EFFECT OF INNOVATIVE STRATEGIES ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NAIROBI COUNTY, KENYA

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REGISTRATION NO: 21/03063

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF CORPORATE MANAGEMENT IN THE SCHOOL OF BUSINESS AT

KCA UNIVERSITY

NOVEMBER 2022

DECLARATION

I the undersigned declare that this dissertation is my original work and has never been presented for a degree award or any other university programme.

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Declaration by the Supervisor

I confirm that the work in this dissertation was done by the candidate under my/our supervision.

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ABBREVIATIONS AND ACRONYMS

CVC: Customer Value Creation

GDP: Gross Domestic Product

IMF: International Monetary Fund

KNBS: Kenya National Bureau of Statistics

NACOSTI: National Commission of Science Technology and Innovation.

OECD: Organization for Economic Co-operation and Development

RBV: Resource-Based View

SEM: Structural Equation Modelling

SMEs: Small and Medium Enterprises

SPSS: Statistical Package for Social Sciences

DEFINITION OF TERMS

Marketing innovation	Adoption of innovation in promoting market success of new products and services (Casidy, Nyadzayo, & Mohan, 2019).
Performance	The measure of actual output or results of an organization against its intended outputs, namely goals and objectives (Kaplan & Norton, 2001).
Process innovation	Implementation of a new or improved production or delivery method, which includes changes in techniques, equipment and software (Omachonu & Einspruch, 2010).
Product innovation	The creation and subsequent introduction of a good or service that is either new, or an improved version of previous goods or services (Choi, Goh, Adam & Tan, 2016):
Service innovation	Innovation taking place in the various contexts of services, including the introduction of new services or incremental improvements of existing services (McDermott & Prajogo, 2018).
Small and Medium Enterprises	Non-subsidiary, independent firms which employ fewer than 50 employees (World Bank, 2020).

ABSTRACT

In a progressively challenging environment, innovation is extensively considered as the most vital source of competitiveness, because it creates a constant improvement that assists the organizations to endure, it leads to product and process enhancements, be more efficient. Innovation is often a necessity for organizations with strictly limited funds and resources yet are trying to remain profitable and competitive. Therefore, this study sought to establish the influence innovation strategies on performance of small and medium enterprises in Nairobi City County. The specific objectives are to determine the effect of product innovation, service innovation, marketing innovation and process innovation on organizational performance in SMEs. Theories informing the study include diffusion innovation theory, resource based view theory and Technology Acceptance Theory. The study used a descriptive research design. A total of 398 Small and Medium Enterprises was used where the enterprise owners was used as the respondents. Primary data was collected through the administration of the questionnaires. Descriptive and inferential statistics analysis was conducted. A regression model was used to determine the effect of innovation strategies on performance of Small and Medium Enterprises in Nairobi County. The regression of coefficients results show that product innovation and organizational performance of SMEs is positively and significantly related. The results further indicated that service innovation and organizational performance of SMEs is positively and significantly related. The results further indicated that marketing innovation and organizational performance of SMEs is positively and significantly related. Lastly, results showed that process innovation and organizational performance of SMEs is positively and significantly related. The study concluded that that innovation strategies positively influences performance of SMEs in Kenya. The study recommends that the SMEs should invest in innovative technology so as to survive intense competition currently experienced in the SMEs. Further the study recommends that the SMEs should continuously produce new products and re-engineer existing products so as to prolong the product life cycle. Further, the study recommends that the SMEs should design an innovative marketing strategy that makes customers feel a part of the enterprise through social responsibility and promotions. The study recommended that the SMEs should invest in benchmarking with the technology in the industry.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The chapter presents the background of the study where the link between innovative strategies on the performance is explained. The section further presents the statement of the problem, the research objectives and research questions. The significance of the study and scope of the study are also presented in the chapter.

1.1 Background of the Study

In a progressively challenging environment, innovation is extensively considered as the most vital source of competitiveness, because it creates a constant improvement that assists the organizations to endure, it leads to product and process enhancements, be more efficient (Lomineishvili, 2021). Innovation is often a necessity for organizations with strictly limited funds and resources yet are trying to remain profitable and competitive (Shin, 2017). Most business organizations are forced to think differently and creatively about how to utilise their resources and environment just to survive. Increasingly, innovation is inescapable for most organizations as they seek to remain sustainable (Kankanhalli, Zuiderwijk & Tayi, 2017). Innovation is one of the key features of entrepreneurial behaviour that has been significantly linked to Small and Medium Enterprises [SMEs] (Petersen & Kruss, 2019). Innovation is widely acknowledged as a core factor to increased productivity and competitiveness. It is one of the key practices underpinning the survival and competitiveness of firms in a competitive globalised environment (Del Vecchio, Di Minin, Petruzzelli, Panniello & Pirri, 2018).

Innovation has played an important role in German enterprises. German investment into research and development of 2.9% of GDP stands above all other European countries driven by innovation (World Bank, 2019). Innovation procedure of Turkish assembling firms has driven them to enhance their budgetary execution (Karabulut, 2019). The innovation technique drives these organizations to enhance their client execution, internal business processes execution and learning and development performance. An innovation system ought to in this manner be reliable to mission, vision, objectives and methodologies of a firm (Demir, 2017). Firms ought to be committed to put resources into innovative work, construct inventive items and accomplish substantial execution to be competitive (Kleiner-Schäfer, 2020).

Innovation in Africa remains challenged by factors that indirectly stymie access to capital, including property rights, poor technical manpower, and inadequate infrastructure (Onyejiaku & Chinyere, 2018). For instance, the proportion of firms that introduced new goods in Nigeria is the same as the proportion that introduced new services at about 40% (Meagher, 2018). This contrasts with most European Union countries where new goods dominate the product innovation landscape, suggesting that the rise and relevance of services may be more pronounced in latecomer contexts. It could also be driven by a heavier presence in developing countries of bundled services, that is, services that accompany manufactured products. In Nigeria, non-technological innovation (such as marketing or organisational innovation) exceeds technological innovation (goods, service and processes) (Edeh, Obodoechi & Ramos-Hidalgo, 2020). This contrasts with the European Union where the rate of technological innovation surpasses non-technological innovation. In South Africa, 54.8% of industrial enterprises were innovative, compared with 49.3% of service enterprises. The proportion of innovative enterprises in South Africa is considerably higher than

the European Union averages of 41.5% for industry and 37.0% for services (Hooli & Jauhiainen, Jarvi, 2019).

Locally, SMEs are supported in their innovation activities by less visible or less commonly known informal institutional links (Muigai & Gitau, 2018). Informal institutions may include personal and family contacts, community and social networks, informal credit for incremental innovation and adoption (Kiveu, Namusonge & Muathe, 2019). Government policy intervention aimed at improving innovativeness among SMEs seems to presume demand-pull strategies, such as reservation of markets for SMEs products, will automatically facilitate SMEs to develop their innovativeness (Chege & Wang, 2020). When the SMEs innovation policies have adopted supply side strategies such as improving access to technology, the policy framework has tended to assume existence of an underlying homogenous SMEs sector, which is in sharp contrast to reality. As a result, SMEs innovativeness in Kenya remain under developed, a factor that Mendi and Mudida (2018) argues contributes to the low survival and growth of SMEs.

1.1.1 Innovative Strategies

Innovation is an important tool that provides opportunities to new inventions and building of new markets, when the entrepreneurs are sure about the market, they will hold longer (Povolná, 2019). To create growth, sustain performance and develop performance in a dynamic and changing environment, innovation becomes core. Managing innovation depends on interrelated basic objectives of competitiveness: improving product quality and the firm's entire technological quality (Aksoy, 2017). However, organisations need to differentiate themselves from other players in the market. Usually, leading companies continuously use innovative strategies to create an edge over their competitors. According to Akinlabi, Badru and Ogunkoya (2020), absence of innovation increases customers' dissatisfaction as customers' needs are not adequately met.

Product innovation entails the creation and subsequent introduction of a good or service that is either new, or an improved version of previous goods or services (Choi, Goh, Adam & Tan, 2016): (Chux, 2019). According to OECD (2015), the product innovation involves a significant improvement in technical specification, features, component and material, inculcated software, user friendliness, portability, durability and other significant characteristics. If not nurtured through continuous improvements, the products are bound to decline and die naturally like any living being. According to Petersen and Kruss (2019), product innovations are expected to be continuous and deliberate strategic approach if organizations expect to sustain profitability and growth.

Services innovation entails transaction of service ideas, service conveyance frameworks, customer interfaces, and advancements (McDermott & Prajogo, 2018). Innovation in services is not the same as innovation in light of the fact that services are portrayed by elusiveness, heterogeneity, perishability, expanded client intuitiveness, and concurrence among production and utilization. Service innovation is increasingly seen as a vector of sustainable growth and competitive advantage at the firm-, industry- and economy level (Nambisan, Wright & Feldman, 2019). With the increasing growth of services in today′s organizations and economy, the importance of understanding service innovation concepts and practices has been on constant upsurge. Service innovation has evolved into a vast field encompassing the study of intangible processes and dynamic interactions among technological and human systems that lead to managerial and organizational change in services (Osano, 2019).

Marketing innovation takes into account marketing activities in the process innovation such as the marketing of new products that meet the needs of customers (McDermott & Prajogo, 2018). Marketing innovation plays a very important role in ensuring and increasing the success of

innovation (Meagher, 2018). Marketing innovation covers all innovation management activities that help to promote market success of new products and services (Casidy, Nyadzayo, & Mohan, 2019). Marketing innovation focuses on the implementation of a new marketing method that involves significant changes in product design or packaging, product placement, product promotion or pricing (OECD, 2015). According to Johne (2019), marketing innovations involve the marketing mix and market offerings that are made to satisfy customer's needs.

Process innovation entails the implementation of a new or an improved production or delivery method which includes changes in techniques, equipment and software (Omachonu & Einspruch, 2010). Davenport, (2013) takes note of that process innovation1 includes the radical improvement of new services and items and new generation frameworks in an inventive way. Process innovation comprise of new generation techniques/production methods and new sources of raw materials, semi-completed items or segments (Osano, 2019). The backbone of process innovation are proficiency and item quality and can come about in increasing competitive edge (Mwanyota, Maalu & Njihia, 2017).

1.1.2 Performance of Small and Medium Enterprises

Organizational performance consists of the actual output or results of an organization that are measured against its intended outputs, goals or objectives. According to Severgnini, Vieira and Galdamez (2018) performance is the actual outcomes and results of an organization as measured against its intended goals and objectives. Organizational performance comprises two specific areas of the firm outcomes: financial organizational performance such as profitability and market share; and non-financial organizational performance such as customer perspectives and growth and learning. According to Rehman, Mohamed and Ayoup (2019), organizational performance is

dependent upon the concept of an organization of productive assets, including human, physical, and capital resources, for achieving a shared purpose.

In recent years, many organizations have attempted to manage organizational performance using the balanced scorecard methodology (Kaplan & Norton, 2001) where performance is tracked and measured in multiple dimensions such as: financial performance (e.g. shareholder return), customer service, social responsibility (e.g. corporate citizenship, community outreach) and employee stewardship. Balanced scorecard also identifies the measures used to monitor, review and assess performance (Armstrong, 2017). The use of the Balanced Scorecard urges the firm to understand how to respond to its shareholders (financial perspective), how customers view it (customer perspective), what internal operations to excel at for competitive advantage (internal perspective) and what it can continue to improve and create value in order to grow; learning and growth perspective (Kaplan & Norton, 2001). This study adopted the dimensions of balanced scorecard to measure performance. Nairobi City County was used as it has the largest concentration of diverse Small and medium enterprises in Kenya.

1.2 Statement of the Problem

According to IMF (2018), SMEs in Kenya are not innovative enough and this is negatively affecting their performance. The SMEs have not fully integrated innovation to enhance performance and as a result remain sustainable (Kiveu, Namusonge & Muathe, 2019). A survey conducted by Kenya National Bureau of Statistics indicated that 400,000 MSEs dying annually (KNBS, 2020). In the last five years 2.2 Million micro enterprises have been closed. Most of these SMEs are normally closed because of increased operating costs, declining income and losses incurred from the business and an indication of insufficient innovation (Chege & Wang, 2020).

Despite SMEs being acknowledged as being better placed to innovate, most of these enterprises remain uncompetitive as compared to their larger counterparts. This study posits that innovation is a fundamental input towards increasing performance of the SMES by way of adopting innovation in enhancing their products, services, marketing and their service delivery processes.

Studies conducted in this area present research gaps; Kiilu and Peter (2020) examined the entrepreneurial innovation processes on firm performance in Kenya. The study presents a conceptual gap as it focused on large organizations while the current study focused on SMEs. Mwangi and Namusonge (2017) study on the influence of innovation on small and medium Enterprise (SME) growth focused on garment manufacturing industries in Nakuru County while the current study expounded to various sectors. Gachara and Munjuri (2018) conducted a study on innovation challenges encountered by Small and Medium Enterprises using innovation challenges, technological challenges, legal and policy challenges and environmental challenges. However, the study presents a conceptual gap as it focused on the innovation challenges while the current study focused on innovation constructs that include service innovation, product innovation, marketing innovation and process innovation. Onyejiaku and Chinyere (2018) study on innovation strategies and enterprise competitiveness in developing West Africa Economies presents a methodological gap as it was conducted in Western Africa while the current study was conducted locally. Therefore, this study sought to establish the effect of innovation on performance of small and medium enterprises in Nairobi City County.

1.3 General Objective

The purpose of this study was to determine the effect of innovative strategies on performance of SMEs in Nairobi County, Kenya.

1.3.1 Specific Objectives

The study was guided by the following specific research objectives;

i. To determine the effect of product innovation on performance of SMEs in Nairobi County.
ii. To establish the effect of service innovation on performance of SMEs in Nairobi County.
iii. To evaluate the effect of marketing innovation on performance of SMEs in Nairobi County.
iv. To evaluate the effect of process innovation on performance of SMEs in Nairobi County.

1.4 Research Questions

The study sought to answer the following research questions;

i. What is the effect of product innovation on performance of SMEs in Nairobi County?
ii. What is the effect of service innovation on performance of SMEs in Nairobi County?
iii. To what extent does marketing innovation on performance of SMEs in Nairobi County?
iv. What is the effect of process innovation on performance of SMEs in Nairobi County?

1.5 Significance of the Study

The study provides an insight on innovation that may be useful to SMEs, government, enterprises, academicians and scholars.

Enterprises

SMEs may use the most prevalent innovation employed by manufacturing firms to expand their market share. Competitive advantages realized through the best innovation may see the SMEs expand and grow to multi-billions sector in the country. The study provides an in-depth understanding of innovation and can be an eye opener to SMEs owners who are looking into

investing in innovation to improve their market share and maintain a sustainable competitive advantage.

Government and Policy Makers

The findings of this study is useful to the government to infer on their policy making process. Formulation of policies that can enhance innovation and boost SMEs industry can be deduced from the findings of this study. The government can also get insight information about SMEs which may be used to resolve the underlying problems affecting the industry. Creation of an enabling environment, products marketing and funding may be realized after getting information on innovation undertaken by the sector.

Academics and Scholars

The study findings is of significant importance to scholars and academia as it contributes to the body of existing knowledge on innovation and performance, and therefore forms future reference. In addition, the findings of the study contributes knowledge on the effects of innovation strategies on performance of SMEs by suggesting areas that can be researched further. It brings out a better comprehension of innovation that are effective in SMEs.

1.6 Scope of the study

The scope of the study is derived from the objectives, which include, service innovation, product innovation and marketing innovation on organizational performance in SMEs. The geographic scope was in Nairobi County, which has the highest concentration of SMEs in the country. The study was conducted between June 2022 and November 2022.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the theoretical framework, empirical review and the conceptual framework. The research gaps identified from the empirical review and operationalization of variables is also presented.

2.2 Theoretical Framework

Theoretical framework serves to guide and support the study as it finds answers to the underlying questions. It provides a structure that helps in approaching the study in a holistic manner. The framework also helps in the understanding of the variables and their grounds in relation to the existent literature (Osanloo, & Grant, 2016). The theories that inform the study are diffusion innovation theory, resource based view theory and Technology Acceptance Theory.

2.2.1 Diffusion of Innovation Theory

Rogers (1962) authored diffusion of innovation theory. The diffusion of innovations theory describes the pattern and speed at which new ideas, practices, or products spread through a population. Diffusion of Innovation Theory conceptualizes a thought or item picks up energy and diffuses (or spreads) through an explicit populace or social framework. The final product of this dispersion is that individuals, as a major aspect of a social framework, adopt another thought, behavior, or service/product (Rogers, 1962).

The stages, by which a person adopts an innovation, and whereby diffusion is accomplished, include awareness of the need for an innovation, decision to adopt (or reject) the innovation, initial use of the innovation to test it, and continued use of the innovation. There are five main factors

that influence adoption of an innovation, and each of these factors is at play to a different extent in the five adopter categories. There are five adopter categories that include innovators, early adopters, early majority, late majority and laggards (Rogers, 1962).

Innovators are characterized by those who want to be the first to try the innovation. Early adopters are characterized by those who are comfortable with change and adopting new ideas. Early Majority are characterized by those who adopt innovations before the average person. Late majority are characterized by those who are skeptical of change and will only adopt an innovation after it has been generally accepted and adopted by the majority of the population. Laggards are characterized by those who are very traditional and conservative they are the last to make the changeover to new technologies. This category is the hardest to appeal to (Rogers, 1962).

The theory is relevant as it informs the innovation process in an organization. The innovation may come in form of product, service, process and marketing. According to the theory, the SMEs can be categorized depending on the level of technology adoption that is innovators, early adopters, early majority, late majority and laggards.

2.2.2 Resource-Based View (RBV) Theory

Barney proposed Resource Based View theory in Barney (1986). According to Barney (1986), RBV focuses attention on an organization's internal resources as a means of organizing processes and obtaining a competitive advantage. Barney (1986), initiated the useful resource-based totally view has due to the fact that turn out to be one of the dominant contemporary methods to the evaluation of sustained aggressive advantage. A critical premise of the resource-primarily based view is that corporations compete on the idea in their resources and abilities (Barney, 1986).

RBV includes the study of the relationship among assets (technological manner innovations and organizational procedure innovations) and operational overall performance. The primary idea of the RBV is that a firm wishes heterogeneous resources, which can be treasured, inimitable, and non-substitutable to gain an extra sustainable overall performance than its competitors (Barney 1986). Furthermore, the RBV acknowledges the significance of intangible belongings of a company.

The theory is relevant as organizational innovation can be seen as distinctive abilities developed with human and financial resources available with the SMEs. These skills in turn contribute to competitive benefit. Performance of an organization is informed by the resource based view theory. With the availability of ample resources, the SMEs can exploit all potential opportunities to its maximum capacity.

2.2.3 Technology Acceptance Theory

The theory was proposed by Davis in 1993. This theory elaborates the phenomenon that can affect and shape users' acceptance of new information technology. It is comprised of two specific variables that are vital determinants of users' attitude toward using technology and actual use of the system. These two variables are perceived usefulness and perceived ease of use with reference to the innovative technology that the user ought to adopt (Davis, 1993). These two variables consider the utility and the simplicity of the new technology to the prospective users, in matters innovation.

The perceived usefulness explains the degree to which how much somebody trusts that utilizing a framework will improve their execution (Davis, 1993). Perceived ease of use is the degree to which user believes that benefits of systems' use outweighs the efforts for using it. The simplicity and the understandable nature of the innovation and system are the properties that involve ease of

use. In the process of technology adoption, individuals have to assess their attitudes towards this new information technology, in order to prevent a failure in implementation, waste of resources and ensure sustainability (Davis, 1993).

The theory is relevant as it informs on innovation capabilities, which allows efficiency in acceptance of new products and services. Using innovation, the SMEs can be able to use the innovation with ease to reach out to a wider market for the product and services.

2.3 Empirical Review

This section presents a review of empirical studies done by other researchers and are presented in accordance to the study objectives. These includes product innovation, service innovation, market innovation and process innovation on performance.

2.3.1 Product innovation and performance

Kawira (2021) assessed the effect of product and service innovation on the performance of Micro, Small and Medium Enterprises in Kenya. The aim of this study was to analyse the effect of innovation on firm competitiveness in manufacturing SMEs in Nairobi County, Kenya. Data was collected from a sample of 284 enterprises for the period 2012–2014. Multiple linear regression was used to analyse the effect of innovation on competitiveness. Findings indicate 97% of the manufacturing SMEs were innovating with majority implementing incremental innovations. Process, marketing and organisational innovations had positive significant effect on competitiveness, while product innovation had positive non-significant effect. The study recommends the implementation of innovations with high novelty by SMEs to increase their competitiveness. This can be facilitated by SMEs forming linkages and cooperating in innovation with knowledge generating institutions.

Hurley and Knight (2014) stated that product innovation enabled the organization to protect itself against threats from the competitors. Studies have also proved that there is positive correlation between the performance of the organization and positive product innovation (Buyus, Erickson & Jacobson, 2003). Espallardo and Ballester (2019) in a study carried out in an organization established that product innovation had a positive impact on the organization's performance in its industry. Varis and Littunen (2010) established that the more an organization was able to introduce new products into the market the more customers associated with that organization as it is assumed the organization is performing well. SMEs have a number of draw backs when it comes to innovation process as compared to large organizations (Rhee, Park & Lee, 2019).

Kiilu and Kithae (2020) sought to establish the influence of product innovation on performance of Small and Medium Enterprises in Nairobi City County, to determine the influence of process innovation on performance of Small and Medium Enterprises in Nairobi City County and to establish the influence of market innovation on performance of Small and Medium Enterprises in Nairobi City County. It employed a descriptive research design. The target population was about 10,000 SMEs in Nairobi City County. Fisher's formula was used to calculate a sample of 106 SMEs. Stratified random sampling technique was used to select the sample and questionnaires were the main instrument for data collection. Regression analysis results showed that product innovation, process innovation as well as market innovation all were positive and had statistically significant relationship with performance of entrepreneurship businesses in Nairobi City County.

Wan et al. (2015) describes product innovation as involving the introduction of new products or services with the aim of creating new markets or customers, or to satisfy current markets or customer. OECD innovation manual defines product innovation "as the introduction of a good or service that is new or significantly improved in relation to its characteristics or intended

functionality. Schumpeter (1934) posits that product innovation as the introduction of a new good which consumers are not yet familiar with, such a good has new/improved quality. He underscores the role of product innovation in spurring organisational growth and argues that competition from new products far outweigh marginal variations in the price of existing products.

Oke *et al*. (2017) carried out a study on firms in UK and concluded that product innovation had a positive impact on firm performance. Atalay. (2016) in their study on firms in the automotive supplier industry in Turkey also concluded that product innovation had a positive significant impact on firm performance. Ar and Baki (2018) in their study on the antecedents and performance impacts of product versus process innovation in SMEs in Turkish Science and Technology parks also confirmed a positive significant effect of product innovation on firm performance. Rosli and Sidek (2018) in a study on the impact of innovation on the performance of manufacturing SMEs in Malaysia found that product innovation had a positive effect on firm performance.

According to OECD (2015), the product innovation involves a significant improvement in technical specification, features, component and material, inculcated software, user friendliness, portability, durability and other significant characteristics. Growth, expansion and acquisition of a competitive advantage. This is remarkable in the SME sector. Compared to large firms, SMEs most often use product or service innovation to differentiate their product or service from others, giving them a competitive advantage (Ganzer *et al*., 2017). Despite the fact that innovation importance is recognized, not all organizations are capable to develop or apply it considering that the average percentage of companies that have implemented any innovation from 2008 to 2018 was 53% (Ganzer, Chais & Olea, 2017).

Kamakia (2014) conducted a study to assess the impact of product innovation on execution of business banks in Kenya. The results of the study demonstrated correspondence of product

innovation to staff was, as it were, with majority agreeing that product innovation affected organization performance. It was found out that to command a higher market share; a commercial bank needed innovative ideas. Most of the respondents firmly agreed that organization strategy and objectives impacted innovation and to continued execution. The study concluded that product innovation impacts on customer satisfaction and that the reputation in the market makes the bank stand out. A competitive bank is one that undertakes rapid innovations and to command a higher market share, commercial banks need innovative ideas.

SMEs are more inclined to new product development and undertake the whole process completely as compared to the large organizations. However, the SMEs do not involve the whole stages of product development, and those with a complete formal new product development strategy achieve higher quality (Huang et al., 2018). Due to the size of SMEs and the fewer number of employees they have as compared to the large organizations, there is more specialization in the cross functional teams formed. There is an environment where employees are able to interact and exchange duties at tasks therefore enabling members of the teams to have a good idea of each other's roles in new product development (Yap et al., 2015). However there is a limitation to this since it is difficult for an employee to specialize in the latest technological knowhow and depending on how the different SMEs differ in their inclination towards learning (Salavou, 2015).

According to Mosey (2015), most SMEs learning is not the area of focus and if it is, the objective is developing similar products The challenge being faced by SMEs in regards to developing strategies for new product development and innovation is that most of them have no sound data archives and most often than not, they never learn from experience. This makes very difficult for SMEs to keep track on where they are going wrong in regards to new product development. Tacit knowledge is important to SMEs since in creates an avenue for them to learn from other

organizations (Lindman, 2017). There is also need for a SME to have dynamic capabilities that are specific knowledge and skills that they learn in order to undertake an effective new product process (Eisenhardt & Martin, 2018). Cooper and Kleinschmidt (2018) in their investigation of new product development process identify the critical success factors that a firm needs in order to be successful; a high quality new product process, a defined product strategy, adequate resources financial and human resources, Research and development resources for the new product development, high quality project teams, commitment from senior management, innovative environment and culture, use of cross- functional teams and senior management accountability for the results.

According to Reguia (2018), the continuance and the persistence of any company depends on its capacities to maintain its market place and face the competition which spreads rapidly and aggressively with the globalization and the expansion of the new technologies, and while product reflects the company's image its whole success depends also on the product success through realizing (compliance) consumers desires and needs, and developing new products. Successful innovation results in new products and services, gives rise to new markets, generates growth for enterprises, and creates customer value. Innovation improves existing products and processes, thereby contributing to higher productivity, lower costs, increased profits and employment (Reguia, 2018). Firms that innovate have higher global market share, higher growth rates, higher profitability and higher market valuation. Customers of innovative products gain benefits in terms of more choices, better services, lower prices and improved productivity. As innovations are adopted and diffused, the "knowledge stock" of the nation accumulates, providing the foundation for productivity growth, long-term wealth creation and higher living standards (Milbergs & Vonortas, 2019).

According to Booz (2017), there are several types of products innovation which are: Launching new products which are not existing before through; buying innovations from other companies, or developing new products through R&D programs done by companies in their laboratories or in external ones; Widening products mix through adding new products; Improving existing products; Reclassification products positions and oriented new products to new markets; Reducing costs through applying new techniques to produce new products.

According to Nielsen (2015), affordability tops global consumers list of reasons for purchasing a new product, but there are regional differences in the order of importance placed on this attribute. In Asia-Pacific, affordability is the third-most important reason for purchasing a new product, behind value and convenience. North Americans place affordability second on their list, behind novelty and tied with brand recognition. In Latin America, affordability is just slightly behind brand recognition as the reason for making a new product purchase. Developing and innovating products is considered as a growth driver for companies, whereas; companies competitive position is determined through their capacity to innovate in their product portfolio and the time that they need to launch their new products.

2.3.2 Service innovation and performance

Makgopa (2020) assessed the influence of service innovation practices on business performance in South Africa. Complexity theory served as the underlying conceptual lens that enabled this research to answer the research questions and attain the research objectives. A mixed research method was used to gain an in-depth understanding of the implementation of service innovation practices in service organizations. The study results revealed the positive relationship between service innovation practices and business performance (profit growth/maximisation, organisational competitiveness, and organisational reputation).

Mohamud (2017) explored the relationships between service innovation, customer value creation (CVC) and customer satisfaction (CS) with specific emphasis to Ghanaian telecommunication operators. The study unveiled that a service firm's ability to achieve CS is dependent on how telecommunication operators harness and deploy their service innovation activities. In addition, the study showed that CVC mediated the relationship between service innovation and CS. The study concluded that, service innovation must create value for customers in order to enhance CS.

Lin (2013) examined the impact of service innovation on performance in developing countries such as China. The study constructed an integrative model linking service innovation, service quality and performance then collected 277 samples in the Chinese tourism sector. The study found that service innovation affects firm performance through direct and indirect paths where service quality plays a positive mediating role. The direct impact is larger than the indirect one; secondly, the innovation mode is cost-reductive, which focuses on eliminating internal cost rather than improving service quality. Thirdly, the assessment of service quality emphasizes the dimensions of assurance and reliability. The study concluded that service innovation has a positive impact on performance.

Ngumi (2014) established the effect of service innovation on performance of Commercial banks in Kenya. The research concentrated on innovations in the area of automated teller machines, debit and credit cards, internet banking, mobile banking, electronic funds transfer and point of sale terminals. The study findings revealed that bank service innovations had a significant effect on salary, return on resources of commercial banks in Kenya. It additionally found that those cell phones had a higher directing impact than web benefits on the bank innovations while affecting budgetary execution of business banks in Kenya. It was inferred that service innovations influenced financial performance of business banks in Kenya decidedly. The study recommended

to the management of commercial banks and the Government to explore and implement sustainable business linkages and collaborations with mobile phone service providers as well as the internet service providers as a way of accelerating the penetration of innovations and eventually creating desired impacts in the economy.

Aas and Pedersen (2014) conducted a study on the impact of service innovation on financial performance. The study empirically investigated if firms focusing on service innovation perform better financially than firms not focusing on service innovation. Analysis of the financial performance of 3575 Norwegian firms in the manufacturing industries supported the proposition that firms focusing on service innovation have significantly higher growth of operating results than firms not focusing on service innovation. However, this proposition was not supported in a corresponding analysis of 1132 Norwegian firms in the service industries. The study posited that service innovation led to improved performance of manufacturing industries.

Feng, Ma and Jiang (2020) assessed the impact of service innovation on firm performance. Studies from 46 peer-reviewed articles were sampled and analyzed. A meta-analytic approach was adopted to conduct a quantitative review on the relationship between service innovation and firm performance, and the effects of any potential moderators were further explored. The results found that service innovation has a significant positive impact on firm performance. Additionally, the relationship between service innovation and firm performance is influenced by measurement moderators (economic region and performance measurement), and contextual moderators (firm type, innovation type, customer factors and attitudes toward risk).

Razavi (2018) argues that organizational capability approach employed by the managers is the mostly known approach to in innovation management. It suggests that product innovation in the long run is better managed by nurturing and enhancing capabilities of firms as innovation engine.

It advocates that superior business performances of the firms depend on the large scale investment in innovation capability instead of investing in the creation of physical assets. The stronger the innovation capability possessed by a firm, the more effective will be their innovation performance.

2.3.3 Marketing innovation and performance

Osano (2019) examined the purpose of this study was to investigate the role of global market strategy on the global expansion of Kenyan firms. The research study used descriptive and inferential design as a chosen design. The researcher used multiple/multivariate regression analysis to determine the functional relationship between the independent variables and the dependent variable. The global market strategy variables considered include market strategy incorporating: global advertising and promotion, external advisory services, foreign market specialization, competitive pricing strategies, and focus on quality products/services; foreign market intelligence on locating markets, trade restrictions, competition overseas, and market and investment opportunities; and logistics and distribution incorporating: handling of documentation, distribution coordination, warehousing, arranging transportation, and collaboration with large firms.

Marketing innovation takes into account marketing activities in the process innovation such as the marketing of new products that meet the needs of customers. Marketing Innovation plays a very important role in ensuring and increasing the success of innovation. Marketing innovation covers all innovation management activities that help to promote market success of new products and services (Casidy, Nyadzayo, & Mohan, 2019). It is the successful marketing of a new product or service for the satisfaction of customer needs. It anticipates future needs and helps identify future and new market opportunities. A firm has two core functions that are "Marketing and Innovation" for him, marketing and innovation are the couple that guarantees the success of the company. In

marketing management the main mission is to increase sales, the focus is therefore on customer and market orientation.

According to Fiore, Silvestri, Contò and Pellegrini (2017), marketing and innovation management have to couple because marketing is effective when there is innovation in marketing tasks. Adoption of marketing innovation tools is needed to meet new challenges of business competitiveness Marketing and innovation are two entities that complement each other for the firm's performance. Having a unique original product highly improve sales and customer growth. On this fact, Hendrayati and Gaffar (2016) have thus affirmed that the performance of the innovation leads to the marketing performance. Marketing innovation is the implementation of a new marketing method that involves significant changes in product design or packaging, product placement, product promotion or pricing (OECD, 2005).

Rodriquez et al. (2014) posit that marketing innovation aim at fulfilling market needs while responding to market opportunities (Sidek & Rosli, 2013). Marketing innovations focus on better addressing customer needs, opening up new markets and positioning a firm’s product in the market, with the objective of increasing the firm’s sales. According to Johne (2019), marketing innovations involve the marketing mix and market offerings that are made to satisfy customer’s needs.

O-Neira (2019) in their study on SMEs in the furniture industries found strong evidence that market innovation positively influenced business performance. Similarly, Varis and Littunen (2010) in their study of SMEs in Finland confirmed a robust significant relationship between marketing innovation and firm performance. However, Rosli and Sidek (2013) in their study of manufacturing SMEs concluded that marketing innovation did not have significant effects on firm performance.

Koffi, Hongbo and Zaineldeen (2021) examining the impact of innovation types on small and medium-sized enterprises performance and competitiveness. Data for the study was obtained from 250 SMEs operating through a structured questionnaire. Findings from this study revealed that marketing innovation, product innovation, organisational and process innovations are the innovation dimensions that contribute to SMEs' performance and competitiveness. Marketing innovation contributes more significantly to SMEs' performance; followed by product innovation; organizational innovation; and process innovation. Additionally, the study found a significant and positive relationship between competitive advantage and SMEs' performance. The study thus concluded that to remain competitive and profitable, SMEs operating in developing countries must embrace innovation and constantly seek ways to be innovative remain relevant in the industry.

Rosli et al., (2017) stated that market innovation is the use of marketing mix and selection with an aim of satisfying the customers' preferences. Organizations should give great importance to market innovation since it enables the organization to reach out to it's the customers at a faster and more efficiently. Marketing innovation is important since it enables the organization to respond to the market opportunities that the organization should exploit and at the same time meet the customers' needs (Rodrigues-Cano et al., 2014). According to Audretsch (2019) entrepreneurial innovation is an important factor in market innovation that leads to growth of the economy.

According to Ren *et al*., (2018), marketing innovation is a necessary tool for organizations to achieve a sustainable competitive advantage. Most businesses focus only on technological innovations that they complete neglect marketing innovations (O'Dwyer *et al*., 2019). Marketing innovation will also consist of continuous and additional adjustments to current activities which enable small and medium enterprises differentiate their offerings with larger firms (Epetimehin, 2018). Ultimately firms are

considered to be more innovative when they engage in marketing innovation as part of their overall innovation strategy.

2.3.4 Process innovation and performance

Agyei-Mensah (2017) conducted a study to examine the effect of process innovation on performance in the banking industry with a case of UT Bank in Ghana. The study adopted a descriptive research design. The study findings indicated that process innovation had a moderate relationship with organizational performance. The study recommended that banks become more proactive in developing products and services that create value for customers. Banks must also empower their frontline executives to become more customer oriented as that presents an opportunity to get customer inputs toward innovative decision making.

Alshorman (2020) assessed the effect of process innovation on business performance of product industries in Malaysia. The quantitative research design approach was used in this study to collect data from 386 respondents selected from the product industries in Malaysia. The required data were obtained using simple random sampling by a validated questionnaire. Furthermore, the data collected from the survey were analyzed using Structural Equation Modelling (SEM). The results of this study showed that there is a significant relationship between process innovation and design management with business performance as well as design management mediate the relationship between process innovation and business performance of product industries in Malaysia. In addition, the study established that process innovation leads to better business performance, which will benefit the product industries in the future.

Kowo, Akinbola and Akinrinola (2018) assessed the effect of process innovation organizational performance. A total of 114 questionnaires were administered to major telecommunication operator employees in Lagos State, Nigeria to get primary data that treated and tested appropriate

research questions and hypotheses accordingly. The study adopted survey method. SPSS was also employed in testing the research hypothesis. The study found out that process innovation has a significant effect on organizational performance and there exist a significant relationship between service modification and sales volume.

Kenfac and Yang (2013) explored how regions in Sweden conducted process development in the waste administration division. The explanation of four municipalities in Sweden (Kalmar, Mörbylånga, Nybro and Torsas) was to assess the impacts of process development in waste collection forms on districts' exhibitions in Sweden by the utilization of grounded theory technique. Amid this investigation, it was found that, the utilization of process innovation positively affect the regions budgetary and clients performance. Additionally, the significance of process development as a well ordered process and not an abrupt change was found to be critical for a successful process innovation. Applying corporate social obligation as a self-direction instrument inside an organization, which add to environmental sustainability for organization; also showed positive relation with municipalities' performances.

Nyamoita (2015) assessed impact of process development in service organizations in Kenya with a case of Kenya Power Company. The study adopted a cross sectional research design. The findings demonstrated a positive factually noteworthy relationship between sale of power, a proportion of the prepaid process innovation and money related execution pointer of profit for resources. The study recommended that there was need for government to encourage innovation in the service organizations which was turn anticipated that would enhance revenue collection, improve utility billing and accuracy, reduce unnecessary costs and be more competitive in the market.

Imran (2014) study sassed the impact of innovation on employee performance in banking sector in Malaysia. Findings indicated that a total of 140 questionnaires had been distributed among different banks and out of which 100 were completed and returned. After analyzing the data very efficiently, it was found that technological advancement had noteworthy effect on inspiration and training of employees. Inspiration had noteworthy effect on worker execution however; training had no significant effect on employee performance. Moreover as the concerned for technological advancement and employee performance, there was significant relationship among them.

Sibanda (2015) in a study sought to determine the influence of innovation on organization performance in South Africa. The study used descriptive design to conduct 12 in-depth interviews within IBM South Africa to determine real-life drivers that helped create the alignment. The study findings revealed that consumers are becoming more empowered; therefore, organizations need to be more flexible in their business models and strategies. Furthermore, the integration of cross-functional roles in the organization at the management level allow for improved alignment between information technology and strategy as better integrated roles bring a combination of these two elements.

Ndunga, Njati and Rukangu (2016) determined the impact of innovation on organization`s performance. From the investigation findings, it was presumed that money related execution of business banks' branches in Meru towns is decidedly impacted by development. Innovation selection by business banks shows a high capability of financial performance enhancement in this manner yielding expanded returns for the investors. Innovations flexibility has come about to their expanded reception rate among the banks and their clients with the take-up additionally quickened by the way that the appropriation is from both the banks and their clients. The recommendations of the study were that banks can manage their costs better in continuing to invest in technology

innovation as opposed to continued investment in brick and motor branches. The internet and mobile channels can process a higher volume of transactions compared to the use of the conventional manual processes.

Charles (2016) conducted a study on the impact of system innovation on organizational performance. The study investigated the impact of technological innovation on organizational performance. The objectives of the study were to determine relationship between process and marketing planning capabilities on organizational performance in the manufacturing industry. The study employed survey research. The hypotheses formulated for this study were tested using correlation, regression analysis, Pearson's Correlation and Analysis of Variance (ANOVA). The findings from the study revealed that strategic planning and marketing capability independently and jointly influence organizational performance. In addition, there was positive interaction between performance variables.

According to (Rosli & Sidek, 2019) process innovation reengineering and improves the internal functions of the organization. This involves changing the organizations functions, technical designs and the manufacturing procedures together with a new research and development aspect (Rosli et al., 2016). Oke et al., (217) argues that process innovation to be successful the organization has to improve its techniques and systems of production of goods and services. Therefore process innovation can be described as the improved techniques, devices and knowledge that are used for the making better of goods and services by a particular organization (Wan et al., 2015).

According to Rosli et al., (2017), process innovation is important to SMEs the organization and should use it as the primary way to distinguish its products from those of the competitors and therefore in the long run the organization is able to gain competitive advantage. When an

organization is involved in such kind of innovation it is able to grow due to the uniqueness of its products and services (Morone & Testa, 2018). A study carried by Varis and Littunen (2018) established that the firms performance correlated positively with the performance of the organization. In agreement to this Ar and Baki (2019) also established that for an organization to outperform its competitors it has to improve its process innovation to include technological innovation.

Gima and Li (2015) in a study to examine the impact of product innovation on the execution of new technology adventures in China found that, the innovation execution interface was dependent upon both environmental elements, including natural disturbance and institutional help, and the relationship-based methodologies of the endeavors, for example, strategic unions for product improvement and political systems administration. Their outcomes proposed the requirement for concurrent thought of condition and relationship-based methodology factors as moderators in the discourse on product innovation strategy among new technology ventures.

Maurice (2019) explored the relationship between organization performance and innovation by development. The findings of the study were deciphered utilizing Likert model and SPSS bundle for the examination of some appropriate measurable strategies, for example, factor examination, regression, and dependability examination. The findings demonstrated that the effect of product innovation on performance execution was higher in Nigeria when shoppers perceive item development as more grounded, progressively good and increasingly exceptional. Innovativeness/quality of the creativity procedure applies a positive impact on product development and performance within the organization. In this manner, it was suggested that imaginative/quality advancements ought to be kept up consistently to create appropriate items constantly.

According to Calantone, Cavusgil and Zhao (2017) process innovation is process that is adapted by the organization in order to adapt itself to the changes in the environment. The process of Innovation will therefore involve building on the capabilities of the organization in order to create new products and services (Yang & Choi, 2019). For process innovation to be a success vision and strategy have to be put in place (Lawson and Samson, 2017). Granovetter (2015) argued that innovation is created in social network interactions by the different people that are involved in the formulation of the process. This interaction may involve the organization suppliers, its customers, the members of the public and the corporation (Romijin & Albaladejo, 2019). It has been argued that an organization that has a closer relationship to the potential customers than the competitors will have the advantage of being more creative than the competitors hence being more innovate (Lawson & Samson, 2018). This is because the organization will have new ideas and will be the first to introduce a new and unique product in the market (Panayides, 2016).

According to Reguia (2018), process innovation can generate value to either internal customers, including employees or the actual organization itself, or it can create value to external customers, including business partners, end users or actual consumers. Values stemming from process innovation include reducing the time it takes to produce a product or perform a service; increasing the number of products produced or services provided within a time frame; and reducing the costs per product produced or service provided. Additionally, process innovation can generate significant gains in product quality and service levels (Reguia, 2018). Overall, an individual organization needs to see a significant increase in some of its key performance indicators (KPIs) to be a true process innovation.

2.4 Research Gap

The study by Kiilu and Peter (2020) examined the entrepreneurial innovation processes on firm performance in Kenya. The study presents a conceptual gap as it focused on large organizations while the current study focused on SMEs. Mwangi and Namusonge (2017) study on the influence of innovation on small and medium Enterprise (SME) growth focused on garment manufacturing industries in Nakuru County while the current study expounded to various sectors. Gachara and Munjuri (2018) conducted a study on innovation challenges encountered by Small and Medium Enterprises using innovation challenges, technological challenges, legal and policy challenges and environmental challenges. However, the study presents a conceptual gap as it focused on the innovation challenges while the current study focused on innovation constructs that include service innovation, product innovation, marketing innovation and process innovation. Onyejiaku and Chinyere (2018) study on innovation Strategies and Enterprise Competitiveness in Developing West Africa Economies presents a methodological gap as it was conducted in Western Africa while the current study was conducted locally. Therefore, this study sought to bridge the research gap by establishing the effect of innovation on performance of small and medium enterprises in Nairobi City County.

2.5 Conceptual Framework

As defined by Hennink, Hutter and Bailey (2020), conceptual frameworks are maps inferred or derived from specific illustrations or circumstances that help to show the relationships between an interplay of variables graphically and diagrammatically. This study focused on 4 variables representing actions that are characteristic of innovation and these are technological advancement, service innovation, product innovation, and market innovation. An illustrative representation of the variables explored by this study is shown in Figure 1.

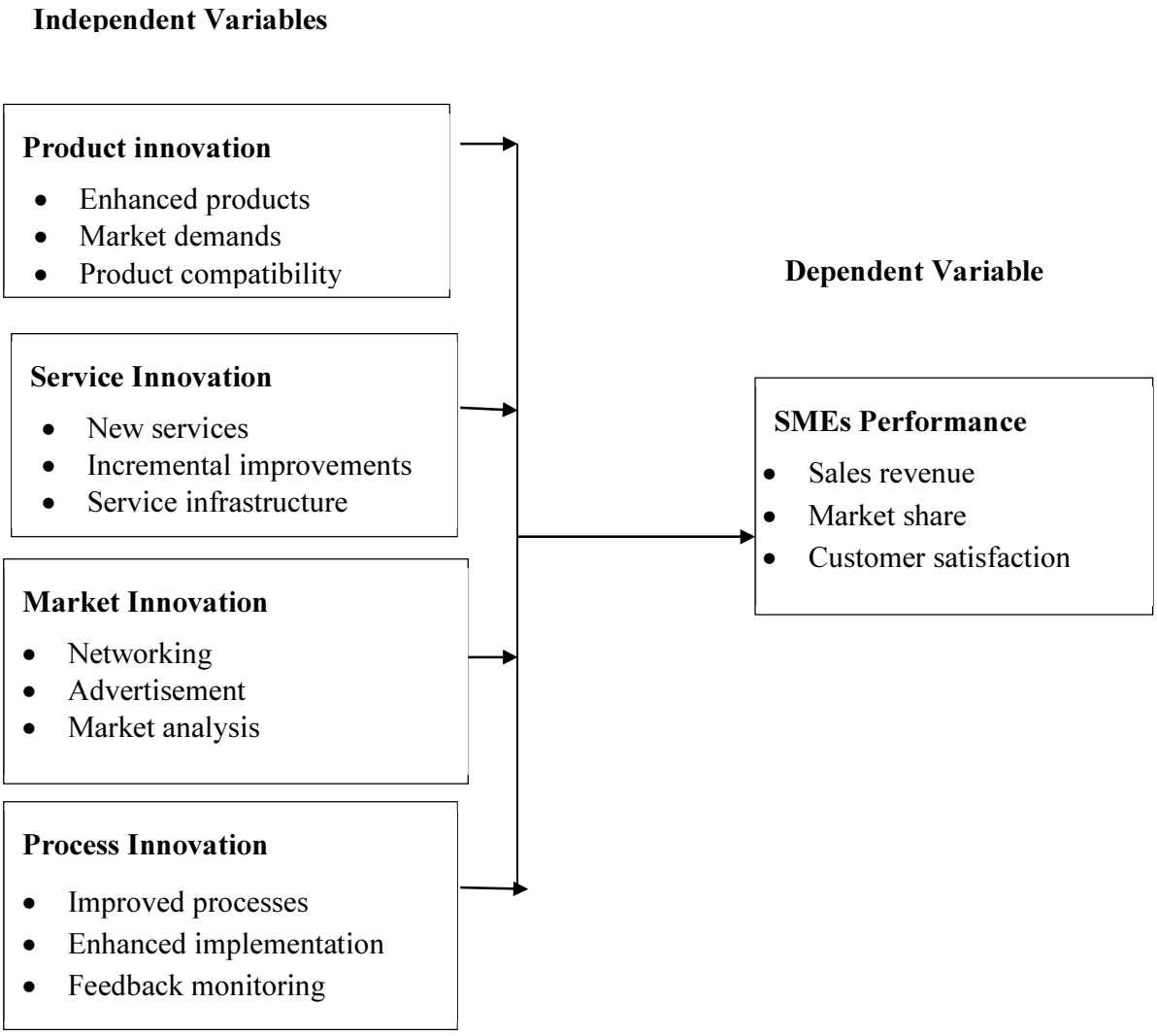

Figure 1: Conceptual Framework

The conceptual framework depicts the independent variables as and product innovation, service innovation, market innovation and process innovation. The indicators for product innovation include enhanced products, market demands and product compatibility. The indicators for service innovation are new services, incremental improvements and service infrastructure. The indicators for market innovation includes networking, advertisement and market analysis. The indicators for process innovation includes improved processes, enhanced implementation and feedback

monitoring. The dependent variable is performance which is indicated by sales revenue, market share and customer satisfaction.

2.6 Measurement of Study Variables

The measurement of the independent and the dependent variables is as shown in the operationalization Table 1.

Table 1: Operationalization of Variables

Variable	Type	Indicators	Measure	Type of Scale
Product innovation	Independent Variable	• Enhanced products • Market demands • Product compatibility	5-point Likert Type Scale 1=Strongly Disagree 5= Strongly Agree	Interval Scale
Service Innovation	Independent Variable	• New Services • Incremental Improvements • Service Infrastructure	5-point Likert Type Scale 1=Strongly Disagree 5= Strongly Agree	Interval Scale
Market Innovation	Independent Variable	• Networking • Advertisement • Market analysis	5-point Likert Type Scale 1=Strongly Disagree 5= Strongly Agree	Interval Scale
Process Innovation	Independent Variable	• Improved processes • Enhanced implementation • Feedback monitoring	5-point Likert Type Scale 1=Strongly Disagree 5= Strongly Agree	Interval Scale
Performance	Dependent Variable	• Sales revenue • Market share • Customer satisfaction	5-point Likert Type Scale 1=Strongly Disagree 5= Strongly Agree	Interval Scale

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section outlines the methodology that was used in carrying out the study. It comprises of research design, population, sample size and sampling procedure, data collection method and data analysis and presentation.

3.2 Research Design

A research design is a segmented master plan that details the methods and procedures for collecting and analyzing data needed for the study. This study shall adopt the descriptive design which is concerned with finding out the what, the where, when and the how of a matter under study. Robson (2002) recognizes that descriptive study represents an accurate profile of persons, a situation or events. Chandran (2004) elucidates that descriptive study describes the existing conditions, attitudes through observations and interpretational techniques. This method was preferred because of its accuracy in the determination of answers to the research questions through the questionnaire.

3.3 Target Population

Population refers to the entire group of people, events or things of interest that the researcher wishes to investigate (Sekaran, 2015). According to Ngechu (2014), a population is a well-defined set of people, services, elements, and events or group of things that are being investigated. The target population for this study was the 98,600 SMEs that have NCC trading licenses (Nairobi County, 2021). The respondents was the managers of the SMEs. The SME sectors were

telecommunication, transport, electronics, automobiles, agriculture, finance, retail, healthcare, energy and construction.

3.4 Sampling and Sample Size

Kombo and Tromp (2006) define a sample as a finite part of a statistical population whose properties are studied to gain information about the whole or universe. By studying the sample, one is able to draw conclusions that are generalizable to the population of interest (Mugenda & Mugenda, 2003; Kothari 2004). Yamane (1967) simplified formula was used to calculate the sample size.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = sample size

N = population size

e = the level of precision

1 = Constant

$n = 98{,}600 / [1 + 98{,}600\ (0.05)^2]$

n = 398 respondents.

Stratified random sampling was used to select the 398 SME managers from the 17 sub counties and who were respondents.

3.5 Research Instruments

Primary data was collected through the administration of the questionnaires. Questionnaires are most effective for quantitative research, they help the researcher explain, better understand and explore research subjects' opinions, behaviour, experiences and phenomenon. According to Blumberg, Cooper and Schindler (2014), the use of structured questions on the questionnaire allows for uniformity of responses to questions. The questionnaire was in 2 sections. Section A contained demographic information and section B contained statements to innovative strategies and performance. The key variables include service innovation, product innovation and marketing innovation and performance. The use of questionnaire ensures collection of data from many respondents within a short time and respondents was free to give relevant information because they was assured of their anonymity as indicated by Dalati and Gómez (2018) and Rominger (2018).

3.6 Pilot Test

Pilot testing was undertaken to ensure that the data collected enabled the investigative questions to be answered (Saunders, Lewis & Thornhill, 2012). Newing (2011) states that the importance of pilot testing cannot be overemphasized as there are questions that people fail to understand or interpret in different ways, they can be places in the questionnaire where they are not sure where to go next, and their questions that turn out simply not to elicit useful information. Cooper and Schindler (2006) concur that the purpose of pilot test was to detect weaknesses in design and implementation and to provide proxy for data collection of a probability sample.

According to Schindler and Cooper (2006), the respondents in a pilot test do not have to be statistically selected when testing the validity and reliability of the instruments. In this study, data collection instrument which is a questionnaire was tested on 10% of the sample of the

questionnaire to ensure that it is relevant and effective. 38 questionnaires were piloted as shown in appendix V

3.7 Validity and Reliability of Research Instrument

Saunders, Lewis and Thornhill (2012) states that validity is the accuracy and meaningfulness of inferences, which are based on the research results. This study used both construct validity and content validity. For construct validity, the questionnaire was divided into several sections to ensure that each section assessed information for a specific objective, and also ensure that the same closely ties to the conceptual framework for this study. To ensure content validity, the questionnaire was subjected to thorough examination by the project supervisors. They was asked to evaluate the statements in the questionnaire for relevance.

Reliability is the consistency of a set of measurement items (Cronbach, 1951). Cronbach's alpha was used to test the reliability of the measures in the questionnaire (Cronbach, 1995). The study used a 10% of the sample. Therefore, 38 questionnaires was piloted by issuing them to respondents who were not be included in the final study sample. The questionnaire response was entered into statistical package for social sciences (SPSS) and Cronbach's alpha coefficient was generated to assess reliability. The closer Cronbach's alpha coefficient was to 1, the higher the internal consistency reliability (Sekaran, 2006). A coefficient of 0.7 was used as recommended by Cronbach (1951) A coefficient of 0.7 was used as recommended by Cronbach (1951). The results are as shown in Table 2.

Table 2: Reliability Test

Variables	Items	Cronbach Alpha
Product innovation	5	0.816
Service innovation	5	0.781
Marketing innovation	5	0.741
Process innovation	5	0.822
Organizational performance	5	0.811

The results indicated that the statements under product innovation (0.816), service innovation (0.781), marketing innovation (0.741), process innovation (0.822), and organizational performance (0.811) had a Cronbach alpha of above 0.7 and thus the statement were considered reliable**.**

3.8 Data Collection Procedure

Leavy (2015) define data collection as the precise, systematic gathering of information relevant to the research sub-problems. The study obtained an approval from the university in order to conduct the study; permission also obtained from the National Commission of Science Technology and Innovation (NACOSTI). Primary data to be used in this study was collected using a questionnaire was administered to the respondents by the researcher. The questionnaires was administered through the use of face to face questionnaires and online survey. The researcher used scheduled phone calls to follow-up on the issued questionnaires.

3.9 Diagnostic Tests

The study conducted normality test, multicollinearity and heteroscedasticity. The diagnostics was conducted so as to avoid doing regression analysis with spurious results.

3.9.1 Multicollinearity

Multicollinearity is the condition in which there is a high degree of association between independent variables and dependent variable. Multicollinearity was tested using variance inflation factor VIF. Multicollinearity was found present if VIF value is above 10. This is according to Bryman and Bell (2013) who indicated that where VIF ≥ 10 indicate presence of Multi-collinearity. Where the values are above 10, multicollinearirty was corrected by removing the highly correlated independent variables.

3.9.2 Heteroscedasticity

According to Williams (2016), heteroscedasticity gives equal weight to all observations and causes the standard errors to be discriminated and consequently results in an incorrect conclusion when testing the hypothesis. Breusch-Pagan was used to check for existence of heteroscedasticity in the data collected. The hypothesis was that the data is homoscedastic and was tested at 0.05 significance level. If the p-value is larger than the critical 0.05, then we concluded that the data does not suffer from heteroscedasticity.

3.9.3 Normality test

The assumption of normality enables one to make accurate statistical inferences from test of hypothesis (Field, 2009). This study used the Jarque-Bera test statistic (Bera & Jarque, 1982) to test for the normality of the residuals. The hypothesis was that the data is normal. If the p-value was above the critical 0.05, then we concluded that the data is normally distributed.

3.10 Data Processing and Presentation

Data analysis according to Kothari (2012) involves a number of closely related operations which are performed with the purpose of summarizing the collected data and organizing them in such a

manner that they answer the research questions. Before the actual analysis, data was cleaned, edited, checked for accuracy and coded. The completed questionnaires was edited for completeness and consistency; data was checked for errors and omissions. Both descriptive and inferential statistics for the data obtained was analyzed. The descriptive statistics was done using Statistical Package for Social Sciences (SPSS) and was presented by means, standard deviation and frequency tables. A regression model was used to determine the innovation strategies on organizational performance of Small and Medium Enterprises in Nairobi County (inferential statistics). This helped to evaluate the relationships between the dependent and independent variables of the study. The regression model was:

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

Where;

Y = Organizational performance

X_1 = Product innovation

X_2 = Service innovation

X_3 = Marketing innovation

X_4 = Process innovation

β_0= Constant term; β_1, β_2, β_3, β_4= Beta coefficients; ε = Error Term.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This chapter focused on data analysis, findings and interpretation. Results were presented in tables and diagrams. The analyzed data was arranged under themes that reflected the research objectives.

4.1 Response Rate

The response rate was analyzed to show the representative from the sample size. A response rate is very important to the credibility of the research results. A low response rate may decrease the statistical power of the data collected and undermine the reliability of the results. It may also undermine the ability of the researcher to generalize the results to the larger target audience. This is further complicated by the fact that a low response rate can be indicative of a non-response bias within the sample. A low response rate can give rise to sampling bias if the non-response is unequal among the participants regarding exposure and/or outcome.

The study administered 398 questionnaires to managers and supervisors of the Small and Medium Enterprises and the results are as shown in Table 2.

Table 2: Response Rate

Response	Frequency	Percent
Returned	337	84.9%
Unreturned	61	15.1%
Total	398	100%

According to Mugenda and Mugenda (2003) and Kothari (2004), a response rate of above 50% is adequate for a descriptive study. Babbie (2004) also asserted that return rates of above 50% are acceptable, 60% is good and 70% is very good. Thus, the response rate of 84.9% under this study was very good for study.

4.2 Demographic Characteristics

This section consists of information that describes basic characteristics including gender, age, highest level of education and the duration in the Small and Medium Enterprises.

4.2.1 Gender

The respondents were asked to indicate their gender and the results are as shown in Figure 2.

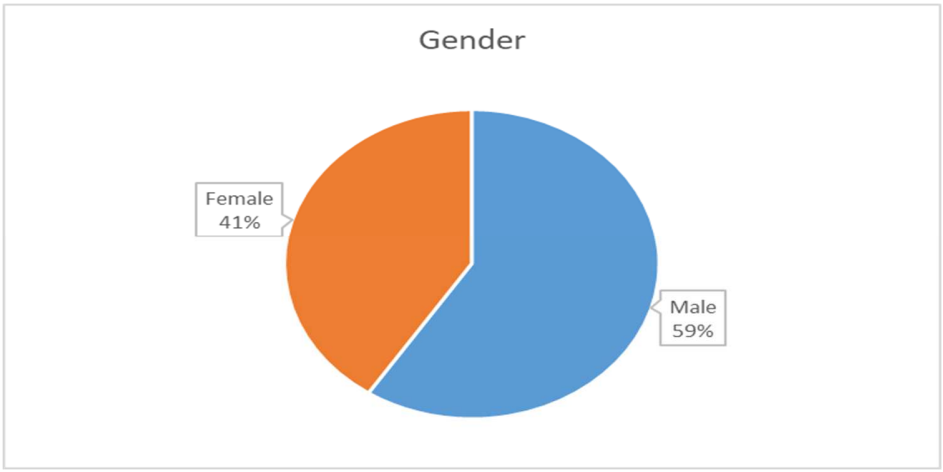

Figure 2: Gender of Respondents

The results show that majority of the respondents were men who represented 59% of the sample while 41% were female. This indicated that the composition of the managers and supervisors in the SMEs in Kenya had more male than female staff representation. According to Zaid, Wang, Adib, Sahyoun and Abuhijleh (2020), there is strong evidence that gender diversity positively affects firm performance. The implication of gender diversity in the organization is that it is likely

to improve transparency and positively influence corporate governance, especially in organizations that lack strong external oversight mechanisms.

4.2.2 Age

The respondents were asked to indicate their age bracket and the results are as shown in Table 3.

Table 3: Age of Respondents

Age	Frequency	Percentage
Below 30 years	55	16.3%
30-39 years	107	31.8%
40-49 years	113	33.5%
Over 50 years	62	18.4%
Total	337	100

Source: Field Survey Data (2021)

Results indicated that most of the respondents were aged between 40-49 years represented by 33.5% and they were followed by 30-39 years at 31%. Those with above over 50 years were at 18.4% and the least was below 30 years at 16.3%. This indicated that the managers and supervisors in the SMEs were middle and above middle age level. According to a study conducted by leadership development consultancy Zenger and Folkman (2017), younger leaders are rated significantly more effective than their older counterparts. The implication of a workforce composed of different age demographics is that it creates an environment where each generation brings different skills and talents to the organization.

4.2.3 Level of Education

The respondents were asked to indicate their highest level of education and the results are as shown in the Table 4.

Table 4: Highest Level of Education

Education	Frequency	Percentage
Diploma	44	13.1%
Bachelor's	137	40.7%
Master	129	38.3%
PhD	27	8%
Total	337	100

Source: Field Survey Data (2022)

The results indicated that most of the respondents had attained a Bachelor's degree and this was represented by 40.7% followed by those with masters at 38.3 %. Further, those who had Diploma were at 13.1% and the respondents who had PhD was the least with 8%. The level of education outcomes suggest that, the respondents were adequately educated and that they able to comprehend to the questions raised and give substantial reaction since they would be advised to understanding as guided by their level of instruction which for this situation majority share having graduate as their education level. According to Mesároš, *et al* (2017), education level is a first step and presumption for better performance and results of every manager. The implication of the education level was that achievement of higher level of education by the employees increases the precondition for its successful results in the management of the organization. Knowledge and a high level of education is only one prerequisite for achieving successful results.

4.2.4 Duration

The respondents were asked to indicate how long they have been in SME sector and the results are as shown in the Table 5.

Table 5: Duration

Duration	Frequency	Percent
Less than 5 years	50	14.8%
5-10 years	164	48.7%
Above 10 years	123	36.5%
Total	337	100

The results indicated that most of the respondents had been in the SME sector for 5-10 years and this was represented by48.7% followed by those with above 10 years at 36.5%. Further, those who had less than 5 years were at 14.8%. The more the duration of work in a sector is likely to reflect more experience.

4.3 Descriptive Statistics

This section presents the descriptive results on product innovation, service innovation, marketing innovation, process innovation and organizational performance. For purposes of presentation, the results for strongly (5) agree and agree (4) were combined as agree while strongly disagree (1) and disagree (2) were combined as disagree.

4.3.1 Product innovation

The first objective of the study was to determine the effect of product innovation on performance of SMEs in Nairobi County. The study evaluated the respondents' level of agreement with the various statements on the product innovation using a scale of 1 – 5 where 5- strongly agree, 4- agree, 3- neutral, 2- disagree and 1- strongly disagree. The findings are as illustrated in Table 6.

Table 6: Descriptive Statistics Outputs on Product innovation

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	S.D
Our products are continually enhanced to meet market needs	8.6%	11.0%	10.1%	32.9%	37.4%	3.80	1.29
Our products are aligned with the market demands	11.6%	9.2%	11.9%	35.3%	32.0%	3.67	1.32
Our products are compatible with the user needs in the market	8.3%	12.8%	11.9%	33.2%	33.8%	3.72	1.28
We engage in continuous product improvement for the market.	9.5%	11.0%	8.9%	35.0%	35.6%	3.76	1.30
We focus increased range of goods or services	9.5%	10.7%	11.0%	38.0%	30.9%	3.70	1.27
Average						**3.73**	**1.29**

The respondents were asked if their products are continually enhanced to meet market needs and 70.3% agreed while 19.6% disagreed with the statement. The respondents were asked of their products are aligned with the market demands and 67.3% agreed while 20.8% disagreed with the statement. When asked if their products are compatible with the user needs in the market, 67.0% agreed 21.1% disagreed with the statement. The respondents were asked if they engage in continuous product improvement for the market and 70.6% agreed while 20.5% disagreed with the statement. Lastly, the respondents were asked if they focus increased range of goods or services and 68.9% agreed while 20.2% disagreed with the statement. The overall mean was 3.73 that showed that majority agreed to the statements on product innovation with variations of 1.29.

4.3.2 Service innovation

The second objective of the study was to determine the effect of service innovation on performance of SMEs in Nairobi County. The study evaluated the respondents' level of agreement with the various statements on the service innovation using a scale of 1 – 5 where 5- strongly agree, 4- agree, 3- neutral, 2- disagree and 1- strongly disagree. The findings are as illustrated in Table 7.

Table 7: Descriptive Statistics Outputs on Service innovation

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	S.D
Introduction of new services has been beneficial for business growth	11.0%	9.5%	10.1%	35.6%	33.8%	3.72	1.316
Incremental improvements of existing services has been for business growth	10.4%	11.3%	8.3%	36.5%	33.5%	3.72	1.315
Improvement of the service infrastructure has been beneficial for business growth	11.6%	10.7%	7.4%	39.5%	30.9%	3.67	1.323
Diverse and new delivery methods have been beneficial for business growth	10.7%	10.4%	12.2%	34.1%	32.6%	3.68	1.314
Service innovation has enabled improved feedback channels	9.5%	8.9%	9.5%	34.1%	38.0%	3.82	1.288
Average						3.72	1.31

The respondents were asked if there is introduction of new services has been beneficial for business growth and 69.4% agreed while 20.5% disagreed with the statement. When asked if incremental improvements of existing services has been for business growth, 70.0% agreed while 21.7% disagreed with the statement. The respondents were asked if improvement of the service

infrastructure has been beneficial for business growth and 70.4% agreed while 22.3% disagreed with the statement. The respondents were asked if diverse and new delivery methods have been beneficial for business growth and 66.7% agreed while 21.1% disagreed with the statement. Lastly, the respondents were asked if service innovation has enabled improved feedback channels and 72.1% agreed while 18.4% disagreed with the statement. The overall mean was 3.73 that showed that majority agreed to the statements on product innovation with variations of 1.29.

4.3.3 Marketing innovation

The third objective of the study was to determine the effect of marketing innovation on performance of SMEs in Nairobi County. The study evaluated the respondents' level of agreement with the various statements on marketing innovation using a scale of 1 – 5 where 5- strongly agree, 4- agree, 3- neutral, 2- disagree and 1- strongly disagree. The findings are as illustrated in Table 8.

Table 8: Descriptive Statistics Outputs on marketing innovation

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	S.D
We engage in networking to increase on our brand visibility	9.5%	8.9%	9.8%	34.1%	37.7%	3.82	1.287
We conduct advertisement to promote our products	8.0%	8.9%	13.1%	31.8%	38.3%	3.83	1.252
We undertake market analysis to identify the market needs	9.8%	11.9%	8.0%	31.5%	38.9%	3.78	1.334
We review our product pricing regularly to increase sales	12.2%	10.4%	9.8%	33.5%	34.1%	3.67	1.359
We renew our distribution channels for efficient delivery	9.5%	9.8%	10.4%	37.1%	33.2%	3.75	1.274
Average						3.77	1.30

The respondents were asked if they engage in networking to increase on our brand visibility and 71.8% agreed while 18.4% disagreed with the statement. The respondents were asked if they conduct advertisement to promote products and 70.1% agreed while 16.9% disagreed with the statement. When asked if they undertake market analysis to identify the market needs, 70.4% agreed while 21.7% disagreed with the statement. The respondents were asked if they review product pricing regularly to increase sales and 67.6% agreed while 22.6% disagreed with the statement. Lastly, the respondents were asked if they renew their distribution channels for efficient delivery and 70.3% agreed while 19.3% disagreed with the statement. The overall mean was 3.77 that showed that majority agreed to the statements on product innovation with variations of 1.30.

4.3.4 Process innovation

The fourth objective of the study was to determine the effect of process innovation on performance of SMEs in Nairobi County. The study evaluated the respondents' level of agreement with the various statements on process innovation using a scale of 1 – 5 where 5- strongly agree, 4- agree, 3- neutral, 2- disagree and 1- strongly disagree. The findings are as illustrated in Table 9.

Table 9: Descriptive Statistics Outputs on Process innovation

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	S.D
Introduction of new processes has been beneficial for the enterprise	9.8%	10.1%	11.0%	33.2%	35.9%	3.75	1.303
Incremental improvements of existing processes has been significant in the enterprise	10.7%	9.2%	8.3%	33.8%	38.0%	3.79	1.325
Improvement of the process infrastructure has been beneficial in the enterprise	9.2%	11.0%	8.9%	36.2%	34.7%	3.76	1.285
Diverse and new delivery methods have been beneficial in the enterprise	12.5%	10.7%	8.9%	36.2%	31.8%	3.64	1.354
Process innovation has enabled improved feedback channels	8.6%	8.9%	10.4%	30.6%	41.5%	3.88	1.28
Average						3.76	1.31

The respondents were asked if introduction of new processes has been beneficial for the enterprise and 69.1% agreed while 19.9% disagreed with the statement. When asked if Incremental improvements of existing processes has been significant in the enterprise, 71.8% agreed while 19.9% disagreed with the statement. The respondents were asked if improvement of the process infrastructure has been beneficial in the enterprise and 70.9% agreed while 20.2% disagreed with the statement. The respondents were asked if diverse and new delivery methods have been beneficial in the enterprise and 68.0% agreed while 23.2% disagreed with the statement. Lastly, the respondents were asked if process innovation has enabled improved feedback channels and

72.1% agreed while 17.5% disagreed with the statement. The overall mean was 3.76 that showed that majority agreed to the statements on process innovation with variations of 1.31.

4.3.5 Organizational Performance

The dependent variable was to determine the organizational performance of SMEs in Nairobi County. The study evaluated the respondents' level of agreement with the various statements on organizational performance using a scale of 1 – 5 where 5- strongly agree, 4- agree, 3- neutral, 2- disagree and 1- strongly disagree. The findings are as illustrated in Table 10.

Table 10: Descriptive Statistics Outputs on Organizational Performance

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	S.D
Our enterprise has experienced an increased profitability	11.0%	10.1%	10.1%	36.5%	32.3%	3.69	1.314
Our enterprise has experienced an increased market share	10.7%	7.7%	11.0%	35.9%	34.7%	3.76	1.294
Our enterprise has experienced increased customer base	8.0%	10.4%	13.1%	31.2%	37.4%	3.8	1.266
Our enterprise has experienced improved customer service delivery	10.1%	9.8%	9.5%	36.5%	34.1%	3.75	1.295
Our enterprise has experienced an increased sales	9.2%	9.8%	11.3%	38.6%	31.2%	3.73	1.255
Average						3.75	1.28

The respondents were asked if their enterprise has experienced an increased profitability and 68.8% agreed while 21.1% disagreed with the statement. The respondents were asked if their enterprise has experienced an increased market share and 70.6% agreed while 18.4% disagreed with the statement. When asked if the enterprise has experienced increased customer base, 68.6%

agreed while 18.4% disagreed with the statement. The respondents were asked if the enterprise has experienced improved customer service delivery and 70.6% agreed while 19.9% disagreed with the statement. Lastly, the respondents were asked if the enterprise has experienced an increased sales and 69.8% agreed while 19.0% disagreed with the statement. The overall mean was 3.75 that showed that majority agreed to the statements on process innovation with variations of 1.28.

4.4 Diagnostic Tests

The diagnostic tests conducted included Multicollinearity Test, Test for Heteroscedasticity and Normality Test.

4.4.1 Multicollinearity Test

Multicollinearity test was conducted to determine if two or more of the predictor (independent) variables in the regression model was highly correlated. Variance inflation factor (VIF) were used to test multicollinearity and VIF of below 10 indicated acceptable limits. If the VIF value of exploratory variables are greater than 10, then variables were regarded as highly collinear.

Table 11: Multicollinearity Test Using Tolerance and VIF

	Collinearity Statistics	
	Tolerance	VIF
Product Innovation	0.327	3.055
Service Innovation	0.388	2.58
Marketing Innovation	0.355	2.817
Process Innovation	0.422	2.369

Source: Field Survey Data (2022)

From the findings above all the variables had tolerance values >0.2 and VIF values <10 as shown in Table 11 and thus according to Myres (2015) who indicated that where VIF ≥ 10 indicate presence of Multicollinearity, there was no multicollinearity among the independent variables.

4.4.2 Test for Heteroscedasticity

Heteroscedasticity is the circumstance in which the variability of a variable is unequal across the range of values of a second variable that predicts it. Running a regression model without accounting for heteroscedasticity would lead to unbiased parameter estimates. To test for heteroscedasticity, the Breusch-Pagan/Godfrey test was used. Heteroscedasticity test was run using Breusch-Pagan / Cook-Weisberg test in order to test whether the error terms are correlated across observations in the cross sectional of the data (Long & Ervin, 2000). The hypothesis was that;

H_1: The data is Homoscedastic.

If the p-value is less than 0.05, the hypothesis is rejected.

The Breusch-Pagan results are presented in Table 12.

Table 12: Heteroscedasticity Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity		
Ho: Constant variance		
Variables: fitted values of Organizational Performance		
chi2(1)	=	35.83
Prob > chi2	=	0.072

Source: Field Survey Data (2022)

Results in Table 12 show that the p-value is greater than the 5%. Then the hypothesis was not rejected at a critical p value of 0.05 since the reported Chi2 (1) = 35.83 and p-value was 0.072>0.05 and thus the data did not suffer from heteroscedasticity.

4.4.3 Normality Test

Test for normality determines if the data is well modeled and normally distributed (linear). To test the normality of the variables, Shapiro–Wilk test was used as it has the highest power among all tests for normality. The hypothesis was tested at a critical value at 0.05, where the rule is that reject H_0 if the probability (P) value is less than 0.05 or else do not reject. The dependent variable should be normally distributed because the study was analyzed using a multiple regression model where the condition of normality must be satisfied (Quataroli & Julia, 2012). The hypothesis was that;

H_1: The data is normal.

The results for normality are as shown in Table 13.

Table 13: Normality Outputs

	Shapiro-Wilk		
	Statistic	df	Sig.
Organizational Performance	0.727	337	0.0638
Product Innovation	0.535	337	0.0633
Service Innovation	0.763	337	0.0602
Marketing Innovation	0.622	337	0.0745
Process Innovation	0.634	337	0.0712

Source: Field Survey Data (2022)

The results indicated that using the Shapiro-Wilk test of normality, the data is normal since the p-values are above 0.05 for all the variables and thus we do not reject the alternative hypothesis (H_1). Therefore, the variables on organizational performance, product innovation, service innovation, marketing innovation and process innovation are normal in distribution and hence subsequent analysis can be carried out.

4.5 Correlation Analysis

Correlation analysis was conducted to establish the relationship between the independent and dependent variables. The correlation matrix is presented in Table 14.

Table 14: Correlation Matrix

		Organizational Performance	Product Innovation	Service Innovation	Marketing Innovation	Process Innovation
Organizational Performance	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Product Innovation	Pearson Correlation	.750**	1.000			
	Sig. (2-tailed)	0.000				
Service Innovation	Pearson Correlation	.674**	.526**	1.000		
	Sig. (2-tailed)	0.000	0.000			
Marketing Innovation	Pearson Correlation	.757**	.560**	.500**	1.000	
	Sig. (2-tailed)	0.000	0.000	0.000		
Process Innovation	Pearson Correlation	.677**	.596**	.684**	.683**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	

Source: Field Survey Data (2022)

The results in Table 14 revealed that product innovation and organizational performance of SMEs is positively and significantly related (r= 0.750**, p=0.000). The results further indicated that

service innovation and organizational performance of SMEs is positively and significantly related (r= .674**, p=0.000). Marketing innovation and organizational performance of SMEs is positively and significantly related (r= .757**, p=0.000). Lastly, results showed that process innovation and organizational performance of SMEs is positively and significantly related (r= .677**, p=0.000). This implies that an increase in product innovation, service innovation, marketing innovation and process innovation leads to an increase on organizational performance of SMEs since the coefficients are positively related.

4.6 Regression Analysis

The study carried out regression analysis to establish the statistical significance relationship between product innovation, service innovation, marketing innovation and process innovation on organizational performance of SMEs. According to Chatterjee and Hadi (2015), regression analysis is a statistical process of estimating the relationship among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent and one or more independent variables. More specifically, regression analysis helps one to understand how the typical value of the dependent variable changes when any one of the independent variable is varied, while the other independent variables are held fixed (Gunst, 2018). The results presented in Table 15 present the fitness of model used of the regression model in explaining the study phenomena.

Table 15: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816a	0.666	0.662	0.339

The variables product innovation, service innovation, marketing innovation and process innovation were found to be satisfactory variables in explaining organizational performance of SMEs. This is supported by coefficient of determination also known as the R square of 0.666. This means that product innovation, service innovation, marketing innovation and process innovation explain 66.6% of the variations in the dependent variable, which is organizational performance of SMEs. This results further means that the model applied to link the relationship of the variables was satisfactory.

The Analysis of Variance (ANOVA) results are shown in Table 16.

Table 16: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	76.1	4	19.025	165.525	.000b
Residual	38.159	332	0.115		
Total	114.259	336			

The findings further confirm that the regression model is significant and supported by F= 84.263, p<0.000) since p-values was 0.000 which is less than 0.05. The study conducted a regression of coefficient analysis to establish the statistical significance relationship between the independents variables notably product innovation, service innovation, marketing innovation and process innovation on the dependent variable that was organizational performance of SMEs.

The regression of coefficient results are as shown in Table 17.

Table 17: Regression of Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	2.653	0.058		45.762	0.000
Product Innovation	0.144	0.027	0.297	5.366	0.000
Service Innovation	0.053	0.026	0.105	2.064	0.040
Marketing Innovation	0.180	0.028	0.347	6.527	0.000
Process Innovation	0.078	0.024	0.161	3.300	0.001

$Y = 2.653 + 0.144X_1 + 0.053X_2 + 0.180X_3 + 0.078X_4$

Where;

Y = Organizational performance

X_1 = Product Innovation

X_2 = Service Innovation

X_3 = Marketing Innovation

X_4 = Process Innovation

β_0= Constant Term;

β_1, β_2, β_3, β_4= Beta coefficients;

ε = Error Term.

The constant of 2.653 showed that when product innovation, service innovation, marketing innovation and process innovation are held constant, organizational performance of SMEs would remain at 2.653 units. The regression of coefficients results show that product innovation and organizational performance of SMEs is positively and significantly related (β=0.144, p=0.000). The results further indicated that service innovation and organizational performance of SMEs is

positively and significantly related (β=0.053, p=0.040). The results further indicated that marketing innovation and organizational performance of SMEs is positively and significantly related (β=0.180, p=0.028). Lastly, results showed that process innovation and organizational performance of SMEs is positively and significantly related (β=0.078, p=0.000).

4.7 Discussion of Findings

The objective of this study was to determine the effect of innovative strategies on performance of SMEs in Nairobi County, Kenya. The variables of interest were product innovation, service innovation, marketing innovation and process innovation on organizational performance of SMEs. The pre-estimation tests conducted on Multicollinearity Test, Heteroscedasticity and Normality Test indicated that the underlying assumptions were fit for regression analysis.

4.7.1 Product Innovation and Performance

The first objective of the study was to determine the effect of product innovation on performance of SMEs in Nairobi County. Correlation results indicated that product innovation and performance of SMEs is positively and significantly related (r= .750**, p=0.000<0.05). The regression of coefficients results show that product innovation and performance of SMEs is positively and significantly related (β=0.144, p=0.000<0.05). This implies that a unitary increase in product innovation leads to increase in performance of SMEs by 0.144 units holding other factors constant. The findings are consistent with Espallardo and Ballester (2019) who established that product innovation had a positive impact on the organization's performance in its industry. This is also in line with Varis and Littunen (2010) who established that the more an organization was able to introduce new products into the market the more customers associated with that organization as it is assumed the organization is performing well. The findings by Kawira (2021) indicated that

process, marketing and organisational innovations had positive significant effect on competitiveness, while product innovation had positive non-significant effect.

The findings are also consistent with Kiilu and Kithae (2020) whose results showed that product innovation, process innovation as well as market innovation all were positive and had statistically significant relationship with performance of entrepreneurship businesses in Nairobi City County. Oke *et al*. (2017) found that product innovation had a positive impact on firm performance. Atalay. (2016) in their study on firms in the automotive supplier industry in Turkey also concluded that product innovation had a positive significant impact on firm performance. Ar and Baki (2018) in their study on the antecedents and performance impacts of product versus process innovation in SMEs in Turkish Science and Technology parks also confirmed a positive significant effect of product innovation on firm performance. Rosli and Sidek (2018) in a study on the impact of innovation on the performance of manufacturing SMEs in Malaysia found that product innovation had a positive effect on firm performance.

4.7.2 Service Innovation and Performance

The second objective of the study was to determine the effect of service innovation on performance of SMEs in Nairobi County. Correlation results indicated that service innovation and performance of SMEs is positively and significantly related ($r=.674^{**}$, $p=0.000<0.05$). The regression of coefficients results show that service innovation and performance of SMEs is positively and significantly related ($\beta=0.053$, $p=0.004<0.05$). This implies that a unitary increase in service innovation leads to increase in performance of SMEs by 0.053 units holding other factors constant. The findings are consistent with Makgopa (2020) who assessed the influence of service innovation practices on business performance and established a positive relationship between service innovation practices and business performance. The findings by Lin (2013) who examined

the impact of service innovation on performance in developing countries such found that service innovation affects firm performance through direct and indirect paths where service quality plays a positive mediating role. Ngumi (2014) findings revealed that bank service innovations had a significant effect on salary, return on resources of commercial banks in Kenya. The findings by Aas and Pedersen (2014) established that service innovation led to improved performance of manufacturing industries. The findings by Feng, Ma and Jiang (2020) found that service innovation has a significant positive impact on firm performance.

4.7.3 Marketing Innovation and Performance

The third objective of the study was to determine the effect of marketing innovation on performance of SMEs in Nairobi County. Correlation results indicated that marketing innovation and performance of SMEs is positively and significantly related ($r= .757^{**}$, $p=0.000<0.05$). The regression of coefficients results show that marketing innovation and performance of SMEs is positively and significantly related ($\beta=0.180$, $p=0.004<0.05$). This implies that a unitary increase in marketing innovation leads to increase in performance of SMEs by 0.180 units holding other factors constant.

The findings are consistent with those of O-Neira (2019) who found strong evidence that market innovation positively influenced business performance. Similarly, Varis and Littunen (2010) in their study of SMEs in Finland confirmed a robust significant relationship between marketing innovation and firm performance. The findings agree with those of Koffi, Hongbo and Zaineldeen (2021) who found that marketing innovation, product innovation, organisational and process innovations are the innovation dimensions that contribute to SMEs performance and competitiveness. Marketing innovation contributes more significantly to SMEs' performance; followed by product innovation; organizational innovation; and process innovation. Additionally,

the study found a significant and positive relationship between competitive advantage and SMEs' performance. However, Rosli and Sidek (2013) in their study of manufacturing SMEs concluded that marketing innovation did not have significant effects on firm performance.

4.7.4 Process Innovation and Performance

The fourth objective of the study was to determine the effect of process innovation on performance of SMEs in Nairobi County. Correlation results indicated that process innovation and performance of SMEs is positively and significantly related ($r= .677^{**}$, $p=0.000<0.05$). The regression of coefficients results show that process innovation and performance of SMEs is positively and significantly related ($\beta=0.078$, $p=0.001<0.05$). This implies that a unitary increase in process innovation leads to increase in performance of SMEs by 0.078 units holding other factors constant.

The findings agree with Alshorman (2020) who assessed the effect of process innovation on business performance of product industries and established that there is a significant relationship between process innovation and design management with business performance as well as design management mediate the relationship between process innovation and business performance of product industries. In addition, the study established that process innovation leads to better business performance, which will benefit the product industries in the future. The findings by Agyei-Mensah (2017) indicated that process innovation had a moderate relationship with organizational performance. Kowo, Akinbola and Akinrinola (2018) found out that process innovation has a significant effect on organizational performance and there exist a significant relationship between service modification and sales volume. Nyamoita (2015) findings demonstrated a positive factually noteworthy relationship between sale of power, a proportion of the prepaid process innovation and money related execution pointer of profit for resources.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study findings, its conclusions and recommendations, presented in consideration to the study objective on the effect of innovative strategies on performance of SMEs in Nairobi County, Kenya.

5.2 Summary of Findings

5.2.1 Product Innovation and Performance

The first objective of the study was to determine the effect of product innovation on performance of SMEs in Nairobi County. Correlation results indicated that product innovation and performance of SMEs is positively and significantly related. The regression of coefficients results show that product innovation and performance of SMEs is positively and significantly related. The results indicated that a unitary increase in product innovation leads to increase in performance of SMEs by 0.144 units holding other factors constant.

5.2.2 Service Innovation and Performance

The second objective of the study was to determine the effect of service innovation on performance of SMEs in Nairobi County. Correlation results indicated that service innovation and performance of SMEs is positively and significantly related. The regression of coefficients results show that service innovation and performance of SMEs is positively and significantly related. The results indicated that a unitary increase in service innovation leads to increase in performance of SMEs by 0.053 units holding other factors constant.

5.2.3 Marketing Innovation and Performance

The third objective of the study was to determine the effect of marketing innovation on performance of SMEs in Nairobi County. Correlation results indicated that marketing innovation and performance of SMEs is positively and significantly related. The regression of coefficients results show that marketing innovation and performance of SMEs is positively and significantly related. The results indicated that a unitary increase in marketing innovation leads to increase in performance of SMEs by 0.180 units holding other factors constant.

5.2.4 Service Innovation and Performance

The fourth objective of the study was to determine the effect of process innovation on performance of SMEs in Nairobi County. Correlation results indicated that process innovation and performance of SMEs is positively and significantly related. The regression of coefficients results show that process innovation and performance of SMEs is positively and significantly related. The results indicated that a unitary increase in process innovation leads to increase in performance of SMEs by 0.078 units holding other factors constant.

5.3 Conclusion

Based on the findings, the study concluded that innovation strategies influences performance of SMEs in Kenya. Innovation enables organizations meet customer needs or specification by improving the quality of the products / services because the customer needs and preferences keep on changing and also achieving a competitive advantage. Our regression results reveal that innovation significantly affects the performance of SMEs. The effects of product innovation, service innovation, marketing innovation and process innovation are statistically significant among these SMEs. The study, hence, concludes that innovation has a positive effect on business

performance. Lastly, the SMEs have adopted the use of technology and systems of operations that has increased the Sales revenue, market share, customer satisfaction in service delivery and general improvement of the organization's savings.

5.4 Recommendations

Based on the study findings, the following recommendations were made;

The study recommends that the SMEs should invest in innovative technology so as to survive intense competition currently experienced in the SMEs. The study recommended that SMEs should invest in automating routine tasks so as to improve efficiency in the production process. The study further recommends that the SMEs should adopt business process reengineering. This will reduce production costs and improve overall performance.

Further, the study recommends that the SMEs should continuously produce new products and re-engineer existing products so as to prolong the product life cycle. This will increase the SMEs returns. In addition, SMEs should invest on increasing product portfolio so as to spread the market risk and enhance performance. The study recommends that SMEs should keenly invest in technology so as to support SMEs strategy. The study recommends that SMEs should have a process feedback channel that captures customer complaints and effectively use the complaints to improve service and products.

Further, the study recommends that the SMEs should design an innovative marketing strategy that makes customers feel a part of the enterprise through social responsibility and promotions. The study recommended that the SMEs should invest in benchmarking with the technology in the industry so as to cut a niche without necessarily reinventing the wheel.

5.5 Limitations of the Study

The study was confined to the SMEs in Nairobi County and the findings may not apply wholesomely to other organizations in Kenya in general as some issues which were addressed are specific to the SMEs. However, it is believed that the findings addresses issues of innovative strategies in SMEs. The study was limited to four variables namely product innovation, service innovation, marketing innovation and process innovation on organizational performance. The fear on confidentiality was a limitation which was addressed by explaining to the respondents that their identity was held and responses will only be used for research purposes.

5.6 Areas for Further Research

The results of the regression analysis indicated that innovation strategies explained 66.6% change in performance of SMEs. This indicated that there are other factors besides the innovative strategies which future studies can undertake and expound on. In addition the scope can be expanded to other organizations which would make the findings more representative.

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APPENDICES

Appendix I: Introduction Letter

Dear Respondent,

I am a researcher from the KCA University undertaking a study to examine the **EFFECT OF INNOVATIVE STRATEGIES ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NAIROBI COUNTY** as a requirement to fulfil my master's degree. The study is purely for educational purposes and any responses you give will be treated confidentially. You will be required to respond to the questions from Section A Section to D. Your honest response will be highly appreciated.

Evans Timothy Bundi Kithinji

Appendix II: Questionnaire

This questionnaire is to collect data for purely academic purposes. The study seeks to determine the Effect of Innovative Strategies on the Performance of Small and Medium Enterprises in Nairobi County. All information will be treated with strict confidence. Do not indicate your name anywhere on this questionnaire.

Answer all questions as indicated by either filling in the blank or ticking the option that applies.

Section A: Background of Respondents

1. What is your gender?
   i. Male [ ]
   ii. Female [ ]
2. What is your age?
   i. Below 30 years [ ]
   ii. 30-39 years [ ]
   iii. 40-49 years [ ]
   iv. Over 50 years [ ]
3. What is your highest level of education?
   i. Diploma [ ]
   ii. Bachelor's [ ]
   iii. Master [ ]
   iv. PhD [ ]
4. What is your position in the SME?
   i. Managers [ ]
   ii. Supervisor [ ]
5. How many years have you been in SME sector?
   i. Less than 5 years [ ]
   ii. 5-10 years [ ]
   iii. Above 10 years [ ]

Section B: Product Innovation

The section contains questions related to product innovation in small and medium enterprises. Please express your agreement and disagreement by marking the appropriate box.

Statement	**Strongly disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
Our products are continually enhanced to meet market needs					
Our products are aligned with the market demands					
Our products are compatible with the user needs in the market					
We engage in continuous product improvement for the market.					
We focus increased range of goods or services					

Section C: Service Innovation

The section contains questions related to service innovation in small and medium enterprises. Please express your agreement and disagreement by marking the appropriate box.

Statement	**Strongly disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
Introduction of new services has been beneficial for business growth					
Incremental improvements of existing services has been for business growth					
Improvement of the service infrastructure has been beneficial for business growth					
Diverse and new delivery methods have been beneficial for business growth					
Service innovation has enabled improved feedback channels					

Section D: Marketing Innovation

The section contains questions related to marketing innovation in small and medium enterprises.

Please express your agreement and disagreement by marking the appropriate box.

Statement	**Strongly disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
We engage in networking to increase on our brand visibility					
We conduct advertisement to promote our products					
We undertake market analysis to identify the market needs					
We review our product pricing regularly to increase sales					
We renew our distribution channels for efficient delivery					

Section E: Process Innovation

The section contains questions related to process innovation in small and medium enterprises. Please express your agreement and disagreement by marking the appropriate box.

Statement	**Strongly disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
Introduction of new processes has been beneficial for the enterprise					
Incremental improvements of existing processes has been significant in the enterprise					
Improvement of the process infrastructure has been beneficial in the enterprise					
Diverse and new delivery methods have been beneficial in the enterprise					
Process innovation has enabled improved feedback channels					

Section F: Organizational Performance

The section contains questions related to organizational performance in small and medium enterprises. Please express your agreement and disagreement by marking the appropriate box.

Statement	**Strongly disagree 1**	**Disagree 2**	**Neutral 3**	**Agree 4**	**Strongly agree 5**
Our enterprise has experienced an increased profitability					
Our enterprise has experienced an increased market share					
Our enterprise has experienced increased customer base					
Our enterprise has experienced improved customer service delivery					
Our enterprise has experienced an increased sales					

Appendix III: Data Collection Letter

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SCHOOL OF GRADUATE STUDIES

KCA/SGS/Oct.22/1 4th October 2022

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: EVANS TIMOTHY BUNDI KITHINJI REG NO: 19/6760

It is my distinct pleasure to introduce to you Mr. Evans Bundi who is a student in our institution pursuing a Master of Business Administration at the School of Business.

Evans is conducting a research on a topic titled: ***"Effect of Innovative Strategies on the Performance of Small and Medium Enterprises in Nairobi County, Kenya"*** which is part of the requirements of the program she is pursuing. The research as well as the data procured thereof shall be used for academic purposes only.

Any assistance accorded to her is highly appreciated.

In case of further inquiry, do not hesitate to contact the undersigned.

Yours faithfully,

Dr. Nyaribo Misuko
Dean, School of Graduate Studies

Appendix IV: List of Nairobi Sub counties

1. Mathare
2. Starehe
3. Makadara
4. Kamkunji
5. Embakasi West
6. Embakasi East
7. Embakasi North
8. Embakasi South
9. Embakasi Central
10. Ruaraka
11. Kasarani
12. Kibra
13. Langata
14. Roysambu
15. Dagoretti North
16. Dagoretti South
17. Westlands

Appendix V: List of Piloted SMEs

1. True Blaq Limited.
2. Quipbank Trust Limited.
3. Rural Distributors Enterprises LTD.
4. Orange Pharma LTD.
5. Professional Digital Systems LTD (PDSL)
6. ASA Limited.
7. Kurrent Technologies LTD (KTL)
8. Dakawou Transport Limited.
9. Apex Lifestyle Consulting
10. Almaijo Agency
11. Aramana Investiments
12. Kangemi General
13. Arkings Investment
14. Assistive Technology
15. Bainridge Holding Limited
16. Balmer Services Limited
17. Barry Enterprises
18. Benn & Dawn
19. Bilconn Enterprises
20. Casse Investments
21. Checo Investments
22. Clean Tone Graphics
23. Cleanglen Technologies
24. Kundalila General Agencies Limited
25. Lackery Enterprise
26. Lajoy Investiments
27. Lantana Supplies
28. Lashmar Investment
29. Lavilla Enterprises
30. Lerian Agencies
31. Lewida Enterprises
32. Libani General Supplies
33. Promto Cleaning Services Limited
34. Puma Enterprises
35. Puriget Enterprises
36. Quillcom Investments
37. Rajamesa Investments
38. Raken Limited