propensity to take risks. They appreciate technology for its own sake and are motivated by the idea of being a change agent in their reference group. They are willing to tolerate initial problems that may accompany new products or services and are willing to make swift solutions to such problems.

The next 13.5% of adopters are "Early Adopters". They are the social leaders, popular and educated. They are the visionaries in their market and are looking to adopt and use new technology to achieve a revolutionary breakthrough that will achieve dramatic competitive advantage in their industries. They are attracted by high-risk, high-reward projects and are not very price sensitive because they envision great gains in competitive advantage from adopting a new technology. They typically demand personalized solutions and quick-response, highly qualified sales and support.

The next 34% of adopters are formed by the "Early Majority". They are deliberate and have many informal social contacts. Rather than looking for revolutionary changes to gain productivity enhancements in their firms, they are motivated by evolutionary changes. According to Rogers (1983), they have three principles in the adoption of new technology:

- *“When it is time to move, let’s move all together*”. This principle defines why adoption increases so rapidly in the diffusion process and causes a landslide in demand.
- “*When we pick a vendor to lead us to the new paradigm,let us all pick the same one*”. This principle explains which firm will become the market leader.
- “*Once the transition starts, the sooner we get it over with, the better*”. This principle shows why the transition stage occurs rapidly.

Late majority are the next 34% of adopters. They are sceptical, traditional and of lower socio-economic status. They are very price sensitive and require completely preassembled, bulletproof solutions. They are motivated to buy technology just to stay even with the competition and often rely on a single, trusted adviser to help them make sense of technology.

The last 16% of the adopters consists of "Laggards". Laggards are technology sceptics who want only to maintain the status quo. They tend not to believe that technology can enhance productivity and are likely to block new technology purchases. Roger's model has found wide appeal and application in such disciplines as marketing and management science.

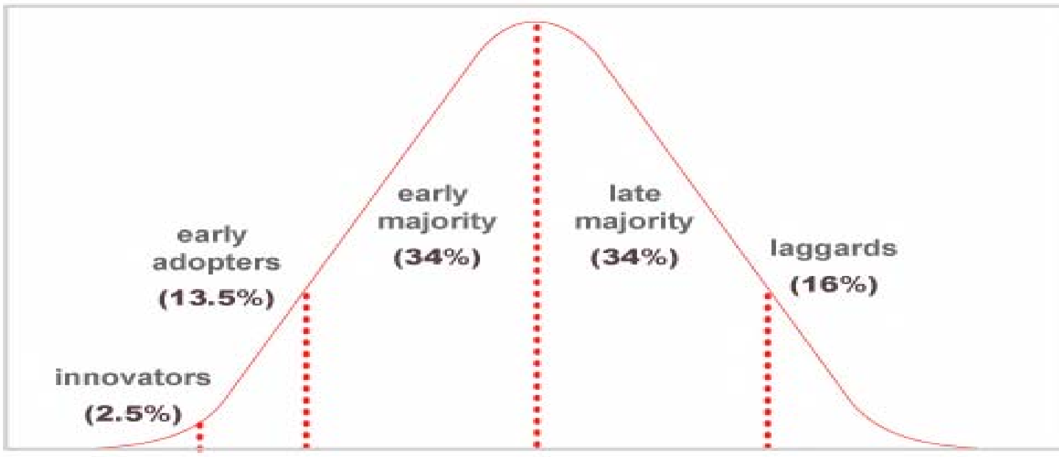


Figure 1 Rogers (1983)

Rogers further explained that the process of innovation diffusion is dictated by uncertainty amongst potential adopters during the introduction of technological innovations.

2.2 Empirical Review

2.2.1 Financial innovations among banking institution in Kenya

According to Schmidt, (2006) financial innovations is the design of new financial instruments and techniques of financial intermediation, structural change in financial system, changes in organization and behaviour of institutions as well as design of new financial instruments of packaging, together with existing financial instruments. Financial innovations can be grouped as new products (e.g. adjustable rate mortgages; exchange-traded index funds); new services (e.g. on-line securities trading; Internet banking); new "production" processes (e.g. electronic record keeping for securities; credit scoring); or new organizational forms (e.g. new type of electronic exchange for trading securities; Internet-only banks). Of course, if a new intermediate product or service is created, that is used by financial services firms, then it may become part of a new financial production process.

In Kenya, majority of banks have introduced internet banking, mobile banking and other e-banking facilities, to enhance delivery channels to their customers. The introduction of these products in to the market does not however have links on profitability by banking institutions. For example, while Internet banking is fast and convenient mode of conducting banking transactions, this is yet to gain acceptance among banking consumers, due to fears of uneasiness in this mode of banking (Akhaven, 2005). Like many other developing countries, e banking in Kenya is at its embryonic stages (Nyangosi, 2008). Not many banks have embraced e banking but majority have at least one or two technology based delivery channels. The non-adoption of e banking by banks has been attributed to impaired non-availability of infrastructure and legislation to support e banking.

Apart from individual banks' ATMs, Kenyan Banks have formed e-banking outsourcing partnership to provide e banking solutions to their customers. These include PesaPoint limited and Kenya switch (Ken switch).Customers of banks that are members of Pesapoint can access 120 Pesapoint ATMs and those banks that are members of Kenya switch can access 152 ATMs. Those banks with membership of both Ken switch and Pesapoint have access to a minimum of 272 ATMs. This increases the number of transaction and efficiency of offering financial services by the banking sector. According to Nyangosi (2008), among the innovative banks in Kenya is Equity Bank that had more ATMs (232) as at December 2007.Research reveals that, only 22 out of 41 banks have their own ATMs. Kenya commercial bank and Barclay's banks have second and third rank with 19.92% and 14.7% of total ATMs in Kenya.

2.2.2 Effect of product and service innovation on growth of SMEs

Among the list of product innovations in the current financial institutions are different types of loans with mortgage loans being increasing prominent. Recent service and product innovation primarily relate to enhanced account access and new methods of payment – each of which better meets consumer demands for convenience and ease.

Automated teller machines (ATMs) which were introduced early 1970s and diffused rapidly through the 1980s significantly enhanced retail bank accounts access and value providing customers with around the clock access to funds. Debit cards largely replaced ATM cards through 1980s and 1990s, which bundle ATM access with ability to make payment from bank accounts to a point of sale. Over the past decade, remote access has migrated from telephone to the personal computer. Online banking which allows customers to monitor accounts and originate payment using electronic bill payment is now widely used.

Debit cards are essentially “Pay now” Instruments linked to checking accounts whereby transactions can happen either instantaneously using online pin based methods or in near future with signature based methods. Customers typically have the choice of using online or offline methods and their selection often hinges on respective benefits. Online debts allow cardholder to withdraw cash at point of sale and offline provides float.

A number of studies have shown that financing is a greater obstacle for SMEs than it is for large firms, particularly in the developing world, and that access to finance adversely affects the growth of the SME sector more than that of large companies (Nyangosi, 2008). Therefore, it is unsurprising that the international development community has listed SME access to finance as an important policy priority that has necessitated its growth.

The advancement of accounts offered by banks and loans in banking institutions has incorporated SMEs banking to enhance their growth. Businesses emerging into corporate are facilitated through this unit where customers’ features include service providers, commodity suppliers, suppliers to suppliers who need flexible terms and rapid facilitation. This unit has been configured to guide the business from being an established SME into an emerging corporate(Amanda, 2007).Mortgage loans given to SMEs, which earlier were most for government and big organizations has diversified the nature of business that small enterprises can venture.

Online banking: As households and firms rapidly adopted internet access during the late 1990s, commercial banks established online presence. According to (Miller, 1998) the first bank websites were launched in 1995 and by 2002 many banks had globally adopted the innovation and were operating transactional websites. A study by (Silber, 2003) found out that online banking was associated with lower costs and higher profitability for a sample of Spanish banks. Prepaid cards: These are instruments whereby cardholders pay early and set aside funds in advance for future purchase of goods and services.

The services supported by SME banking includes supply chain financing, business advisory, investment accounts, asset financing, commercial loans, overdrafts, invoice discounting ,local cheque discounting and other services. Equity Bank has been named often to be the start of SME banking, offering support to SMEs in terms of credit facilities through different accounts with other banks following the trend hence increasing the pool for SMEs support(Emilio, 2005). Such support has increased access to more financing of Small and Medium Enterprises hence increasing the utilization of local sources and accelerating rural development.

2.2.3 New organizational forms

Banking institutions have shifted their organisational form. Mary (1998) states that, the new institutionalism paradigm result from path-dependent change in the new institutional environment. Such paradigm shifts give rise to changes at the organizational level as firms adapt their governance structure to capture new opportunities for profit and gain from trade opened by the institutional changes. To embrace the new organizational forms in the banking institutions, banks have adopted agency banking and branchless banking that diversifies their opportunities for more profits and access to their products and services (Mike & Eric, 2010).

In 2009, the Central Bank of Kenya (CBK) commenced measures to open up banking channels to non-bank agents. An amendment to the Banking Act (passed as part of the Finance Act 2009) allowed banks to start using agents to deliver financial services. Using small shops, petrol stations, pharmacies and other retail outlets as agents could have a dramatic impact on improving access to financial services, especially in rural areas.

Kenya Commercial Bank (KCB), Co-operative Bank and Equity Bank, all financial institutions with a large retail footprint, are in the process of rolling out agent banking networks. KCB expected to have 2,000 agents by the end of 2011. Equity Bank has recruited 8,000 agents, with 2,000 in operation(IMF, 2011). Co-op Bank has already seen its profits increase through partnerships with SACCOs that tap deposit pools in rural areas. Effectively, the agency-banking model provides an extension into a market already targeted. Co-op Bank and Equity have both succeeded with business models aimed at low-income customers. Up-market banks may follow suit. Examples of agency banking among the Kenyan banks include “Co-op Kwa Jirani," for Co-operative bank, Equity bank, which has "Equity Agent," and Kenya Commercial Bank (KCB) that runs "KCB Mtaani".

Under the CBK regulations, agents can offer a number of banking services, including cash deposits and withdrawals, fund transfers, bill payments, loan payments, payment of benefits and salaries, and collection of account and loan applications. However, agents are limited to cash-only transactions and cannot assess applications (Ratio Magazine, 2007).

Agency banking has enabled bank customers including the SMEs to access the basic banking services, for example, cash deposit, cash withdrawal and bank balance inquiry conveniently or what would be termed as within the comfort of their neighbour-hood. The convenience of access to banking services and the extended hours that the agencies work has been the most attractive features of these advancements. The rural population has heartily welcomed this idea since they have had to sometimes go through inconvenient experiences to access banking services due to the poor road infrastructure and high costs (Giorgio, 2009).

Other widely adopted organizational form is branchless banking, by banking institutions as a welcome to financial innovations. According to Duffie, (1995), branchless is delivery of financial services outside conventional bank branches using information and communications technologies and nonbank retail agents.

Branchless banking adopted by commercial banks in Kenya that involves use of mobile banking has enhanced reduction in operating cost and time. According to Tufano, (2003), mobile banking has the potential to reduce operating costs up to 12% and can help shift some financial flows from informal to formal channels and most in correspondent with other banking channels. Such innovations like M-Pesa by Safaricom and Airtel Money models have facilitated swift exchange of money and access to cash for quick decision making which has also necessitated access to banking services in rural areas leading to start and stabilization of entrepreneurs (Oxford Business Group, 2011). Online banking has facilitated the payment of bills and purchase of goods and services online that has transformed the operations of SMEs from traditional ways to modern ways hence diversifying their access to essential utilities required by such SMEs (United Nations, 2005).

2.2.4 Effect of production process innovation on growth of SMEs

As an innovative strategy towards being innovative in the way banks carry out their production (service provisions to their customers),Kenyan banks have exponentially embraced the use of information and communication technologies in their service provision (Nyangosi, 2008).They have invested huge amounts of money in implementing the self and virtual banking services with the objective of improving the quality of customer service. Some of the ICT-based products and services include the introduction of SMS banking, ATMs, Anywhere banking software's, Core banking solution, and Electronic clearing systems and direct debit.

Cheque truncation is a newly introduced cheque clearing system, which involves clearing and settlement between banks, based on images and associated electronic payment data, without the physical exchange of the cheques. In mid 2005, Kenya's Banking Industry moved a milestone by introducing Real Time Gross and Settlement system (RTGS) which was renamed Kenya Electronic Payment and Settlement system (KEPSS)(Miller, 1998). This was meant to facilitate the inter-bank financial data transfer. Other developments include e banking, which is aimed at reducing congestion in banking halls and incidences of long queues. Digital–based financial services have made a significant contribution in covering the cost of offering financial services, which has a direct effect on banks' profits.

Banks have also adopted a marketing strategy whereby the new products offered in the market, continue to assume local development brand names to suit the domestic environment and targeting the larger segment of local customer base. Among the products, include Islamic banking which was introduced in 2005, tailored in line with "Shariah" principles. Currently, Barclays Bank of Kenya, Kenya Commercial Bank, K-Rep-Bank and Dubai Bank have introduced Islamic banking products in the market. All the above clearly indicate that, Kenya's banking Industry has great developments like any other banking market in the world.

2.3 Conceptual framework

The relationship between dependent and independent variables in the study is been discussed under conceptual framework shown in figure 2.1 below.

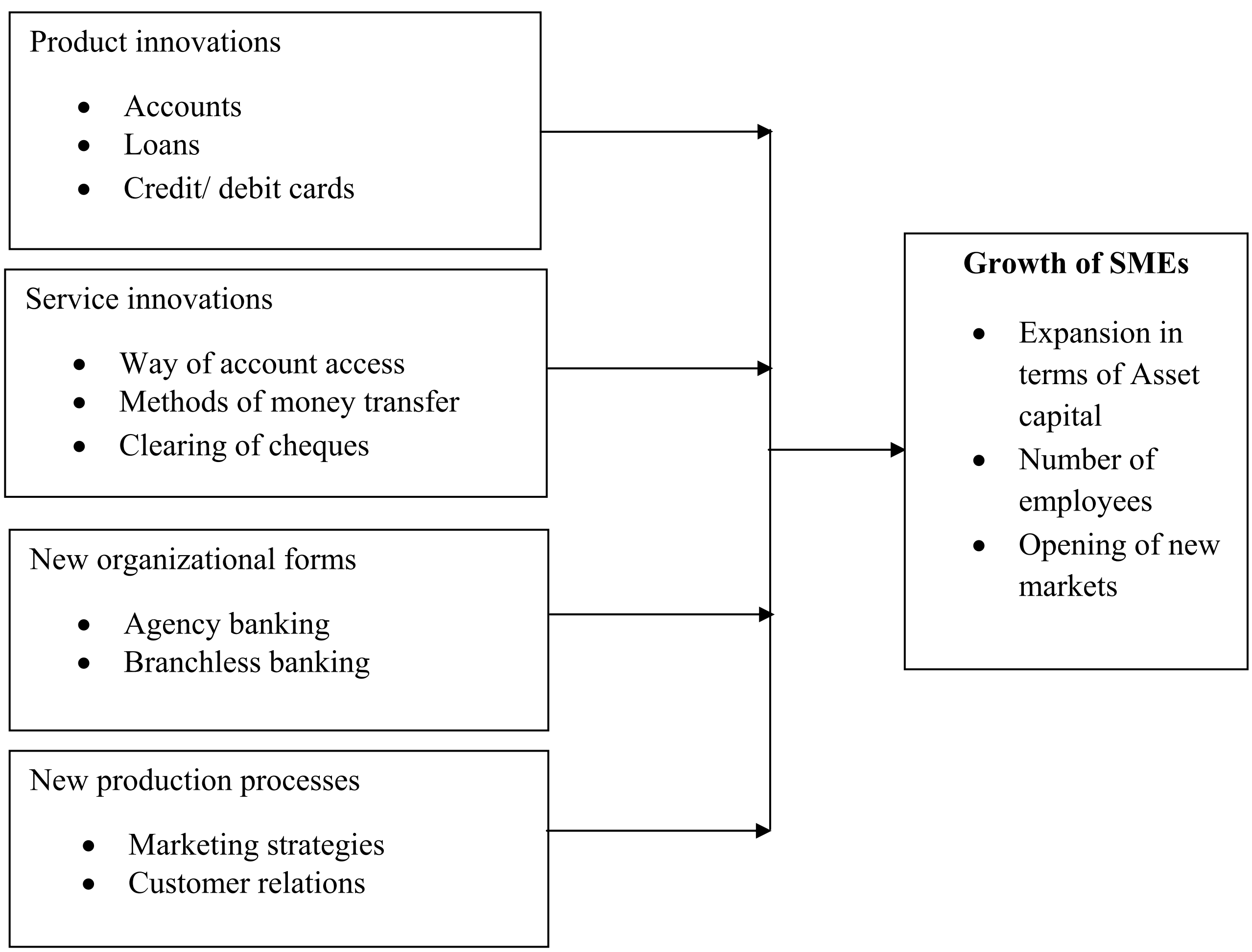


Figure 2.1: Conceptual framework

Financial innovations form the studies independent variables. Growth of SMEs is the study's dependent variable and is subject to new products, services, organizational forms and production processes that create a win-win situation between the banking institutions and SMEs. The indicators of growth among SMEs will be measured in terms of asset expansion, opening up of new markets as well as number of employees. By having innovation that has positive implications on SMEs, banking institutions are expected to increase capital access to SMEs and thus facilitate growth.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research design

The study adopted a descriptive survey design. A descriptive survey was suitable in this study owing to the large population and banking institutions targeted by the study. A survey design describes people responses to questions about a phenomenon or situation with aim of understanding respondent's perceptions from which truism is constructed (KIM, 2009).This was based on the constructivist epistemology which holds that, reality is what respondents generally perceive to be. A survey design was particularly useful as the study sought to establish the perception of respondents in reference to effect of financial innovations on growth of SMEs.

3.2 Target population

The target population for this study was SMEs in Nairobi central business district and major banking institutions in Kenya. The banks are; Barclays Bank of Kenya, Standard Chartered Bank, Kenya Commercial Bank, Stanbic Bank, Commercial Bank of Africa, Cooperative Bank of Kenya, African Banking Corporation, Citi Bank, National Bank of Kenya, National Industrial Credit Bank and Equity Bank (*those with branches in Nairobi and other parts of the country).* Nairobi Central Business District was picked due to high concentration of banking institutions as well as SMEs. Nairobi being the country's capital city attracts different types of SMEs due to high population. The population of SMEs was drawn from SME list from Nairobi City Council while that of banking institution was drawn from Kenya bankers association (KBA). The SMEs was grouped as per the kind of service or product provided as indicated in Nairobi city council list. According to KBA, Kenya has 11 banks with nationwide branch network while the SMEs as per Nairobi City Council are 98,608(CCN, 2011)

The research targeted managers of all levels of sales executives who are believed to have adequate knowledge and experience in formulating financial innovations and presenting the ideas to prospective SMEs. The Nairobi Central Business districts host 11 major banking institutions (with branches in Nairobi and Mombasa and other major towns in the country). These include; Barclays Bank of Kenya, Standard Chartered Bank, Kenya Commercial Bank, Stanbic Bank, Commercial Bank of Africa, Cooperative Bank of Kenya, African Banking Corporation, Citi Bank, National Bank of Kenya, National Industrial Credit Bank and Equity Bank. Every bank will therefore provide at least three managers and three marketing executives so that the total target population for banks is 66. The NCBD has98,608 SMEs according to 2011 records of Nairobi City Council.

3.3 Sampling Design and Sample Size

Sampling refers to a method used in drawing samples from a population usually in such a manner that the sample facilitated determination of some hypothesis concerning the population (Chandran, 2004). This study sampled two categories of population; banking institutions and small and medium enterprises within Nairobi.

3.3.1 Sampling of Banking Institutions

Purposive sampling was used to select the banking institutions based on their branch network within Nairobi and other major towns in Kenya. Thus, 11 banks will be selected to participate in the study. Each bank provided three marketing executive and three managers who provided information on financial innovations and how they have affected growth and development of SMEs.

Table 3.1 Sample population of banking institutions

Employee category	Managers population	Marketing executives
Barclays Bank of Kenya	3	3
Standard Chartered Bank	3	3
Kenya Commercial Bank	3	3
CFC Stanbic Bank	3	3
City Bank	3	3
National Bank of Kenya	3	3
Commercial Bank of Africa	3	3
Cooperative Bank of Kenya	3	3
African Banking Corporation	3	3
. National Industrial Credit Bank	3	3
. Equity Bank	3	3
Total	**33**	**33**

3.3.2 Sampling of SMEs

The sampling frame for SMEs was drawn from the list of SME in Nairobi City Council. Systematic sampling and random sampling was used to select SMEs to participate in the study. According to Kenya Institute of Management (2009), systematic sampling is a way of selecting every n^{th} item on a randomised list. Thus in the randomised list of 24 categories of SMEs, 30% of SMEs was selected to participate in the study. Sampling interval of 3was used to select individual categories of SMEs to participate in the study until a required sample size of 7 SMEs have been identified. Categories of SMEs to participate in the study and their population were shown in table 3.2. The sample size for different categories of SMEs to participate in the study was determined using Krejcie (1970) model and generated by Morgan (1990) (Refer appendix VI). Thus based on calculation of sample size for given populations the sample size for SMEs selected was 478 respondents.

Table 3.2: Sample population for SMEs

Business category	**Total population**	**Sample size**
Small transportation company	2249	83
Small storage facility	813	30
Small lodging house with restaurant / bar	205	7
Large eating house, snack , bar tea house	522	19
Medium financial services	406	15
Small entertainment facility	63	2
Small workshop service repair contractor	8,727	322
Total	**28,510**	**478**

3.4 Data collection instruments

The researcher used both secondary and primary data to accomplish the research objectives. Primary data was collected through questionnaires administered to managers of banking institutions and managers of different SMEs. According to Chandran (2004), Questionnaires provide a high degree of data standardization and adoption of generalized information amongst any population. They were useful in a descriptive study where there was a need to quickly and easily get information from people in a non-threatening way. They provided flexibility at the creation phase in deciding how questions were administered. Secondary data was gathered through analysis and review of relevant literature on the perceived impact of financial innovations on the growth of SMEs.

3.4.1 Description of data collection procedure

Data collection process began by the researcher seeking an introduction letter to carry out research from the University. She further sought consent from Nairobi City Council and corporate managers in banking institutions to be studied. With help of a research assistant, the researcher issued the questionnaire to the targeted respondents to fill. She closely monitored the process to clarify any issues that would arise during the answering of the questionnaire. For respondents who were unable to fill the questionnaire at the time the researcher was undertaking the exercise, more time was allocated for them so that they could be able to fill.

3.5 Reliability and validity

Validity and reliability was undertaken through a pilot test. According to (Mugenda, 2003), pilot studies are small-scale version[s], or trial run[s], done in preparation for the major study. He further adds that it can be used for pre- testing of a research instrument. Chandran (2004) indicates that one advantage of conducting a pilot study is that it might give advance warning about where the main research project could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated. The researchers issued questionnaire to two respondents, respondents in the banking institution and each category of SME selected. The results of the pilot test and issues emanating from the questionnaire was then used to correct the main questionnaire before actual data collection is undertaken.

3.6 Ethical considerations

The researcher sought consent to carry out the study from Nairobi City Council and corporate managers of banking institutions to be studied. The researcher also assured the management and other respondents that the information gathered was treated with utmost confidentiality and was only used for the purpose of the research.

3.7 Data Analysis techniques

Quantitative technique was used to undertake data analysis. This involved analytical use of numeric measures in establishing the scores of responses provided. This entailed generation of descriptive statistics after data collection, estimation of population parameters from the statistics, and making of inferences based on the statistical findings, with the help of Statistical Package for Social Sciences (SPSS).Correlation a statistical technique that can show whether and how strongly pairs of variables are related was then undertaken to determine if a relationship existed between financial innovations by banking institutions and growth and development of SME's. The output was presented in form of tables and charts and the results of the numerical data were then interpreted based on the research objectives and thereafter conclusion and recommendations made.

3.8 Model linking innovation and growth

The relationship between different financial innovations and growth of SMEs was established through a multiple regression model of the form shown below.

$$Y=\alpha+\beta_{1X1}+\beta_{2X2}+\beta_{3X3}+\beta_{4X4}+\varepsilon$$

Where Y=Dependent variable (growth of SMEs),a is the constant, β_1 is the coefficient of the product innovations,$\beta_2$is the coefficient of service innovations ,β_3 is the coefficient of new organizational forms , β_4 is the coefficient of new production process , ε is the error term (prediction error / residual).It refers to the difference between the actual and the predicted values of Y.

Strength of the relationship was determined by multiple correlation for a regression model, which is the correlation between the actual values of Y and the predicted values of Y. It is denoted by R and it falls between 0 and 1. Uppercase notation distinguishes this measure from r for the bivariet model. The larger the multiple correlation R, the better the predictions of Y by the set of independent variables.

Properties of R

- R falls between 0 and 1
- R = 1 only when the prediction error is 0, that is, when all predicted values are equal to actual values. In that case, the prediction equation passes through all the data points.
- R2 = 0 when the predictions do not vary as any of the x-values vary. In that case, $\beta 1 = \beta 2 = \_ \_ \_ = \beta k = 0$, the independent variables do not add any predictive power. When this happens, the correlation between y and each variable equals 0.
- Values of 0.5 show moderate relationship and values above 0.7 show strong relationship.

The researcher was present the output in form of tables and charts. The result of the numerical data was then interpreted based on the research objectives, then conclusions and recommendations drawn.

CHAPTER FOUR
DATA ANALYSIS

4.0 Introduction

This chapter has discussed the findings on the effects of financial innovations on the growth of small and medium enterprises. The subtopics discussed in this chapter include: Background information, the effect of product innovations; service innovations; organizational forms and new production processes on growth of SMEs.

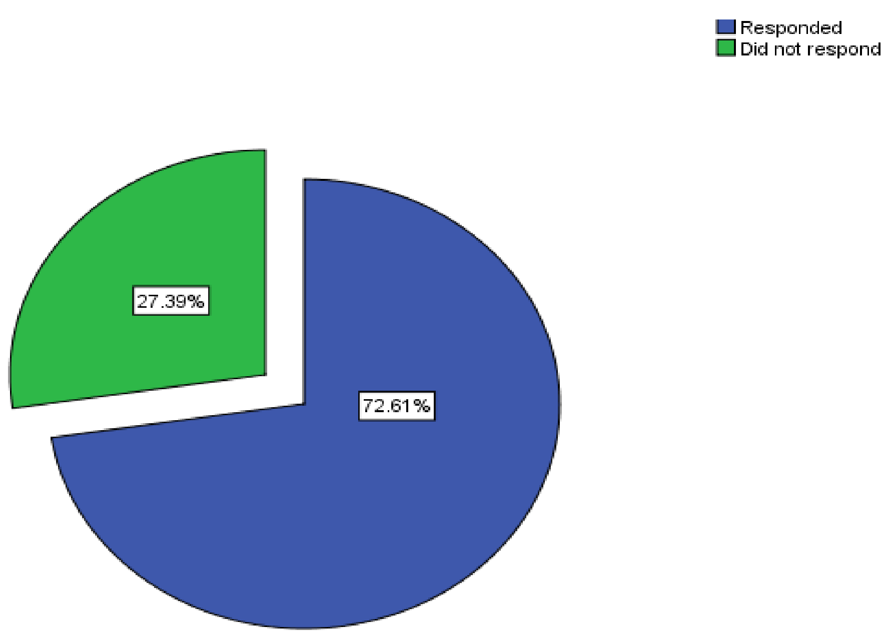
4.1 Background Information

The study sought to establish the effects of financial innovations on the growth of small and medium enterprises. The background information provided the data on response rate, Banking managers and marketing executives' gender, SME gender, how long you have worked in the bank, how long you have worked in this enterprise, work category in the Bank and category in representing the enterprise.

4.1.1 Response Rate

The study sought to determine the percentage of the respondents who participated in the study. The findings were indicated in the figure below.

Figure 4.1: Response Rate

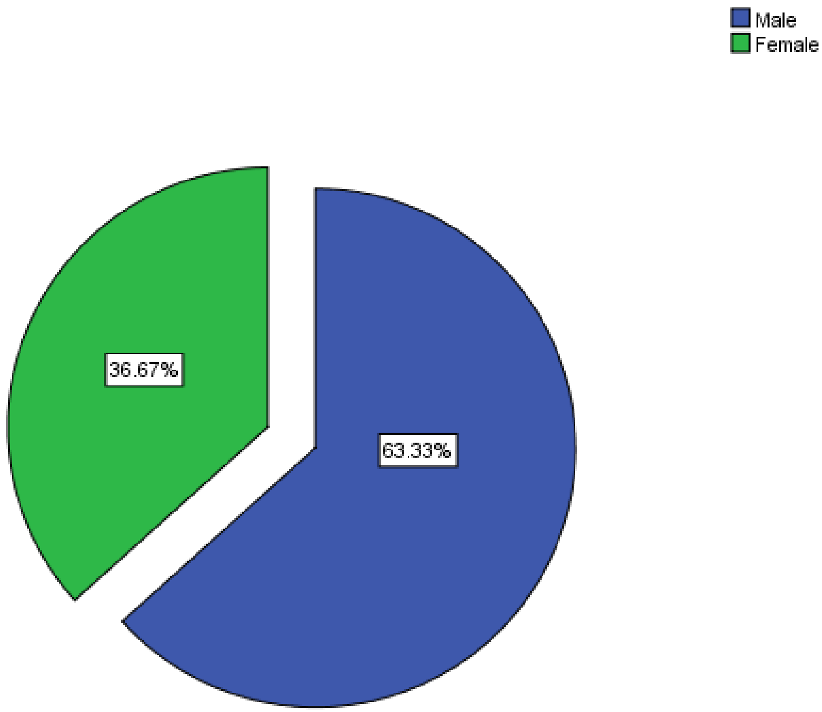


The researcher sampled 544 respondents and 395 of them responded to the study giving a response rate of (72.61%) while (27.39%) did not respond.

4.1.2 Banking managers and marketing executives gender

The study sought to establish the respondents' gender and the results of the findings were indicated in the figure below.

Figure 4.2 : Banking managers and marketing executives gender

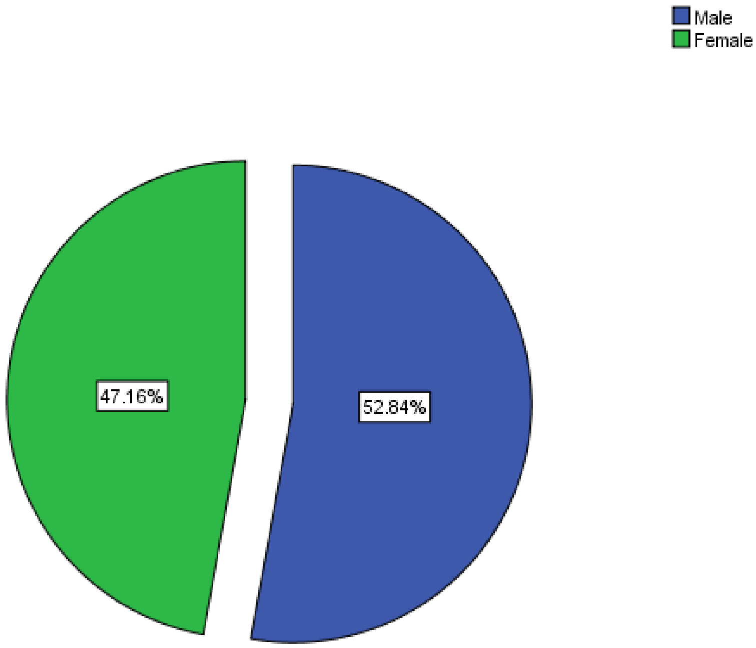


An analysis of respondents' gender indicated that (63.33%) of the respondents were male against (36.67%) female. This could imply that a large proportion of Bank managers and marketing executives in Banks are male as opposed to the female.

4.1.3 SME gender

The study sought to determine SMEs respondents gender and the results of the findings were indicated in the figure below.

Figure 4.3 : SME gender

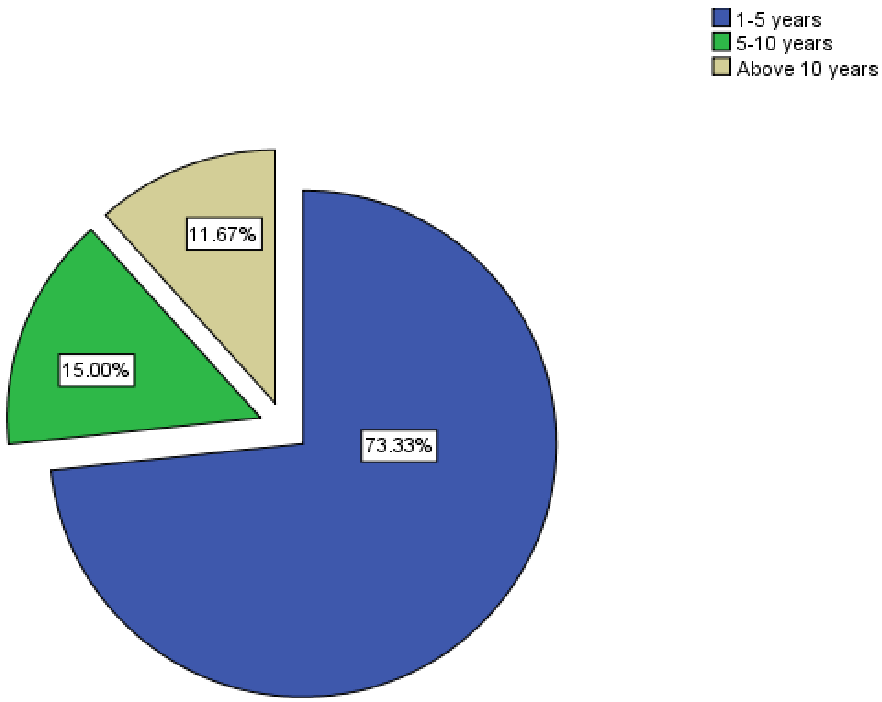


The gender distribution as reflected in the study indicate that majority (52.84%) of SMEs were male against (47.16 %) female. This could imply that a large proportion of SMEs are male as opposed to the female.

4.1.4 How long you have worked in this Bank

The study sought to establish the number of years the respondents had worked in the specific bank and the results of the findings were presented in figure below.
Majority of them had worked for a period of one to five years followed by five to ten years. Only a few had worked for a period above ten years.

Figure 4.4 : How long you have worked in this Bank



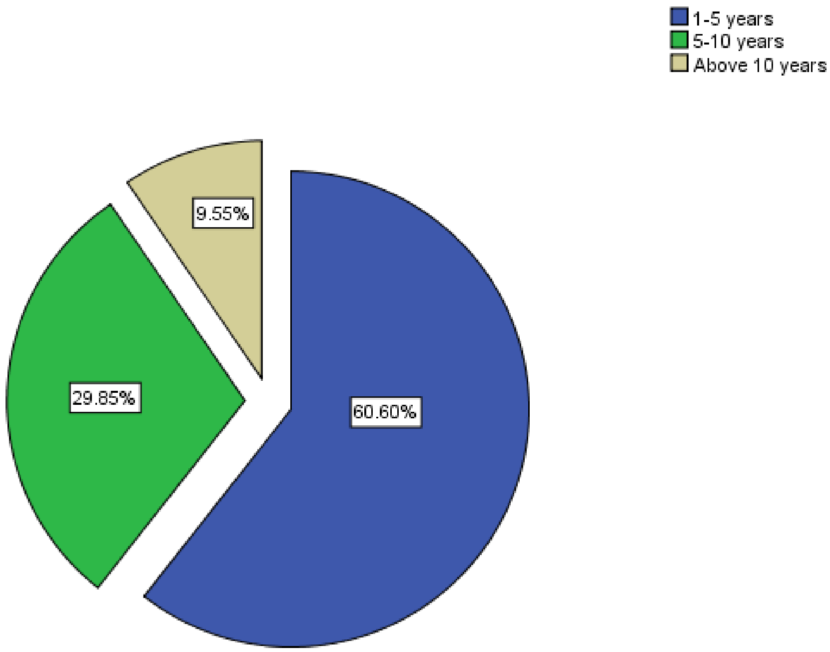
An analysis of the number of years the Bank managers and marketing executives had worked in the Bank indicated that: Majority (73.33 %) of the respondents indicated between 1-5 years while (15.0%) indicated between 5-10 years. The results further indicated that (11.67%) had worked in the bank above 10 years.

4.1.5 How long you have worked in this enterprise

The study sought to establish the number of years the respondents had worked in their enterprises and the results of the findings were presented in figure below.

Majority of the respondents had worked for a period of one to five years followed by five to ten years.

Figure 4.5 : How long you have worked in this enterprise



An analysis of the number of years the SMEs had worked in their enterprises indicated that: Majority (60.60%) of the respondents indicated between 1-5 years while the (29.85%) indicated between 5-10 years. The results further indicated that (9.55%) had been working above 10 years.

4.1.6 Work category of Bank managers and marketing executives

Bank managers and the marketing executives were asked to indicate their work category .The findings were represented on the table below.

Table 4.1 : Work category of Bank managers and marketing executives

	Frequency	Percent
Top level management	3	5.0
Middle level management	10	16.7
Lower level management	16	26.7
Marketing executive	31	51.7
Total	**60**	**100.0**

An analysis of the work category of the bank managers and marketing executives indicated that majority (51.7%) were in the category of marketing executives, (26.7%) were in the lower level management ,(16.7%) were in the middle level management and (5.0%) in the top level management.

4.1.7 Category in representing the enterprise

In a bid to establish the category of respondents in representing the enterprise, the SMEs were asked to indicate the category of representing the enterprise and the findings were represented in the table below.

Table 4.2 : Category representing the enterprise

	Frequency	Percent
SME owner	258	77.0
Employee	36	10.7
Manager	41	12.2
Total	**335**	**100.0**

An analysis of the respondents' category in representing the enterprise indicated that, majority (77.0%) were SME owners, (10.7%) were employees while (12.2%) indicated that they were managers of the enterprise.

4.2 Financial Innovations

4.2.1 Financial innovations

The Bank managers and the marketing executives were asked to indicate the common financial innovations that their Bank was using in a bid to establish the common financial innovations. The study findings were indicated in the table below.

Table 4.3 : Financial innovations

		Frequency	percent
Whether small scale business loans is the financial innovation that your bank has used in the last three years	Yes	51	85.0%
	No	9	15.0%
	Total	60	100.0%
Whether small scale business accounts is the financial innovation that your bank has used in the last three years	Yes	52	86.7%
	No	8	13.3%
	Total	60	100.0%
Whether mobile banking is the financial innovation that your bank has used in the last three years	Yes	48	80.0%
	No	12	20.0%
	Total	60	100.0%
Whether e-banking is the financial innovation that your bank has used in the last three years	Yes	45	75.0%
	No	15	25.0%
	Total	60	100.0%
Whether agency banking is the financial innovation that your bank has used in the last three years	Yes	48	80.0%
	No	12	20.0%
	Total	60	100.0%
Whether direct marketing is the financial innovation that your bank has used in the last three years	Yes	43	71.7%
	No	17	28.3%
	Total	60	100.0%

Majority (85.0%) of the managers and marketing executives indicated that small scale business loans were the financial innovation their Banks had used in the last three years while (15.0%) declined.

When asked whether small scale business accounts was the financial innovation that their bank had used in the last three years, majority (86.7%) of the respondents indicated that it was the financial innovation that their bank had used in the last three years while (13.3%) disagreed.

When asked whether mobile banking was the financial innovation that their bank had used in the last three years, majority (80.0%) of the respondents indicated that it was the financial innovation that their bank had used in the last three years while (20.0%) did not concur with that.

An analysis of whether e-banking was the financial innovation that their bank had used in the last three years indicated that, majority (75.0%) of the managers and marketing executives agreed while (25.0%) indicated that it was not the financial innovation that their bank had used in the last three years .

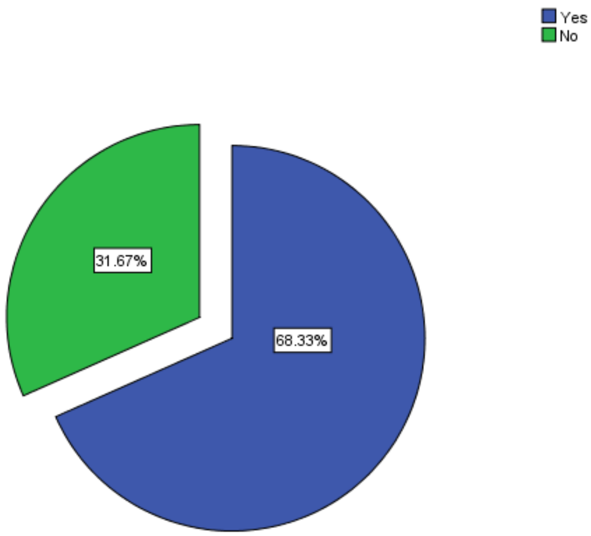
An analysis of whether agency banking was the financial innovation that their bank had used in the last three years indicated that, majority (80.0%) of the managers and marketing executives agreed while (20%) indicated that it was not the financial innovation that their bank had used in the last three years.

An analysis of whether direct marketing was the financial innovation that their bank had used in the last three years indicated that, majority (71.7%) of the managers and marketing executives agreed while (28.3%) indicated that it was not the financial innovation that their bank had used in the last three years.

4.2.2 Whether you have specific innovations tailored for small and medium enterprises

The study sought to establish whether the Banks had specific innovations tailored for small and medium enterprises and the results were represented in the figure below showing that 68.33% agreed while 31.67 disagreed.

Figure 4.6: Whether you have specific innovations tailored for small and medium enterprises



An analysis of whether the Banks had specific innovations tailored for small and medium enterprises indicated that: Majority (68.33%) of the Bank managers and marketing executives concurred, while (31.67%) disagreed that Banks had specific innovations tailored for small and medium enterprises.

4.2.3 The specific innovations in your Bank for small and medium enterprises

The study sought to determine specific innovations that banks have tailored for small and medium size enterprises. Banks had several innovations as per the findings presented in the table below. The specific innovations have also been embraced by small and medium enterprises differently with some showing a high frequency while others have low frequency.

Table 4.4: **The specific innovations in your Bank for small and medium enterprises**

		Frequency	percent
If business loans is the specific innovation you have for small and medium enterprises	Yes	44	73.3%
	No	16	26.7%
	Total	60	100.0%
If business accounts is the specific innovation you have for small and medium enterprises	Yes	45	75.0%
	No	15	25.0%
	Total	60	100.0%
If mobile banking is the specific innovation you have for small and medium enterprises	Yes	34	56.7%
	No	26	43.3%

	Total	60	100.0%
If business clubs is the specific innovation you have for small and medium enterprises	Yes	22	36.7%
	No	38	63.3%
	Total	60	100.0%
If financial literacy is the specific innovation you have for small and medium enterprises	Yes	17	28.3%
	No	43	71.7%
	Total	**60**	**100.0%**

When asked whether business loans were the specific innovation they had for small and medium enterprises, majority (73.3%) of the respondents concurred that business loans was the specific innovation they had for small and medium enterprises,while (26.7%) of the respondents disagreed.

An analysis of whether business accounts were the specific innovation they had for small and medium enterprises: Majority (75.0%) of the respondents concurred, while (25.0%) of the respondents declined that business accounts was the specific innovation they had for small and medium enterprises.

An analysis of whether mobile banking was the specific innovation they had for small and medium enterprises: Majority (56.7%) of the respondents concurred, while a significant number (43.3%) of the respondents declined that mobile banking was the specific innovation you have for small and medium enterprises.

When asked whether business clubs was the specific innovation they had for small and medium enterprises, majority (63.3%) of the respondents declined, while (36.7%) of the respondents agreed thatbusiness clubs was the specific innovation they had for small and medium enterprises.

An analysis of whether literacy was the specific innovation they had for small and medium enterprises: Majority (71.2%) of the respondents declined, while (28.3%) of the respondents concurred that financial literacy was the specific innovation they had for small and medium enterprises.

4.2.4 Rating business operations in the last one year

The SMEs were asked to rate their business operations in the last one year and the findings of the study were represented in the table below.

Table 4.5: **Rating business operations in the last one year**

		Frequency	Percent
Rating business operations in terms of expansions of asset capital	Increasing	78	23.3%
	Constant	49	14.6%
	Unpredictable	208	62.1%
	Total	335	100.0%
Rating business operations in the recruitment of new employees	Increasing	51	15.2%
	Constant	74	22.1%
	Unpredictable	210	62.7%
	Total	335	100.0%
Rating business operations in the opening up of branches in new regions	Increasing	37	11.0%
	Constant	53	15.8%
	Unpredictable	245	73.1%
	Total	**335**	**100.0%**

An analysis of the rating of business operations in terms of expansions of asset capital indicated that, Majority (62.1%) indicated that it was unpredictable, (23.3%) indicated that asset capital was increasing while (14.6%) indicated it was constant in the last one year.

An analysis of the rating of business operations in the recruitment of new employees indicated that, Majority (62.7%) indicated that it was unpredictable, (22.2%) indicated that it was constant while (15.2%) indicated that recruitment of new employees in the last one year was increasing.

Majority (73.1%) of the respondents indicated that business operations in the opening up of branches in new regions were unpredictable while (15.8%) indicated that it was constant. The results further indicated that (11.0%) of the respondents indicated that opening up of branches in new regions was increasing.

4.2.5 Innovation by banking institutions affecting SMEs business operations

In a bid to establish the banking innovations affecting business operations, the SMEs were asked to indicate how innovations by banking institutions affected their business operations .The study findings were indicated in the table below.

Table 4.6: **Innovation by banking institutions affecting SMEs business operations**

		Frequency	Percent
Whether SME business accounts affect business operations	Yes	249	74.3%
	No	86	25.7%
	Total	335	100.0%
Whether SME credit facilities affect business operations	Yes	260	77.6%
	No	75	22.4%
	Total	335	100.0%
Whether direct marketing strategies by banks affect business operations	Yes	238	71.0%
	No	97	29.0%
	Total	335	100.0%
Whether improved customer relations affect business operations	Yes	175	52.2%
	No	160	47.8%
	Total	335	100.0%
Whether banking agents affect business operations	Yes	301	89.9%
	No	34	10.1%
	Total	335	100.0%
Whether mobile banking affect business operations	Yes	308	91.9%
	No	27	8.1%
	Total	335	100.0%
Whether e banking affect business operations	Yes	192	57.3%
	No	143	42.7%
	Total	335	100.0%
Whether branchless banking affect business operations	Yes	201	60.0%
	No	134	40.0%
	Total	**335**	**100.0%**

When asked whether SME business accounts affected their business operations, majority (74.3%) of the SMEs concurred while (25.7%) indicated that SME business s account did not affect their business operations.

An analysis of whether SME credit facilities affected business operations indicated that, majority (77.6%) of the SMEs agreed while (22.4%) indicated that SME credit facilities did not affect their business operations.
An analysis of whether direct marketing strategies by banks affected business operations indicated that, majority (71.0%) of the SMEs agreed while (22.4%) indicated that direct marketing strategies by banks did not affect their business operations.

When asked whether improved customer relations affected their business operations, slightly more than a half indicating (52.2%) of the SMEs concurred while a significant number (47.8%) indicated that improved customer relations did not affect their business operations.

An analysis of whether banking agents affected SMEs business operations indicated that, More than two thirds of the respondents indicating (89.9%) indicated that banking agents affected their business operations while (10.1%) indicated that banking agents did not affect their business operations.When asked whether mobile banking affected their business operations, majority (91.9%) of the SMEs concurred while (8.1%) indicated that mobile banking did not affect their business operations.

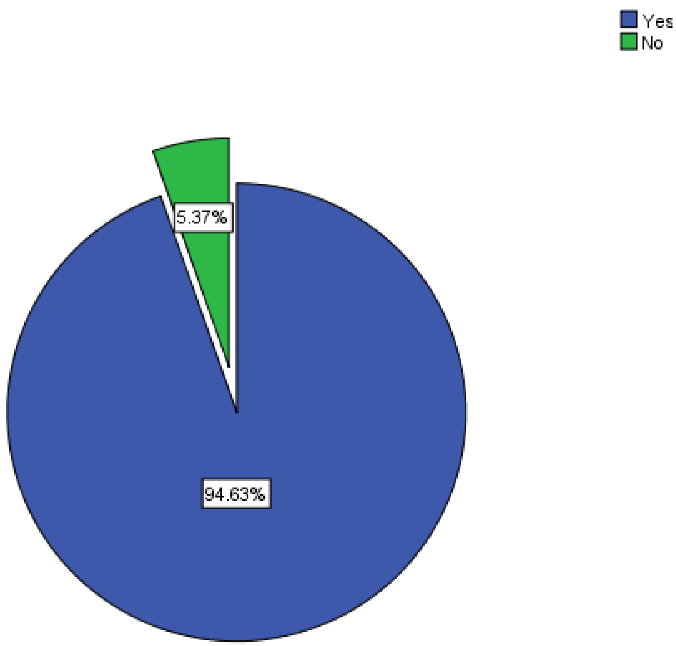
When asked whether e banking affected their business operations, slightly more than a half indicating (57.3%) of the SMEs concurred while a significant number (42.7%) indicated that e banking did not affect their business operations.

An analysis of whether branchless banking affected business operations indicated that, majority (60.0%) of the SMEs agreed while (40.0%) indicated that branchless bankingdid not affect their business operations.

4.2.6 If facing any challenges that bar you from growth and expansion

In establishing if the SMEs were facing any challenges, the respondents were asked whether they were facing any challenges that barred them from growth and expansion. The results were represented in the figure below.

Figure 4.7 : If facing any challenges that bar you from growth and expansion



An analysis of whether the respondents were facing any challenges that barred them from growth and expansion, majority (94.63%) indicated that they were facing challenges that barred them from growth and expansion while (5.37%) indicated they were not facing any challenges.

4.2.7 Challenges that hinder growth and expansion of your enterprise

The study sought to determine the challenges that SMEs were facing in bid to grow and expand their businesses .The results were represented in the table below.

Table 4.7: **Challenges that hinder growth and expansion of your enterprise**

		Frequency	Percent
If lack of enough finances hinder growth and development of your enterprise	Yes	300	89.8%
	No	34	10.2%
	Total	334	100.0%
If lack of financial management skills hinder growth and development of your enterprise	Yes	305	91.0%
	No	30	9.0%
	Total	335	100.0%
If lack of market for products hinder growth and development of your enterprise	Yes	294	87.8%
	No	41	12.2%
	Total	**335**	**100.0%**

When asked if lack of enough finances hindered growth and development of their enterprise, majority (89.8%) of the SMEs indicated that lack of enough finances hindered growth and expansion of their enterprise while (10.2%) of the respondents declined.

When asked whether lack of financial management skills hindered growth and development of their enterprise , majority (91.0%) of the SMEs indicated that lack of financial management skills hindered growth and development of their enterprise while (9.0%) of the respondents did not concur.

An analysis of whether lack of market for products hindered growth and development of their enterprise , majority (87.8%) of the SMEs indicated that lack of market for products hindered growth and development of their enterprise while (9.0%) of the respondents disagreed.

4.2.8 Effects of financial innovation on growth and expansion of your enterprise

To establish the effects of financial innovation on growth and expansion of their enterprise, the SMEs were asked to indicate the extent growth and expansion of their enterprise could be attributed to financial innovations among banking institutions. The results of the findings were represented in the table below.

Table 4.8: **Effects of financial innovation on growth and expansion of your enterprise**

		Frequency	Percent
Whether use of mobile banking has reduced operational costs in your business	strongly agree	42	12.5%
	Agree	223	66.6%
	Undecided	28	8.4%
	Disagree	21	6.3%
	Strongly disagree	21	6.3%
	Total	335	100.0%
Whether availability of branchless banking has increased accessibility to banking opportunities	strongly agree	0	0.0%
	Agree	325	97.0%
	Undecided	10	3.0%
	Disagree	0	0.0%
	Strongly disagree	0	0.0%
	Total	335	100.0%
Whether SMEs customized loans has reduced the level of financial challenges among banking institutions	strongly agree	0	0.0%
	Agree	158	47.2%
	Undecided	177	52.8%
	Disagree	0	0.0%
	Strongly disagree	0	0.0%
	Total	335	100.0%
Whether customer relation innovations have enhanced the level of relationship between SMEs and banking institutions	strongly agree	0	0.0%
	Agree	168	50.1%
	Undecided	158	47.2%
	Disagree	0	0.0%
	Strongly disagree	9	2.7%
	Total	335	100.0%
Whether new marketing strategies has increased the level of awareness on SME products among banking institutions	strongly agree	0	0.0%
	Agree	306	91.3%
	Undecided	0	0.0%
	Disagree	18	5.4%
	Strongly disagree	11	3.3%
	Total	335	100.0%
Whether as a result of financial training by banking institutions SMEs have been more sustainable	strongly agree	0	0.0%
	Agree	126	37.6%
	Undecided	191	57.0%
	Disagree	16	4.8%
	Strongly disagree	2	0.6%
	Total	335	100.0%
Whether we have opened new branches as a result of financing from banking institutions	strongly agree	0	0.0%
	Agree	0	0.0%
	Undecided	325	97.0%
	Disagree	10	3.0%
	Strongly disagree	0	0.0%
	Total	335	100.0%

An analysis of whether use of mobile banking had reduced operational costs in their businessindicated that: Majority (66.6%) agreed, while (12.5%) strongly agreed while still (8.4%) were undecided. The results also indicated that (6.3%) of the respondents either disagreed or strongly disagreed that, the use of mobile banking had reduced operational costs in their business.

An analysis of whether availability of branchless banking had increased accessibility to banking opportunities indicated that: Majority (97.3%) agreed while (3.0%) of the respondents were undecided on whether availability of branchless banking had increased accessibility to banking opportunities.

An analysis of whether SMEs customized loans had reduced the level of financial challenges among banking institutions indicated that: Majority (52.8%) were undecided ,while a significant number indicating (47.2%) of the respondents agreed that SMEs customized loans had reduced the level of financial challenges among banking institutions.

An analysis of whether customer relation innovations had enhanced the level of relationship between SMEs and banking institutions indicated that: slightly more than a half indicating (50.1%) agreed, while a significant number indicating (47.2%) were undecided .The result further indicated that (2.7%) strongly disagreed that customer relation innovations had enhanced the level of relationship between SMEs and banking institutions.

An analysis of whether new marketing strategies had increased the level of awareness on SME products among banking institutions indicated that: Majority (91.3%) agreed, (5.4%) disagreed and (3.3%) strongly disagreed that new marketing strategies had increased the level of awareness on SME products among banking institutions.

An analysis of whether as a result of financial training by banking institutions SMEs had been more sustainable indicated that: Majority (57.0%) of the respondents were undecided, while a significant number indicating (37.6%) agreed. The results further indicated that (4.8%) disagreed and (0.6%) strongly disagreed that because of financial training by banking institutions SMEs had been more sustainable.

An analysis of whether they had opened new branches as a result of financing from banking institutionsindicated that: Majority (97.0%) were undecided while (3.0%) of the respondents disagreed that they had opened new branches as a result of financing from banking institutions.

4.2.9 Your opinion on financial innovation provided by banking institutions as far as facilitating business growth is concerned

The study sought to determine whether financial innovation provided by banking institutions had any effect on the business growth and the results were represented in the table below.

Table 4.9 : Your opinion on financial innovation provided by banking institutions as far as facilitating business growth is concerned

	Frequency	Percent
They have no effect	45	13.4
Have had positive contribution	169	50.4
Have had negative contribution	119	35.5
No response	2	.6
Total	**335**	**100.0**

An analysis of the SMEs opinion on financial innovation provided by the banking institutions as far as facilitating business growth is concerned indicated that: Majority (50.4%) indicated that they had a positive contribution, (35.5%) indicated that they had a negative contribution while (13.4%) indicated that the financial innovations by the banks had no effect.

4.3 Effects of product innovation on growth of SMEs

To establish the effects product innovation on growth of SMEs the managers and marketing executives were asked to indicate the extent product innovation affected the growth of SMEs in terms of expansion and turnover and the results of the findings were indicated in the table below.

Table 4.10: **Effects of product innovation on growth of SMEs**

		Frequency	Percent
Whether providing SMEs suitable loan products has decreased financial challenges among SMEs	strongly agree	4	6.9%
	Agree	41	70.7%
	Neutral	4	6.9%
	Disagree	4	6.9%
	Strongly disagree	5	8.6%
	Total	58	100.0%
Whether most SMEs can sufficiently pay the loan facilities provided to them	strongly agree	4	6.8%
	Agree	6	10.2%
	Neutral	32	54.2%
	Disagree	8	13.6%
	Strongly disagree	9	15.3%
	Total	59	100.0%
Whether most SMEs have been able to increase their savings as a result of favorable business accounts	strongly agree	10	16.7%
	Agree	11	18.3%
	Neutral	31	51.7%
	Disagree	6	10.0%
	Strongly disagree	2	3.3%
	Total	60	100.0%
Whether most customers are not aware of how to use mobile banking	strongly agree	15	25.0%
	Agree	12	20.0%
	Neutral	14	23.3%
	Disagree	18	30.0%
	Strongly disagree	1	1.7%
	Total	**60**	**100.0%**

An analysis of whether providing SMEs suitable loan products had decreased financial challenges among SMEs indicated that: Majority (70.7%) of the respondents agreed, while (6.9%) either strongly agreed, were neutral; or disagreed .The results further indicated (8.6%) strongly disagreed that providing SMEs suitable loan products had decreased financial challenges among SMEs.

When asked whether most SMEs could sufficiently pay the loan facilities provided to them, slightly more than a half of the respondents' indicating (54.2%) were neutral, (15.3%) disagreed while (13.6%) strongly disagreed. The results further indicated (10.2%) agreed and (6.8%) strongly agreed that most SMEs could sufficiently pay the loan facilities provided to them.

When asked whether most SMEs had been able to increase their savings as a result of favorable business accounts, slightly more than a half of the respondents' indicating (51.7%) were neutral, (18.3%) agreed, while, (16.7%) strongly agreed .The results further indicated (10.0%) disagreed and (3.3%) strongly disagreed most SMEs had been able to increase their savings as a result of favorable business accounts.

An analysis of whether most customers were not aware of how to use mobile banking indicated that: Majority (30.0%) of the respondents disagreed, while (1.7%) strongly disagreed. The results further indicated (25.0%) strongly agreed, (20.0%) agreed and (23.3%) were neutral that most customers were not aware of how to use mobile banking.

4.4 Effects of service innovations on growth of SMEs

To establish the effects **Service** innovation on growth of SMEs the managers and marketing executives were asked to indicate the extent service innovation affected the growth of SMEs and the results of the findings were indicated in the table below.

Table 4.11: **Effects of service innovation on growth of SMEs**

		Frequency	Percent
Whether with the more uses associated with ATM cards ,SMEs can easily and conveniently access their bank accounts	strongly agree	10	16.7%
	Agree	40	66.7%
	Neutral	0	0.0%
	Disagree	4	6.7%
	Strongly disagree	6	10.0%
	Total	60	100.0%
Whether most SMEs have reduced their time they	strongly agree	32	53.3%

undertaken to do banking as a result of mobile banking	Agree	14	23.3%
	Neutral	0	0.0%
	Disagree	10	16.7%
	Strongly disagree	4	6.7%
	Total	60	100.0%
Whether clearing of cheques within a short time increased efficiency in SMEs operations	strongly agree	10	16.7%
	Agree	16	26.7%
	Neutral	20	33.3%
	Disagree	12	20.0%
	Strongly disagree	2	3.3%
	Total	**60**	**100.0%**

An analysis of whether with the more uses associated with ATM cards, SMEs could easily and conveniently access their bank accountsindicated that: Majority (66.7%) of the respondents agreed, while (16.7%) strongly agreed. The results further indicated that (10.0%) strongly disagreed, and (6.7%) disagreed that with the more uses associated with ATM cards, SMEs could easily and conveniently access their bank accounts.

When asked whether most SMEs had reduced the time they undertook to do banking as a result of mobile banking indicated that: Majority (53.3%) of the respondents strongly agreed, while (23.3%) agreed. The results further indicated that (16.7%) disagreed, and (6.7%) strongly disagreed that most SMEs had reduced the time they undertook to do banking because of mobile banking.

Majority (33.3%) of the respondents were neutral to the assertion that clearing of cheques within a short time increased efficiency in SMEs operations, while (26.7%) agreed and still (16.7%) strongly agreed. The results further indicated that (20.0%) disagreed, and (3.3%) strongly disagreed thatclearing of cheques within short time increased efficiency in SMEs operations.

4.5 Effects of new organizational forms on growth of SMEs

To establish the effects new organisational forms on growth of SMEs the managers and marketing executives were asked to indicate the extentnew organisational forms affected the growth of SMEs and the results of the findings were indicated in the table below.

Table 4.12: **Effects of new organisational forms on growth of SMEs**

		Frequency	Percent
Whether new banking practices increased more accessibility to banking services for SMEs	strongly agree	30	50.0%
	Agree	10	16.7%
	Neutral	4	6.7%
	Disagree	10	16.7%
	Strongly disagree	6	10.0%
	Total	60	100.0%
Whether many SMEs have not been able to adopt technology ,despite the introduction of e banking	strongly agree	16	26.7%
	Agree	20	33.3%
	Neutral	10	16.7%
	Disagree	12	20.0%
	Strongly disagree	2	3.3%
	Total	60	100.0%
Whether most SMEs find banking technology too complex for adoption	strongly agree	8	13.3%
	Agree	6	10.0%
	Neutral	24	40.0%
	Disagree	12	20.0%
	Strongly disagree	10	16.7%
	Total	60	100.0%
Whether many SMEs owners still feel insecure about financial innovation and have not been able to benefit from them	strongly agree	20	33.3%
	Agree	24	40.0%
	Neutral	10	16.7%
	Disagree	6	10.0%
	Strongly disagree	0	0.0%
	Total	60	100.0%
Whether most SMEs shy away from financial innovation because of the costs associated	strongly agree	14	23.3%
	Agree	24	40.0%
	Neutral	16	26.7%
	Disagree	6	10.0%
	Strongly disagree	0	0.0%
	Total	60	100.0%
Whether most banks shy away from providing their financial innovations to prospective SMEs	strongly agree	10	16.7%
	Agree	12	20.0%
	Neutral	36	60.0%
	Disagree	2	3.3%
	Strongly disagree	0	0.0%
	Total	60	100.0%
Whether branchless banking has led to increased time allocation to SME operations	strongly agree	12	20.0%
	Agree	10	16.7%
	Neutral	28	46.7%
	Disagree	10	16.7%
	Strongly disagree	0	0.0%
	Total	**60**	**100.0%**

An analysis of whether new banking practices increased more accessibility to banking services for SMEs indicated that: Majority (50.0%) of the respondents strongly agreed, while (16.7%) either agreed or disagreed. The results further indicated that (10.0%) strongly disagreed, and (6.7%) were neutral that new banking practices increased more accessibility to banking services for SMEs.

When asked whether many SMEs had not been able to adopt technology, despite the introduction of e banking, majority (33.3%) of the respondents agreed, (26.7%) strongly agreed and (16.7%) were neutral. The results further indicated that (20.0%) disagreed, and (3.3%) strongly disagreed that many SMEs had not been able to adopt technology, despite the introduction of e banking.

An analysis of whether most SMEs found banking technology too complex for adoption indicated that: Majority (40%) of the respondents were neutral, (20.0%) disagreed and (16.7%) strongly disagreed. The results further indicated that (13.3%) strongly agreed, and (10.0%) agreed that most SMEs found banking technology too complex for adoption.

An analysis of whether many SMEs owners still felt insecure about financial innovation and had not been able to benefit from them indicated that: majority (40%) of the respondents agreed, a significant number (33.3%) strongly agreed, (16.7%) were neutral and (10.0%) disagreed that many SMEs owners still felt insecure about financial innovation and had not been able to benefit from them.

An analysis of whether most SMEs shied away from financial innovation because of the costs associated indicated that: majority (40%) of the respondents agreed, (23.3%) strongly agreed, (26.7%) were neutral and (10.0%) disagreed that most SMEs shied away from financial innovation because of the costs associated.

When asked whether most banks shied away from providing their financial innovations to prospective SMEs, majority (60%) of the respondents were neutral , (20.0%) agreed, , (16.7%) strongly agreed and (3.3%) disagreed that most banks shied away from providing their financial innovations to prospective SMEs.

When asked whether branchless banking had led to increased time allocation to SME operations, majority (46.7%) of the respondents were neutral , (20.0%) strongly agreed,(16.7%) either agreed or disagreed that branchless banking had led to increased time allocation to SME operations.

4.6 Effects of new production processes on growth of SMEs

To establish the effects new production processes on growth of SMEs the managers and marketing executives were asked to indicate the extentnew production processes affected the growth of SMEs and the results of the findings were indicated in the table below.

Table 4.13: **Effects of new production processes on growth of SMEs**

		Frequency	Percent
Whether you provide SMEs with investment advice apart from finances	strongly agree	10	16.7%
	Agree	10	16.7%
	Neutral	20	33.3%
	Disagree	14	23.3%
	Strongly disagree	6	10.0%
	Total	60	100.0%
Whether accounts products with business clubs has enhanced networking among SMEs	strongly agree	12	20.0%
	Agree	14	23.3%
	Neutral	20	33.3%
	Disagree	8	13.3%
	Strongly disagree	6	10.0%
	Total	60	100.0%
Whether limited management skills among SMEs has been a major hurdle towards their growth and development.	strongly agree	18	30.0%
	Agree	12	20.0%
	Neutral	6	10.0%
	Disagree	16	26.7%
	Strongly disagree	8	13.3%
	Total	60	100.0%
Whether user friendly advertisement has increased the level of networking among SMEs	strongly agree	20	33.3%
	Agree	10	16.7%
	Neutral	20	33.3%
	Disagree	6	10.0%
	Strongly disagree	4	6.7%
	Total	60	100.0%
Whether enhanced and innovative customer relations has increased understanding on financial services among SMEs	strongly agree	36	60.0%
	Agree	14	23.3%
	Neutral	6	10.0%
	Disagree	2	3.3%
	Strongly disagree	2	3.3%
	Total	**60**	**100.0%**

An analysis of whether they provided SMEs with investment advice apart from finances indicated that: Majority (33.3%) of the respondents were neutral, (23.3%) disagreed and

(10.0%) strongly disagreed. The results also showed that (16.7%) either strongly agreed or agreed that they provided SMEs with investment advice apart from finances.

An analysis of whether accounts products with business clubs had enhanced networking among SMEs indicated that: Majority (33.3%) of the respondents were neutral, (23.3%) agreed and (20.0%) strongly agreed. The results also showed that (13.3%) disagreed and (10.0%) strongly disagreed that accounts products with business clubs had enhanced networking among SMEs.

When asked whether limited management skills among SMEs had been a major hurdle towards their growth and development, majority (30.0%) of the respondents strongly agreed, (20.0%) agreed and (10.0%) were neutral. The results also showed that (26.7%) and (13.3%) strongly disagreed that limited management skills among SMEs had been a major hurdle towards their growth and development.

When asked whether user friendly advertisement had increased the level of networking among SMEs, majority (33.3%) of the respondents' either strongly agreed or neutral while (16.7%) agreed. The results also showed that (10.0%) disagreed and (6.7%) strongly disagreed that user-friendly advertisement had increased the level of networking among SMEs.

An analysis of whether enhanced and innovative customer relations had increased understanding on financial services among SMEs indicated that: Majority (60.0%) of the respondents strongly agreed, (23.3%) agreed and (10.0%) were neutral. The results also indicated that (3.3%) either disagreed or strongly disagreed enhanced and innovative customer relations had increased understanding on financial services among SMEs.

4.7 Regression Analysis on the relationship between financial innovations and growth of SMEs

The regression analysis was conducted to find out how different financial innovations related to growth of SMEs.The respondent's overall mean score on growth of SMEs was considered as the dependent variable while various financial innovation were treated as independent variables. Thus, mean aggregate scores for respondents' product innovations, service innovations, new organizational forms and new productions processes were regressed overall on the growth of SMEs.The beta coefficients provided the relative importance of various financial innovations on growth of SMEs. The highest beta coefficient value of financial innovation was considered to have the highest influence on growth of SMEs, while the second highest beta coefficient stands second in terms of relative significance. The overall model was also statistically significant, where (R2 = .4, p<.001), the adjusted R Square value 0.450, which shows that this model has accounted for 45.0% of the variance in the dependent variable. The Regression results are shown in tables below

Table 4.14 Summary of regression model

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

a. Predictors: (Constant), product innovations, Service innovations, new organizational forms, and new production processes

b. Dependent Variable: Growth of SMEs

Table 4:15 Regression Coefficients

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

Y (Growth of SMEs) =0.430+0.205(product innovations) +0.483(Service Innovations) + 0.120 (New Organizational forms) +0.460 (New production processes) + €

Financial innovations were generally found to have positive influence on growth of SMEs. Service innovation was found to have the highest influence as indicated by a relative beta coefficient value of 0.483 followed by New production processes with a value of 0.460.Other innovations with influence on growth of SMEs included product innovations and New organisational forms.

CHAPTER FIVE
CONCLUSION

5.1 Introduction

This chapter provides conclusions on the effect of financial innovations on the growth of small and medium enterprises. The chapter provides a summary of key observation, conclusions and recommendations based on the findings in chapter four above.

5.2 Research questions

This study was guided by the following research questions.

i. What is the effect of product innovation on growth of SMES?
ii. What is the effect of service innovation on growth of SMEs?
iii. What is the effect of new organisational forms on growth of SMEs?
iv. What is the effect of new production processes on growth of SMEs?

5.3 Summary of the findings

The study sought to establish the effect of financial innovations on the growth of small and medium enterprises. Thus, it focused on establishing the effect of product innovation, service innovation, new organisational forms and new production processes on growth of SMEs. The researcher sampled 544 respondents and 395 of them responded to the study giving a response rate of (72.61%).The results further indicated that a large proportion (63.33%) of Bank managers and marketing executives in Banks were male and majority (52.84%) of SMEs were male as opposed to the female .Majority (73.33 %) of Bank managers and marketing executives had worked in the Bank between 1-5 years and majority (60.60%) of the SMEs between 1-5 years.

5.3.1 Financial innovations

Majority of the managers and marketing executives concurred that small scale business loans indicating (85.0%) , small scale business accounts (86.7%) , mobile banking

(80.0%) ,e-banking (75.0%) , agency banking (80.0%) and direct marketing (71.7%) were the financial innovation that their bank had used in the last three years.

Most (68.33%) of the Bank managers and marketing executives further indicated that their banks had specific innovations tailored for small and medium enterprises. majority indicated that business loans (73.3%), business accounts (75.0%) and mobile banking (56.7%) were the specific innovation they had for small and medium enterprises..However, most of the respondents declined that business clubs (63.3%) and financial literacy (71.2%) were among the specific innovation they had for small and medium enterprises.

Most (62.1%) of the SMEs rated their business operations in terms of expansions of asset capital unpredictable. Furthermore, (62.7%) rated business operations in the recruitment of new employees unpredictable and (73.1%) rated business operations in the opening up of branches in new regions as unpredictable. Moreover, most of the SMEs indicated that ,SME business accounts (74.3%) ,SME credit facilities (77.6%) ,direct marketing strategies by banks (71.0%) , improved customer relations (52.2%) , banking agents (89.9%), mobile banking (91.9%) , e banking (57.3%) affected their business operations and majority further indicated that branchless banking (60.0%) also affected their business operations .

According to the study findings, majority (94.63%) of the SMEs indicated that they were facing challenges that barred them from growth and expansion. Most (89.8%) of the respondents pointed lack of enough finances, lack of financial management skills (91.0%) and lack of market for their products (87.8%) as the hindrances to the growth and development of their enterprises.

The use of mobile banking as indicated by majority (66.6%) of the SMEs had reduced operational costs in their business while still(97.3%) of them indicated that availability of branchless banking had increased accessibility to banking opportunities. The results further showed that majority (52.8%) were undecided on whether SMEs customized loans had reduced the level of financial challenges among banking institutions.Majority (50.1%) also concurred that customer relation innovations had enhanced the level of relationship between SMEs and banking institutions. New marketing strategies had increased the level of awareness on SME products among banking institutions as indicated by the majority (91.3%) and majority (57.0%) of the respondents were undecided on whether financial training by banking institutions had made SMEs more sustainable.Majority (97.0%) still were undecided that they had opened new branches as a result of financing from banking institutions.

5.3.2 The effect of product innovation on growth of SMEs

Majority (70.7%) of the Bank managers and marketing executives indicated that providing SMEs suitable loan products had decreased financial challenges among SMEs. (54.2%) were neutral on whether SMEs could sufficiently pay the loan facilities provided to them and (51.7%) were neutral on whether most SMEs had been able to increase their savings as a result of favorable business accounts.Further more, majority (30.0%) of the respondents disagreed that most customers were not aware of how to use mobile banking.

5.3.3 The effect of service innovation on growth of SMEs

There was a strong association observed between this variable and growth of SMEs. In a bid to ascertain whether with the more uses associated with ATM cards, SMEs could easily and conveniently access their bank accounts indicated, majority (66.7%) of the respondents agreed.

The findings also indicated that most (53.3%) SMEs had reduced the time they undertook to do banking as a result of mobile banking while majority (33.3%) of the respondents were neutral to the statement that clearing of cheques within a short time increased efficiency in SMEs operations.

5.3.4 The effect of new organisational forms on growth of SMEs

The study revealed a mild association between this variable and growth of SMEs.
Majority

(50.0%) of the respondents strongly agreed that new banking practices had increased more accessibility to banking services for SMEs. Despite the introduction of e banking majority(33.3%) of the respondents indicated that many of the SMEs had not been able to adopt technology.

Moreover, most 40%) of the respondents were neutral on whether most SMEs found banking technology too complex for adoption. Majority (40%) of the respondents also agreed that most SMEs owners still felt insecure about financial innovation and had not been able to benefit from them.Majority (40%) of the respondents also agreed that most SMEs shied away from financial innovation because of the costs associated, while majority (60%) of the respondents were neutral on whether most banks shied away from providing their financial innovations to prospective SMEs. Majority (46.7%) of the respondents were also neutralon whether branchless banking had led to increased time allocation to SME operations.

5.3.5 The effect of new production processes on growth of SMEs

Most (33.3%) of the respondents were neutral on whether they provided SMEs with investment advice apart from finances and (33.3%) of the respondents were neutral on whetheraccounts products with business clubs had enhanced networking among SMEs. Limited management skills among SMEs had been a major hurdle towards their growth and development as it was indicated by the (30.0%) of the respondents. Furthermore, friendly advertisement had increased the level of networking among SMEs as majority (33.3%) of the respondents' indicated. Majority (60.0%) of the respondents strongly agreed that enhanced and innovative customer relations had increased understanding on financial services among SMEs.

5.4 Conclusion

The study was able to prove that the various financial innovations are indeed significant and have positively affected the growth of SMEs. If banks continued to develop products tailored for SMEs, then SMEs will embrace such products so as to access finances which are very critical in their growth and sustainability.

The financial innovations that the banks were using in bid to grow and develop SME enterprises included small-scale business loans, small-scale business accounts, mobile banking, e banking, agency banking and direct marketing. Moreover, most of the banks have specific innovations tailored for small and medium enterprises. These include, business loans, business accounts and mobile banking though most of the respondents declined that declined that business clubs and financial literacy were among the specific innovation they had for small and medium enterprises.

Moreover, most of the SMEs indicated that, SME business accounts, SME credit facilities, direct marketing strategies by banks, improved customer relations, banking agents, mobile banking, e banking affected and branchless banking affected their business operations .However, most SMEs rated their business operations as unpredictable in spite of the financial innovations by the banks in terms of expansions of asset capital, in the recruitment of new employees and in the opening up of branches in new regions.

The SMEs faced challenges barred them from growth and expansion. This included lack of enough finances, lack of financial management skills and lack of market for their products as the hindrances to the growth and development of their enterprises.In bid to reduce this challenges the banks established the use of mobile banking as strategy to reduce SMEs operational costs in their business, availability of branchless banking to increase accessibility to banking opportunities, SMEs customized loans to reduce the level of financial challenges among banking institutions ,customer relation innovations in a bid to enhance the level of relationship between SMEs and banking institutions, new marketing strategies to increase the level of awareness on SME products among banking institutions and financial training by banking institutions to make SMEs more sustainable .

5.5 Recommendations

The study makes the following recommendations which may be used as guidelines for Banks that are seeking to encourage SMEs to embrace financial innovation.

1. The government and the banks have a role in educating the SMEs on managerial skills in a bid to their business sustainable which occasionally fall for lack of managerial and entrepreneurial skills.
2. Financial factors cripple management operations of SMEs leading to their eventual death. This is because of inaccessibility of loan from banks due to the terms of borrowing and repayment involved .The banks should reduce their interests rate if they are to attract SMEs.
3. Delays in loan disbursements from the banks to the SMEs denied SMEs the opportunity to plan and schedule their business operations based on the timing of loan receipts. The Banks therefore should endeavor to improve its efficiency in lending to the SMEs.

4. Since most SMEs can only afford low loan amounts this profoundly limits their ability to expand and diversify their investments in a way that would guarantee both continued growth and innovation. The government through the banks should thus see to it that SMEs have access to finance capable of enhancing the innovativeness and growth of SMEs.
5. Limited and shrinking markets increase the odds that SMEs would either stagnate or collapse. The shrinking market increases competition and this is further heightened by the fact that most SMEs engage in low value commodities this is because they are not able to grow and expand to realize their full potential as they lack both funding and business support services to venture into unexplored business ideas. The banks and the government should thus provide business support to the SMEs through continual training and empowerment.

REFERENCES

Akhaven, F. A. (2005). The diffusion of financial innovations : an examination of adoption of small . *Journal of business*, 577-596.

Alvarez, F. F. (2009). Financial Innovation and the Transaction Demand for Cash. *Econometrica*, 363-402.

Amanda E. (2007). *World Bank: Gender and Economic Growth in Kenya: Unleashing the Power of Women.* World Bank Publications.

Beck et al,. (2006). The Determinants of Financing Obstacles. *Journal of International Money and Finance, 25*, 932–952.

Chandran. (2004). Research Methods with illustrations from Christian Ministries. Nairobi: Daystar University. (n.d.).

Duffie, D. R. (1995). Financial Market Innovation and Security Design : An Introduction . *Journal of Economic Theory* , 1-42.

Emilio S. . (2005). *Access to Bank Credit in Sub-Saharan Africa: Key Issues and Reform Strategies* . International Monetary Fund.

IMF. (2011). *Request for a Three-Year Arrangement Under the Extended Credit Facility-Staff Report; Press Release on the Executive Board Discussion; and Statement by the Executive Director for Kenya.* Washington DC: International Monetary Fund.

Kenya Institute of Management (2009) Fundamentals of Management Research Methods; Nairobi Macmillan Publishers. (n.d.).

Mary C. . (1998). *The New Institutionalism in Sociology.* New York: Russell Sage Foundation.

Mike G. & Eric P. (2010). *Managing Risk and Creating Value With Microfinance.* Washington DC: World Bank Publications.

Miller, M. H. (1998). Financial Innovation: The Last 20 years and Next . *Journal of Financial and Qualitative Analysis* , 459-471.

Mugenda, M. O. (2003). *Research methods: Quantitative and Qualitative approaches.* Nairobi: African Centre For Technology Studies (ACTs) Press.

Mwanko, U. M. (2010). *Sustainable Biotechnology Adoption in Nigeria.* USA: Peterlang.

Nyangosi, R (2008). The evolution of e banking : a study of indican and Kenyan Technogy awareness . International Journal o Electronic Finance , 149 -169. (n.d.).

Oxford Business Group. (2011). *The Report: Gabon.* New York: Oxford Business Group.

Rafinejad, D. (2007). *Innovation, Product Development and Commercialization.* USA: Daurish.

Ratio Magazine . (2007). Expanding Financial Servcies in Kenya : Agency Banking Verses Mobile Banking . *The Inside Track to East Africa's Economies*

Rogers, E.M. 1983. *Diffusion of Innovations*, 3rd edition. New York, NY.

Schmidt, S.L., and Brauer, M. (2006). Strategic Governance: How to assess Board Effectiveness in Guiding Strategy Execution□. . *Strategic Governance*, 14, 13-22.

Schumpeter, J. A (1949). *Theory of Economic Development*, Cambridge, Massachusetts : Harvard University Press

Silber, B. H. (2003). Financial innovation : A linear programming approach. *Journal of banking and finance*, 141-176.

Tatiana N., Cecile T. & Anjum A. (2009). *Bringing Finance to Pakistan's Poor:Access to Finance for Small Enterprises and the Underserved* . Washington DC.: World Bank Publications.

Tufano, P. (2003). Financial Innovation. *The handbook of Economics and Finance*, 541 -556.

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.

United Nations Conference On Trade And Development (UNCTAD). (2001). *Improving the competitiveness of SMEs Iin Developing Countries ; The role of finance to enhance enterprises* . New York ; Geneva : United Nations .

APPENDICES

Appendix I: Introduction letter

EUNICE MWIKALI NZOVE
KCB CARD CENTRE,
P.O BOX 58233 – 00200,
NAIROBI
TEL: 0720 791 706
Email: emwikali@kcb.co.ke

Dear Sir/Madam

MBA RESEARCH PROJECT

I am a postgraduate student at the University of Nairobi pursuing an MBA – Finance degree programme. In partial fulfilment for award of this degree, I am undertaking a Research on *''managerial perceived impact of financial innovations on the growth of small and medium enterprises ''*

I kindly request your approval to circulate the attached questionnaire within Nairobi central business. The information requested is needed purely for academic research purposes and will be treated with utmost confidentiality.

Your assistance in facilitating the same will be highly appreciated.

Thank you.

Yours faithfully,

Eunice Mwikali Nzove
Student

Appendix II: Questionnaire for bank managers and marketing executives

Dear Respondent,

This questionnaire is aimed at gathering primary data on effect of financial innovations on growth and development of SMEs.You are kindly requested to fill in the questions depending on the instructions given. The information you provide will be treated with utmost confidentiality and will be used for accomplishing an academic goal. Do not include your name anywhere in the questionnaire. Note that there are no wrong or right answers.

SECTION 1: Background information

1. Kindly indicate your gender

a. Male ☐

b. Female ☐

2. How long have your worked in this banking institution?

a. 1-5 Years ☐

b. 5-10 Years ☐

c. Above 10 years ☐

3. Indicate your work category

a. Top level management ☐

b. Middle level management ☐

c. Lower level management ☐

d. Marketing executive ☐

SECTION 2: FINANCIAL INNOVATIONS

4. Please indicate some of the common financial innovations that your bank is often using in the last 3 years.

a. Small scale business loans ☐

b. Small scale business accounts ☐

c. Mobile banking ☐

d. e- banking ☐

☐

e. Agency banking
f. Direct marketing
g. Others (Please specify) …………………………………………
5. Do you have specific innovations tailored for small and medium enterprises?
a. Yes
b. No
6. If yes in question 5 above, what specific innovations do you have for Small and medium enterprises?
a) Business loans
b) Business accounts
c) Mobile banking
d) Business clubs
e) Financial literacy

SECTION 3: FINANCIAL INNOVATIONS AND GROWTH AND DEVELOPMENT OF SME'S

The following statements indicate parameters related to effect of financial innovations on growth of SMEs. Please indicate the extent of agreement with the statements using the symbol √; 1- Strongly agree (SA), 2- Agree (A) 3- Neutral (N), 4- Disagree (D), 5- Strongly Disagree (SD)

Statement	1-SA	2- A	3- N	4-D	5-SD
Providing SMEs suitable loan products has decreased financial challenges among SMEs					
Most SMEs can sufficiently pay the loan facilities we provide them					
With the more uses associated with ATM cards , SMEs can easily and conveniently access their banks accounts					
Most SMEs have been able to increase their savings as a result favourable					

business accounts					
We not only finance SMEs but also provide them with investments advice					
Limited management skills among SMEs has been a major hurdle towards their growth and development					
New banking practices increased more accessibility to banking services for SMEs					
Most SMEs have reduced the time they undertaken to do banking as a result of mobile banking					
Despite the introduction of e banking , many SMEs have not been able to adopt the technology					
. Most customers are not aware of how to use mobile banking					
. Most SMEs find banking technology too complex for adoption					
. Many SMEs owners still feel unsecure about financial innovation and have not been able to benefit from them					
. Most SMEs shy away from financial innovations because of the costs associated					
. Most banks shy away from providing their financial innovations to prospective SMEs					
. Clearing of cheques within a short time increased efficiency in SMEs operations					

. Account products with business clubs has enhanced networking among SMEs					
. Provision of agency banking has increased accessibility of banking opportunities among SMEs					
. Branchless banking has led to increased time allocation to SME operations					
. User friendly advertisement has increased the level of networking among SMEs					
. Enhanced and innovative customer relations has increased understanding on financial services among SMEs					

21. In what other ways do you think financial innovations among banks have enhanced growth and development among SMEs

i. ………………………………………………………………………………

ii. ……………………………………………………………………………...

iii. ……………………………………………………………………………...

iv. ………………………………………………………………………………

v. ………………………………………………………………………………

End

Thank you for your participation

Appendix III: Questionnaire for SMEs

Dear Respondent,

This questionnaire is aimed at gathering primary data on effect of financial innovations among banking institutions and growth and development of growth and development of SMEs.You are kindly requested to fill in the questions depending on the instructions given. The information you provide will be treated with utmost confidentiality and will be used for the purpose of accomplishing an academic goal. Do not include your name anywhere in the questionnaire. Note that there are no wrong or right answers.

SECTION 1: Background information

1. Kindly indicate your gender
   a. Male ☐
   b. Female ☐
2. How long have worked in this enterprise
   a. 1-5 Years ☐
   b. 5-10 Years ☐
   c. Above 10 years ☐
3. Indicate category under which you represent this enterprise
   a. SME owner ☐
   b. Employee ☐
   c. Manager ☐
   d. Other____________ (Please specify) ☐

SECTION B: EFFECT OF FINANCIAL INNOVATIONS AMONG BANKING INSTITUTIONS ON GROWTH OF FINANCIAL INNOVATIONS

4. How would you rate your business operations in terms of following parameters in the last 1 year?

	Increasing	Constant	Unpredictable
Expansion in terms of asset capital			
Expansion in terms of asset capital			

Recruitment of new employees			
Opening up branches in new regions			

5. Do you attribute your answer in question 4 above to any of the following innovations by banking institutions? Kindly tick (√) one of the options provided.

	Yes	No
SME business accounts		
SME Credit facilities		
Direct marketing strategies by banks		
Improved customer relations		
Banking agents		
Mobile banking		
e banking		
Branchless banking		

6. Are you facing any challenges that bar you from growth and expansion?

a. Yes

b. No

7. If yes in question 7 above what are some of the challenges that hinder growth and development of your enterprise?

a. Lack of enough finances ☐

b. Lack / still financial management skills ☐

c. Lack of market for products ☐

d. Others (Please specify)____

8. To what extent do you agree that expansion and growth of your enterprises has been attributed to the following parameters related to financial innovations among banking institutions.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Use of mobile banking has reduced operational costs in our business					
Availability of branchless banking has increased accessibility to banking opportunities					
SMEs customized loans have reduced the level of financial challenges among banking institutions					
Customer relation innovations have enhanced the level of relationship between SMEs and banking institutions					
New marketing strategies has increased the level of awareness on SMEs products among banking institutions					
As a result of financial training by banking institution SMEs have been more sustainable					
We have opened new branches as a result of financing from banking institutions					

9. What is your opinion on financial innovation provided by banking institutions as far as facilitating your business growth is concerned.

a. They have no effect

b. Have had positive contribution

c. Have had negative contribution

d. Other (Please explain)--

Kindly indicate other ways in which banks can contribute towards growth and development of SMEs?

i. …………………………………………………………………………........

ii. ……………………………………………………………………………

iii. ……………………………………………………………………………..

iv. ………………………………………………………………………………

End: Thank you for your participation

Appendix IV: List of SME Population

Business Category	Business code	Description	Total count
3	315	Small transportation company	2,249
	115	Small Trader, Shop or Retail Service	53,293
1	110	Medium Trader Shop or Retail Services	15,774
	335	Small Petrol Filling	790
	365	Small Storage Facility	813
	380	Small Communications Co.	158
4	415	Small agric. Producer/Processor/Dealer	2,201
5	515	Medium Lodging House With Restaurant Or bar	258
518	518	Small Lodging House With Restaurant/Bar	205
524	524	Medium Lodging House	305
527	527	Small Lodging House Basic Standard	397
546	546	Small Restaurant With Bar	917
549	549	Large Eating House; Snack Bar; Tea House	522
552	552	Medium Eating House; Snack Bar; Tea House	1,010
6	610	Medium professional services firm	437
	615	Small professional services firm	5,166
	630	Medium financial services	406
	635	Small financial services	443
7	735	Small private health facility	52
	740	Doctor/ Dentist/Physiotherapist	871
	760	Small Entertainment Facility	63
8	815	Small Industrial Plant	644
	825	Medium Workshop, Services-Repair Contractor	2,907
	830	Small Workshop Service Repair Contractor	8,727
Total			**98,608**

Source*: City Council of Nairobi (2011)*

Appendix V: List of banking institutions in Kenya

No	Name of the Bank	Number of branches	Location of the branches
1	Kenya Commercial Bank	12	5 at Kencom House , Kenyatta avenue, Tommboya street , university way , Kimanti street, Biashara street , Mama Ngina street , Moi avenue
2	Standard Chartered Bank	6	Moi Avenue , SCB building, Electricity House Harambee Avenue , Biashara Street , Koinange street
3	Barclays Bank of Kenya	8	Office Park building , Moi Avenue , Haileselassie Avenue , University of Nairobi main campus , Mama Ngina street , Loita Street and Waiyaki way
4	Bank of India	1	Kenyatta avenue
5	Bank of Baroda	1	Baroda house – Kenyatta avenue
6	Commercial Bank of Africa	4	Wabera Street , Mama ngina street , Hilton ,
7	Habib Bank	1	Koinange street
8	Prime Bank	2	Kenindia house Loita street , Biashara street
9	Cooperative bank	13	Coop House 2 branches ,Ukulima Coop House , Moi Avenue , Posta Plaza , Cannon House , Elite Arcade Building Kimanthi street , City hall Annex Kaunda street , China centre , Uganda House , Riverroad/ Accra Junction , Tom mboya street
10	National Bank of Kenya	5	Kenyatta Avenue , Harambee avenue , Hailesalese Avenue , Times tower building , National Bank Building Harambee avenue
11	Oriental Commercial Bank	2	Finance house Koinange street
1	Citibank	1	Upperhill road

2			
13	Habib Bank A-Z zurich	1	Nangina House – Koinange street
14	Bank of Africa	2	Reinsurance Plaza ,Taifa road , Highway centre , Uhuru Highway
15	Dubai Bank	1	ICEA building , Kenyatta Avenue
16	Consolidated Bank	2	Harambee Avenue , Latema and river road junction
17	Credit Bank Limited	1	Mercantile House Koinage street
18	Transnational Bank	1	City hall way , Transnational Plaza
19	Chase bank	1	Prudential Assurance Building – Wabera street
20	CFC Stanbic bank	7	Stanbic Bank Buidling 2 branches , Digo road , HarambeeAvvenue , City Hall way , Chiromo road , Waiyakin way
21	African Banking Corporation	2	Koinange street
22	Imperial bank	1	IPS building Kimanthi Street
23	NIC Bank	8	Wabera Street , NIC bank , Masaba Road , Harbour House building , Moi Avenue , Harambee Avenue , Ongingaondinga street
24	Giro Commercial bank Limited	2	Banda street , Kimanthi Street
25	Equatorial Commercial bank	4	Nyerere Road , Chelster House , Koinage street , Waiyaki way
2	Paramount Universal	1	Koinange street

6	Bank		
27	Jamii Bora bank	1	Koinange street
28	Fina Bank	3	Kimanthi street , Waiyaki way , Piedmont plaza
29	Gurdian Bank	1	Biashara street
30	I and M bank	3	Kenyatta Avenue, Sarit Centre, Asha Plaza
31	Southern Credit and coop bank	1	Koinange street , Chelster House , Nginda lane Opposite meridian cordt hotel
32	Development Bank	2	Finance house
33	Fidelity bank	2	Kimanthi Lane
34	Diamond Trust bank	3	Kimanthi street ,Natioan centre and Jubilee insurance House ground floor
35	K Rep bank	1	K Rep centre Kenyatta avenue
36	Equity Bank	6	Equity centre ,Fourway towers . Tom Mboya, harambee Avenue, mfangano street , Business arcade
37	Family Bank	10	Moi Avenue , Kenyatta Avenue , Corgen house , Fourway towers, Muindimbingu street , Ronald Ngala street , Moi avenue ,Tom mboya street
38	Gulf bank	1	Kenyatta Avenue
39	First Community Bank	2	Prudential Assurance Building , Wabera street , Jamia mosque Wabera street

Source: *Kenya Bankers Association: (*2011)

Appendix VI: Sample size determination table for given population

Population Size	Sample size	Population size	Sample size	Population size	Sample size
10	10	100	80	4000	351
20	19	150	108	5000	307
30	28	200	132	10000	370
40	35	250	162	20000	377
50	44	300	169	50000	381
60	52	400	196	10000	382
70	59	1500	306		
80	66	2000	322		
90	73	3000	341		

Source: Morgan (1990)