INFLUENCE OF STRATEGIC INNOVATION ON PERFORMANCE OF INSURANCE COMPANIES IN KENYA

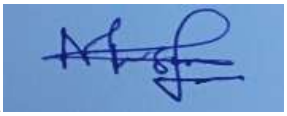
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A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS AND LEADERSHIP MANAGEMENT IN FULLFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS OF BUSINESS ADMINISTRATION (MBA) OF ST. PAUL'S UNIVERSITY, KENYA

SEPTEMBER, 2023

DECLARATION

This dissertation is my original work and has not been presented to any other examination body. No part of it should be reproduced without my consent or that of the St Paul's University.

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DEDICATION

This proposal is dedicated to my wife and children. This has always been their dream.

ACKNOWLEDGEMENT

Firstly, I would like to thank God the Almighty for giving me the knowledge, strength and intelligence to complete my studies. The success of my project was largely dependant on the encouragement and guidance of many. I wish to express my deep gratitude to my supervisors, Dr. William Sang and Dr. Redempta Kiilu for their expert input to this dissertation which helped me in completing it on time.

ABSTRACT

Increased global and regional rivalries have led firms to create and innovate means of sustained competitive edge against similar entities in the sector or industry. A first changing environment with constant abrupt changes make firms to continually innovate in order to adapt and survive. . Owing to performance disparities among firms, it is important to investigate whether the level of strategic innovation is a major source of variation in their perfomance. The overall aim of this study was therefore to determine the influence of strategic innovation on performance of insurance firms in Kenya and the following objectives were formulated in purpose of achieving this overall objective.To establish the effect of product innovation on firm performance; marketing innovation on firm performance; process innovation on firm performance and innovation on firm performance. This study was anchored on Schumpeterian innovative theory, theory of innovative enterprise, resource based theory and dynamic capability theory. The research design employed was descriptive research design. The population comprised of all the 41 insurance firms in Kenya leading to usecensus survey design as well . Both primary and secondary data was collected.

Reliability was assessed using Cronbach's alpha coefficient and validity (face, content and construct) of data collection tools was evaluated. Numerous pre-estimation and post-estimation tests (diagnostic tests) such as normality test, linearity test, homoscedasticity test and multicollinearity test were performed so as to determine whether the data conformed to the statistical assumptions of regression analysis. The study applied multiple regression analysis as the principal estimation tool. The findings suggest that product and process innovation were negatively and significantly related to performance while marketing and organizational innovation were positively and significantly associated with performance. The findings were presented in form of tables and figures. The study made significant contribution to management practice, policy formulation and theory development.

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DEFINATION OF TERMS

Firm Performance: This refers to the positive change in organizational performance in relation to profitability, market share, customer satisfaction, customer loyalty and customer retention

Product Innovation: This is the introduction of goods or services that is new or significantly improved with respect to its attributes or intended uses.

Marketing Innovation: This is the implementation of new marketing methods involving significant changes in product design of packaging, product placement, promotion or pricing.

Process Innovation: This is the implementation of a new or significantly improved production or delivery method.

Organizational Innovation: This is the implementation of a new organizational method in the firm's business practices, workplace organization or external relations.

LIST OF ACCRONYMS

AI	**Artificial Intelligence**
AKI	Association of Kenyan Insurers
CFA	**Confirmatory Factor Analysis**
EDT	**Expectancy disconfirmation Theory**
IRA	Insurance regulatory authority
KIPI	Kenya Intellectual Property Institute
MBR	Market to Book Ratio
MIP	Medical Insurance providers
OECD	Organization of Economic Co-operation and Development
PLS	Partial Least Squares
RBV	Resource based view
ROI	Return on Investment
SDGs	Sustainable Development Goals
SEM	Structural Equation Model
SMEs	Small and Medium Size Enterprises

AI	Artificial Intelligence
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SDGs	Sustainable Development Goals
SEM	Structural Equation Model
SMEs	Small and Medium Size Enterprises

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Strategic innovation is progressively becoming a significant aspect in the quest for corporate excellence, and a vital competitive strategy Owing to intensified global rivalry, acceleration in technological advancement, and shortening product life cycles. When firms make use of assorted differentiation strategies, strategic innovation becomes an integral focal point in business performance and sustainability (Suhag, Solangi, Larik, Lakho & Tagar, 2017). This not only benefits the firm's profits as well as growth andmarket share, but it equally makes it harder for rivals to mimic it (Roach, Reyman & Mukani, 2016). Inevitably, many firms are leveraging their overall performance through strategic innovations in form of product, process, market and organization structure (Marinidaraga & Cuartas-Martin, 2019).

The conventional explanation for the positive linkage between strategic innovativeness and firm performance is grounded on Schumpeter's (1942) profit extraction theory, which suggest that via innovative strategies, organizations gain provisional quasi-monopoly status that permit them to extract economic rents. These super normal rents can come to an end for two major reasons: imitations from rivals that erode the monopolistic status of the innovators or novel innovative strategies that makes the focal firm's innovation outdated (Tseng & Lee). Therefore, organizations can uphold their market supremacy over time via incessant streams of innovations which turn provisional gains from a solitary new product into unrelenting, superior performance by introducing multiple products. According to Krasnicka, Glod and Wronka-Pospiech (2019),

innovation positively contributes to firm performance by enhancing the natural forces of rivalry or variations in consumption trends that tend to dissipate superior profits over time.

Strategic innovation is increasingly becoming more important for many firms, mainly owing to three key trends: challenging and disjointed markets, varied and rapidly changing technologies and rigorous international competition (Viet, 2016). In the current tough economic environment, the innovation of a completely novel business models or the drastic redesign of existing ones, is the only way firms can develop and generate wealth so as to augment performance (Ahu, 2015). Therefore, strategic innovation remains to be one of the essential instruments of corporate growth strategies in order to maintain a competitive edge and enhance market share. Theincreasing rivalry in the international markets has led companies in developing markets to realize the significance of strategic innovation that rapidly changes the value addition to products/services (Almatrooshi, Kumar & Faruk, 2016). It provides firms with a strategic orientation that help them to conquer the challenges they face while they endeavor to attain sustainable competitive advantage. Organizations with the capability to innovate respond to environmental related challenges better and faster than non-innovative organizations (Bryan, 2016). Thus, strategic innovation is extensively considered as a serious tool for the firms can ‘economically exploit to viability .his remains to be one of the key drivers of competitive advantage and long-term success. Recent meta-analytical investigations have offered sufficient evidence of a positive linkage between strategic innovation and overall performance (Hsui, 2017).

The concept of strategic innovation is increasing gaining ground and plays a critical role in success within the dynamic and competitive insurance industry. In Kenya, insurance companies

operate in a volatile industry where clients' preferences and tastes, product/service technologies, and competitive weapons frequently vary unpredictably (Kariuki, 2018). Gaining of stability and improved performance for insurance companies are not only catalytic to seeking new opportunities but are also becoming highly innovative in terms of product, process, market and organization structures (Lichtenthaler, 2020). The insurance industry in Kenya has witnessed momentous changes in recent times following the liberalization of the financial services sector. Insurance sector locallyhas undergone a myriad of changes in service delivery with the aim of enhancing the quality of service being offered to the clients (IRA report, 2020). The right type of investment and innovation in new technologies and strategies can help insurance companies to improve their performance (Rajapathiran & Hui, 2018).

1.1.1 Strategic Innovation

Schumpeter (1934) describes strategic innovation as coming up with a product which is new to customers or one of greater quality than the available products, new ways of production, the opening of new markets, new forms of competition and the utilization of new sources of supply that leads to industrial restructuring. Kumar and Priyanka (2015) term strategic innovation as the adoption or production, exploitation and assimilation of value-added novelties in social-economic spheres; enlargement of services, development of new techniques of production, products and markets; and establishment of new management systems. Exposito and Sanchis-Llopis (2019) suggest that strategic innovation is the implementation and generation of improved or new products/services, processes, production techniques or solitary actions meant to increase the competitiveness of an entity. According to Organization for Economic Co-operation and Development (OECD) (2005), strategic innovation is the execution of a new or considerably

enhanced product/service, a new marketing method, or process, or a new organizational technique in workplace organization, corporate practices, or external relations. Furthermore, Hajar (2015) suggests that the fundamentals of strategic innovation consist of commercialization and newness whereby the process, products and techniques are introduced into the market.

According to OECD (2005), strategic innovation can be divided into four parts, namely: product, process, marketing and organizational innovation. Product innovation entails introduction of diverse goods/ services that is greatly improved or novel in regard to their attributes or intended application. This entails considerable enhancements in components and materials; user friendliness; incorporated software, technical specifications or other functional attributes (Aminu & Sharrif, 2015). Product innovation is based on extant combinations or uses of current knowledge and technologies to produce new functional goods and services (Ameme & Wireko, 2016). Process innovation is a mechanism of augmenting corporate efficiency. As described by OECD (2005), process innovation is the implementation of significant or new enhanced delivery or production techniques that entails significant variations in software, equipment or techniques. It has the potential of reducing delivery or production costs to improve quality, deliver or produce significantly new or better products.

On the other hand marketing innovation refers to implementation of new marketing techniques comprising of considerable variation in product packaging or design; promotion, placement or pricing (Domeher, Frimpong & Appiah, 2015). It helps in rejuvenating the organizations market position by addressing clients' needs, opening new markets, and increasing market sales leading to new sales and creation of effective marketing techniques. Finally, organizational innovation is

the implementation of new corporate techniques in the organization's business practices, external relations or workplace groups (Hilal, 2015). It extends the vision and the capabilities of firm; enhances staff motivation and satisfaction, and contributes to corporate transformation. Furthermore, it has managerial implications that enhance performance (Martin & Steve, 2017).

Strategic innovation is a critical device which organizations employ to meet clients' needs, stay abreast of competition, attract new clients, align their strengths with market opportunities, venture into new markets improving business performance in the process (Kalay & Lynn, 2015). Normally, economic growth is achieved via intensifying production, competitive advantage, and employment which contribute to increase in social welfare and economic growth (Karabulut, 2015). It is progressively becoming an important competence aspect and avenue for strategic change that enhances sustained competitive advantage. Consequently, increased pressure on the entire organizations to constantly innovate by coming up and launching new products and services is greater than ever (Lily & Juma, 2014). Therefore, Innovation is an important source of competitiveness among many firms which enable them to introduce new processes and products that position them ahead of their rivals. Furthermore, innovation aims at augmenting a corporate performance through improving the workplace environment that satisfy workforce and significantly reduces transaction and administrative costs (Obeng & Boachu, 2018).

Despite the great attention that has been given to innovation, there is no standard approved single measure owing to its multidimensionality. It still remains a broad concept that is conceptualized and operationalized in diverse ways. The most common indicators of strategic innovation that have been identified by OECD (2005) and widely applied in many empirical studies include:

product, process, marketing and organizational innovation. Examples of empirical studies that have employed these measures include: Hoang and Ngoc (2019); , Liem, Thu and Khung (2019); Laban and Deya (2019); Mentresor and Vezzoni (2017); Hult, Hurley and Knight (2013); Yusheng and Ibrahim (2020); Muharam, Andria and Tosida (2019); Al-Battaineh (2018); Varis and Littunen (2020); Mamun, Muhammad and Ismail (2017); Azmi, Riza and Surabi (2019) and Karaburlt (2015).

1.1.2 Firm Performance

Performance is a multi-faceted construct that shows the ability of an entity to manage available resources in diverse ways so as to enjoy a competitive advantage (Altit, 2017). Also, Chen (2017) acknowledges that performance is methods applied by a firm to manage its diverse resources and maintain its position in the market. It is delineated as the outcome attained by the organization in relation to its externally and internally set goals (Tajjedini, 2017). This is essentially measured in terms of both the financial and non-financial attributes of the business. According Taalbi (2017), firm performance is the firm's ability to accomplish goals by applying numerous resources in an efficient and effective way. It is ascertained by how well an organization utilizes its internal resources and adapts to external environment and additionally reflects the achievement of strategic and growth goals (Rocha, 2015). Firm performance is therefore associated with the overall corporate success due to new and/or superior efforts made to gain profit and growth. In corporate world, performance is critical because it attracts new investors; enable firms to acquire additional assets through various capital investment initiatives; enable the government to collect more revenue through taxation and access to credit at lower cost (Vicente, Abrantes & Teixeira, 2015).

Firm performance as a measure can be divided into quantitative and qualitative indicators : indicators (Al-Kalouti, 2020). Financial indicators quantitative measures encompass profitability and economic aspects that can be classified into accounting measures such as return on equity, working capital ratio, gross profit margin, return on investment, return on assets and net profit margin or market based measures such as Tobin Q, market to book ratio (MBR), price earnings ratio (PER) among others. On the other hand, non-financial measures are subjective/judgmental organizational performance measures which consist of clients and staff descriptive such as market share productivity, growth and customer satisfaction (Akgun & Keskin, 2019). These are vital requisites for profitability and signify that for a firm to accomplish successful objective performance, careful attention must be given to the service quality offered, as well as client and employee satisfaction (Hijnik & Ruzzier, 2016).

1.1.3 Insurance Companies in Kenya

In 2019, Kenya had fifty four insurance firms which dropped to forty one in 2021 but reinsurance firms maintained the same number in the same year. Additionally there were two reinsurance brokers in the market in 2021 bringing the total of the firms in the industry to eighteen. The agents within the insurance sector increased from 9,263 to 11,139. In contrast, the licensed insurance brokers have decreased by nine to a total of 205 players in the market.. Insurance industry products can be separated into kinds of insurance namely life insurance and non-life (general) insurance. Life insurance acts as a long term investment mechanism whose principal aim is to facilitate capital growth (AKI Report, 2021). Life insurance enables attainment of long-standing savings that guarantees a decent amount accrual to meet policyholders' financial requirements at different stages in life. On the other hand, non-life insurance allows for safeguard

against risks that contribute to damage or losses to various properties. The insurance sector in Kenya encompasses of 20general insurers, nine life insurers and 20 composite insurers. Other players comprise of 199 licensed insurance brokers, 5,156 insurance agents, 28 medical insurance providers (MIPs), 134investigators, 26 loss adjusters,109 motor assessors, and 25 insurance surveyors (AKI Report, 2021). There are two key associations in the insurance sector; The Association of Insurance Brokers of Kenya (AIBK) and The Association of Kenya Insurers (AKI) and the regulating body of the industry is the Insurance Regulatory Authority (IRA) (AKI Report, 2015).

Non-life insurance business contributes approximately 56.38% of the insurance sector gross premium income. Medical and motor insurance contributes nearly 67.16% of the non-life gross written premium. The non-life insurance infiltration locally was 1.28% in 2021 which is a decline from the 1.36% documented in 2020. Non-life insurance gross premium totaled to KES 132.72 Billion in 2021, an insignificant reduction from KES 133.46 Billion posted in 2020. Motor and medical insurance classes upheld a top position in terms of contribution in non-life insurance gross premium at 33.71% and 33.44% respectively. Underwriting outcomes improved from a loss of KES 3.28 Billion in 2019 to a loss of KES 2.34 Billion in 2021. This is attributed to reduction in management expenses and incurred claims as a result of COVID-19 pandemic. Medical insurance posted the uppermost underwriting income of KES 1.71 billion as a result of households shying away from hospitals leading into minimal hospital visits that resulted from fear of contracting corona virus. The collective ratio for medical business reduced from 99.27% in 2020 to 94.45% in 2021, giving insurers some protection against the squeeze in their top-line earnings.

In contrast, life insurance business contributed 43.63% of the entire insurance gross premium revenue in 2021. By the end of the same year, IRA had registered a total of 24 life insurance firms and 3 re-insurers in Kenya. Life insurance increased from KES 97.86 billion in 2020 to KES 102.62 billion in 2021 while the life insurance saturation locally was 1.2 % in 2021. However, the market indicators predicted that the insurance sector was expected to experience a more challenging short-run outlook. The COVID-19 pandemic coupled with slowed down economy both domestically and internationallyleading to higher unemployment rates and financial pressure at both household and corporate expenditure levels. The market was anticipated to revert to sturdier growth in 2022and benefit from ingenuities of the providers that expand the access of insurance via enhanced use of digital innovations, sales outlets and superior diversity in terms of range of products.

The insurance firms in Kenya have innovated around the numerous phases of insurance life cycle, by leveraging on adoption of digital tools to augment efficacy in the processes. For instance, for the underwriting stage, insurance firms have used the current data systems and taken advantage of digital tools such as artificial intelligence (AI) to eradicate some of the tedious manual steps that would have been followed in the traditional methods of insurance processes Furthermore, to simplify clients' response, insurance can take advantage of AI tools such as chat bots. Currentlyhowever , Insurance companies are making use of automated messaging platforms and chat bots to modernize support operations and simple client feedback. With vast of the functions being automated via innovative mechanisms, the process is reduced to minutes instead of the hours or days that is has been the norm ally experienced. To keep in pace with the ever-changing digital environment, insurance firms have begun the process of entrenching digital solutions

within their structures. locally they have been pricing products using competitive driven and historical experience rates. This is where Information technology provides the answer for addressing these issues via dynamic pricing tools that puts into account real-time data . Technology oriented vendors such as mobile network operators, are beginning to assimilate insurance products into their products lines. With intense rivalry from players outside the sector, insurance firms must continually come up with innovative mechanisms to improve their profitability and retain their market share.

1.2 Problem Statement

The insurance industry in Kenyaweathered COVID–19 pandemic marginally, with gross premium income and assets growing by 1.5 and 7.4 percent in 2021, respectively. Profitability and Investments were, nonetheless, impacted negatively with investment income reducing by 24.4 percent and profit after tax reducing by 42.6 percent and in the same year. The return on assets and return on equity dropped by 1.31 percentage points and 4.72 percentage points, respectively in 2021 due to increased expenditures and volatility in the capital markets, a crucial source of investment revenue, as result of COVID–19 pandemic. Furthermore, the rate of insurance penetration, proxied by the insurance premium to gross domestic product ratio, largely remained low at 2.4 percent in 2021, and 2.4 percent in 2020, which was way belowglobal average of 7.4 percent. During the period (COVID-19), some insurance firms such as Britam, Jubilee, ICEA, AAR and UAP reported better performance in comparison to other insurance companies in the year 2021. This observation provided a motivation to investigate whether the better performance of these firms was related to variation in the levels of strategic innovationsor not.

The COVID-19 pandemic revealed vulnerabilities in the operating processes of the firms because a significanta number of them still reliedon manual operational processes, obsolete software and too much of paperwork. As firms readjust to the new 'normal', insurance firms need to change their present ways of working, including going to paperless transaction processing and additional automations (Al-Kalouti, 2020). To attain this, insurance firms need to make strategic digital decisions in order to shift into the digital insurance in future. Due to increased competition in the insurance industry, many firms have shifted their focus to strategic innovation to allow them to effectively compete in the volatile market (Byukusenge&Munene). In Kenya, some insurance firms have adopted numerous distinguishing features to counter rivalry and elevate themselves among other industry players. The adoption of information technology, particularly the mobile technology in information dissemination and facilitate claim and premium payments is principally due. Additionally, other insurance firms have customized certain products/ services to address the specific requirements of their customers, as well as coming up with new distribution channels such as bank assurance that bring them closer to their target markets (AKI report, 2021).

In the contemporary world of exceedingly competitive business environment, it is critical for firms to stay ahead of its competitors by creating a competitive edge (Ho, Nguyen, Prasad, Miles &Bonney, 2018). One of the key forces that expedite this process is the capacity of an organization to utilize its innovative aptitude (Su, Cheng, Chung & Chen, 2018). A high level of flexibility permits an organization to respond to fluctuations in demand and clients preferences more rapidly and align its product range in line with the most recent trends (Canh, Liem, Thu &Khuong, 2019). As innovation progresses with time, it permits the production of superior

products, which, in turn leads to better firm performance as long as they meet the needs of the customers

Notably, the empirical findings associated with firm performance on strategic innovation substantially vary across studies. This point of view is largely supported by varied empirical findings(Rocha, 2015; Kelay& Lynn, 2015; Taalbi, 2017),. Whereas the predominant view is that strategic innovation is positively relatedto performanceFassio(2015), Fixavi&Pallez(2016) and Kummar&Sunderraj, (2016). have documented negative or no significant effects The study took the view that these conflicting standpoints can be resolved by modifying research methodologiesand investigate multiplestrategic innovations and performance, as well as varied sets of constructs that define variables. Furthermore, contextual disparities between developed and developing markets as well as sectorial variations have equally contributed to mixed empirical findings with respect to strategic innovation-firm performance relationships. This study therefore sought to address these gaps by answering the research question, what is the influence of strategic innovation on performance of insurance companies in Kenya?

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1.3 Research Objectives

The general research objective of the research was to determine the relationships between strategic innovationsand performance of insurance companies in Kenya.

1.3.2 Specific Objectives

Specific objectives were to determine the relationship between

(i) Product innovation AND performance of insurance companies in Kenya.

(ii) Marketing innovation AND performance of insurance companies in Kenya.

(iii) Process innovation on performance of insurance companies in Kenya.

(iv) Organizational innovation and performance of insurance companies in Kenya.

1.4 Research Questions

(i) What is the effect of product innovation on performance of insurance companies in Kenya?

(ii) What is the influence of marketing innovation on performance of insurance companies in Kenya?

(iii) What is the effect of process innovation on performance of insurance companies in Kenya?

(iv) What is the influence of organizational innovation on performance of insurance companies in Kenya?

1.5 Significance of the Study

The findings of the study significantly contributes to theoretical development, managerial practice and policy formulation. This study makes an endeavor towards radically contributing to the Sustainable Development Goals (SDGs) which entails innovation, industry and infrastructure. The outcomes of this study add to the both theoretical contribution on strategic innovation and performance from a developing market context. This study thus provides theoretical support for the implementation and adoption of innovation in the insurance sector and its potential effect on firm performance. This study expressively contributes to a better understanding of the innovation practice in insurance companies and how it affects organizational performance. This study's findings add to the existing body of knowledge in the area of strategic innovation and firm

performance and can be used by future scholars as a point of reference while attempting to fill the identified research gaps.

This study makes significant contributions to the management practice by looking at the effect of strategic innovation on firm performance. This implies that strategic innovation is very critical to the survival of insurance firms. The findings of this study enable the managers to know the influence of each dimension of innovation (product, marketing, process and organizational) on performance and identify a dimension that the firm should put more emphasis on. This enables the firms to withstand the intense competition and survive the adverse effects of COVID-19 pandemic that has greatly affected diverse sectors of the economy.

To the state and its relevant arms that comprise of Kenya Intellectual Property Institute (KIPI), Ministry of Industrialization and enterprise development (MOIED) and National Commission for Science Technology and Innovation (NACOSTI), the study outcomes offer the knowledge that is essential for the formulation of effective and relevant programmes and policies in the area of enterprise growth and use of innovation as a tool to enhance development and for stimulating innovativeness. The findings are also anticipated to give valuable insights to consultants so s to enable them to provide advice on the potential effect of strategic innovation on performance.

1.6 Scope of the Study

The study sought to investigate the influence of strategic innovation on firm performance by focusing on the insurance companies in Kenya. The study modeled firm performance as the outcome variable and was operationalized by two indicators, return on assets (ROA) and non-

financial performance (customer satisfaction, internal business processes and learning & growth) while the explanatory variable strategic innovation took into consideration product, marketing, process, and organizational innovation as the dimensions of the variable. Finally, multiple linear regression analysis was used to estimate the effect of innovation on firm performance.

1.7 Limitations of the Study

The current study utilized the cross-sectional dataset which captures the attributes under study at once and therefore making it impossible to probe the long term effect of strategic innovation on performance. The study also is bivariate in nature whereby two variables were considered, namely strategic innovation and performance but in essence the linkage is usually not linear. it is usually influenced by a number of variables such as mediators and moderators to give a resultant composite effect. Finally, the study is limited to insurance sector and therefore the findings may not apply in the other sectors of the economy that that have different characteristics

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents an in-depth theoretical empirical literature, summary , and the conceptual gaps. Significant theories reviewed include Schumpeter's innovation theory;theory of the Innovative enterprise, resource based theory and dynamic capabilities theory of Innovation. Relevant empirical literature regarding the linkage between diverse innovation dimensions (product, marketing, process and organizational) and performance were critically examined. Finally, the conceptual framework which shows the conceptual linkages among the study variables wascaptured.

2.2 Theoretical Literature Review

This study is anchored on Schumpeterian innovation theory, theory of innovative enterprises, resource based theory and dynamic capability theory. The suitability of these theories in supporting the study were discussed in details as shown in subsections that follow.

2.2.1 Schumpeterian Innovation Theory

This is an economic theory that was pioneered by Schumpeter (1911), aneconomist by background The theory proposes the role of innovation and entrepreneurship in economic growth process andItsuggests that markets and economies are in constant change where therein is a resolute economic force that explains growth and change embodied in an entrepreneurwhich Schumpeter (1934) terms innovation as thevital facet of economic change. The theory suggest that economic disparities revolve around innovation, market power and entrepreneurial activities which when combined becomes a vital dimension of a market Hojnik and Ruzzier (2016) opine

that market power originating from innovation is capable of offering superior outcomes that keep organizations in a good position than old arrangements or imperceptible elements such as price competition. It further proposes that technological innovation frequently produce provisional monopolies, permitting abnormal returns that are easily duplicated by passing out imitators and industry rivals (Tavassoli&Karlsson, 2016). These impermanent monopolies play a significant role in providing incentives for organizations to come up with new processes and products (Pasch, 2019) implying that innovation is not a destination but a continuous process.

Schumpeter (1934) describes economic progress as historical process which is characterized by structural changes that is significantly determined by innovation. These can be categorized into five types: launching of a new product varieties already in existence; application of new technique in production or sales of a ; coming up with new market; acquiring of new sources of supply of semi-finished goods or raw materials and new industry structure such as the destruction or creation of a monopolistic position. Furthermore, innovation is viewed as an important process of industrial revolution, responsible for the revolution of the economic structure via a process termed as creative destruction (Mai, Vu, Bui & Tran, 2019).

Based on Schumpeter theory, innovations often results into economic progression and an entrepreneur is understood as an individual who innovates. Such a person has aresponsibility of apportioning existing resources to new uses and developing numerous new combinations (Chen, 2017). In this theory, entrepreneurship is regarded as one of the exceptional attributes of production that leads to economic change which Altit, (2017) refers to as the main driver behind investments and profitability. However innovation is not coming up with new products that have

never existed but itcomprises of new techniques of executing things, combining processes or methods in order to come up with diverse products utilizing existing resources to make new products and adopting new technology (Schumpeter, 1942). The further suggests that organizations in quest of profits need to innovate since entrepreneurial innovation contributes to increased revenue. Schumpeter, (1934) explains that innovation is a major driver of organization economic progression and competitiveness

Schumpeter's theory of innovation is relevant in explaining the relationship between strategic innovation and firm performance as variables of the study because anybody seeking profits must innovate. Strategic innovation that embodies creative means of changing product, marketing, process and organization way of doing thinsg is critical if any firm is to survive and succeed in acompetitive market. By nature entrepreneurs innovate so as to contribute to the process of creative destruction that creates value and economic development. The theory also informs the study of the numerous innovative dimensions that can be employed to create value. Innovation is therefore the foundational bedrock of competitiveness and sustained economic progression.

This theory bears criticizismon the various grounds thatit focuses on innovation as the ingredientrequired by entrepreneur to succeed which is not the case. Secondly, the theory fails to take into consideration profit as a reward for risk-taking, thirdly, it is the capitalist as opposed to the entrepreneur who bears the risk and Fourthly, the theory ignores the significance of ambiguity bearing which is one of the factors that influences profitability. Other limitations that have been put forward are , the theory attributes profitability to strategic innovation only while overlooking other functions of an entrepreneur, in a monopoly earnings are permanent in nature

while the theory suggests that earnings arising from innovation occur momentarily and thetheory presents a narrow view of the functions of the entrepreneur.

2.2.2 Theory of the Innovative Enterprises

This theory was advanced by Lazonick (2003) who explained the genesis of greater performance in the wake of markets which are imperfect. The theory postulates that the function of an organization is to transform fruitful possessions into goods orservices that can be commercialized by anorganization by engaging in some sort of innovation. Thus, exemplary performance often emerges from enterprises that are innovative and manufacture products of higher quality at minimal cost (Lichtenthaler, 2020). Innovative enterprises possess the capacity to transforms industrious resources into superior quality; reduce cost goodsorservices contributing to numerous benefits for the clientele and other participants in the larger market (Wang, 2015). Furthermore, the theory suggest that firms are capable of gaining and sustaining competitiveness to effectively compete in the industry via strategic innovation.

Innovative organizations also undertake innovation to preserve their market share against innovative rivals or to attain strategic market positioning (Marinidaraga *et al*, 2019). Strategic innovation makes it possible for the organizations to come up with superior products and develop more efficient production techniques, marketing and organizational methods among others (Su et al, 2018). In the short- run, an innovation is not determined by an increase in costs but production of relevant products contributing to a reduction in the cost per unit relative to increase of in market share. Strategic innovation allows the innovating enterprise to gradually enter a variety of market segments on the basis of the diverse economic power of the buyers (Canh *et al*, 2019).

This offers a ground upon which the organizations can devise capabilities to enter other market segments. The innovative organizations are also able to apply innovation to attain strategic differentiation by providing distinct products and services to various clients that are exceptional. In this manner, strategic innovation strategies enable organizations to effectively compete in the market. Continuous enhancement of products, processes and methods due often contributes to differentiation which leads into an increased corporate competitiveness (Vicente, et al., 2015).

Theory of innovative enterprises is relevant in explaining the role of strategic innovation and how it contributes to superior firm performance via the production of better products and services in the competitive market. It often leads to differentiation; which is an essential aspect of competitiveness that contributes to new exclusive processes, products, that serves unique marketsthat can bear the cost of products spherically targeting them. . This plays an integral role in aiding the organizations to cope up with competition in the extant market and reduce the number of competitors in a class or level.

2.2.3 The Resource Based Theory

This theory was initially put forward by Penrose, (1959), but later more contribuiona were made by Wernerfelt,(1984) but it was Barney(1991) would put it into clear perspective that have made immense contribution in the field of strategic management.). The Resource-Based Theory (RBV) provides the origins of superior performance and competitive advantage where intangible resources are the focal concern of competitiveness because they are not as obvious as visible resources.. RBV explicates the performance disparities among organizations with respect to firm-leveland the influence of strategic innovation as a firm-specific resource on firm performance

(Wernerfelt, 1984). Resource based view theory postulate that organizations possess a bundle of vital resources which can be strategically applied for firmsto become competitive. The theory suggests that an organizations can gain competitive edge by having idiosyncratic resources or capabilities which are valuable, impossible to imitate and rare in the marketplace. Advocates of this viewpoint reckon that firms must first employ internal sources of competitiveness before embarking on external ones (Barney, 2002).

The proponents of RBV suggest that it is more practicable to take advantage of external opportunities by utilizing available resources in a new way instead of attempting to obtain new skills for each distinct opportunity (Exposito&Sanchis-Llopis, 2019). Corporate processes and resources are essential to firms because they affect its activities and conduct. This can be in form of competency, an asset, information, firm processes, capability or knowledge considered to be exceptional if it is valuable, rare, hard to imitate and has no close substitute (Kumar &Sunderraj, 2016). Similarly, it is a unique resource that leads to superior returns and sustained competitiveness. An organization is regarded as a synchronized bundle of resources which can be utilized for sustainable competitive advantage (Karabulut, 2015).

Resource based view theory is vital in explaining the linkage between strategic innovation and performance in the context of this study because firmsinfluencestrategic innovation by providing the inputs that are transformed and combined to produce diverse innovations (such as product, processes, organizational and marketing) which in turn lead to competitive advantage. Thus, strategic innovation provides an avenue to competitive edge among the firms by providing outputs that are valuable, rare, and impossible to replicate. This partly explains why innovative

firms exhibit superior performance in comparison to those that minimally innovate. Essentially, pecuniary resources are among the most vital bundle of resources that can be employed to support innovative efforts particularly research and development. Similarly, human capital resources are key determinant of competitiveness and firm performance because knowledge based resources facilitate the invention of crucial ideas and exploitation of opportunities for strategic i.

2.2.4 The Dynamic Capability Theory

This theory was proposed by Teece, Pisano and Shuen (1997) and it propose that organizations can achieve and sustain competitive edge on the basis of the processes that occur in a firm to match the volatile and dynamic environment. . Ostensibly, dynamic capability theory takes into account innovation, organizational learning, knowledge, entrepreneurship and change management (Wang, 2014). The capacity of an organization to adjust to variations in the market via innovation is necessary for the firms to be competitive. The theory alludes that the essential ingredient that drives the capitalism originates from innovation of new methods of production, new products, new forms of industrial organization and new markets (Domeher *et al.,* 2015).

Specifically, dynamic capabilities are the organization's ability to develop new processes and products in reaction to dynamic market situations (Suheg *et al.,* 2017). Therefore, dynamic capabilities include organizational structures, skills, procedures and decision rules that can be applied by organizations to create synergistic value. The dynamic capabilities may arise from product enhancement, innovative managerial capabilities and changing routines (Tseng & Lee, 2014). These factors allow the organizations to align their idiosyncratic competences or resources to the fluctuating business environment. Basically, dynamic capabilities are essential for long-

term profitability of companies (Ho et al., 2018). Generally, they enable organizations to gainfully organize its competences, resources, and other valuable assets for markets sustenance (Krasnicka, *et al*., 2018).

Dynamic capabilities theory plays a significant role in theorizing the relationship between strategic innovation and firm performance. Strategic Innovation is often recognized as one of the essential firm capabilities that influences firm's sustained competitive advantage as well as unrivaled performance. Innovative proficiency permits firm's to employ existing resources to create new process, products, markets and organizational systems as well as devising novel methods of utilizing new resources to gain a competitive edge. Therefore, Innovative aptitude can be improved via research and development, processes, learning and training, corporate associations with other vital players such as clients, suppliers, public and research institutes. The dynamic capability approach mirrors an organizations ability to solve market challenges and to attain competitiveness. The theory of dynamic capabilities offers a broader framework that aids in understanding how organizations create value for competitiveness in a dynamic environment.

2.3 Empirical Literature

In this section an in-depth review of empirical literature on the relationship between various strategic innovations dimensions (product, marketing, process and organizational) and firm performance has been carried out. In each study included here in, the objective, variables measurement , estimation technique, findings and evaluation of the findings was identified for the purpose of identifying the knowledge gaps that existed in relation to the variables

2.3.1 Product Innovation and Firm Performance

To examine the determinants of organizations innovative activities Hoang and Ngoc (2019) assessed the impact of innovation capacity on company's performance among the electronic companies in Vietnam. A cross-sectioned data was obtained from 374 valid firms, and confirmatory factor analysis (CFA) was used among other models in , structural equation model (SEM). Innovation capacity was operationalized by product and process innovation while performance was captured by net profit. The findings revealed that innovation capability was significantly and positively related to organizational performance. This study however did not include other dimensions of innovation such as marketing and organizational innovation.

An empirical study by Canh, Liem, Thu and Khung (2019) examined individual effects of strategic innovation and their interaction with external collaboration; on corporate performance and corporate social performance. The investigation applied longitudinal study where data was sourced from a sample of 8387 manufacturing firms in Vietnam for the period 2011-2015. To obtain innovation indicators, product and process metrics were employed while return on asset and market share were utilized to as indicators of organizational performance. Furthermore, corporate social responsibility was represented by community, environment and product dimensions. The fixed-effect and random effects techniques were employed as the models for estimating the panel datasets. The empirical findings showed that strategic innovation is beneficial to corporate performance from the perspective of market share and not ROA. This suggested that innovative investments needed considerable time to make significant impact on profitability, but it was opined that it aided in gaining client's loyalty. There was also sufficient

evidence that corporate social responsibility is positively related with innovation. The major shortcoming of the study is that it focused on product and process innovation.

Al-Battaineh (2018) conducted a study to determine the impact of innovation strategies on performance of SMEs. Primary data was randomly collected from a total of 143 managers at the three levels of managem A linear regression model was used as a method of prediction of the method of the variable relationships. Performance was measured by customer satisfaction whereas innovation was represented product, process management and marketing innovation. The empirical results suggested that all the indicators of innovation had appositive influence on performance. However, performance was measured using non-financial measures of performance and the study recommended that future studies should integrate both financial and non-financial metrics of performance for robustness of the results.

2.3.2 Marketing Innovation and Firm Performance

In United States (US), Hult, Hurley and Knight (2013) examined the antecedents of innovations and its impact on corporate performance. While employing a sample of 1000 companies with sales above US dollars 100 million per year, innovation was operationalized by market, entrepreneurial and learning metrics. Performance on the other hand was indicated by market share and ROA. To test the hypotheses, Structural Equation Model (SEM) was used to estimate the cross-sectional data obtained.. The findings showed there was a positive influence of innovation on business performance. The research gap identified from the study was that the findings obtained might not reflect the local context since it was based in a developed economy

(USA) which is politically, economically and culturally different from the economies of developing countries

Locally, Laban and Deya (2019) studied 14 information and communication technology firms in Kenya and found a relationship between strategic innovation and performance. Data was collected from 99 respondents that comprising of directors of innovation and other strategy managers. To establish the relationship between innovation and performance, linear regression analysis was used to analyze data. Performance was measured by the market share while innovation by product, organizational, process and marketing innovation. The findings confirmed a positive relationship between various dimensions of strategic innovation and firm performance. However, one major limitation of the study is that it utilized a small sample size and the findings of the study cannot be generalizations for related industries

Muharam, Andria and Tosida (2019) probed the effect of market and process innovation on financial performance with the moderating influence of disruptive technology among Indonesian pharmaceutical companies. To investigate the proposed relationship, the study collected data from the managers of the pharmaceutical firms using a questionnaire as data collection instrument. Structural Equation model which included partial least square (PLS) was used to estimate data. The findings highlighted a positive relationship between market and process innovation and performance while disruptive technology moderated the proposed relationship. The study utilized two indicators of innovation namely market and process.

2.3.3 Process Innovation and Firm Performance

To examine the effects of innovation of manufacturing firms in Turkey, Karabulut (2015) conducted an empirical study using 198 manufacturing firm located in Istanbul. To estimate the data, multiple and factor analysis were applied on the cross-sectional dataset. Innovation was measured on the topology of Oslo manual (OECD, 2005), that is product market, process and organizational innovation. Performance was measured using both financial and non-financial measures. The findings established that innovation had a positive influence on business performance based on multiple regression analysis. Nonetheless, this study was done in a developed county setting (Turkey) and therefore the empirical estimates may not hold locally.

With evidence form Ghana's banking industry, Yusheng and Ibrahim (2020) explored innovation types, innovation capability and performance with the data set sourced from 451 participants consisting of clients and bank staff in Kumasi metropolitan. To analyze data and confirmatory factor analysis (CFA), exploratory factor analysis (EFA) and structural equation models were used to analyze data via SPSS v24 and Smart PLS3. The results revealed that innovation dimensions (process product, marketing and organizational) contribute to improved corporate performance in term of financial and non-financial metrics. The implication is that the choice of appropriate innovation dimensions is capable of enhancing the business performance. The major shortcoming of this study is that it only focused on the banking sector and the findings therefore may not hold in other sectors.

In contrast, Varis and Littunen (2020) found on significant influence of process, market and product innovation on profitability of SMEs in Finland. The objective of the study was to assess

the link between different types of innovation, sources of information and performance of entrepreneurial SMES. Logistic regression was applied as the statistical method of identifying then variations between those organizations which had introduced valid innovations and those that they had not done so. Logistic regression was preferred since it takes into account the synergetic variation linkages and does not demand for restrictive assumptions. Nevertheless, the study was carried out in a single region characterized by idiosyncratic attribute; hence generalizability of the results to other regional context is somehow ambiguous.

2.3.4 Organizational Innovation and Firm Performance

Mentresor and Vezzoni (2017) studied last 415 flash Eurobarometer European companies from theUsing cross-sectional data from a sample of 1201 empirically investigated the relationship between design, innovation and performance at firm level. The study suggested that investment design may offer organizations with increased capacity for introducing organizational innovation. Innovation was captured by organization structure while performance was measured by non-financial measures. The econometric estimates using linear regression confirmed the anticipated theoretical expectations. Notably, a higher level of innovation was associated with non-systematic design and increased firm performance. Nonetheless, this study was done in European market and findings cannot be generalized for firms in developing countries.

A study by Azmi, Riza and Surabi (2019) investigated innovation capability and firm performance in Malaysian public sector. To operationalize the variables, the researchers modeled innovation as the predictor variable and with a focus on organizational innovation while performance was measured by customer satisfaction, internal business process and learning and

growth. To estimate the cross-sectional data collected from16 firms, SEM was used to analyze the data. The estimation results revealed that innovation capability significantly contributed to improved performance. However, the study applied a small sample size and therefore impairing the generalizability of the study findings.

In Malaysia Mamun, Muhammad and Ismail (2017) assessed the influence of entrepreneurial innovation of absorptive capacity one SME's innovativeness and performance, using cross-sectional research design and stratified sampling techniques where primary data was sourced from 419 micro-entrepreneurs. Innovation was represented by organizational innovation while performance was captured by the metrics identified in the balanced score card. The findings based on SEM suggested that absorption capacity and micro-entrepreneurial innovativeness had a significant effect on business performance. This study however focused on organizational innovation which cannot fully explain relationship between innovation and performance.

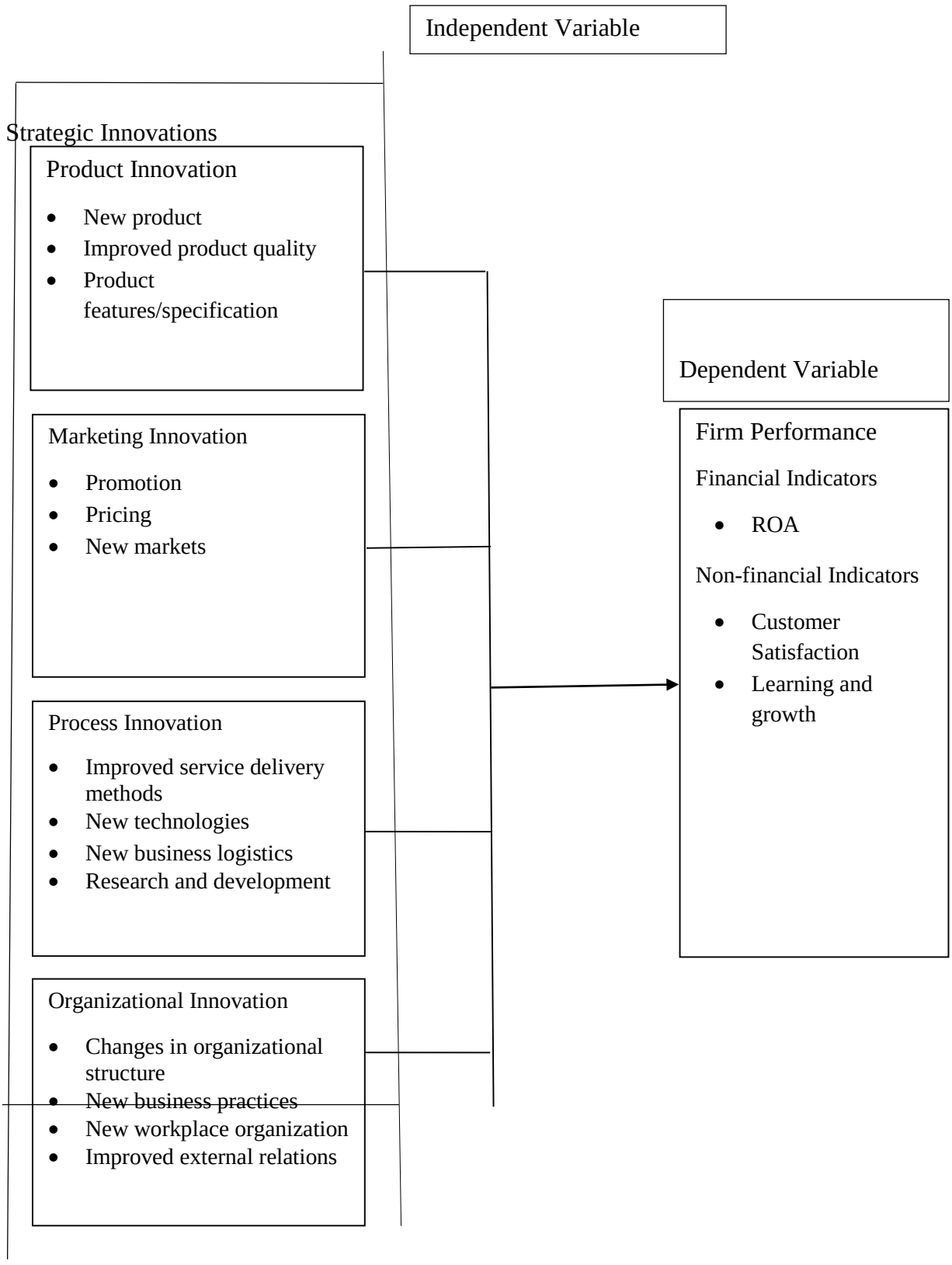
Table 2.1: Summary of empirical Literature and Research Gaps

Author	Focus	Methodology	Findings	Gaps
Hoang and Ngoc (2019)	Determinants of organizations innovative activities	Structural Equation Model (SEM)	Innovation capability was significantly and positively related to organizational performance	Only organizational innovation was considered.
Canh, Liem, Thu and Khung (2019)	Effects of strategic innovation and their interaction with external collaboration; on corporate performance and corporate social performance.	Panel regression model	Positive relationship between innovation and performance	The study focused on product and process innovation only
Laban and Deya (2019)	strategic innovation and performance	Regression analysis	Positive influence of strategic innovation on organizational performance	A small sample size was used and the findings were not ideal for making generalizations.
Mentresor and Vezzoni (2017)	design, innovation and performance at firm level	Regression analysis	Investment design may offer organizations with increased capacity for introducing organizational innovation.	This study was done in European market and findings cannot be generalized in a Kenyan setting.
Hult, Hurbely and Knight (2013)	Antecedents of innovations and its impact of corporate performance	Structural Equation Model (SEM) alongside Confirmatory Factor Analysis (CFA)	The findings validated the positive influence of innovation on business performance	The findings obtainedcannot be applied wholly in a local context since the study was performed in developed economy
Karabulut (2015)	effects of innovation among manufacturing firms	Regression analysis	innovation has a positive influence on business performance	This study was done in a developed country) and therefore the empirical estimates may not hold for local firms
Yusheng and Ibrahim (2020)	innovation types, innovation capability and performance	confirmatory factor analysis (CFA), exploratory factor analysis (EFA) and structural equation	Innovation dimensions (process product, marketing and organizational) contribute to improved corporate performance in term of	The study focused on banking industry whose dynamics are different

		(SEM) models	financial and non-financial metrics	
Andria and Tosida (2019)	The effect of market and process innovation on financial performance	Structural Equation Model (SEM)	The findings highlighted a positive linkage between market and process innovation and performance	The study utilized market and process innovation
Al-Battaineh (2018)	Impact of innovation strategies on performance	Regression and correlation analysis	The empirical results suggested that innovation had appositive influence on performance	Pefromance measures considered non-financial measures of performance.
Varis and Littunen (2020)	The link between different types of innovation, sources of information and performance	Logistic Regression	Significant influence of process, market and product innovation on profitability	The study was carried out in a single region characterized by idiosyncratic attribute; hence generalizability of the results to other regional context is somehow ambiguous
Mamun, Muhammad and Ismail (2017)	The influence of entrepreneurial innovation of absorptive capability /capacity one SME's innovativeness and performance	Structural equation Model (SEM)	The absorption capacity and micro-entrepreneurial innovativeness have significant effect on business performance	This study however focused on organizational innovation.
Azmi, Riza and Surabi (2019)	innovation capability and firm performance	Structural Equation Model (SEM)	The estimation results revealed that innovation capability significantly contributed to improved performance	this study applied a small sample size and therefore impairing the generalizability of the study findings

2.4 Conceptual Framework

A conceptual framework model was used to , logically depicts the linkage between the key variables studied in order to demonstrate how ideas practically relate to explain a phenomenon. The study's independent variable is strategic innovation which was measured by the following constructs; product, marketing, process and organizational dimensions whereas firm performance is the dependent variable which was operationalized by ROA as an indicator of financial component while non-financial ones were customer satisfaction, internal business processes and learning and growth. Based on the research problem, empirical and theoretical literature reviews constructs of the variables were derived, and conceptual framework, as depicted in Figure 2.1 was drawn. The conceptual model illustrates the study variables in a way that they are easily the understandable, as opposed to perceived theorized linkages between the four objectives and the arrows show the proposed direction of the relationship


Independent Variable
Strategic Innovations
Product Innovation
New product
Improved product quality
Product features/specification
Marketing Innovation
Promotion
Pricing
New markets
Process Innovation
Improved service delivery methods
New technologies
New business logistics
Research and development
Organizational Innovation
Changes in organizational structure
New business practices
New workplace organization
Improved external relations
Dependent Variable
Firm Performance
Financial Indicators
ROA
Non-financial Indicators
Customer Satisfaction
Learning and growth

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers research methodology that was used to realize research objectives and they include study design, population, data collection, and data analysis. Other procedures that support these methods such as validity, reliability and diagnostic tests are discussed in details. Operationalization of the variables was done in order to provide clarity for the models and tests. Also ethical considerations of data collection and disclosure are provided.

3.2 Research Design

According to Young and Pearce (2018), research design refers to a blueprint or a descriptive plan that gives guidance on how to conduct a research. It shows procedures of collecting, measuring and analyzing data (Mohajan, 2018). It is a general roadmap that assists the researcher to carry out the entire process of investigation right from formulation research objectives and hypotheses which determine data analysis and the findings. It is a guideline that depicts the structuring of the problem which aids in obtaining empirical evidence on the conceptualized relations in a study (Kothari, 2018).

Once a research problem has been conceptualized research designs that can be used to carry out investigations are determined. Broadly they can be classified as exploratory, causal or descriptive designs. Exploratory approach is grounded on research question approach where very little is known about the phenomenon and therefore only current data can be used to draw meaningful conclusions. Causal research designs generally determine the fundamental cause and effect of

variables under focus in a study. Descriptive research design, on the other hand is concerned with describing the characteristics of the variable being studied. In this design the research endvours to answer the what, the how and the why of the variable.

This study adopted the cross-sectional and descriptive research approaches since the study was dealing with determination of how strategic innovations relates to performance of firms. Cross sectional approach to a study refers to a short period of time with which a study is carried out and for this study it was appropriate because of rapid change of strategies that organizations apply continuously in order to survive in a competitive environment. The choice of descriptive design for such a research is supported by . Saunders, Lewis and Thornhill (2016) who argue that the design provides in-depth information about the attributes of subjects within a specific field of study, thus aiding to identify relationships between the study variables. Porta (2014) equally opines that the design gives the researcher a profile to describe pertinent aspects of the phenomena of interest for an organization, individual, or other perspectives of characteristics..

3.3 Population of the Study

According to Oladipo, Ikamari, Kiplang'at and Barasa (2015), population refers to whole set of counts or measurements which a researcher wants to draw a conclusion about. The target population aids in ascertaining the elements to be either involved or omitted from the study. For the purpose of this study there were a total of 41 licensed insurance companies that operated as at 31stDecember 2021 (Insurance Regulatory Authority report, 2021). IRA is the only authority vested with supervision and regulation of the insurance sector in Kenya and therefore a sampling frame obtained from the organization was deemed to be a true reflection of the actual number of

insurance companies lisensed to operate in Kenya. It ensures compliance within the insurance industry in order to promote a high degree of security for policyholders. The study focused on Insurance sector because it is within the financial sector and has a myriad of challenges which are largely be overcome through continuous strategic innovation hence enabling the firms to stay afloat in an environment where the uptake of insurance products is relatively low.. The study principally focused on all the 41 insurance firms that transact both general (short term) and life (long term) insurance business because the population was relatively small and sampling would not have provided a true reflection of the state of the variables that were being studied.

3.4 Data Collection

Data collection is defined as the process of collecting and evaluating information on targeted variables in a conventional organized manner which enables the drafting of appropriate questions and determination of outcomes (Ajai & Sanjoya, 2016). The data for the study was primary in nature and it was collected using a questionnaire. (Appendix II). The key benefit of using questionnaires as a tool for data collection is that data can be obtained from a huge population and inexpensively. It was structured and contained sections that had related items carefully constructed with precise words and ordered in a logical manner that comprehensively addressed attainment of the research objectives , a view that is supported by (Rahi, 2017). The questionnaires applied a 5-point Likert scale where 1 was assigned to the statement strongly disagree progressively to 5 which denoted strongly agree. The main advantage of the scale is that it permits a technique for survey gathering and quantifying opinions in a way that permits quantitative methods of data analysis to be applied.

The questionnaire comprised of three major sections namely; section one which covers questions on the general demographic information of the respondents while others were structured as follows. Section two covered questions on four constructs of strategic innovation; product innovation, marketing innovation, process innovation and organizational innovation. Section three had two indicators of performance; financial and non-financial performance. The items used to operationalize the constructs were derived from reviewed empirical literature, consultation with the experts in the discipline of strategic management within the university and . the metrics borrowed heavily from the OECD (2005) manual guideline for measuring innovation. Performance measures were drawn from balanced score card metrics associated with Kaplan and Norton (1992).

In compliance with standard research practices, an authorization cover letter from the university and a research permits from NACOSTI were obtained prior to data collection process. Owing to adverse effects of COVID-19 pandemic, the questionnaires were electronically administered to the targeted respondents who were managers in charge of innovation with the help of the two trained research assistants. The Google docs formatted questionnaire was transmitted via emails and WhatsApp to the targeted respondents.

3.5 Validity the Research Instrument

Validity in research process refers to the extent to which data gathering technique correctly measures what it intends to measure (Kothari, 2018). There are a various type of validity but the one adopted in a research depends on the applicable validity. However all researches must meet content and face validity Content validity evaluates the degree to which an explicit metric

measures every single characteristic of a construct while face validity is the meaningfulness that can be perceived to be measured by what a research instrument purports to measure (Saunders et al., 2016). To achieve content validity, the researcher sought assistance from well-informed experts in the field of the investigation to appraise the relevance of questions in the research instrument. On the basis of advice of the experts, unclear and imprecise items were revised, items rephrased and those improper omitted.

Face validity is the magnitude to which a questionnaire is intuitively deemed to measure the concept it asserts to assess (Kothari, 2018). To evaluate the face validity, the questionnaire was offered to an expert in the related area of the study to adjudge whether the instrument exactly operationalized what it proposed to measure. Finally, construct validity connotes the magnitude to which construct measurement ostensibly operationalize what the theory suggest. To ensure construct validity, the constructs was aligned to key theoretical postulations as reviewed in the literature.

3.6 Reliability of the Research Instrument

Reliability in research is the level to which outcomes are constant overtime and are a precise depiction of the population under study (Young & Pearce, 2018). This suggest that the responses provided by participants are consistent when repeated at a different time or with a different group of people derived from the unit of observation The most prevalent threats to reliability may arise from observer error, instrument error, or participants' error (Ajai & Sanjoya, 2016). To achieve the research tool's reliability, the target population was chosen after consideration of the suitability of data that was necessary to meet the objectives. The research assistants were

carefully trained to ensure that their role was to transmit and receive the questionnaires without interference with respondents.

The questionnaire reliability was evaluated using the Cronbach's alpha coefficient, which operationalize the internal consistency amongst a given set of items. The procedures followed to achieve this are supported determination of Cronbach's Alpha coefficient is supported by Zikmund (2013). The Alpha coefficient ranges from zero to 1 where by various literature have suggested that values above 0.5 indicate reliability but Mohajan (2018) and others recommendsan alpha score of 0.7 and above as the acceptable values for for reliability which was accepted in this study.

3.7 Diagnostic Tests

Generally, estimators of a linear regression is grounded on a range of axioms namely linearity, normality, homoscedasticity and multicollinearity. Linearity occurs when the independent and the dependent functionshave a linear relationship . This is important so that sensitivity to the outliers in the regression model with a significant effect to final results is eliminated (Porta, 2014). Linearity is evaluated using both statistical and graphical methods and this employed statistical technique of evaluating linearity.

Normality assumption suggests that estimation residuals from regression should resume a normal distribution (Zikmund, 2013). The empirical data that is not normally distributed demonstrates high skewdness and kurtosis with substantial outliers that pose a threat of distorting linkages and significance tests. Empirically, there are diverse techniques of testing such as plots of Q-Q and P-

P, skewness and kurtosis, histograms among others which are largely visual techniques. Furthermore, statistical methods of testing normality include Shapiro Wilk test, Kolmogorov-Smirnov test among others. This current study used Shapiro-Wilk test to assess whether the data was normally distributed.

Homoscedasticity is a situation where the disturbances are analogous across the entire values of the explanatory variables (Rahi, 2017). Normally, lack of homogeneity of variances infers the presence of heteroscedasticity (Young & Pearce, 2018). Insignificant heteroscedasticity has little effect on significance tests; however, when heteroscedasticity is substantial, this can lead to great distortion of findings and wholly weaken the analysis therefore increasing the possibility of a type one error. The P-P plotsscatter plots and histograms are used to evaluate homoscedasticity by splitting data into low and high values to ascertain whether there are substantial differences. In this study Breusch-Pagan test, a statistical technique for assessing homoscedasticity was applied.

Multicollinearity occurs when the explanatory variables are greatly correlated, implying that they can easily predict each other (Zikmund, 2013). As a result of substantial correlations among explanatory variables, it is improbable to distinguish between the predictive influence of the independent variable (Porta, 2014). Multicollinearity often leads to serious problems such as redundancy of statistical data, making it hard to segregate the influence of distinct regressors because it expands disturbances/residuals and weakens the t-values in estimation process.

3.8 Operationalization and Measurement of the Study Variables

According to Kothari (2018), operationalization of study variables is vital measurement procedure of bridging empirical observation level with the conceptual-theoretical levels. The process involves assigns numbers/numerals and other relevant symbols to a given set of study variables and the consequent interpretation. In this study, product innovation, marketing innovation, product innovation and organizational innovation were modeled as the explanatory variables while firm performance became the outcome variable.

Table 3.1: Summary of Operationalization and Measurement of Variables

Variable	Indicator	Operational Definition	Measurement	Scale	Comparable Studies
Strategic Innovation (Independent Variable)	Product Innovation	Modification of an existing product in a way that it appears new.	Section B	Interval	Canh et al. (2019)
	Marketing Innovation	It is an improved and effective way of marketing a product that leads to gaining new markets or increasing market share	Section C	Interval	Hoang and Ngoc (2019)
	Process Innovation	Introduction of of new tools and sequences of production that increases efficiency and productivity	Section D	Interval	Hult et al. (2013)
	Organizational Innovation	This is a combination of new methods and techniques of operations that helps an organization increase efficiency and productivity.	Section E	Interval	Karabulut (2015)
Firm Performance (Dependent Variable)	Financial Indicators	They are monetary metrics used to measure how well a company is doing	ROA = Net Profit/ Total Asset	Ratio	Mamun et al. (2017)
	Non-financial indicators	These are quantitative metrics that cannot be expressed in monetary terms.	Section F	Interval	Azmi (2019)

Source: Research Data (2021)

3.9 Data Analysis and Presentation

The empirical data was analyzed using both descriptive and inferential statistics. Prior to analyzing data, the collected data was prepared so as to identify and correct any potential errors that usually impair statistical analysis. Data coding was performed so as to translate qualitative data into numeric codes that facilitate statistical analysis. The descriptive statistics was undertaken to describe, summarize and display the data in a meaningful way. Descriptive analysis in form of mean, standard deviation, kurtosis, skewness and maximum/minimum values is used to describe the characteristics of the variables. The findings were presented in form of frequencies tables and graphs. Descriptive statistics is essential in identifying trends and patterns in the data which form the basis of performing inferential statistics. Person's correlation analysis was carried out to establish the magnitude and the strength of the relationship between the study variables.

Inferential data analysis was estimated using ordinary least squares (OLS) method. OLS is a widely applied technique for estimating regression weights of general linear models to describe the linkages between one or more explanatory quantitative and outcome variables. The key advantage of OLS is that it allows for innate mathematical computations, permits flexible variable selection and also it is suitable for cross-sectional dataset. The significance of the unstandardized regression beta (β), weights is that it depicts the relative contribution explanatory variables have on the response variable, while the negative/positive signs associated with the beta weights show the direction of the hypothesized linkages. To establish the relationship between strategic innovation and firm performance, a generalized linear regression model stated below was applied:

$$FP = B_0 + B_1PDI + B_2MI + B_3PCI + B_4OI + \zeta \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.1$$

$$NFP = B_0 + B_1PDI + B_2MI + B_3PCI + B_4OI + \zeta \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.2$$

Where: FP = Financial Performance

Where: NFP = Non-financial Performance

PDI = Product Innovation

MI = Marketing Innovation

PCI = Process Innovation

OI = Organizational Innovation

ξ =Error Term

3.10 Ethical Considerations

To ensure the study conformed to the research ethical standards, the research observed the following necessities. To begin with, authorization was sought from St. Paul's University post graduate School and from the National Council for Science Technology and Innovation (NACOSTI). A letter was attached I as an introduction to the respondents to explained the purpose and importance of the research while giving an assurance for confidentiality, privacy, and anonymity of the data provided.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter focuses on the response rate, respondent's demographic profiles, reliability and validity of research instruments, descriptive statistics, diagnostic tests and finally inferential analysis as a basis of meeting research objectives.

4.2 Response Rate

A total of 41 insurance companies in Kenya were targeted by the study out of which 40 firms duly completed the questionnaires,. The results are as shown in figure 4. 1 below.

Table 4.1: Response Rate

	Frequency	**Percentage**
Response Rate	40	98
Non-Response	1	2
Total	40	100

Source : Research Data, 2021

Table 4. 1 above shows that 40 of the 41 insurance firms participated in the study which translated to into a response rate of 98%.This was facilitated by making constant follow ups via phone calls and emails to the targeted respondents. This compares well with suggestions made by Kothari (2018) who recommended that a response rate of 60% is a sufficient condition for analysis and assessment of the objectives.

4.3Age of the Firm

The study sought to establish the age of the firm based on the number of year's organization has been operating in Kenya. The responses obtained were tabulated as shown in table 4.2 below.

Table 4.2: Age of the Firm

	Frequency	Percent
1-5 years	12	27.3
6-10 years	3	6.8
11-15 years	5	11.4
16-20 years	5	11.4
Over 21 years	15	34.1
Total	**40**	**100.0**

Source : Research Data, 2021

Table 4.2 above shows that 27.3% of the firms had operated in Kenya for a period of 1 to 5 years, 6.8% of them between 6 to 10 years, 11.4% , 11 to 15 years, 11.4%, 16 to 20 years while 34.1% over 21 years. This implies that majority of the insurance firms in Kenya have operated for a longer period of time and therefore they must have enganged in strategic innovation in order for them to improve the performance.

4.4Customer Base

The study sought to assess the firms' terms of their customer base and the results are presented in table 4.3 below.

Table 4.3: Customer Base

	Frequency	Percent
Large	6	13.6
Medium	15	34.2
Small	19	43.2
Total	**40**	**100.0**

Source : Research Data 2021

Table 4.3 above shows that, 13.6% of the firms had large customer base, 34.2% medium cus while 43.2% had smallest customer base. This implies that on average, majority of the insurance firms had a relatively small clientele base.

4.5 Asset Base

The study sought to assess the firms in terms of their asset base. The findings are presented in Table 4.4

Table 4.4: Asset Base

	Frequency	**Percent**
Large	12	27.3
Medium	24	54.5
Small	4	9.1
Total	**40**	**100.0**

Table 4.4 above indicates that, 27.3% of the firms had larger asset base, 54.5% medium a while 9.1% of the firms had smallest asset base. This indicates that on average, majority of the insurance firms had a modest asset base.

4.6 Reliability Test

Reliability is the ability of a measure to consistently yield similar results under the same circumstances repeatedly.Cronbach's Alpha was used to evaluate reliability and results recorded as shown on table 4.6 below

Table 4.5: Reliability Test Results

Variable	**N**	**Cronbach's Alpha**	**Interpretation**
Product Innovation	16	0.78	Reliable
Marketing Innovation	12	0.77	Reliable
Process Innovation	11	0.86	Reliable
Organization Innovation	7	0.74	Reliable

Non-financial Performance	16	0.70	Reliable

Table 4.6 above shows the results of Cronbach's Alpha Cofficient were as follows product innovation, $\alpha = 0.78$; marketing innovation, $\alpha = 0.77$; process innovation, $\alpha = 0.86$; organization innovation, $\alpha = 0.74$ and non-financial performance, $\alpha = 0.790$).The findings indicated that the data collection was reliable since the coefficients of all the variables were above 0.7 which is provided as a sufficient condition for reliability when using the Cronbach's Alpha scale.

4.7 Validity Test

Validity refers to the precision of a measure inferring that the findings represent what they are meant to measure (Kothari, 2004). In order to assess content and face validity, the expert advice of industry practitioners and the academic supervisors was sought and they assisted in evaluating the essence, rationality and power of the instruments questions in examining the variables. Construct validity on the other hand was achieved by aligning the measure to the existing knowledge of the theories that anchored the study.

4.8 Diagnostic Tests

Diagnostic tests were carried out to ensure adherence to the basic assumptions of regression analysis and more specifically, OLS. These tests comprised of Shapiro Wilk test for assessing normality, Variance Inflator Factor (VIF) for evaluating multicollinearity and Breusch-Pagan/Cook Weisberg for testing homoscedasticity.

4.8.1 Normality Test

Shapiro Wilk's test was used to assess normality of the data which is statistically significant if p value is greater than 0.05 The findings obtained are indicated in table 4.6 below.

Table 4.6: Normality Test Results

Variable	N	W	V	z	Prob>z
PDI	40	0.98	0.90	-0.22	0.59
MI	40	0.96	1.74	1.17	0.12
PCI	40	0.89	4.15	3.00	0.00
OI	40	0.94	2.41	-1.30	0.03
NFP	40	0.99	0.54	-1.30	0.90
FP	40	0.81	7.55	4.25	0.00

Source: Empirical Data (2022)

Where: PDI = product innovation, MI = marketing innovation,PCI = process innovation, OI = organizational innovation, NFP = non-financial performance, FP = financial performance.

The findings in Table 4.6 suggest that the data for product innovation, marketing innovation and nonfinancial performance were normally distributed since their p values were greater than 0.05. In contrast, the data for process innovation, organization innovation and financial performance were not normally distributed since their p values were less than 0.05. Nevertheless, normality does not weaken estimations in cross-sectional data sets particularly while applying ordinary least squares method because even with non-normal data, OLS is capable of giving best linear unbiased estimates (BLUE).

4.8.2 Multicollinearity Test

This study applied Variance Inflation Factors (VIF) and tolerance value (TV) to evaluate the absence or presence of multicollinearity among the predictor variables as shown in Table 4.3.

Table 4.7: Multicollinearity Test Results

Variable	VIF	Tolerance Value (1/VIF)
PDI	1.80	0.55
MI	1.77	0.57
PCI	1.70	0.59
OI	1.39	0.72
Mean VIF/Tolerance Value	**1.67**	

Source: Research Data (2021)

Where: PDI = product innovation, MI = marketing innovation, PCI = process innovation, OI = organizational innovation

Zikmund (2013) posits that the acceptable threshold for Inflation Factor (VIF) and tolerance values that signify absence of multicollinearity are<10 and > 0.1 respectively. The findings suggest that the VIF values for the entire variables used in the study were < 10 (product innovation =1.80; marketing innovation = 1.77, process innovation = 1.70 and organizational innovation =1.39) implying that multicollinearity was absent. Likewise, the all of tolerance value were greater than 0.1 (product innovation =0.55; marketing innovation = 0.57, process innovation = 1.0.59 and organizational innovation =0.72) thus confirming absence of multicollinearity.

4.8.3 Homoscedasticity Test

In this study, Breusch and Pagan/Cook-Weisberg test was used to assess the presence of heteroscedasticity. The results are as shown below in Table 4.8.

Table 4.8: Heteroscedasticity Test Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Variable	Chi-square	p-value	Conclusion
FP	2.36	0.12	Homoscedasticity present
NFP	3.65	0.06	Homoscedasticity present

Source: Research Data (2021)

Typically, homoscedasticity is inferred if the $p > 0.05$. Nevertheless, the outcome shows the presence of heteroscedasticity if the $p < 0.05$. Since the p-values were > 0.05, homogeneity of variances was confirmed.

4.9Descriptive Statistics

The empirical study sought to determine the influence of strategic innovation on performance of insurance firms in Kenya. To realize this objective, four indicators of strategic innovation were investigated, namely: product innovation, marketing innovation, process innovation and organizational innovation. On the other hand two metrics of non-financial performance were examined: namely customer satisfaction and learning and growth. The mean score was used as a measure of central tendency while standard deviation was used as a measure of dispersion.

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4.9.1 Strategic Innovation

Strategic innovation was conceptualized as the independent variable. This variable was measured by generating a composite score of the four indicators, namely: product innovation, marketing innovation, process innovation and organizational innovation. The respondents were asked to indicate the extent to which on a scale of 1-5, they agreed with the attributes of strategic innovation via a set of statements and the findings are shown in Table 4.9.

Table 4.9: Strategy Implementation

Indicator	N	Min	Max	M	SD
Product Innovation	40	2	5	3.95	0.61
Marketing Innovation	40	2	5	4.08	0.65
Process Innovation	40	2	5	3.83	0.54
Organizational Innovation	40	2	5	3.88	0.52
Average Score	**40**	**2**	**5**	**3.94**	**0.58**

Source: Research Data (2021)

The findings suggest that the average score for the attributes employed to denote product innovation was (M = 3.95, S.D = 1.61) implying that that majority of the participants were in agreement that their firms had adopted product innovation in their organizations. The mean score for the statements describing marketing innovation was (M = 4.08, SD = 1.65)implying that majority of the respondents were in agreement that their organizations had adopted marketing innovation in their corporate strategies. The average score for the features depicting process innovation was (M =3.83, SD = 0.54) inferring that respondents were in agreement that that their firms had adopted process innovation in their corporate strategies. The mean score for the statements describing organizational innovation was (M = 3.88, SD = 0.52) signifying that most of the participants agreed that their organizations had adopted organizational innovation. Overall, the average score for the indicators used to indicate strategic innovation was (M = 3.94, SD = 0.58) indicating that most of the respondents agreed that their organizations had accepted strategic innovation as one of their core corporate strategies.

4.9.2Non-financial Performance

Non-financial performance was modelled as the dependent variable. This variable was operationalized by computing a composite score of the two indicators, namely: customer satisfaction and learning and growth. The respondents were asked to indicate the extent to which

on a scale of 1-5, they agreed with the attributes of strategic innovation through a set of statements and the results are shown in Table 4.10.

Table 4.10:Non-financial Performance

Non-financial performance	N	Min	Max	M	SD
Customers Satisfaction	40	2	5	3.63	0.53
Learning and Growth	40	3	5	3.75	0.48
Average Score	**38**	**3**	**5**	**3.69**	**0.51**

Source: Research Findings (2021)

The results indicate that the average score for the features of customer satisfaction was (M = 3.63, S.D = 0.53) indicating that that most of the respondents were in agreement that their customers were satisfied with their services. The mean score for the statements describing learning and growth was (M = 3.75, SD = 0.48) implying that majority of the respondents were in agreement that their organizations was implementing learning and growth in order to improve performance. Overall, non-financial performance was operationalized using two indicators: customer satisfaction and learning and growth. On average, the participants agreed that their firms had adopted non-financial performance measures (M = 3.69, S.D = 0.51).

4.9.3 Financial Performance

Financial performance was conceptualized as the dependent variable. This variable was indicated by return on assets (ROA) and the results are shown in Table 4.11.

Table 4.11: Financial Performance

FP	N	Min	Max	M	SD
ROA	40	-3.63	2.72	0.99	1.01

Source: Research Data (2021)

The average value for ROA was 0.99. The standard deviation for the ROA on the other hand was 1.01 which is a clear indication of considerable variance in ROA among insurance firms in Kenya. This implies that insurance companies significantly varied in terms of financial performance.

4.10 Correlation Analysis

Correlation analysis shows the magnitude to which two variables are related and demonstrates the strength/extent of the association. The correlation coefficient vary from + 1, representing perfect positive correlation to -1 which represents perfect negative correlation. Pearson's product moment coefficient was adopted as a measure of correlation and the findings are as presented in Table 4.12 below.

Table 4.12: Correlation Analysis Results

	PDI	MI	PCI	OI	NFP	FP
PDI	1					
MI	0.60*	1				
PCI	0.28	0.37*	1			
OI	0.54*	0.46*	0.50*	1		
NFP	0.13	0.29	-0.01	0.46*	1	
FP	0.13	0.52*	0.33*	0.46*	0.34*	1

Source : Research Data 2021

Where: PDI = product innovation, MI = marketing innovation, PCI = process innovation, OI = organizational innovation, NFP = non-financial performance, FP = financial performance.
*= Significant correlation

The correlation findings indicate that product innovation was moderately and significantly positively correlated with marketing innovation ($r = 0.60$, $p < 0.05$) and organizational innovation ($r = 0.54$, $p < 0.05$) while process innovation ($r = 0.28$, $p > 0.05$), non-financial performance ($r = 0.13$, $p > 0.05$) and financial performance($r = 0.13$, $p > 0.05$) weakly positively, but insignificantly correlated with product innovation. Marketing innovation was moderately and

significantly positively correlated with process innovation ($r = 0.37$, $p < 0.05$), organizational innovation ($r = 0.46$, $p < 0.05$) and financial performance ($r = 0.52$, $p < 0.05$) while in contrast positively and insignificantly, though moderately correlated with non-financial performance ($r = 0.29$, $p > 0.05$).

Process innovation is positively and significantly correlated with organizational innovation ($r = 0.50$, $p < 0.05$) and financial performance ($r = 0.33$, $p < 0.05$) but in contrast negatively and insignificantly weakly correlated to non-financial performance. Furthermore, organizational innovation is moderately and positively correlated with non-financial performance ($r = 0.46$, $p < 0.05$) and financial performance ($r = 0.46$, $p < 0.05$). Finally, non-financial performance was positively and significantly correlated with financial performance ($r = 0.34$, $p < 0.05$) though weakly.

4.11 Strategic Innovation on Performance of the Insurance Firms

The general objective of the study was to determine the influence of strategic innovation on performance of insurance firms in Kenya. The constructs of the explanatory variable were product innovation, marketing innovation process innovation and organizational innovation. The response variable was performance and it was measured by financial and non-financial indicators. The regression analysis using OLS was conducted based on the specific objectives of the study.

Table 4.13 shows the empirical findings of the relationship between strategic innovation and performance. The coefficient of determination (R^2) suggested that 45% of variation in performance of insurance industry was explained by product, marketing, process and organizational innovation while the other55% was accounted for by other factors not considered in the estimation model. Overall, the regression model was fit in predicting the relationship

between strategic innovations and performance of insurance firms in Kenya {F (4, 35) = 7.14, p < 0.05}.

Table 4.13: Strategic Innovation and Financial Performance

FP	β	SE	t	p	R^2	Adj. R^2	F
Constant	-3.11	1.14	-2.72	0.01	0.45	0.39	F (4, 35) = 7.14, p = 0.00
PDI	-0.77	0.28	-2.73	0.01			
MI	0.91	0.25	3.59	0.00			
PCI	0.05	0.28	0.18	0.86			
OI	0.83	0.32	2.55	0.02			

Source: Research Data (2022)
Where: PDI = product innovation, MI = marketing innovation, PCI = process innovation, OI = organizational innovation, FP = financial performance.

The first specific objective of the study was to examine the influence of product innovation on performance of insurance companies in Kenya. The results indicate that there was a significant negative influence of product innovation on financial performance (β = -0.77, t = -2.73, p = <0.05). This implies that a unit improvement in product innovation leads to an equivalent decline in financial performance by 0.77 units, ceteris paribus.

The second specific objective of the study was to establish the effect of marketing innovation on performance of insurance firms in Kenya. The findings suggest that financial performance was significantly and positively predicted by marketing innovation (β = 0.91, t = 3.59, p = < 0.05). This signifies that financial performance improved by 0.91 units as a result of a unit increase in marketing innovation, ceteris paribus.

The third specific objective of the study was to determine the influence of process innovation on performance of insurance firms in Kenya. The results established that process innovation was insignificantly associated with financial performance (β = 0.05, t = 0.18, p = > 0.05).

The fourth specific objective of the study was to assess the effect of organizational innovation on performance of insurance firms in Kenya. The estimation results established that organizational innovation positively and significantly influenced financial performance (β = 0.83, t = 2.55, p = < 0.05). This suggests that0.83 of financial performance occurred due to a unit increase in organizational innovation, ceteris paribus. The final predictive model was as specified below;

$$FP= -3.11 + -0.77PDI + 0.91MI + 0.83OI$$

Table 4.14: Strategic Innovation and Non-financial Performance

FP	β	SE	t	p	R^2	Adj. R^2	F
Constant	2.69	0.54	4.97	0.00	0.36	0.28	F (4, 35) = 4.85, p = 0.00
PDI	-0.23	0.13	-1.74	0.09			
MI	0.21	0.12	1.71	0.10			
PCI	-0.30	0.13	-2.31	0.03			
OI	0.57	0.15	3.74	0.00			

Source: Research Data (2022)

Where: PDI = product innovation, MI = marketing innovation,PCI = process innovation, OI = organizational innovation, NFP = non-financial performance

The first specific objective of the study was to examine the influence of product innovation on performance of insurance companies in Kenya. The estimation results suggested that there was a significant negative association between product innovation and non-financial performance (β = -0.23, t = -1.74, p = < 0.05). This confirms that for every unit increase of product innovation non-financial performance decreased by 0.23, ceteris paribus.

The second specific objective of the study was to establish the effect of marketing innovation on performance of insurance firms in Kenya. The findings indicated that non-financial performance was insignificantly predicted by marketing innovation ($\beta = 0.25$, $t = 1.71$, $p = > 0.05$).

The third specific objective of the study was to determine the influence of process innovation on performance of insurance firms in Kenya. The outcome confirmed that process innovation was negatively but significantly related to non-financial performance ($\beta = -0.30$, $t = -2.31$, $p = < 0.05$).This signifies that non-financial performance declined by 0. 30 units due to a unit increase in process innovation, ceteris paribus.

The fourth specific objective of the study was to assess the effect of organizational innovation on performance of insurance firms in Kenya. The empirical findings suggest that organizational innovation positively and significantly influenced non-financial performance ($\beta = 0.57$, $t = 3.74$, $p = < 0.05$). This implied that non-financial performance increased by 0. 57 units as a result of unit increase in organizational innovation, ceteris paribus. The final predictive model was as specified below;

$$NFP= 2.69-0.30PCI + 0.57OI$$

The findings of this study in regard to financial performance were similar to those of Hoang and Ngoc (2019) who while assessing the impact of innovation capacity on company's performance among the electronic companies in Vietnam established a significant association between product innovation and organizational performance. In this study a unit increase in product innovation led to a significant decrease of -0.71 units in financial performance because a substantial amount of money is required in research and design. For the of insurance firms no production cost was involved because they offer services as compared to a manufacturing firm. The outcome of this

study also comparable to the findings obtained by Canh *et al.* (2019) who while examining the on individual effects of strategic innovation (product innovation) and the interaction with external collaboration; on corporate performance and corporate social performance ,established that product innovation is beneficial to corporate performance from the perspective of market share. The estimation results also concurs with those of Al-Battaineh (2018) who while investigating on the impact of innovation strategies on performance of SMEs found out that there was a significant influence .

Regarding the market innovation, the findings of the current study indicated that marketing had a positive and significant on financial performance but it had insignificant effect on non-financial performance. This can be understood in the sense that when marketing increases it creates awarenessof the product and in most of the times it leads to increased revenue . On non financial perfomance marketing was insignificant because the internal customers know he organization and therefore marketing had no impact The findings of this study had similarity with those obtained by Hult *et al.* (2013) who examined the antecedents of innovations and its impact on corporate performance and , established that there was a positive influence of marketing innovation on performance. The findings also are in agreement with those of Laban and Deya (2019) who found a positive and significant relationship between marketing innovation and performance of communication technology firms in Kenya. The findings of this study also support those of Muharam *et al.* (2019) who studied the effect of market innovation on performance with the moderating influence of disruptive technology among Indonesian pharmaceutical companies and established a positive linkage between marketing innovation and performance.

The findings on process innovation showed no significant relationship with financial performance while it was significant with non-financial performance. The explanation for this is that there is almost no financial input in a service process assuming that no new employees or technology while internally a process had significant influence on non financial performance because staff are directly affected by any change in a process. The findings agree with with those of Karabulut (2015) who investigated on the effects of innovation of manufacturing firms in Turkey and reported a significant influence of process innovation on firm performance. The outcomes also concur with Yusheng and Ibrahim (2020) study that explored innovation types, innovation capability and performance of banks in Kumasi metropolitan and found significant influence of process innovation on performance. Similarity was also drawn from Varis and Littunen (2020) study that found a significant influence of process innovation on profitability of SMEs in Finland.

On organizational innovation the findings of this study showed that it had a significant relationship with both financial anad non-financial performance. This was explained by the fact that any change on the organization affects any other function that takes place within and by it. The results were similar to t those of Mentresor and Vezzoni (2017) who investigated on the relatioship between design, innovation and performance at firm level among European firms and found that higher level of organizational innovation was associated with non-systematic design and increased firm performance. Other related studies include that of Mamun *et al.* (2017) who assessed the influence of entrepreneurial innovation of absorptive capacity of SME's innovativeness and performance. Azmi, Riza and Surabi (2019) also found out that organizational innovation capability significantly contributed to improved performance in Malaysian public sector.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains the summary of the key empirical findings of the study, conclusions arrived at and recommendations and gaps that were in light of the findings.

5.2 Summary of the Key Findings

The primary objective of the study was to determine the influence of strategic innovation on performance of insurance firms in Kenya. The results from demographic information were the response rate was 98% implying that most of the study the data obtained was a true reflection of the strategic innovation across the insurance firms. The findings suggested that majority of the insurance firms in Kenya had operated locally for a longer period for well over 21 years. On average, majority of the insurance firms had a relatively small customer base with average of 43.2%. On the other hand on average, majority of the insurance firms had a modest asset base of about54.5%The data used for analysis satisfied the statistical assumptions of regression analysis by confirming normality, absence of multicollinearity and homogeneity of variances. The items used to capture the study variables were also valid and reliable.

The first objective was to examine the influence of product innovation on performance of insurance companies in Kenya. The results indicate there was a significant negative influence of product innovation on financial performance but insignificant on non-financial performance The second objective was to establish the effect of marketing innovation on performance of insurance firms in Kenya. The outcome suggested that financial performance was significantly and positively predicted by marketing innovation but insignificant on non-financial performance.

The third objective was to determine the influence of process innovation on performance of insurance firms in Kenya. The outcome confirmed that process innovation was negatively and significantly related with non-financial performance but in contrast insignificantly associated with financial performance. The fourth objective was to assess the effect of organizational innovation on performance of insurance firms in Kenya. The findings suggested that organizational innovation positive and significant influence firm performance.

5.3 Conclusions

The results on the influence of strategic innovation on performance were found to be diverse. These were attributed to the choice of performance employed in the empirical investigations. Study concluded that product innovation had a significant negative effect on financial performance product innovation is a costly exercise that consumes significant amount of corporate resource especially when developing o new products, improvement of the quality of the existing products and coming up with additional features or specifications for the existing ones.

Marketing innovation was found to have a significant influence on performance. This is because new markets, pricing strategies and promotional techniques play a key role in increasing the sales volume and enhancing customer satisfaction thus enhancing the overall corporate performance. Thirdly, the study concluded that process innovation was negatively and significantly related to financial performance. This is due to the fact that process innovation is an expensive venture as a result of costs associated with improved service delivery methods, new technologies, business logistics as well as research and development. Lastly, the study concluded that organizational innovation is negatively and significantly associated with performance. This was attributed to the

fact that new business practices, changes in organizational structure and improved external relations bring about additional benefits that enhance firm performance.

5.4 Contribution of the Study

The study made a range of contributions with respect to theory development, policy implication and management practice and. The scholars in the area of strategic management should sufficiently reflecton the empirical evidence put forward by the current research to further their research interests on the account of knowledge gaps pointed out during the empirical investigation. This augments the extant theoretical arguments concerning the linkage between strategic innovation and performance especially with respect to financial and non-financial metrics applied the same time

The study findings had a significant policy implication with respect to the relationship between strategic innovation and performance among insurance firms in Kenya. At the government level a requirement for a policy that higher education institutions should have curriculums that address business management and administration innovations so that graduates can support it in all types of industries beyond insurance industry that was investigated in this research. The insurance industry should have a deliberate policy that addresses continuous innovation in product, processes, marketing and institutional organization in order to keep up with competition and changes in the business environment.. Concerning the state agencies such as Kenya Intellectual Property Institute (KIPI), Ministry of Industrialization and enterprise development (MOIED) and National Commission for Science Technology and Innovation (NACOSTI), the findings offer the knowledge that is essential for the formulation of effective and relevant programmes and policies in the area of enterprise growth and use of innovation as a tool to enhance development stimulate

innovativeness. The findings also give valuable insights to consultants to enable them provide advice on the potential effect of strategic innovation on performance.

The study makes significant contributions to the management practice by looking at the effect of strategic innovation on firm performance. Maanagers need to know the influence of each dimension of innovation (product, marketing, process and organizational) on performance and identify a dimension that the firm should put more emphasis on.

5.5 Recommendations

The current study focused on linear relationship between strategic innovations and organizational performance of insurance industry in Kenya . In reality business operations are impacted on by a range of factors and therefore other paths of relationships of the types of innovations investigated need to be investigated further in order to identify specific factors that influence performance in the industry,

The current study based on the cross-sectional dataset representing a snap shot at one point in time across a number of units. Future studies in the same area should consider replicating the study in oedr to find out whether the business environment supports similar findings.

This study focused only on few commercial banks located in Makueni County. Future studies should consider using dataset drawn from all the commercial banks in Kenya so as to help in obtaining more credible findings. Future studies should be replicated in other contexts such as manufacturing, insurance firms among others so as to ascertain whether analogous outcome will be obtained since these firms are institutionally and culturally distinct from one another

REFERENCES

Ahu, T. K. (2015). Effects of innovation strategy on firm performance: A study conducted on manufacturing firms in Turkey. *Procedia - Social and Behavioral Sciences 195* (2015) 1338 – 1347.

Ajai, S. G., Sanjaya, S. G. (2016). *Statistical Methods for Practice and Research. A Guide to Data Analysis using SPSS.* New Delhi: Sage Publishers.

Akgun, A., & Keskin, H. (2014). Organizational resilience capacity and firm product innovativeness and performance. *International Journal of Production Research, 52*(23), 6918–6937.

Al-Battaneh, M. (2018). Effect of innovation strategies on the functional performance of SMEs organizations. *International Journal of Business and management Invention,7(*5), 12–18.

Al-kalouti, J., Kumar, V., Kumar, N., Garza-Reyes, J. A., Upadhyay, A., & Zwiegelaar, J. B. (2020). Investigating innovation capability and organizational performance in service firms. *Wiley*, 103-113.

Almatrooshi, B., Kumar, S. & Farouk, S. (2016) "Determinants of Organizational Performance: A Proposed Framework", *International Journal of Productivity and Performance Management*, *65*(6). 844-859.

Al-Tit, A. A. (2017). Factors affecting the organizational performance of manufacturing firms. *International Journal of Engineering Business Management, 9*, 1-9.

Ameme, B., & Wireko, J. (2016).Impact of technological innovations on customers in the banking industry in developing countries. *The Business and Management Review, 7*(3), 388–397.

Ameme, B., &Wireko, J. (2016).Impact of technological innovations on customers in the banking industry in developing countries.*The Business and Management Review*, *7*(3), 388–397.

Aminu, I. M., & Shariff, M. N. M. (2015). Determinants of smes performance in Nigeria: A pilot study. Mediterranean Journal of Social Sciences, 6(1), 156.

Bryan, R. (2016). Resonant co-creation as an approach to strategic innovation. .*Journal of Organizational Change Management*. *29(*7). 1135-1152. DOI: 10.1108/JOCM-01-2015-0009

Byukusenge, E., & Munene, J. C. (2017). Knowledge management and business performance: Does innovation matter? *Cogent Business & Management*, 1-18.

Canh, N. T., Liem, N. T., Thu, P. A., & Khuong, N. V. (2019).The impact of innovation on the firm performance and corporate social responsibility of Vietnamese manufacturing firms. *Sustainability*, 1-14.

Chen, S. (2017). The Relationship between Innovation and Firm Performance: A Literature Review. *Advances in Computer Science Research*, 648- 652.

Christian, L., Mothe, C., Uyen, T., & Nguyen, T. (2015) "The Differentiated Impacts of Organizational Innovation Practices on Technological Innovation Persistence", *European Journal of Innovation Management*. *18*(1) 110-127. DOI: 10.1108/EJIM-09-2012-0085.

Domeher, D., Frimpong, J. M., & Appiah, T. (2015).Adoption of financial innovation in the Ghanaian banking industry. *African Review of Economics and Finance*, *6*(2), 88–114.

Exposito, A., & Sanchis-Llopis, A. J. (2019). The relationship between types of innovation and SMEs' performance: A multidimensional empirical assessment. *Eurasian Business Review*, *9*, 115–135.

Fassio, C. (2015). How similar is innovation in German, Italian and Spanish Medium-technology sectors? Implications for the sectoral systems of innovation and distance-to-the-frontier perspectives.*Industry and Innovation, 22*, 102-125. doi:10.1080/1 3662716.2015.1033160

Fixari, D., & Pallez, F. (2016).A public strategy under construction?Coordination and performance in territorial innovation systems.*International Review of Administrative Sciences, 82*, 418-434. doi:10.1177/0020852315597774.

Hajar, I. (2015). The effect of business strategy on innovation and firm performance in the small industrial sector. *The International Journal of Engineering and Science (IJES).4* (2) PP.01-09.

Hilal, M. (2015). Technological transition of banks for development: New information and communication technology and its impact on the banking sector in Lebanon. *International Journal of Economics and Finance, 7*(5).https://doi.org/10.5539/ijef.

Ho, K. L., Nguyen, C. N., Prasad Adhikari, R., Miles, M. P., & Bonney, L. (2018). Exploring market orientation, innovation, and financial performance in agricultural value chains in emerging economies.*Journal of Innovation & Knowledge (JIK), 3*(3), 154-163.

Hoang, C., & Ngog, B. (2019). The relationship between innovation capability and firms performance in electronic companies. *Journal of Asian Finance and Business,3(*2), 295–304.

Hojnik, J., & Ruzzier, M. (2016). The driving forces of process eco-innovation and its impact on performance: Insights from Slovenia. *Journal of Cleaner Production*, *13*, 812-825. doi:10.1016/j.jclepro.2016.06.002.

Hsiu, H. C. (2017). The antecedents of creative article diffusion on blogs: integrating innovation diffusion theory and social network theory. *Online Information Review,41*(1), pp.70-84. DOI: 10.1108/OIR-07-2015-0221

Hult, G., Hurley, R., & Knight, G. (2013). Innovativeness: Its antecedents and impact on business performance. *Journal of Industrial Marketing Management,*6(2), 52–68.

Kalay, F., & Lynn, G. (2015). The impact of strategic innovation management practices on firm innovation performance. *Research Journal of Business and Management*, *2*(3), 412–429.

Kalay, F., & Lynn, G. (2015). The impact of strategic innovation management practices on firm innovation performance. *Research Journal of Business and Management*, *2*(3), 412–429.

Kang, S., & Na, Y. K. (2020). Effects of strategy characteristics for sustainable competitive advantage in sharing economy businesses on creating shared value and performance. *Sustainability*, 1-21.

Karabulut, A. T. (2015). Effects of innovation types on performance of manufacturing firms in Turkey.*Procedia: Social and Behavioral Sciences*, *195*, 1355–1364.

Kariuki, J. N. (2014). The Effect of Strategic Innovation on Performance of Mobile Telecommunication Firms in Kenya. Master's Project University of Nairobi.

Kothari, C. (2018). *Research methodology: Methods and techniques* (4th ed.). New Delhi: New Age International (P) Limited.

Krasnicka, T., Głod, W., &Wronka-Pospiech, M.(2018). Management innovation, pro-innovation organisational culture and enterprise performance: testing the mediation effect. *Sustanability*, 737-769.

Kumar, J. N., Priyanka, S. (2015). *Fundamentals of Research Methodology*: *Problems and Prospects*, (1st Ed) New Delhi: Sage Publishers.

Kumar, V., &Sundarraj, R. P. (2016).Schumpeterian innovation patterns and firm-performance of global technology companies.*European Journal of Innovation Management*, *19*, 276-296.doi:10.1108/EJIM-05-2015-0034

Laban, O. M., & Deya, J. (2019). Strategic Innovations and the Performance ofInformation Communication Technology Firms in Nairobi Kenya.*International Journal of Academic Research in Progressive Education and Development*, *8*(2), 1-24.

Laban, R., & Knight, G. (2013). Innovativeness: Its antecedents and impact on business performance. *Journal of Industrial Marketing Management*,6(2), 52–68.

Lazonick, W. (2003).The theory of the market economy and the social foundations of innovative enterprise.*Economic and Industrial Democracy*, 24 (1): 9-44.

Lichtenthaler, U. (2016). Toward an innovation-based perspective on company performance. *Management Decision*, *54*, 66-87.

Lilly, L., & Juma, D. (2014). Influence of strategic innovation on performance of commercial banks in Kenya: The case of Kenya commercial bank in Nairobi County. *European Journal of Business Management*, *2*(1), 336–341.

Mai, A. N., Vu, H. V., Bui, B. X., & Tran, T. Q. (2019). The lasting effects of innovation on firm profitability: panel evidence from a transitional economy. *Economic Research, 32*(1), 3417–3436.

Mamun, A., Muhammad, N., & Ismai, M. (2017). Absorptive capacity, innovativeness and performance of micro-enterprises in Malaysia. *Journal of Economics and Management sciences,3*2), 51–65.

Marinidarraga, D. A., &Cuartas-Martin, J. C. (2019). Relationship between innovation and performance: impact of competitive intensity and organizational slack. *Journal of Business Management, 59*(2), 95-107.

Martin, G., V., & Steve, E. (2017).*Product, service, and business model innovation: A discussion* [Conference session]. 15th Global Conference on Sustainable Manufacturing, Haifa, Israel.

Mohajan, H. (2018). Two criteria for good measurement in research: Validity and reliability. *Annals of Spiru Haret University*, *17*(3), 58–82.

Muharam, H., Andria, F., & Tosida, E. (2020). Effect of process innovation and market innovation on financial performance with moderating role of disruptive technology. *Journal of Economics and Management sciences,11(*3), 24–29.

Muigai, R. G., & Gitau, S. N. (2018).The Effect of Innovation Strategies on Financial Performance of Banking Industry in Kenya. *European Journal of Economic and Financial Research, 3*(1), 168-186.

Obeng, Y. A., &Boachie, E. (2018).The impact of IT-technological innovation on the productivity of a bank's employee.*Cogent Business & Management, 5*, 1–19.

Oladipo, R., Ikamari, T., Kiplang'at, J., & Barasa, L. (2015). *General research methods*. Nairobi: Oxford University Press.

Organization for Economic Co-Operation and Development. (2005). *Oslo manual: Guidelines for collecting and interpreting innovation data* (3rd ed.).

Pasch, T. (2019). Strategy and innovation: the mediating role of management accountants and management accounting systems' use. *Journal of Management Control, 30*, 213–246.

Porta, D. D. (2014). *Methodological practices in social business research*. New York: Oxford press.

Rahi, S. (2017). Research design and methods: A systematic view of research paradigms, sampling issues and instrument development. *International Journal of Economics and Management sciences,6(*2), 1–5.

Rajapathirana, R. J., &Hui, Y. (2018).Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation and Knowledge, 3*, 44-55.

Rehman, S. U., Bhatti, A., &Chaudhry, N. I. (2019). Mediating effect of innovative culture and organizational learning between leadership styles at third-order and organizational performance in Malaysian SMEs. *Journal of Global Entrepreneurship Research, 9*, 1-24.

Roach, D. C., Ryman, J. A., &Makani, J. (2016). Effectuation, innovation and performance in SMEs: An empirical study. *European Journal of Innovation Management*, *19*, 214-238. doi:10.1108/EJIM-12-2014-0119

Rocha, F. (2015). Does governmental support to innovation have positive effect on R&D investments? Evidence from Brazil.*RevistaBrasileira de Inovação*, *14*, 37-60.

Rukundo, J. (2017). Firm performance and innovation o in the developing countries; Evidence from firm-level survey. *Journal of Economics and Management sciences,8(*2), 11–25.

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2016). *Research methods for business students* (7thed.). Harlow: Pearson Education Ltd.

Saunders, M., Lewis, P., & Thornhill, A., (2012).*Research Methods for Business Students* (6th ed.) Harlow: Pearson Education.

Schumpeter J. A. (1942). *Capitalism, socialism and democracy*. New York: Harper & Row

Schumpeter J.A. (1954). *History of Economic Analysis*, Edited from manuscript by E.B Schumpeter, London: Allen &Unwin.

Schumpeter, J. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.

Schumpeter, J. (1939). *Business cycles: A theoretical, Historical and Statistical Analysis of the capitalist process,* Vol.2, New York: McGraw-Hill.

Schumpeter, J. A. (1934). *The theory of economic development.*Cambridge, MA: Harvard University Press

Su, M. F., Cheng, K. C., Chung, S. H., & Chen, D. F. (2018). Innovation capability configuration and its influence on the relationship between perceived innovation requirement and organizational performance: Evidence from IT manufacturing companies. *Journal of Manufacturing Technology Management*, *29*(8), 1316-1331.

Suhag, A. K., Solangi, S. R., Larik, R. S., Lakho, M. K., & Tagar, A. H. (2017). The relationship of innovation with organizational performance. *International Journal of Research - Granthaalayah, 5*(2), 292-306.

Taalbi, J. (2017). What drives innovation? Evidence from economic history. *Research Policy, 46*, 1437-1453.

Tajeddini, K. (2016). Financial orientation, product innovation and firm performance: An empirical study in the Japanese SMEs. *International Journal of Innovation and Technology Management*, *13*(3), Article 1640005. doi:10.1142/S0219877016400058

Tavassoli, S., & Karlsson, C. (2016). Innovation strategies and firm performance: Simple or complex strategies? *Economics of Innovation and New Technology*, *25*, 631-650. doi:10.1080/10 438599.2015.1108109

Teece, D.J., Pisano, G., &Shuen, A., (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 537-56.

Tseng, S. M., & Lee, P. S. (2014).The effect of knowledge management capability and dynamic capability on organizational performance. *Journal of Enterprise Information Management*, *27*(2), 158-179.

Varis, M., & Littunen, H. (2020). Types of innovation, sources of information and performance in enterpreneural SMEs. *European Journal of Innovation Management,13(*2), 111–126.

Vicente, M., Abrantes, J. L., & Teixeira, M. S. (2015). Measuring innovation capability in exporting firms: *The Innovscale International Marketing Review*, *32*(1), 29–51.

Viet, T.T.H. (2016). A study on the factors that influence innovation capability of leather enterprises in Hanoi city, *Vietnam. Journal of Economic Management*, *74*(1), 52-63.

Wang, C. (2014). A longitudinal study of innovation competence and quality management on firm performance. *Innovation Competence and Quality Management on Firm Performance*, *16*, 392-403. doi:10.1080/14479338.2014.11081995

Wernefelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.

Yong, G., & Pearce, S. (2018). A Beginner's Guide to Factor Analysis: Focusing on Exploratory Factor Analysis. *Tutorials in Quantitative Methods for Psychology 9*(2), p. 79-94.

Yusheng, K., & Ibrahim, M. (2020). Innovative capabilities, innovation types and firm performance: Evidence from the banking sector of Ghana. *Journal of Economics and Management sciences,4(3),* 13–19.

Zikmund, W. G. (2013). *Business research methods*. (8th ed.) South-Western: Cengage.

APPENDICES

Appendix I: Introduction Letter

JOSEPH MWITA MASERO
Mobile number: 0704534953

Dear Participant,

RE: DATA COLLECTION

I am a student at St Paul's University pursuing a Master of Business Administration and currently writing my research project in partial for the award of the degree. In order for me to achieve this I need your assistance in data collection. Kindly provide responses for the questionnaire provided. The findings of the study can be provided on request. The questionnaire is structured in a way that the respondent or the firm on whose data is provided is not identified and therefore data will only be attributed to the industry and used for academic purpose only.

Yours Sincerely,

Mwita Masero

Appendix II: Questionnaire

Instructions

This questionnaire is designed to collect data that will help in better understanding the Influence of strategic innovation on performance of insurance companies in Kenya. The data provided by this questionnaire will be treated in strict confidence.

Section A: Demographic Information

1. 1How long has your firm been in operation in Kenya?
   1 – 5 years ( )6- 10 years ( )
   11 – 15 years ( )
   16 - 20 years ( )
   Over 21 years ( )

2. Kindly indicate below how you would rate your firm in terms of customer base.
   Large ( )
   Medium ( )
   Small ( )

3. Please indicate how you would rate your firm in terms of asset base
   Large ( )
   Medium ( )
   Small ( )

4. How would you categorize your firm within the insurance industry in Kenya?

(i) Wholly Publicly owned ( )
(ii) Publicly owned with Government shareholding ( )
(iii) Privately owned ( )
(iv) Privately owned with foreign shareholding ( )

Section B: Product Innovation

What is your level of agreement on the following statements about the influence of product innovation on performance of insurance companies in Kenya? 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree.

	Statements	**1**	**2**	**3**	**4**	**5**
1	Our firm continuously launch new products/services					
2	There is remarkable improvement in organizations technical specification					
3	Our firm is continuously engaged in improvement in quality of existing products/services					
4	Quality management systems such as ISO 9001 has been adopted in our organization					
5	Our firm has introduced additional features to the existing services/products					
6	Our products have superior unique attributes compared to those of the rivals in the market					
7	Our firm has patents for the product/service that they pioneered in introducing new products					

Section C: Marketing Innovation

What is your level of agreement on the following statements about the influence of marketing innovation on performance of insurance e companies in Kenya? 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree.

	Statements	**1**	**2**	**3**	**4**	**5**
7	New media/techniques for product promotion (i.e. the first time use of a new advertising media, a new brand image, introduction of loyalty cards, etc)					
8	New methods for product placement or sales channels (i.e. first time use of franchising or distribution licenses, direct selling, exclusive retailing, the concept for product presentation, etc					
9	Our firm has introduced new strategies to enter and create new markets					
10	The bank is continuously engaged in new pricing strategies so as to remain competitive in the market					
11	Our organization initiate services/products which other firms respond to					
12	It is possible to see attributes, prices and usage areas of usage in our organization website					
13	The new marketing methods has made the firm to be competitive					

Section D: Process Innovation

What is your level of agreement on the following statements about the influence of process innovation on performance of insurance companies in Kenya? 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree.

	Statements	**1**	**2**	**3**	**4**	**5**
14	There are new/significantly improved supporting activities for your processes, such as maintenance systems or operations for purchasing, accounting, or computing					
15	Significant changes to the aesthetic design or packaging of a services/products					
16	Ease of making insurance payments via the mobile phone					
17	There is innovative underwriting/claim processes to ensure efficiency					
18	Our firm is implementing new/improved product and service delivery method					
19	The bank has embraced new techniques of service delivery					
20	Our firm is progressively embracing new technologies in order to improve on service delivery					
21	Our firm has automated most of its processes					
22	Compared to our rivals, our firm is the first to come up with new methods of doing business.					
23	Our firm has elaborate logistic system that ensure smooth operation of the business					
24	Our firm outsources essential services which leads into overall cost reduction					
25	Our firm has heavily invested in research and development (R&D)					

Section E: Organizational Innovation

What is your level of agreement on the following statements about the influence of organizations innovation on performance of insurance companies in Kenya? 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree.

	Statements	**1**	**2**	**3**	**4**	**5**
26	Staff from all levels of the organization are involved in the organizational planning stage					
27	The organization reviews its structure in line with the new					

	corporate strategy					
28	The employees' roles in the organization are well defined					
29	The employees are informed about the improved reporting structure in the organization					
30	The employees are informed about the new organization changes with respect to layout					
31	Employees are reminded of the new organization strategies from time to time					
32	The is continuous reorganization in bank's external relations					
33	Our organization is continuously reviewing its routines, procedures and mechanisms					
34	Our firm often reorganize the workplace so as to better satisfy the needs of diverse stakeholders					
35	There are many initiatives that have been undertaken to change our business model					

Section F: Firm Performance

What is your level of agreement on the following statements about the influence of product innovation on performance of insurance companies in Kenya? 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree.

	Statements	1	2	3	4	5
	(i) Customer Satisfaction					
36	There is increased number of new customers					
37	The sales to the new clients have tremendously increased					
38	There is minimal customer complaints					
39	Our firm retains most of its customers on average					
	(ii) Learning and Growth					
40	Employee are satisfied with the organization					
41	There is low employee turnover rate					
42	Employees undergo trainings quite often					
43	The staff report to work on time					
44	There is minimal employee absenteeism					
45	Our firm has good working environment that support all operations					
46	The firms employee productivity/development has improved					

THANK YOU

Appendix III: Data Collection Sheet

Variable	2017	2018	2019	2020	2021
Net Profit					
Total Assets					

Appendix IV: List of Insurance Companies in Kenya

No	Company Name
1	AAR Insurance Company Ltd
2	ABSA insurance ltd
3	Africa Merchant Assurance Ltd
4	AIG Kenya Insurance Company Ltd
5	Allianz insurance company Ltd
6	APA Insurance Company Ltd
7	Britam General Insurance
8	Jubilee Insurance Ltd
9	Takaful Insurance company Ltd
10	Capex Life Assurance Company Ltd
11	CIC Group Insurance Company Ltd
12	Corporate Insurance Company Ltd
13	Directline Assurance Company Ltd
14	Sanlam Insurance company Ltd
15	GA Insurance Company Ltd
16	Saham Insurance Company Ltd
17	Geminia Insurance Company Ltd
18	Kenya Orient Insurance ltd
19	Heritage Insurance Company Ltd
20	Kenya Alliance insurance company Ltd
21	KUSCCO Mutual Assurance Ltd
22	KENINDIA Insurance Company Ltd
23	Liberty insurance company Ltd
24	Fidelity insurance Ltd
25	INVESCO Assurance Company Ltd
26	Madison insurance company Ltd
27	Mayfair insurance company Ltd
28	Metropolitan insurance company Ltd
29	The Monarch insurance company Ltd
30	MUA insurance company Ltd
31	Occidental Insurance company Ltd
32	Pacis Insurance company Ltd
33	First Assurance Company Ltd
34	Pioneer Insurance company Ltd
35	Prudential Insurance company Ltd
36	Resolution Insurance company Ltd
37	ICEA Lion Group
38	Tausi Assurance Company Ltd
39	Old Mutual Insurance company Ltd
40	Xplico Insurance company Ltd
41	Trident Insurance company Ltd

Appendix V: Budget for the Study

Code	Items	Quantity	Cost	Total
1	Pencils	4	60	120
2	Erasers	2	20	40
3	Ball pens	3	30	90
4	Printing paper	3 Rims	800	2,400
5	Type and print proposal	6	1000	6,000
6	Transport		20,000	20,000
7	Typesetting	6	1500	9,000
8	Typesetting, Printing, photocopying of questionnaires	150	50	7,500
9	Data collection	150	100	15,000
10	Data analysis	1	5,000	10,000
11	Review and Publishing	1	10,000	10,000
		Total		**75,150**

Appendix VI: Work Plan

Work Plan for A Research Project on influence of srategic innovation on performance of insurance companies in Kenya												
Activities	**Timeline (3 Months)**											
Topic Identification and objectives												
Close checking whether both independent and dependent variables will fill the research gap												
Preparation of tools & pre-testing												
Acquire relevant permissions												
Visiting insurance companies												
Collect the needed information for compiling and analysis												
Data collection												
Proof read the proposal before submission												

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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Date of Issue: **06/June/2022**

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This is to Certify that Mr.. JOSEPH MWITA MASERO of St Paul's Cathedral, has been licensed to conduct research in Machakos on the topic: INFLUENCE OF STRATEGIC INNOVATION ON INSURANCE COMPANIES IN KENYA for the period ending : 06/June/2023.

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BOARD OF POSTGRADUATE STUDIES

11th May, 2022

National Commission for Science and Technology,
P.O. BOX 30623-00100,
Nairobi.

Dear Sir/Madam,

RE: RECOMMENDATION FOR JOSEPH MWITA MASERO - MBAMKS894419 TO CONDUCT RESEARCH

This letter confirms the above named person is a student of the Master in Business Administration program at St. Paul's University.

The second year consists of a major research work leading to a dissertation. The student's selected topic is *"Influence of Strategic Innovation on Performance of Insurance Companies in Kenya."*

Kindly grant this student the required permit.

Yours Faithfully,

DIRECTOR POSTGRADUATE STUDIES
ST. PAUL'S UNIVERSITY
11 MAY 2022
TEL: 020-2020505/2020510
P.O. PRIVATE BAG - 00217, LIMURU

Dr. Julius Kahuthia
Director, Board of Postgraduate Studies