THE IMPACT OF INNOVATIONS ON FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN STAREHE CONSTITUENCY, NAIROBI COUNTY

BY

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DECLARATION

This research project is my original work and has not been submitted for examination in any other University.

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Supervisor's Approval

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

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DEDICATION

I dedicate this project work to my entire family, for their support and encouragement throughout the period. I thank my colleagues for their co-operation, inspiration and spiritual support and to my supervisor, for the understanding, patience and guidance.

May God bless you all abundantly.

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Iam grateful and highly indebted to many outstanding individuals without whom this work would not have been successful. Special gratitude to the Almighty God for granting me good health and strength to work on this project, may abundant glory be to God. I am deeply indebted to my supervisor Prof. Josiah O. Aduda for his personal commitment, encouragement, availability, patience and tolerance during the many discussions which immensely contributed to the success of the project.

To all of you, may our dear Lord richly bless you!

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LIST OF ABBREVIATIONS

DTMs	Deposit Taking Microfinance Institutions
MFIs:	Micro-Finance Institutions
OECD:	Organization for Economic Co-operation and Development
R&D:	Research and Development
SMEs:	Small and Medium Enterprises
UK:	United Kingdom
USA:	United States of America

ABSTRACT

The recent advancement in information technology has impacted heavily on SMEs ability to innovate hence impacting on their financial performance. This study therefore sought to investigate what is the impact of innovations on the financial performance of SMEs in Starehe Constituency, Nairobi County. The main objective of this study was to investigate the impacts of innovations on financial performance of SMEs in Starehe Constituency, Nairobi County. The theories include disruptive innovation theory, innovator's dilemma theory and innovator's solution theory. For the purpose of this study descriptive survey research design was used. The study population was SMEs located within Starehe Constituency in Nairobi County. A total of 72 questionnaires were given to business managers and owners which represent 10% of the population planned. This study utilized a questionnaire to collect primary data. This study collected quantitative data using a self-administered questionnaire. Data was analysed using SPSS where the findings were presented in form of tables and figures. Regression line was also developed. The study concluded that innovations ensure that there is improvement in routines, procedures and processes employed to execute firm activities. Enhancing current products leads to improved ease of use by customers and improved customer satisfaction. It also decreases manufacturing cost in components and materials of current products. It further concluded that marketing approach of current and/or new products can be improved. This can be done through changes such as altering appearance, packaging, shape and volume without changing their basic technical and functional features. The study recommends that management of the SMEs should adopt new or beneficial innovations. This is because innovations can be used to facilitate coordination between different functions such as marketing and manufacturing thus resulting to a better firm performance. SMEs marketing departments should consider improving the product promotion techniques employed for the promotion of the current and/or new products offered by the SMEs, this helps to reduce the cost on product promotion.

CHAPTER ONE
INTRODUCTION

1.1 Background of the study

Numerous efforts have been explored to define the concept of Small and Medium Enterprises in different economies. The various attempts have resulted into multi approach in understanding the concept of SMEs. The concept of SMEs varies from one country to another depending on the indicators used (Visser, 1997).The first criteria, based on the number of employees, defines SMEs as those enterprises below a certain number of workers. The second criterion defines the SMEs as the degree of legal formality, and has been used to distinguish between the formal and informal sectors. Even though the definition varies from one country to another (depending on the economic structure), the regulatory and institutional framework for the Kenya's SMEs has been based on the number of employees and the company's annual turnover (MSMEs Act, 2012).

1.1.1 Small and Medium Enterprises

An enterprise is considered to be any organized effort intended to return a profit or economic outcome through the provision of services or products to an outside group (Carland, 2009). The operation of an enterprise traditionally requires the investment of capital and time in creating, expanding or improving the operations of a business (Meredith, 2001). Small to medium enterprises are considered those enterprises which have fewer than 250 employees. In distinguishing between small and medium sized enterprises, the small enterprise is defined as an enterprise which has fewer than 50 employees. These businesses are often referred to as SMEs and are associated with owner proprietors (Volery 2004). According to Carland (2009), an SME owner is an individual who establishes and manages a business for the principle purpose of furthering personal goals. The business is their primary source of income and will consume a majority of the owner's time and resources. The owners perceive the business as an extension of their identity and are intricately bound with family needs and desires.

1.1.2 SMEs Financial Performance

According to Nyangori (2012) the SMEs sector has continuously experienced growth thereby becoming a key sector in the economy of the country as well as creating most of the new

jobs. The sector constitutes 98% of all businesses in the country, absorbing a high population of school, college and university leavers (Malick, 2004). Bowen at el (2009) notes that SMEs contributed over 50 percent of new jobs created in the year 2005. For that reason, SMEs play a crucial role in increasing growth, innovation and prosperity (Dalberg, 2011). Therefore, this sector is important because it plays a crucial role in the development of the Kenyan economy and thus it cannot be ignored.

In the developing countries, a handful of SMEs´ approach to product/service oriented activities is tailored as a closed (internal) attempt to deliver offering in the market place (Carland, 2009). Their internal research and development (R&D) seems to be the de facto source of innovation and whose success can be regarded as cloudy sometimes. As a matter of fact, it is not uncommon to note that the management of some firms (in the developing countries) take lightly what business modelling, networking, collaboration involving partners are all about in their operational directions or they do not pay attention to them at all. Also tied to the above explanations is the issue of inability to plan and poor financial background (Lumpkin, 2006).

1.1.3 Innovations in SMEs

The competitive environments in most countries and for most firms irrespective of size and sector have changed as production has become more technology-driven and knowledge-based, and competition has globalized and developed into more innovation-based (Meredith, 2009). To survive today's global market economy and achieve long-term success, firms have recognized the importance of being able to adapt and keep innovating to overcome intense competition and to match changing market demands (Tucker, 2008). Even small and medium firms need to seek new strategies and business models, introduce new and better products and services, and consider new knowledge and technologies (Barra, 2009).

Innovation is considered to be of importance to the growth of firms, despite their size, with great leverage in creating economic values and competitive advantages and in driving changes (Dougherty, 2010). The traditional innovation literature, as instigated by Joseph Schumpeter (1934), has primarily been concerned with the manufacturing industries and the patenting intensities in developed markets and economies (Roos, 2011). The uprising of the

developing markets and economies has created conspicuous changes through structural reforms and growth-enhancing investments and are providing firms with more opportunities and propitious environments (Kim, 2008).

1.1.4 SMEs in Kenya

The Kenyan SME sector usually operates on small-scale, locally and at a subsistence level. They have fewer employees, they operate for a shorter period, and have poor access to water and electricity and few sell outside the establishments where the entrepreneurs live (World Bank, 2009). Majority of the SMEs are micro enterprises with fewer than 10 employees, while 70 per cent of them are one person, own account workers. This means that majority of SME entrepreneurs are operating at the bottom of the economy, with a significant percentage falling among the 53 percent of Kenyans living below the poverty line of USD 1 per day.

1.2 Statement of the Problem

The recent advancement in information technology has impacted heavily on SMEs ability to innovate hence impacting on their financial performance. Emphasis on the impact of innovations on the financial performance of SMEs can be considered a very key issue to Entrepreneurs, scholars, practitioners and policy developers in Kenya. SMEs face several challenges towards optimizing their financial performances which include changing consumer behavior and needs, globalization, and disintermediation. Information technology is also having its impact (Chorafas, 2007).

In the globalized world, the use innovations as a way of maintaining a competitive edge is one of the greatest challenges faced by SMEs currently in the developing countries. This is due to the lack of knowledge on the benefit of innovations to their businesses. SMEs therefore need to embrace technology and innovations in their operation so as to overcome this global challenge. The ability to upgrade functions, processes and products by SMEs has become an ultimate matter for their long term survival.

Despite the SMEs importance in the Kenyan economy, Sessional Paper No. 2 of 2005 indicates that three out of five businesses fail within the first three years of operation (RoK, 2005). The failure of SMEs lead to loss of jobs and consequently increased insecurity, low liquidity in the economy, and decline in economic growth (OECD, 2009).The study

undertaken by Herr (2008) and Newberry (2006) reveals that adequate innovation is an important ingredient to development of SMEs.

Although there are quite numerous conceptual studies, analytical and empirical studies are limited both in terms of numbers and the extent and depth of the analysis. Only a few studies have intimately examined the relationship between innovation types and SMEs growth as Jin (2009) stated. The empirical studies focused on the relations between a few dimensions of innovation types and a single growth aspect. These studies have also been only conducted in the developed countries therefore leaving a huge research gap in this area.

Previous local studies done on innovation include Mwangi (2007) who did a study on the effect of innovation in Kenya Financial Institutions, Gitonga (2003), who studied the factors influencing innovation in Kenya's banking industry. It is evident that no local study has been done on the impact of innovations on the financial performance of SMEs in Starehe Constituency, Nairobi County hence a knowledge gap exists. This study therefore sought to investigate what is the impact of innovations on the financial performance of SMEs in Starehe Constituency, Nairobi County.

1.3 Objective of the Study

1.3.1 Main Objective

The main objective of this study was to investigate the impacts of innovations on financial performance of SMEs in Starehe Constituency, Nairobi County.

1.3.2 Specific Objectives

i. To establish the role technological innovation on SMEs financial performance in Starehe constituency.
ii. To assess the impacts of product innovation on SMEs financial performance in Starehe constituency.
iii. To analyze the effects of new market innovation on SMEs financial performance in Starehe constituency.
iv. To investigate the effects of process innovation on SMEs financial performance in Starehe constituency.

1.4 Significance of the Study

The study is invaluable to the management and owners of SMEs as they will be able to uncover the causes of failure of their businesses and come up with effective ways of adopting the best innovation strategies, as well as taking appropriate measures against risks facing the Small and Micro Enterprises.

The study will be useful to the government in policy making regarding to innovations by the Small and Micro Enterprises. The policy makers will obtain knowledge on the best mechanisms that should be factored into the registration of patents, copyrights and trademarks.

The study will also be significant to scholars who will find this study useful as it will provide information on the relationship between innovations and SMEs performance. It will also be of significance to researchers as it will provide basis upon which further studies will be carried out on broad subjects.

CHAPTER TWO:

LITERATURE REVIEW

2.1 Introduction

This chapter summarizes the information from other researchers who have carried out their research in the same field of study. It provides a theoretical and empirical review of the study. It also provides a review of the local research and the chapter's summary.

2.2 Theoretical Literature Review

This study is reinforced by three theories of innovations. The theories include disruptive innovation theory, innovator's dilemma theory and innovator's solution theory.

2.2.1 Disruptive Innovation Theory

Disruptive innovation theory was hypothesized by Christensen in 1997. He suggested that in a quickly changing and uncertain world, innovation is the key to competitive advantage. Yet innovation also increases uncertainty and market pressure (Lettice, 2006). The more radical the innovation, the more difficult it is to estimate its market acceptance and potential. The increasing complexity and market dynamics create a substantial knowledge gap between theory and practice. Many companies are not organized to give new ideas a chance, to recognize trend breaking points in the market, to adapt quickly to changing market circumstances, or to cause market changes in the first place (Markides, 2009).

Disruptive innovations change the game. They attack an existing business, and offer great opportunities for new profit growth. Only radical innovations lead to growth (Hamel, 2009). Lettice and Thomond (2006) define disruptive innovation as: A successfully exploited product, service or business model that significantly transforms the demand and needs of an existing market and disrupts its former key players. A radical innovation is a product, process or service with either unprecedented performance features or familiar features that offer significant improvements in performance or cost that transform existing markets or create new ones.

Breakthrough innovations are based on inventions that serve as a source of many subsequent inventions (Ahuja, 2010). Ambiguous, extremely turbulent and uncertain times, combined with a long development time, make breakthrough innovations a highly risky matter. Disruptive innovation frequently results from a combination of the emergent qualities of several smaller ideas based on observing the world differently, challenging presuppositions, expanding boundaries, spotting the "white space", discovering the as yet unrealized needs of customers, setting challenging targets, thinking the unthinkable and challenging our underlying mental models (Coulson, 2011).

Innovation patterns appear as fractals, with small decision cycles imbedded in larger decision cycles (Leonard, 2008), in which the basic development steps identify; develop; plan; implement are the guiding principle. Within this basic outline, the process of disruptive innovation is a rhythm of searching and selecting, exploring and experimenting, of learning and unlearning, and cycles of divergent and convergent thinking. It is a complex and interactive process of probing and learning or feedback. Contrary to linear, incremental innovation processes, such as the stage-gate concepts (Cooper, 2008), disruptive innovation is more like a spiral or circular development process of continuous fast feed-forward and feed-back loops.

This disruptive innovation development process is an interdependent system, based on the concepts of system thinking and of dynamic strategic thinking with learning as a central aspect (Brown, 2009). This process is affected by exogenous determinants such as economic, social and political factors, competition and infrastructure, and endogenous determinants such as resources, corporate structure and corporate culture.

2.2.2 Dilemma Theory of Innovation

The innovator's dilemma theory was proposed by Christensen in 2003. The crux of Christensen's (2007) insight is that firms wishing to innovate face an irresolvable dilemma: their existing customers will encourage them to focus resources on building a better widget, while somewhere else another company is building a gadget, either for new sub-segments of the market, or for an altogether new market. The technological trajectory of the gadget,

however, will lead it to eventually usurp the position of widgets in the whole marketplace by destroying the widget market altogether.

Therefore, widget companies that listen closely to their existing customers and perfect their technology will one day inevitably face a situation where the market for their technology has been made redundant by the market for the next-best-thing: the gadget. The existing customers will then defect to gadgets, leaving widget producers high and dry. The story thus told may be captured in the following relationship and its consequences for firm strategy: The better aligned management incentives are to serving the existing customer base by improving the current technology of the firm, the more likely the incumbent firm is to be blindsided by a market for a fresh new technology created by a challenger entrepreneurial firm. This fresh new technology initially appeals only to customer markets that do not appeal to the firm, but goes on to capture the firm's core customer base over time.

Analytically, this dilemma was explained by Christensen as having three key elements: The first is that there is a strategically important distinction between what one call sustaining technologies and those that are disruptive. Second, the pace of technological progress can, and often does, outstrip what markets need. This means that the relevance and competitiveness of different technological approaches can change with respect to different markets over time. And third, customers and financial structures of successful companies color the sorts of investments that appear to be attractive to them, relative to certain types of entering firms (Christensen, 2008).

The simultaneous advance in new technology, along with the substantial upgrading of old technology, underlines the pervasive uncertainty confronting industrial decision makers in a world of rapid technological changes (Rosenberg, 2006). Second, the marketing literature has focused on a central and unsettling suggestion made by Christensen and Bower (2006), that the innovator's dilemma consists in the fact that by doing the right thing (i.e. listening to current customers) leading firms often end up losing their markets to upstart newcomers. This is unsettling because compelling evidence exists in the marketing literature that market orientation leads to positive business performance (Matsuno, 2009).

The essence of this debate suggests a trade-off between two fundamental functions of good management: the creation of satisfied customers and the creation of innovations. The trade-off is echoed in Workman (2008), who recently concluded in line with Christensen and Bower (2008) that: Third, organizational researchers have been concerned with the questions that the innovator's dilemma poses for organizational change, in particular the problem that disruptive technologies pose for organizational capabilities (Henderson, 2009). The essence of this problem is very well understood in the literature on organizational learning: it is an example of organizations having to cope with the difficulties inherent in trading-off the exploitation of existing technologies, capabilities and markets with the exploration for new technologies, capabilities and markets.

2.2.3 Innovator's Solution Theory

Christensen and Raynor's theory of the innovator's solution is a brilliant analysis of why companies fail to innovate. It explains convincingly why corporate managements don't learn about good ideas, and why managers succumb to inherent pressures to run away from the challenge of disruptive competition rather than stand and fight. The decisions made as a result of these pressures make sense in the short run to the individuals involved, but in due course they send the organization into an inexorable death spiral (Anthony, 2008).

But while their analysis of the causes of failure to undertake disruptive innovation is effective, their project for solving the dilemma of disruptive innovation is less helpful. The central premise of their thesis the innovator's solution is to accept the grim reality that big companies are inherently and constitutionally disinclined to tackle disruptive innovation. A modern organization will crush disruptive new ideas, because they represent a threat to management, to careers, to power structures, to customary ways of things, to client bases, to brands, to corporate culture. The authors' solution is to protect genuine innovators and their disruptive change ideas from these hostile forces.

According to Christensen and Raynor (2008) corporate leaders should put up a wall between the innovation and the existing hierarchy. Leadership should create an independent business unit, which will provide a safe and protected environment for innovation. There the

innovation can flourish without having to fight off the interferences and intrusions and anti-innovation attitudes of the hierarchy.

Allowing a different culture to flourish in a separate organization eventually leads to repeated power struggles and culture clashes, which members of the mainstream organization invariably win. Interest in the new ventures tends to be cyclical. Brief surges of enthusiasm, triggered by abundant resources and the desire to diversify, are followed by sharp declines. The life spans of both internal venture units and corporate venture capital funds, therefore, tend to be short on average, only four to five years.

Christensen and Raynor's innovator's solution theory rests on the hope that if one can build enough commercial success in the marketplace, he/she has a better chance of eventually winning that battle of persuasion. Surely, their argument goes, the hard numbers will win the war. Unfortunately the track record shows that even with strong commercial success, numbers and reason are not enough to dislodge the forces of stasis and inertia.

2.3 Empirical Literature Review

Zerenler (2008) made a research in the Turkish automotive supplier industry in order to investigate the influence of innovativeness upon the SMEs performance. 117 questionnaires were sent to managers of marketing department, R&D department and production department. The response rate of this study was high (78% or 92 respondents). Main conclusion from this study is: SMEs growth had significantly positive relationships with innovation performance.

In the study of Wu (2008), they attempted to explore the mediating effect of innovation on SMEs growth. The research was made in Taiwanese manufacture and non-manufacture industries. Seven hundred survey questionnaires were mailed to firms. The response rate of the study is 22.71%. They found that effects of innovation exist at significant levels, suggesting a perfect mediating effect of innovation on growth. Abouzar (2009) carried a study on the role of innovation in Iran the study found out that operational, organisational or managerial processes are significantly related in attaining innovation. However, the

companies chosen for the study were mainly large companies thus; the results may not be applicable to SMEs. The survey was limited to one country (Iran)

Empirical Review Lafourcade (2005) carried out a study on an overview of the innovations and financial performance of microfinance institutions in Africa and concluded that there is a strong relationship between the two variables. The authors collected information about MFIs primarily through country-level networks and contracted consultants. All the data were self-reported from MFIs and then reclassified according to international accounting standards and cross-referenced if audited financial statements were available. Of the 163 MFIs analyzed, 77 earned positive returns in 2003. According to their findings, MFIs in Africa tend to report lower levels of profitability, as measured by return on assets, than MFIs in other global regions. Among the African MFIs that provided information for this study, 47 percent post positive unadjusted returns attributed by high operating cost and lack of enough financial innovation to counter it. This drives Institutions to continue seeking ways to increase efficiency through better communication, improved lending products, new technology, or some combination of these improvements.

According to Ignazio (2007), financial innovation has not only opened up new opportunities for the SMEs, but also increased new market players arising from new products in the financial market. These developments have increased the range of financing and investment opportunities available to economic agents besides changing the role of SMEs with expanded diversification choices in terms of portfolio size and sources of financing. Such developments affect the speed and strength of the channels of monetary policy transmission mechanism in the economy. In this case, as financial markets become more liquid and complete, changes in official interest rates are more readily transmitted to the whole term structure and more generally to financial asset prices. This in turn affects the whole economy through the cost of investment financing and return on saving.

2.4 Review of Local Research

Ngugi (2010) did a study on the influence of innovativeness on the growth of SMEs in Kenya. The study targeted 4560 SMEs in Nairobi County who are registered by Ministry of Industrialization and Ministry of Trade. Regression models were used to examine the influence of innovativeness skills on growth of SMEs in Kenya. Questionnaires were used as the main data collection. Descriptive statistics and inferential data analysis method was to analyze the gathered data. Data analysis was done with the help of software programme SPSS version 21 which is the most current version in the market and Microsoft excel to generate quantitative reports. The findings indicated that innovativeness influences the growth of SMEs in Kenya. The tendency of owner/manager to engage in and support new ideas, novelty, experimentation and creative processes results in new products, services or technological processes which has a great influence on the performance of SMEs.

Mugo (2012) sought to investigate the effects of financial innovation on the growth of Micro Finance Institutions (MFIs) in Kenya. A survey was conducted targeting all the thirty four registered MFIs in Kenya. After data collection, the research data was analyzed in a correlation design using SPSS program. The research concluded that financial innovation by MFIs lead to an aggregate growth of firm in various dimensions like number of products, market share, loan sales and the overall profitability.

Mwangi (2013) did a study on the effect of financial innovation on the financial performance of deposit taking microfinance institutions. The study targeted all DTMs (9) in Kenya. Data was analyzed by applying both descriptive and inferential statistics. Descriptive statistics was used to summarize qualitative data and the results presented in tables. The SPSS Version 17 was used to analyze primary data collected by using questionnaire administered to the respondents. Through 20 regression analysis, the researcher was able to formulate an analytical model that shows the effect of financial innovation on financial performance of DTMs. The study concludes that financial innovations have positive effect on financial performance of DTMs in Kenya.

Mbogo & Asika (2005) did a study focusing on the SMES registered with the County of Nairobi in Kenya to find out the factors that influence product innovation in the microfinance institutions. A census research design was used, with a self-administered questionnaire given to 138 participants. The questionnaire included the construct items adapted from previous studies and some questions on demographics. The data gathered was analyzed and processed using Statistical Package for Social Sciences (SPSS) version 15.0 and presented using descriptive statistics. Results from findings of this paper established that there is a positive correlation between legal environment, liquidity management and human resources for SMES and product innovation.

Mwangi (2007) did a study to establish factors influencing financial innovation in Kenyan's Securities market. Data was collected from all the 48 listed companies in Kenya to establish which factors influence financial innovation and to what extent do they impact on financial innovation. Primary data was collected and place on six Likert scale and then analyzed using statistical techniques. The major findings were that under regulatory factors, Kenyan laws protecting investors was the major factor influencing financial innovation. Unstable foreign exchange rates factor influencing financial innovation among market volatility factors. The absence of automated trading systems as a technological factor was found to influence financial innovation negatively. Global financial competition and integration had an influence on financial innovation with increased financial competition amongst financial institutions.

2.5 Summary of Literature Review

This study has been guided by a set of theories which includes disruptive innovation theory, dilemma theory of innovation and innovation solution theory. These theories have been discussed exhaustively and linked to the area of the study. From the empirical findings Mbogo & Ashika (2005) on their study on factors influencing product innovation in SMEs in Kenya, the finding indicate that there is a positive correlation between legal environment, liquidity management and human resources for SMEs and product innovation hence performance of SMEs. A study done by Mwangi (2007) on factors influencing financial innovation in Kenya's securities market, the findings indicate that technology directly affects

financial institutions performance. Ngugi et al (2010) in their study on the influence of innovativeness on the growth of SMEs in Kenya concluded that the tendency of Managers to engage in and support new ideas, novelty, experimentation and creative processes results in new products and services which has great influence on the growth of SMEs. Therefore innovativeness directly influences the growth of SMEs in Kenya.

None of these studies covered the impact of innovations on the financial performance of SMEs in Starehe Constituency, Nairobi County. This study therefore intended to fill theses pertinent gaps in literature by studying the selected independent variables on the impacts of innovation on the financial performance SMEs. This study will add value to existing literature by providing empirical evidence on the impacts of innovations on financial performance of SMEs in Starehe Constituency, Nairobi County and fill the existing contextual and conceptual gaps.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter discusses the research design and methodology of the study; it highlights a full description of the research design, the research variables and provides a broad view of the description and selection of the population. The research instruments, data collection techniques and data analysis procedure have also been presented.

3.2 Research Design

The research design according to Mugenda and Mugenda (2003) provides answers for questions such as; what techniques were used to gather data, what kind of sampling strategies and tools were used and how were time and cost constraints dealt with. In other words, it is an arrangement of conditions for collection and analysis of data in a way that combines their relationship with the purpose of the research. It is a means to achieve the research objectives through empirical evidence that is required economically.

Descriptive studies portray the variables by answering who, what, and how questions. According to Mugenda and Mugenda (2003), descriptive design is a process of collecting data in order to test hypothesis or to answer the questions of the current status of the subject under study. For the purpose of this study descriptive survey research design was used. This design enabled the researcher to establish the impacts of innovations on SMEs financial performance in Starehe Constituency, Nairobi County.

3.3 Target Population.

Target population is that population to which a researcher wants to generalize the results of a study (Mugenda and Mugenda, 2003). The target population in a research study comprises all those potential participants that could make up a study.

Table 3.1 Target Population

SME List	Target	Percentage
General Trade	389	54
Storage , Transport, Communications	152	21
Agriculture, Forestry, Natural Extracts	34	5
Accommodation &Catering	26	4
Professional &Technical	29	4
Private Education, Health, Entertainment	39	5
Plants, Factories, Workshops, Contractors	51	7
Total	**720**	**100**

The study population was SMEs located within Starehe Constituency in Nairobi County. The said target population was critical to this study because it gave first-hand information to the researcher.

3.4 Sample Design

The sampling plan describes the sampling unit, sampling frame, sampling procedures and the sample size for the study. The sampling frame describes the list of all population units from which the sample will be selected (Cooper and Schindler, 2003). Stratified random sampling technique is used when population of interest is not homogeneous and can be subdivided into groups or strata to obtain a representative sample. A sample of respondents was drawn from all the SMEs operating in Starehe Constituency, Nairobi County.

Table 3.2 Sampling Frame

SMEs in Starehe Constituency	Target	Sample (%)	Sample(count)
General Trade	389	10	39
Storage , Transport, Communications	152	10	15
Agriculture, Forestry, Natural Extracts	34	10	3
Accommodation &Catering	26	10	3
Professional &Technical	29	10	3
Private Education, Health, Entertainment	39	10	4
Plants, Factories, Workshops, Contractors	51	10	5
Total	**720**	**10**	**72**

For the purposes of the research stratified random sampling was used to select the target group. Stratified random sampling was employed in selecting respondents. The population is

segregated into several mutually exclusive sub-populations or strata herein referred to as business categories as shown in Table 3.2.

The research applied 10% sampling across the strata. According to Mugenda and Mugenda (2003) a good sample should be the one of 10% to 30% of the entire population. The actual businesses sampled were arrived at by using simple random procedures to draw the sample from each stratum. A total of 72 questionnaires were given to business managers and owners which represent 10% of the population planned. In order to achieve the intended 72 interviews, 100 contacts were made.

3.5 Data Collection

3.5.1 Research Instrument

With respect to innovations and SMEs financial performance, this study utilized a questionnaire to collect primary data as used in various previous research projects (Lumpkin, 2001). The questionnaire designed in this study comprised of two sections. The first part included the demographic and operational characteristics designed to determine fundamental issues including the demographic characteristics of the respondent. The second part was devoted to the identification of the innovations by SMEs where the four variables of the study were put into focus. The questionnaire was designed to include only structured questions. The structured questions were used in an effort to conserve time and money as well as to facilitate an easier analysis as they were in immediate usable form.

3.5.2 Data Collection Method

This study collected quantitative data using a self-administered questionnaire. Nevertheless, where it was proved difficult for the respondents to complete the questionnaires immediately, the questionnaire was left with the respondents and picked later. The questionnaires were hand delivered and administered at the respondents' place of business to ensure objective response and reduce non-response rate. The results of the pilot study were not included in the actual study.

A cover letter from Nairobi University was taken along to enable the administering of the questionnaire. The respondents were assured of confidentiality of their names and responses

and that the responses were not handled by any other person but rather to be used purely for academic purposes. Each questionnaire was coded and only the researcher had the knowledge on which person responded.

3.6 Pilot Test

The researcher carried out a pilot study to pre-test and validates the questionnaire. According to Cooper and Schindler (2003), the pilot group can range from 25 to 100 subjects depending on the method to be tested but it does not need to be statistically selected. This pilot study involved 10 respondents working in SMEs within Nairobi Central Business District. This pilot was conducted on four SMEs along Moi Avenue in the Nairobi Central Business District. The respondents were conveniently selected since statistical conditions are not necessary in the pilot study (Cooper and Schindler, 2003).

The purpose was to refine the questionnaire so that respondents in the major study would have no problem in answering the questions. Expert opinion was also requested on the representativeness and suitability of questions. This helped to improve the content validity and reliability of the data that was collected.

3.6.1 Validity

Validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity which was employed by this study is a measure of the degree to which data collected using a particular instrument represented a specific domain or content of a particular concept. Mugenda and Mugenda (1999) contend that the usual procedure in assessing the content validity of a measure is to use a professional or expert in a particular field.

3.6.2 Reliability

Reliability refers to the consistency of measurement and is frequently assessed using the test–retest reliability method. Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. The researcher computed a Cronchbach alpha score of the instrument used to obtain the primary data. Cronchbach alpha ranges between 0-1.Scores between 0-0.6 indicate that the

instrument has a low reliability while scores of 0.7 and above indicate that the instrument has a high level of internal consistency and reliability.

Table 3.3: Reliability Coefficients

Reliability of the questionnaire was evaluated through Cronbach's Alpha which measures the internal consistency Cooper & Schindler (2008). Cronbach's alpha was calculated by application of SPSS for reliability analysis.

Scale	Cronbach's Alpha	Number of Items
Technological Innovations	0.834	7
Product Innovations	0.767	5
Marketing Innovations	0.753	5
Process Innovations	0.820	5

Cooper and Schindler (2008) indicated 0.7 to be an acceptable reliability coefficient. Table 4.3 shows that technological innovations had the highest reliability (α=0.834) followed by process innovations (α=0.820) and product innovations (α=0.767) and finally market innovations (α=0.753). This illustrates that all the four scales were reliable as their reliability values exceeded the prescribed threshold of 0.7.

3.7 Data Analysis and Presentation

3.7.1 Conceptual model

The study examined the impact of innovations on financial performance. The variables in the study were classified into dependent and independent variables. The independent variables were unique innovations to SMEs.

The relationship between the variables is stated using a mathematical function.

$Y = f(X_1, X_2, X_3, X_4)$

Where Y is the dependent variable and X_1, X_2, X_3 and X_4 are independent variables.

Whereby:

Y = Financial Performance

X_1 = Technological innovation were measured by the extent to which the SMEs have automated operations, use of internet and websites and how it has contributed to the increase in revenue for the SMEs.

X_2 = Product Innovation were measured by the extent to which new products are developed and how it has contributed to increase in revenue for the SMEs.

X_3 = Marketing Innovation was the level of new customer outreach and more number of retail outlets and how it had contributed to increase in customer number hence revenue of the SMEs.

X_4 = Process Innovation was the level of process innovation as measured by the extent adoption of office automation, electronic banking services and electronic money transfer has contributed to cost reduction of SMEs.

A positive relationship between the dependent and the independent variable was expected. Most of the studies done relating innovation and financial performance find a positive relationship between the two. Financial innovation indeed contributes to and is positively correlated to profitability in the SMEs (Ngigi, 2012). A study of MFIs in Kenya Mikwa (2011) found a positive relationship between financial innovation and financial performance. The findings based on the coefficient of regression, new products/services, new processes, institutional innovation and new technology were found to be positively associated with the financial performance.

3.7.2 Analytical Model

This is the algebraic expression of the conceptual model.

An analytical model of a linear multiple regression equation of the form shown below was developed.

The regression equation ($\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$):

Linear regression analysis was used to estimate the coefficients of a linear equation and the Independent variables that best predict the value of the dependent variable. From this model, test of significance at 5% significant level was conducted on the various variables of this study using coefficient of determination (R2), correlation coefficient (R), F-test and ANOVA table in order to check the significant of the data analyzed.

3.8 Ethical Considerations

An introductory letter accompanied each questionnaire and interview guide to seek consent and voluntary participation of the respondents. The letter explained the purpose of the

research study and assured confidentiality. Consequently, data and information was treated in such a way that it cannot be traced to any particular person and thereby desist from any harm to participants

Throughout the research study, the work of others was acknowledged by use of citation and references. Again, the principle of objectivity was observed during the entire research process including the design, data collection, analysis and interpretation of data. The findings of this study would be disseminated to allow accessibility by SMEs, researchers and other interested individuals.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATIONS AND PRESENTATION

4.1 Introduction

This chapter analyses, interprets and presents the study findings as per the aim of this study, which was to investigate the impacts of innovations on financial performance of SMEs in Starehe Constituency, Nairobi County. Also the study sought to establish the role technological innovation, assess the impacts of product innovation, to analyze the effects of new market innovation and to investigate the effects of process innovation on SMEs financial performance in Starehe constituency.

4.2 Response Rate

The researcher gave out 100 questionnaires and received back 72 of the questionnaires as was the sample size of the study research. Mugenda (2003) states that a 50% response rate is adequate, 60% is good and above 70% is rated very well. The response was therefore rated very well. The commendable response rate was achievable after the researcher administered the questionnaires personally and made personal visits and phone calls to remind the respondents to fill-in and return the questionnaires. In the descriptive statistics, relative frequencies, pie charts and graphs were used in some questions and other were analyzed using mean scores with the help of Likert scale ratings in the analysis. A straight line predictor regression model was also developed.

4.3: Background information

4.3.1 Respondents Gender

The respondents were asked to indicate their gender. The results are shown in figure 4.1.

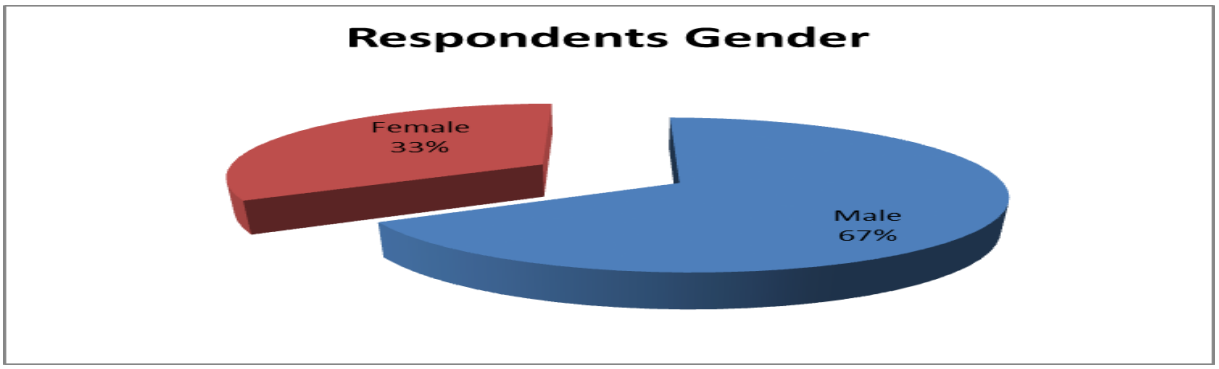

Figure 4.1: Gender

Source: Author (2015)

From the findings, 67% of the respondents indicated that they were male while 33% indicated that they were female. This means that both genders were well represented in this study though not in equal proportions.

4.3.2 Age of the Respondent

The respondents were requested to indicate their ages; the findings were presented in figure 4.2

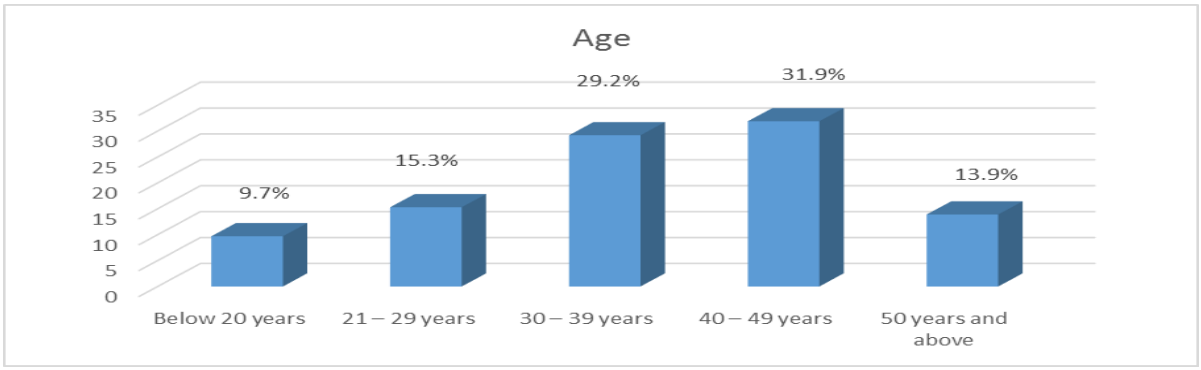

Figure 4.2: Age of the Respondent

Source: Author (2015)

From the findings, 31.9% of the respondents indicated that they were aged between 40 and 49 years, 29.2% indicated that they were aged between 30 and 39 years, 15.3% of the respondents indicated that they were aged between 21 and 29 years, 13.9% indicated that they aged 50 years and above whereas 9.7% of the respondents indicated that they were below 20 years. This is an indication that respondents were well distributed in terms of their age. This also showed that respondents aged between 40 to 49 years (31.9%) who were the majority had been in their SMEs for quite some time and they had adequate knowledge on the different types of innovations adopted by their organisations..

4.3.3 Highest Level of Education

The respondents were requested to indicate their highest level of education. The study findings were presented in figure 4.3

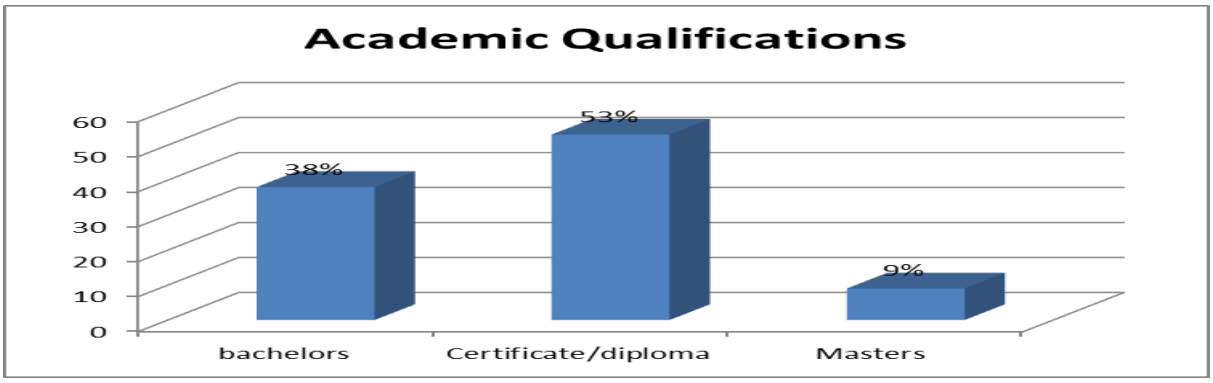

Figure 4.3: Level of Education
Source: Author (2015)

From the findings, 53% of the respondents indicated that they had either a certificate or a diploma from institutions of higher learning. Further 38% of the respondents indicated that they had a bachelor's degree while 9% of the respondents indicated that they had masters as their highest academic qualifications. This clearly shows that most of the respondents in the study were having either a diploma or a certificate as the highest level of education. This is an implication that the respondents were in a position to understand the question and answer questions asked in this study.

4.3.4 Period of Operation

The respondents were requested to indicate for how long they had been operating. The results were shown in figure 4.4

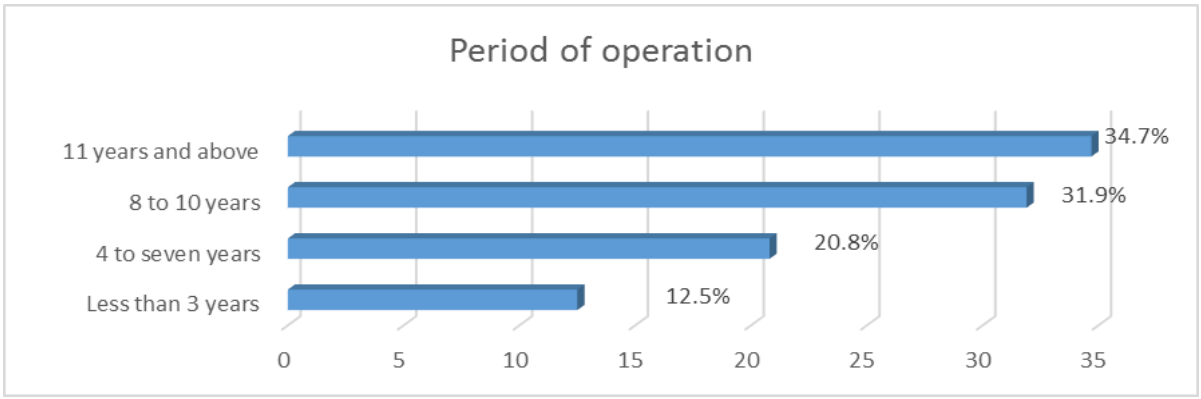

Figure 4.4: Period of Operation

Source: Author (2015)

From the findings the study found out that 34.7% of the respondents indicated that they had been in the operation of SMEs for a period of 11 years and above, 31.9% of the respondents indicated that they had been in operation for a period of 8 to 10 years. Also the study indicated that 20.8% of the respondents indicated that they had been in the operation for a period of 4 to seven years and 12.5% of the respondents indicated that they had been in operation for a period of less than 3 years. Thus the study indicates that majority of the respondents who were involved in the study had been in operation for a period more than 3 years and thus were better positioned to give credible information about the study.

4.3.5 Number of Employees

The respondents were requested to indicate the number of employees they had. The research findings were presented in figure 4.5

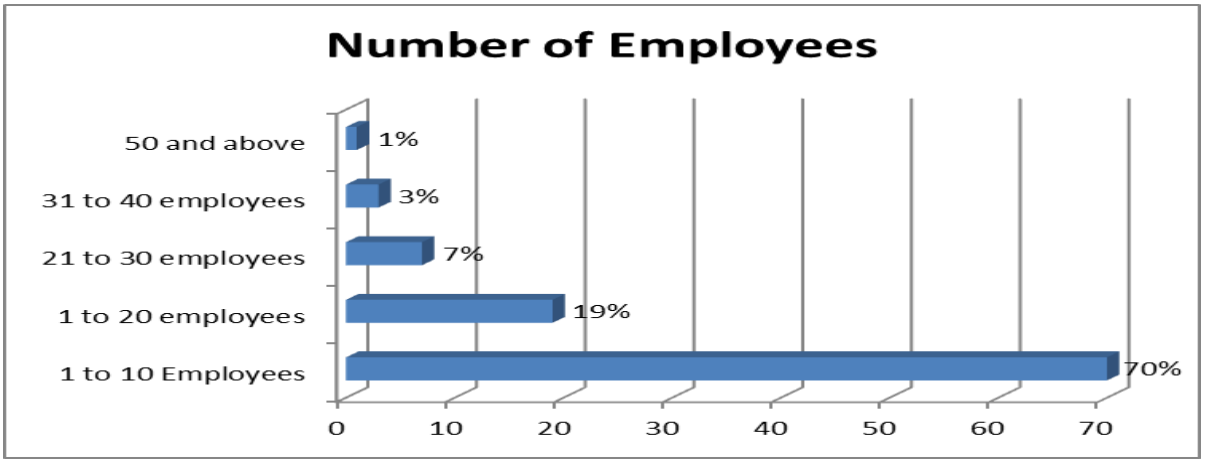

Figure 4.5: Number of Employees

From the findings the study found out that 70% of the respondents indicated that they had 1-10 employees, 19% of the respondents indicated that they had 1 to 20 employees. Also the study found out that 7% of the respondents had employed 21 to 30 employees. Also the study indicated that 3% of the respondents had 31 to 40 employees whereas 1% of the respondents indicated that they had 50 employees and above.

4.4: Technological Innovation

The respondents were requested to indicate extent to which the listed technological innovation items were implemented in their organization in the last three years. The findings are as shown in table 4.4.

Table 4.4: Technological Innovation

Technological Innovations	N	Min	Max	Mean	Std. Dev
Renewing the routines, procedures and processes employed to execute firm activities in innovative manner	72	2.00	4.00	3.6250	.72067
Renewing the supply chain management system.	72	2.00	5.00	4.1250	.80382
Renewing the production and quality management systems	72	3.00	5.00	3.7778	.45105
Renewing the human resources management system.	72	3.00	5.00	4.1250	.78610
Renewing the in-firm management information system and information sharing technologies.	72	3.00	5.00	3.0694	.30611
Renewing the organization structure to facilitate teamwork	72	2.00	5.00	3.2917	.98492
Renewing the technologies used to facilitate coordination between different functions such as marketing and manufacturing.	72	2.00	5.00	4.4306	.05918

Respondents indicated by a mean of 4.4306 that there was renewing of technologies used to facilitate coordination between different functions such as marketing and manufacturing. Also as indicated by a mean of 4.1250, there was the renewing of the supply chain management system and also renewing the human resources management system. Also the respondents indicated that current technologies were improved when renewing the production and quality management system which was indicated by a mean of 3.7778.

Further the study also found out that the respondents indicated that current technologies were improved while renewing the routines, procedures and processes employed to execute firm activities in innovative manner this was indicated by a mean of 3.6250. The study research further indicated that most of the respondents indicated that technological innovation were imitated from international markets this was indicated by a mean of 3.2917 where the respondents indicated that there was the renewing the organization structure to facilitate teamwork. Also as was indicated by a mean of 3.0694 respondents indicated that there was renewing in-firm management information system and information sharing

technologies. All the standard deviations were less than one an indication that the responses did not vary that much.

These findings concur to those of Ogubenga and Ekiti (2012), when they conducted a study on the investigation on the impact of technological, infrastructure and financial supports on the performance of SMEs in Nigeria. They found out that Modern technology adoption eased business running and coordination in the SMEs.

4.5: Product Innovation

The researcher requested the respondents to indicate the extent that the product innovations implemented in their organization in the last three years related to the listed kinds of activities.

Table 4.5: Product Innovations Implementation

Product Innovations	N	Min	Max	Mean	Std. Dev
Increasing manufacturing quality in components and materials of current products	72	1.00	5.00	3.8056	.81602
Decreasing manufacturing cost in components and materials of current products	72	2.00	5.00	4.0972	.44909
Developing newness for current products leading to improved ease of use for customers and to improved customer satisfaction	72	1.00	5.00	3.6111	.79710
Developing new products with technical specifications and functionalities totally differing from the current ones	72	1.00	5.00	3.8611	.99726
Developing new products with components and materials totally differing the current ones	72	1.00	5.00	4.3889	.66196

As was indicated by a mean of 4.3889 respondents indicated that there was the developing of new products with components and materials totally differing from the current ones. Respondents also indicated that as results of current products were being improved there was decreasing manufacturing cost in components and materials of current products this was indicated by a mean of 4.0972. Further the respondents indicated with a mean of 3.8611 that through the current products being improved there was developing of new products with technical specifications and functionalities totally differing from the current ones.

In addition the study further found out that there is Increasing manufacturing quality in components and materials of current products because of the current products being improved. Respondents also indicated with a mean of 3.6111 that there was developing newness for current products leading to improved ease of use for customers and to improved customer satisfaction as a result of current products being improved. This study further revealed that SMEs strive to develop new products only when they are forced to do so by market developments, or for reasons of continuity.

The findings coincide with those of Wu, Chang and Chen (2008) who found that mediating effects of product innovation on financial performance of SMEs in Kenya exist at significant levels. Inferences can therefore be drawn to imply that tendency of a firm to engage in and support new ideas, uniqueness, experimentation and creative processes results in new products and processes. Any innovation requires the firm to have competences relating to technology and relating to customers.

4.6: Marketing Innovation

With regards to marketing innovation the respondents were requested to indicate the extent to which the listed kinds of market innovations had been implemented in their organization in the last three years. The findings are as shown in table 4.6.

Table 4.6: Market Innovations Implementation

Marketing Innovations	N	Min	Max	Mean	Std. Dev
Renewing the design of the current and/or new products	72	3.00	5.00	3.5417	.55507
Renewing the distribution channels without changing the logistics processes related to the delivery of the product.	72	3.00	5.00	3.9861	.51712
Renewing the product promotion techniques employed for the promotion of the current and/or new products.	72	3.00	5.00	4.2083	.73038
Renewing the product pricing techniques employed for the pricing of current and/or new products	72	3.00	4.00	3.4722	.50273
Renewing general marketing management activities	72	3.00	4.00	3.6111	.49092

Respondents indicated that there had been renewing the product promotion techniques employed for the promotion of the current and/or new products as was indicated by a mean of 4.2083. Also the respondents indicated that there was the renewing the distribution channels without changing the logistics processes related to the delivery of the product this

was indicated by a mean of 3.9861. Further the study found out that there had been renewing the general marketing management activities as was indicated by a mean of 3.6111.

Further the respondents indicated that there had been renewing the design of the current and/or new products through changes such as in appearance, packaging, shape and volume without changing their basic technical and functional features this was indicated by a mean of 3.5417. Also the respondents indicated that marketing innovation was imitated from international markets as with a mean of 3.4722 respondents indicated that there had been the renewing of the product pricing techniques employed for the pricing of current and/or new products.

4.7: Process Innovation

The researcher requested the respondents to indicate the extent in which the listed kinds of process innovations were implemented in their organization in the last three years used. The findings were presented in table 4.7

Table 4.7: Process Innovation

Process Innovations	N	Min	Max	Mean	Std. Dev
Determining and eliminating non-value adding activities in production processes	72	3.00	4.00	3.9583	.20123
Decreasing variable cost components in manufacturing processes, techniques, machinery and software.	72	3.00	5.00	4.5694	.74732
Increasing output quality in manufacturing processes, techniques, machinery and software	72	3.00	5.00	3.9444	.37110
Determining and eliminating non-value adding activities in delivery related processes	72	3.00	4.00	3.9861	.11785
Decreasing variable cost and/or increasing delivery speed in delivery related logistic processes	72	3.00	5.00	4.0278	.53001

From the findings majority of the respondents indicated that current products were improved in process innovations. Respondents indicated that there was a decreasing variable cost component in manufacturing processes, techniques, machinery and software this was indicated by a mean of 4.5694. Also the study found out that there was decreasing variable cost and/or increasing delivery speed in delivery related logistic processes this was indicated

by a mean of 4.0278. Also the study found out that there was determining and eliminating non-value adding activities in delivery related processes this was indicated by a mean of 3.9583. In addition the study found out that there was determining and eliminating non-value adding activities in delivery related processes as was indicated by a mean of 3.9861. Further the study found out that there was increasing output quality in manufacturing processes, techniques, machinery and software this was as was indicated by a mean of 3.9444.

The findings concurs to those of Ngugi (2010) who concluded that the tendency of Manager to engage in and support new ideas, novelty, experimentation and creative processes results in new products and services which has great influence on the performance of SMEs. Therefore process innovativeness directly influences the growth of SMEs in Kenya

4.7.1: Financial Performance Measures

The researcher requested the respondents to indicate how they would rate the level of achievement of the listed financial performance items in their organization after the implementation or lack of implementation of any of the above innovations.

Table 4.8: Financial Performance Measures

Performance Measures	N	Min	Max	Mean	Std. Dev
General profitability of the firm	72	3.00	5.00	3.9861	.20508
Return on sales (profit/total sales)	72	3.00	5.00	3.9861	.99990
Return on assets (profit/total assets)	72	3.00	5.00	4.0139	.20508

Respondents indicated with a mean of 3.9861 that general profitability of the firm and return on sales (profit/total sales) would be successful in each case. Respondents also indicated that return on assets (profit/total assets) would also be successful as was indicated by a mean of 4.0139.

4.8 Regression Model

This section illustrates the regression model derived, the model summary and the analysis of variance.

Table 4.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.901[a]	.811	.778	.88195

Adjusted R squared is coefficient of determination shows the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.778 an indication that there was variation of 77.8% on financial performance of SMEs due to changes in technological innovations, product innovation, new markets innovations and process innovations at 95% confidence level. R is the correlation coefficient which shows the relationship between the study variables and from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.901.

Table 4.10: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.042	2	0.021	15.52	.0018[b]
	Residual	22.49	69	0.326		
	Total	**22.53**	**71**			

From the ANOVA statistics in Table 4.11 , the processed data, which is the population parameters, had a significance level of 1.8% which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (*p*-value) is less than 5%.

The following tables gives the coefficients which helps in establishing the regression line;

Table 4.11: Table of Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.161	0.129		9	0
Technological Innovations	0.482	0.064	0.093	7.53	0.03
Product Innovation	0.342	0.05	0.232	6.84	0.01
New Markets Innovations	0.218	0.04	0.03	5.45	0.04
Process Innovations	0.119	0.029	0.007	4.10	0.01

The established regression equation was as follows;

$Y=1.161+0.482\ x_1+0.342\ x_2+0.218\ x_3+0.119\ x_4$

From the above regression model, holding technological innovations, product innovation, new markets innovations and process innovations to a constant zero, financial performance of SMEs would be 1.161. It was established that a unit increase in technological innovations would cause an increase in financial performance of SMEs by a factor of 0.482, a unit increase in product innovation would cause an increase in financial performance of SMEs by a factor of 0.342, also a unit increase in new markets innovations would cause an increase financial performance of SMEs by a factor of 0.218, also unit increase in process innovations would cause an increase in financial performance of SMEs by a factor of 0.119.

This clearly shows that there is a positive relationship between financial performance of SMEs and technological innovations, product innovation, new markets innovations and process innovations. The study further revealed that the *P*-value were less than 5% in all the variables, which shows that all the independent variable were statistically significant and thus in position to make conclusion for the study.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings, conclusions and recommendations for practice and further research on the problem. The main objective of this study was to investigate the impacts of innovations on financial performance of SMEs in Starehe Constituency, Nairobi County. Also the study sought to establish the role technological innovation, assess the impacts of product innovation, and analyzes the effects of new market innovation and to investigate the effects of process innovation on SMEs financial performance in Starehe constituency.

5.2 Summary of the Key Findings

5.2.1: Technological Innovation

The study revealed that that majority of the respondents indicated that current technologies were improved. Also the study revealed that there was renewing the technologies used to facilitate coordination between different functions such as marketing and manufacturing as represented by a mean of 4.43. Further the study revealed that there was the renewing the supply chain management system and also renewing the human resources management system. In addition the study revealed that current technologies were improved when renewing the production and quality management systems.

Further the study revealed that current technologies were improved while renewing the routines, procedures and processes employed to execute firm activities in innovative manner. The study research further indicated that technological innovations were imitated from international markets and the study revealed that there is renewing the organization structure to facilitate teamwork. Also there was renewing in-firm management information system and information sharing technologies.

5.2.2: Product Innovation

From the findings the study revealed that current products were being improved. Also the study established that there was the developing of new products with components and materials totally differing from the current ones as represented by a mean of 4.3. Further the study also established that as results of current products were being improved there was decreasing manufacturing cost in components and materials of current products. Further the study revealed that the current products being improved there was developing of new products with technical specifications and functionalities totally differing from the current ones.

In addition the study further found out that there is Increasing manufacturing quality in components and materials of current products because of the current products being improved. Also there was developing newness for current products leading to improved ease of use for customers and to improved customer satisfaction as a result of current products being improved.

5.2.3: Marketing Innovation

With regard to marketing innovation the study revealed that current marketing practices have been improved. Also the study revealed that there had been renewing the product promotion techniques employed for the promotion of the current and/or new products s represented by a mean of 4.2. Also there was the renewing the distribution channels without changing the logistics processes related to the delivery of the product. Further the study established that there had been renewing the general marketing management activities.

Further the study established that there had been renewing the design of the current and/or new products through changes such as in appearance, packaging, shape and volume without changing their basic technical and functional features. Also the study unveiled that marketing innovation was imitated from international markets also there had been the renewing of the product pricing techniques employed for the pricing of current and/or new products.

5.2.4: Process Innovation

From the study findings it was revealed that current products were improved in process innovations. Also the study revealed that there was decreasing variable cost components in manufacturing processes, techniques, machinery and software as represented by a mean of 4.5. Also the study unveiled that there was decreasing variable cost and/or increasing delivery speed in delivery related logistic processes. Also the study found out that there was determining and eliminating non-value adding activities in delivery related processes.

In addition the study established that there was determining and eliminating non-value adding activities in delivery related processes. Further the study revealed that there was increasing output quality in manufacturing processes, techniques, machinery and software. On financial performance the study revealed that general profitability of the firm and return, return on assets and innovations would be successful upon the application of process innovation.

5.3 Conclusion

The study concludes that on the role technological innovation on SMEs the technological innovation ensures that there is the renewing of the routines, procedures and processes employed to execute firm activities in innovative manner thus facilitating teamwork in an organization.

Regarding product innovation the study concludes that developing newness for current products leads to improved ease of use for customers and to improved customer satisfaction and also decreases manufacturing cost in components and materials of current products.

The study concludes that on marketing innovation the design of current and/or new products can be renewed. This can be done through changes such as in appearance, packaging, shape and volume without changing their basic technical and functional features.

The study concludes that through process innovation there is the determining and eliminating non-value adding activities in delivery related processes and also aids in decreasing variable cost components in manufacturing processes, techniques, machinery and software.

5.4 Recommendations

The study recommends that management of the SMEs should adopt new or beneficial technological innovation. This is because better technological innovation used to facilitate coordination between different functions such as marketing and manufacturing thus better firm performance.

Regarding product innovation on SMEs financial performance the study recommends that SMEs management should consider developing new products with technical specifications and functionalities totally differing from the current ones this is because newness for current products leads to improved ease of use for customers and to improved customer satisfaction.

The study recommends that the SMEs marketing departments should consider renewing the product promotion techniques employed for the promotion of the current and/or new products if the technique if unfavouring the services or products offered by the SMEs and also to avoid too much cost on product promotion.

The study recommends that the management of the SMEs should adopt undertaking process innovation as through process innovation there is increased output quality in manufacturing processes, techniques, machinery and software. Also through process innovation there is determining and eliminating non value adding activities in delivery related processes.

5.5 Areas for Further Studies

This study was aimed to investigate the impacts of innovations on financial performance of SMEs in Starehe Constituency, Nairobi County Kenya. The research suggests that further studies to be carried out this time investigate the effects of mobile banking on SMEs financial performance in any county.

REFERENCES

Abouzar, L. (2009). *Financial Innovation in Retail and Corporate banking*, Edward Elgar, UK 21(1), 47-48.

Abouzar, Z. (2009): *The role of structural capital on competitive Intelligence.* Industrial Management and Data Systems 109(2): 262-280.

Ahuja, E. (2010), an empirical investigation on aspects of strategy formulation and implementation within large private manufacturing companies in Kenya. Unpublished PHD thesis, University of Strath clyde.

Akova.A. (1934), *The Theory of Economic Development*, Cambridge, Mass.: Harvard.

Alstrup, B. (2010), Strategic Issue Management, *Strategic Management Journal*, vol. 1, pp. 131-148

Ashton, J. (2007), organizational culture: can it be a source of sustained competitive advantage? *Academy of Management Review*, 11(3), pp. 656 – 665.

Ayyagari, J. (2011) The Innovation Value Chain in New Technology Based Firms: Evidence from the UK. *Journal of Product Innovation Management. Forthcoming.*

Barney, J. (1991). Firms resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.

Barney, J. (2007). *Resource-Based Theory*. Creating and Sustaining Competitive Advantage: Oxford University Press.

Barra, R. (2009).*Interactive innovation in financial and business services*: the vanguard of the service revolution, Research Policy, Vol. 19 pp.215-37.

Bayati, A. (2007). The impacts of acquiring ISO 9000 certification on the performance of SMEs in Tehran. *TQM Magazine,* 19(2).

Beddowes, S. (2008), Strategic Marketing of Dairy products in Kenya, Unpublished MBA project School of Business University of Nairobi.

Bollen, K. (1993).Testing structural equation models. Newbury Park, CA: Sage.

Bowen, A. (2009). The functional diversity and spillover effects of social capital. *Journal of African Economies*, 11(1): 14-29. Based Firms: Evidence from the UK.*Journal of Product Innovation*

Brown, B. (2009), Managing Change: *A Strategic Change to Organizational Dynamics,* 2nd Edition, London, Pitman Publishing.

Calantone, D. (2010), *Every Business is a Growth Business,* Times Books.

Carland, J. (2009)'' Differentiating entrepreneurs for small business owners :A conceptualization. 'Academy of management Review 9(2).

Chorafas, H. (2007). *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Boston, MA: Harvard Business School Press..ISBN 1–57851 837–7.

Christensen, A. (2007), Increasing returns and the new world of Business, *Harvard Business Review*, July/ August, pp.100-109.

Christensen, J. (1997), Organizational structure, environment and performance: the role of strategic choice, *Sociology*, pp. 2-22.

Cooper, D. & Schindler, P. (2006) Business Research Methods (9th Edn). New York: McGraw Hill.

Coulson, N. & Martin, K. (2011). Internationalization of Service SME's: An Integrated Perspective from the Engineering Consulting Sector, Journal of International Marketing, 1, 4, pp. 42-66.

Covin, J. (2007). "A conceptual Model of Entrepreneurship as Firm Behavior, "*Entrepreneurship Theory and Practice* 16(1):7-25.
Crawford, A. (2008), *Strategy and Structure: Chapters in the history of industrial enterprise*, New York, Doubleday.
Cumming, C. (2008), Online banking: Strategic and management challenges, *Long Range Planning*, 30(6), 890-898.
Daley.J, (2009), Amortization Policy for Advertising and Research and Development Expenditures, *Journal of Accounting Research*, 23, pp. 326-335.
Danneel, A. (2001). Using an intellectual capital perspective to design and implement a growth strategy: the case of APiON. *European Management Journal, 19*(5), 510-525.
Dougherty, J. (2010). The intangible economy and Australia. *Australian Journal of Management*, 26(3) Special August Issue.
Doyle, P. (2010), *Marketing management and Strategy*, Prentice Hall international.
Easternby, F. & Trist, E. (2007), the causal texture of organizational environments', Human relations pp. 21 – 32.
Fagerberg, M. (2008).*Intellectual Capital and Innovation Performance:* Empirical Evidence in the Turkish Automotive Supplier. J. Technol. Manage. Innov., 3(4): 31-40
Fulmer, J. (2012), the strategic decision process and organization structure', *Academy of Management Review*, pp. 280 – 297.
Gitonga, T, (2003) *Innovation processes and the perceived role of the CEO in the banking industry*, unpublished MBA Project University of Nairobi.
Gunasekaran, J. & Madden, T. (2006), *Marketing Management*, the McGraw-Hill Co. Inc.
Hamels, G. & Wernerfelt, B. (2009), Determinants of firm performance: The relative importance of economic and organizational factors', *Strategic management Journal*, pp. 399 – 411
Hammer,M. & Chamy, U. (2009): Reengineering the corporation; A manifesto for Business Revolution, New York ; Harper Collins.
Hart, M. & Crittenden, F. (2006), A taxonomy of competitive retailing strategies, *strategic management journal*, pp. 275 – 287.
Henderson, C. & Grosse, R. (2009) 'Rich man, poor man: resources on globalization, ' *Reference Services Review*, vol. 31, pp. 285-295
Higgins, C. & Jones, G. (2005), *Strategic Management Theory*, An Integrated Approach, 5th Edition.
Hooley, D., MacMillan I. & Day, D. (2010). "Strategic Attributes and Performance in the BCG Matrix." *Academy of Management Journal;* 500–509.
Ignazio, V. (2007). Financial Deepening and Monetary Policy Transmission Mechanism, *BIS Review* 124, 28-29.
Institutions in Kenya: A case Study of MFIs Registered With the Association of Microfinance Institutions. 3 (1), 45-46.
Ittner, P. (2008), *Organizations: A Quantum View*, Englewood Cliffs, Prentice – Hall.
Johne, G. and Scholes, K. (2008), *Exploring Corporate Strategy*, Prentice-Hall Europe, Hemel Hempstead.
Kakabadse, H. (2008), Strategic Responses by Firms Facing Changed Environmental Conditions: A study of motor vehicle Franchise holders in Kenya. Unpublished MBA Project School of Business University of Nairobi.
Kim, A. (2009), *Business Policy and Strategic Management*, New Delhi ,TMH.

Kim, H. (2008) *Exploring the Significance of Entrepreneurship in Agriculture,* Research Institute of Organic Agriculture FiBL.

Kothari, C.R (2006) *Research Methodology: Methods and techniques,* (1st Ed), New Age international publishers.

Lafourcade, L. (2005). Overview of the Outreach and Financial Performance of Microfinance Institutions in Africa. ISBN 0-13-149786-3.

Langerak, D. (2004), the Structural and Environmental Correlates of the Business Strategy, *Strategic management Journal*, pp.55-76.

Leonard, J. (2008), Organization and Environment, Cambridge, Harvard University Press.

Lettice, G. (2006), *Essentials of Marketing*, UK, McGraw Hill Book Company Ltd.

Lumpkin, G. (2006).Clarifying the entrepreneurial orientation construct and linking it to performance. *The Academy of Management Review*.21(1), pp.135-172.

Margerison, D. & Toulouse, J. (2011), Chief Executive Personality and Corporate Strategy and Structure in Small Firms, *Management Science*, pp. 1389 -1409.

Markside, R. & Snow, C. (2009), *Organizational Strategy, Structure and Process*, New York, Mc-Graw Hill.

Matsuno, D. & Friesen, P. (2009), strategy making and the environment: the third link, *Strategic Management Journal*, pp. 221-235.

Mbogo, M. & Ashika, A. (2005). Factors Influencing Product Innovation in Micro Finance

Meredith, G. (2009).*Small business management in Australia* .4th ed.McGrawHill.

Meyer, L. (2008), Expansion strategies of European banks to Brazil and their impacts on the Brazilian banking sector, *Latin American Business Review*, v.3, n.4, p. 59 – 91.

Milton, J. (2013). Intellectual Capital and Firm Performance. *Journal of Innovations in Business & Management London*, UK, 2011, 4(2), 215-226.

Mugo, J. G. (2012). The Effect of Financial Innovation on The growth of Microfinance Institutions in Kenya. Unpublished MBA Project, University of Nairobi.

Mumford, H. (2008), Strategy- making in three modes, *California Management Review* Vol. 2 pp 44 – 53.

Mwangi S. (2007), *Factors influencing financial innovation in Kenya's securities market. A study of firms listed at the NSE*, unpublished MBA Project University of Nairobi.

Mwangi, A. K. (2013). Effect of Financial Innovation on the Financial Performance of Deposit Taking Microfinance Institutions in Kenya. Unpublished MBA Project, University of Nairobi.

Mwangi, M. K. (2007). Factors Influencing Financial Innovation in Kenya"s Securities Market: A Case Study of Firms Listed at The Nairobi Securities Exchange. Unpublished MBA Project, University of Nairobi.

Ngugi J. K., Mcorege M. O. & Muiru J. M. (2010). *The Influence of Innovativeness on the Growth SMEs in Kenya. International Journal of Business and Social Research, 3(1), 26-29.*

Pinto, J. (2008).TQM and performance in small enterprises: The mediating effect of customer orientation and innovation. *International Journal of Quality and Reliability Management,* 25(3), pp 256-275.

Prahalad, J. & Robinson, R. (2008), *Strategic Management: Strategic Formulation and Implementation*, 3rd Edition. Richard D. Irwin Inc.

Raycroft, D. (2009), *Growth Strategies*, John F. Kennedy School of Government, Harvard University.

Reichheld, C. & Hamel, G. (2005), "The core competence of the corporation", *Harvard Business Review*, Vol. May/June pp.79-91.

Roos, J. (2011), "*Measuring your company's intellectual performance*", Long Range Planning, Vol. 30, No. 3, p. 325.

Rosenberg, R. (2006), *Towards a Strategic Theory of the Firm, Competitive Strategic Management, Englewood Cliffs*, Prentice- Hall.

Schon, P. (2008), *Leadership in Administration: A Sociological Interpretation*, Row, Peterson, Evanston II.

Slater, D. & Hofer, C. (2010), *Strategic Management, A new view of business policy and planning, Boston,* Little Brown and Co.

Storey, E. (2010), *The Marketing Game, Adams media Corporation*, 12th edition, Tata McGraw Hill.

Thompson, J.L. (2007), Strategic Awareness: Awareness and change, 3rd edition. International Thompson Business Press.

Tucker, J. (2008), "Shaken, not stirred, Defining and connecting indicators for the, measurement and valuation of intangibles" *Journal of Intellectual Capital*, Vol. 5, No. 2, pp. 268-281.

Visser, A. (1997). 'Management of the Innovation Process in Small Companies in Finland'. IEEE Transactions on Engineering Management, 38 (2): 120–6.

Vonortas, A. (2010). The resource –based view: A review and assessment of its critiques. *Journal of Management*, 36 364-381

Vossen, T. (2009), Insurance Training and Education: the Current & Future Perspectives, the 14th Annual Conference of the Insurance Institute of Kenya

Wind, H. (2007), *Strategic Management and Business Policy,* Fifth Edition, New York Addison-Wesley Publishing Company.

Workman, I. (2008), Financial services in the Euro-zone, *European Management Journal*, October, v.17, n.5, p. 447 – 465.

Wu W. C. & Chen k. (2008). Dimensions of Social Capital and Firm Competitiveness. TheMediating Role of Information Sharing. *Journal of Management Studies*, 45(1): 122-146.

Wu, W. (2008). Dimensions of social capital and firm competitiveness improvement: The mediating role of information sharing. *Journal of Management Studies*, 45(1): 122-146

Zerenler, M., G. Schrieder, J., Von B. & Heidhues, F. (2008). Rural Finance for Food Security for the Poor: Implications for Research and Policy. Washington DC, USA. Vol. 3.

APPENDICES

Appendix I: Letter to Respondent

Dear Respondent,

RE: IMPACT OF INNOVATIONS ON FINANCIAL PERFORMANCE OF SMEs

I am a student at the University of Nairobi pursuing a Master of Business Administration degree in Finance. I am conducting a research on the impact of innovations on financial performance of SMEs. I kindly request you to spend a few minutes of your time in completing the attached questionnaire. Your response is highly valuable to assist me gather data from you for the completion of this project. I assure you that any information will be treated with utmost confidentiality for the sole purpose of this research.

Thank you,

Alex Muli (Researcher)

Appendix II: Questionnaire for Employees

Section A: Background information

1. What is your gender?

Male ( )

Female ( )

2. Age of the respondent

Below 20 years ( )

21 – 29 years ( )

30 – 39 years ( )

40 – 49 years ( )

50 years and above ( )

3. What is your highest level of education?

Masters ( )

Bachelors ( )

Certificate/Diploma ( )

Other ……..

4. For how long have you been operating?

Less than 3 years ( )

4 to seven years ( )

8 to 10 years ( )

11 years and above ( )

5. How many employees do you have?

1 - 10 employees ( )

11 – 20 employees ( )

21 – 30 employees ( )

31 – 40 employees ( )

50 and above ( )

Section B: Technological Innovation

6. To what extent were the following technological innovation items implemented in your organization in the last three years? (Five-point scales ranging from 1= 'not implemented', 2= 'imitated from national markets', 3= 'imitated from international markets, 4= 'current technologies were improved', 5= 'original technological innovations were implemented')

Factors	**1**	**2**	**3**	**4**	**5**
Renewing the routines, procedures and processes employed to execute firm activities in innovative manner					
Renewing the supply chain management system.					
Renewing the production and quality management systems					
Renewing the human resources management system.					
Renewing the in-firm management information system and information sharing technologies					
Renewing the organization structure to facilitate teamwork					
Renewing the technologies used to facilitate coordination between different functions such as marketing and manufacturing.					

Section C: Product Innovation

7. To what extent were the product innovations implemented in your organization in the last three years related to the following kinds of activities? (Five -point scales ranging from 1= 'not implemented', 2= imitated from national markets', 3= 'imitated from international markets, 4= 'current products were improved', 5= 'original product innovations were implemented')

Factors	**1**	**2**	**3**	**4**	**5**
Increasing manufacturing quality in components and materials of current products					
Decreasing manufacturing cost in components and materials of current products					
Developing newness for current products leading to improved ease of use for customers and to improved customer satisfaction.					
Developing new products with technical specifications and functionalities totally differing from the current ones.					
Developing new products with components and materials totally differing the current ones					

Section D: Marketing Innovation

8. To what extent were the following kinds of market innovations implemented in your organization in the last three years? (Five-point scales ranging from 1= 'not implemented', 2= 'imitated from national markets', 3= 'imitated from international markets, 4= 'current marketing practices were improved', 5= 'original marketing innovations were implemented')

Factors	**1**	**2**	**3**	**4**	**5**
Renewing the design of the current and/or new products through changes such as in appearance, packaging, shape and volume without changing their basic technical and functional features.					
Renewing the distribution channels without changing the logistics processes related to the delivery of the product.					
Renewing the product promotion techniques employed for the promotion of the current and/or new products.					
Renewing the product pricing techniques employed for the pricing of current and/or new products					
Renewing general marketing management activities					

Section E: Process Innovation

9. To what extent were the following kinds of process innovations implemented in your organization in the last three years? (Five-point scales ranging from 1= 'not implemented', 2= 'imitated from national markets', 3= 'imitated from international markets, 4= 'current processes were improved', 5= original process innovations were implemented')

Factors	**1**	**2**	**3**	**4**	**5**
Determining and eliminating non value adding activities in production processes					
Decreasing variable cost components in manufacturing processes, techniques, machinery and software					
Increasing output quality in manufacturing processes, techniques, machinery and software					
Determining and eliminating non-value adding activities in delivery related processes					
Decreasing variable cost and/or increasing delivery speed in delivery related logistic processes					

Section F: Financial Performance Measures

10. How would you rate the level of achievement of the following financial performance items in your organization after the implementation or lack of implementation of any of the above innovations? (Five-point scales ranging from 1= ‘very unsuccessful’, 2= ‘unsuccessful, 3= ‘somehow successful’, 4= ‘successful’, 5= ‘very successful’)

Factors	**1**	**2**	**3**	**4**	**5**
General profitability of the firm					
Return on sales (profit/total sales)					
Return on assets (profit/total assets)					

Thank you for your time.