

**INFLUENCE OF STRATEGIC INNOVATIONS ON PERFORMANCE OF NATIONAL
TRANSPORT AND SAFETY AUTHORITY, KENYA**

BY

IRENE WANJIKU NJUGUNA

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF
REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS
ADMINISTRATION, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES,
UNIVERSITY OF NAIROBI**

2023

DECLARATION

This research project is my original work and that it has not been presented in any other University or Institution for academic credit.

irene njuguna

22/11/23

Signature

Date

Irene Wanjiku Njuguna

D61/39114/2021

SUPERVISOR

This research project has been submitted for examination with my approval as university supervisor.



Signature

28.11.2023

Date

DR. Moses Machuki Maturi Otieno (Ph.D.)

Department of Business Administration

Faculty of Business and Management Sciences

The University of Nairobi

DEDICATION

I would like to dedicate this project to my husband and children for the support they offered me during my studies and encouragement fueled every night session.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank God for the gift of life, good healthy and strength to complete my studies. I sincerely thank everyone involved in making this endeavor a success.

I would like to acknowledge my supervisor Dr. Moses Maturi Machuki for his close guidance during the execution of this project. My parents, brothers and sister who provided unwavering support, prayers and motivation during my studies. My brother Davis Mwangi thank you for the encouragement and prayers during my studies. I would like to thank my interviewees for taking time to respond to the oral interview and making this project a success, I appreciate the dedication of my teammates and colleagues, whose collaborative efforts brought to fruition of this project. Last but not least, I want to thank the University of Nairobi for offering me an opportunity to pursue this course.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	viii
ABSTRACT.....	ix
CHAPTER ONE: INTRODUCTION.....	1
1.1Background.....	1
1.1.1 Strategic Innovations	2
1.1.2 Firm Performance	3
1.1.3 Transport sector in Kenya.....	3
1.1.4 National Transport and Safety Authority (NTSA)	4
1.2 Research Problem.....	4
1.3 Research objective.....	5
1.4 Value of the study	5
CHAPTER TWO: LITERATURE REVIEW.....	6
2.1 Introduction	6
2.2 Theoretical Foundation	6
2.2.1 Organizational Innovation Theory.....	6
2.2.2 Diffusion of Innovation Theory.....	6
2.3 Strategic Innovation and Organization Performance	7
2.4 Empirical review and Research Gaps.....	8
CHAPTER THREE: RESEARCH METHODOLOGY	10
3.1 Introduction	10
3.2 Research design.....	10

3.3 Data collection.....	12
3.4Data analysis	10
CHAPTER FOUR: RESULTS/FINDINGS AND DISCUSSION	12
4.1 Introduction	12
4.2 Importance of Strategic Innovations on Performance.....	12
4.3 Nature of the Strategic Innovations.....	13
4.4 Types of Strategic Innovations.....	13
4.5 Influence of Strategic Innovations on Performance	14
4.6 Performance of NTSA.....	15
4.7 Strategic Innovations Policy.....	15
4.8 Discussion of Research Findings	16
4.8.1 Importance of Strategic Innovations on Performance	16
4.8.2 Nature of the Strategic Innovations	17
4.8.3 Types of Strategic Innovations	18
4.8.4 Influence of Strategic Innovations on Performance	19
4.8.5 Performance of NTSA	20
4.8.6 Strategic Innovations Policy	21
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	22
5.1 Introduction	22
5.2 Summary of Findings	22
5.3 Conclusion.....	24
5.4 Implications of the Study	26
5.5 Limitations of the Study	26
5.6 Suggestions for Further Research	26
REFERENCES.....	28

APPENDICES	38
APPENDIX I: Interview schedule	38

LIST OF TABLES

Table 2.1: Knowledge gap.....	13
--------------------------------------	----

ABSTRACT

Strategic innovations adoption can enhance the performance of an organization. Strategic innovations that are effective are associated with improvement in the performance of an organization. At NTSA, little was known about the influence of strategic innovations on performance of NTSA which this study sought to determine. The study sought to address this research question; how does strategic innovations influence performance of National Transport and Safety Authority? The goal was to ascertain how strategic innovations influence performance of National Transport and Safety Authority, Kenya. The research was directed by organizational innovation theory and diffusion of innovation theory. The study adopted case study research design and the target population was top level management staff at NTSA, Nairobi office. The primary data for the study were obtained through interview using interview. In this study, qualitative data was analyzed using content analysis where findings were presented using common thematic narratives. The study established that performance improves when an organization is able to offer new services that meet customer needs which strategic innovations has helped NTSA to achieve. In order to provide real-time information to clients that is an indicator of good performance, strategic innovations should be adopted. The adoption of strategic innovations is known to increase speed at which work is done and it also helps to minimize errors and enhance service quality. Strategic innovations are incremental where performances are constantly changing due to process or technology have been adopted that lead to improvement in the performance of services provided. Incremental innovation with internal applied research and development has been adopted, proven innovation and incremental innovators are used. Strategic innovations help the organization create its direction in-terms of deciding on the course of the organization's effort. Strategic innovations help NTSA coordinate well its operations and hence it contributes organizational performance improvement. The established that at NTSA, the organization tries to minimize death toll through road crashes. However, death toll is still a major concern to the government as well as other stakeholders. As per strategic plan 2022/2023, NTSA strategic innovations policy is prioritization of Road safety Audits, staffs should be trained on road safety audits and budget provision for road safety activities should be sustained and dedicated. The study concluded that performance improves when an organization is able to offer new services that meet customer needs. Strategic innovations adopted are incremental in nature and it comprises of constant technological or process changes. Strategic innovations help NTSA apply more productive processes, and seek positive reputation in customer's perception about the services provided by the organization. The study has contributed to enhancement of the Organizational Innovation Theory as appropriate when studies on strategic innovations are done. Paper recommends further research be done at NTSA offices at county levels and not only at the headquarters. This will help to understand the performance of respective NTSA offices in the 47 counties in Kenya in regards to the impact caused by the strategic innovations adopted.

CHAPTER ONE: INTRODUCTION

1.1 Background

Innovations create a competitive advantage that enables organizations to record good performance. Although adopting strategic innovations is a risky choice, organizations that are successful are those that take risks which makes them achieve high performance (Karabulut, 2021). Strategic innovation is an important component that enhances long term success for an organization. Organizations that are innovative become more successful than those that are not (Ogbonna, & Harris, 2020). How effective the strategic innovations adopted is influenced by the strategic innovation process adopted. According to a report of the World Bank (2018), the factors that boosts the strategic innovations adopted in the transport sector include strategic innovation process. In the United Kingdom, Damanpour, Walker, and Avellaneda (2019) posit that organizations have adopted strategic innovations in the transport sector so as to achieve better performance. The strategic innovations adopted has had a significant impact on how organizations perform.

Among the theories that informed the research are Organizational innovation theory which was developed by Sullivan (1967). It was adopted in this study because it talks about strategic innovations, and how its implementation influences the effectiveness of an organization (Kalay, & Gary, 2021). The current study was on strategic innovations and thus this theory was essential to understanding strategic innovations and its effects on firm performance. Diffusion of innovation theory was also adopted and it was formulated by Rogers (1962). The theory states that an idea or innovations spread through diffusion to all stakeholders in the social system. The theory was adopted in this study because it talks about implementation and how an idea about strategic innovations spread this thus has an impact on organizational performance.

In Nigeria, Young, Ediri, and Daniel (2017) posit that strategic innovations have been adopted by almost all firms due to the changes that take place in the business environment. In Tanzania, strategic innovations are adopted by firms to improve performance. The strategic innovations adopted varies across firms and their impact of organizational performance differs as well (Pacho, 2020). In Kenya, Strategic innovations have been determined to be essential for organizational performance (Kiptoo, & Koech, 2019). The NTSA has adopted many strategic innovations with the intention to enhance its performance. How effective NTSA becomes, is influenced by the

strategic innovations adopted. It is therefore important for the strategic innovations adopted to enhance performance of National Transport and Safety Authority.

1.1.1 Strategic Innovations

Strategic innovation is the application of novel concepts, procedures, goods and/or services (Bitar, 2003). An organization that is successful knows the importance of strategic innovation in an organization (Lilly, & Juma, 2018). Strategic innovation is very important as it has high chances of enhancement of an organizations long-term success (Karakas, Öz, & Yıldız, 2018). Strategic innovation is systematic approach that is holistic and its focus is on generation of beyond incremental breakthrough or discontinuous innovations (Namusonge, Muturi, & Olaniran, 2021). Futterer, Schmidt and Heidenreich (2018) posit that firms that are innovative record better performance. Such organizations invest or adopt strategies that are creative as well as novel who intention is to enhance their working processes as well as provide products and/or services that are unique, appealing to customers and enhances sales revenue. According to Spanos (2022) organizations that understand the importance of strategic innovation, are always open to new ideas which helps them to be creative on how operational activities are executed at the organization which helps to improve the overall performance of the organization.

Strategic innovation will be successful depending on how efficient the strategic innovation process adopted is (McDermott, & Prajogo, 2022). The strategic innovations adopted helps an organization to identify and exploit new opportunities in the market. It also helps an organization to develop new approaches to an idea implementation (Nybakk, & Jenssen, 2022). Strategic innovations facilitate a proactive approach to innovation that fronts identification and exploitation of emerging trends as well as technologies which helps to enhance the performance of an organization (Kombo, K'Obonyo, & Ogutu, 2017). Strategic innovations will be effective when there is a deep understanding of the market, competitive landscape, as well as after a deep understanding of the organization's strengths as well as weaknesses (Micheline, & Reinhilde, 2018). The strategic innovations that are effective are the ones that involve development of an organizations' long-term vision as well as alignment of innovation efforts with that vision.

Strategic innovations implementation require that a culture of innovation is adopted where workforce is encouraged to generate new ideas, experiment with new approaches, as well as take on well calculated risks (Ogbonna, & Harris, 2020). Strategic innovations that are effective are

those which its adoption generates better organizational performance (Avermaete, Viaene, & Crawford, 2020). Strategic Innovations adopted helps firms gain a strategic orientation that helps the organizations to overcome problems encountered when organizations strive to achieve better organizational performance (Jin, Hewitt-Dundas, & Thompson, 2021).

1.1.2 Firm Performance

Firm performance refers to assessment of a firms' performance against its objectives as well as goals (Lusweti, 2019). Firm performance refers to a comparison between real results or output vis-a-viz intended output (Rosli, & Sidek, 2021). It helps to measure whether an organization achieves its objectives, which can be in terms of achievement of organization market orientation as well as financial goals (Ouakouak, & Ouedraogo, 2021). Measurement of firm performance is important as it helps an organization to assess whether it is achieving its objectives or not (Frame, & White, 2020).

Measurement of firm performance aids in decision making in an organization set (Karanja, 2019). When an organization measures its performance, one can be able to tell whether an organization is making progress or not (Song, Im, & Song, 2021). Firm performance can be measured using various indicators; financial performance indicators might include; profit growth rate, return on sales, and return on assets among others (Rudd, Greenley, & Lings, 2018). Firm performance can also be measured using market performance among others. When firms adopt financial performance indicators it helps them determine how profitable firms are (Owolabi, & Makinde, 2022). NTSA just like any other organization has its objectives that it intends to achieve. The current study sought to determine how adoption of strategic innovation process has affected performance of NTSA.

1.1.3 Transport sector in Kenya

The transport sector in Kenya entails a wide range of service providers and it comprises of various modes of transport, that is, air, road, rail and sea. In Kenya, it is the Ministry of Transport that is in charge of the overall policy of the transport sector (Kiiru, 2020). The ministry of roads and public works is the one in charge of formulation of the roads' sub-sector policy. In a bid to harmonize the operations of the key road transport departments, the government of Kenya founded the National Transport and Safety Authority (NTSA) which is semi-autonomous (GoK, 2023). More information about NTSA is provided below.

1.1.4 National Transport and Safety Authority (NTSA)

NTSA was established by a parliamentary legislature to set regulate and govern the transport sector and enhance safety to road users (NTSA, 2012). It was formed in 2012 through National Transport and Safety Act 2012 (NTSA Act, 2012). NTSA advises and makes recommendations on road transport and safety matters. It implements policies that relate to road transport as well as safety; plan, manage as well as it oversee road transportation industry sector as per the Act provision. NTSA provides safe, reliable as well as efficient road transport service among others. NTSA registers and licenses motor vehicles in Kenya, it certifies and inspects automobiles and controls public transport vehicles; advises the Government of Kenya on national policy with regard to road transport sector; develops as well as implements road safety strategies (NTSA, 2019). NTSA facilitates the education of members of the public on road safety, as well as it conducts research as well as it audits on road safety amongst others.

1.2 Research Problem

Strategic innovation involves the application of creativity as well as innovation to strategic management which enables strategic differentiation as well as competitive advantage among others (Micheline, & Reinhilde, 2018). To achieve better performance, strategic innovations should be adopted (Aziz, & Samad, 2022). Strategic innovations that are effective are associated with improvement in the performance of an organization (Lusweti, 2019). National Transport and Safety Authority (NTSA) implements policies on road transport as well as safety. It plans, manages as well as regulates the road transport sector. To achieve its core mandate NTSA adopts strategic innovation for it to offer quality services (NTSA, 2019). For NTSA to provide safe, reliable as well as efficient road transport service, conduct motor vehicle inspection as well as certification, strategic innovations are adopted. NTSA develops and implements road safety strategies and the strategic innovations adopted should enhance performance. Little was known about the effect of strategic innovations on performance of NTSA which this study sought to determine.

Kalay and Gary (2021) examined the impact of strategic innovations on performance of firms operating in the manufacturing sector in Turkey. The study established those strategic innovations enhances performance of firms operating in the manufacturing sector. The study had not provided justification for the use of primary data as the only source of data. Kiptoo, and Koech (2019) researched on strategic innovations and organizational performance of manufacturing firms in

Kwale County. Findings revealed that the former enhanced the latter. The study had not provided justification for the research design adopted and therefore a methodological gap existed. The study sought to address this research question; how does strategic innovations influence performance of National Transport and Safety Authority?

1.3 Research objective

To determine how strategic innovations influence performance of National Transport and Safety Authority, Kenya.

1.4 Value of the study

The government through the ministry of transport will benefit as the study will be able to provide more information on the strategic innovations and performance of NTSA. This information might influence policy formulation on strategic innovations that will help to better performance at the entity.

The study will benefit the management of the entity as they will be able to get more insights on the influence of strategic innovations on performance of NTSA. The information will help the management of NTSA to know which strategic innovations to adopt if the organization has to record better performance. The study will also help the management of NTSA to impact caused by the strategic innovations adopted on its performance. This is important in development of both short-term and long-term plans that might help NTSA execute its core mandate in an effective manner.

The scholars/ researchers will also benefit from this study as suggestions for further studies will be provided in the study will contribute to the corpus of knowledge already available on influence of strategic innovations and performance. The study will also contribute to empirical review and theoretical review on strategic innovations and performance.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The literature review discusses recent research on the study topic, which was to ascertain the influence of strategic innovations and performance in firms. The also discusses the theoretical framework, knowledge gaps and theoretical review.

2.2 Theoretical Foundation

There are various theoretical studies that have been conducted on the strategy innovations and performance to assist comprehend the study variables. The following theories guided the study.

2.2.1 Organizational Innovation Theory

It was developed by Sullivan (1967) and it states that how strategic innovations informs the strategies an entity can adopt that will ensure strategic innovations are implemented in a successful manner (Kalay, & Gary, 2021). It will also make organizations adapt alternative strategies known as adaptation strategies which helps to ensure organizations overcome challenges associated with innovation implementation (Laban, & Deya, 2019).

Innovation refers to creation as well as adoption of new ways of managing as well as organizing (Bitar, 2021). This states that management systems as well as procedures helps an organization create efficiency in implementation of strategic innovations which not only enhances successful strategic innovations but it helps to enhance better performance (Bergfors, & Larsson, 2016). It helps a business concern achieve efficiency in implementation of strategic innovations adopted by an organization (Damanpour et al., 2019). The theory focuses on innovation as well as implementation of strategic innovations and therefore was suitable to inform strategic innovations and how it influences the performance of an organization.

2.2.2 Diffusion of Innovation Theory

It was founded by Rogers (1962) and it explains how an idea spreads over time through a specific population. Diffusion refers to the process by which communication about an innovation is done over time among stakeholders in a social system (Sanchez, Ferras, & Ribera, 2021). For strategy innovations to be implemented, an idea must be perceived first (Simiyu, 2020). As per this theory, inventiveness, time, social structure, and communication channels, are the primary factors in the of the diffusion of invention (Terziovski, 2018).

The DOI theory is important for business concerns to know strategic innovations and how the idea about strategic innovations spread in an organization (Walker, 2021). Diffusion helps an organization to fully perceive and implement innovations. Diffusion is ways in which information about innovation is conveyed in a business concern (Youtie, & Roper, 2016). The theory was adopted in this study because it talks about the importance of diffusion in enhancing the success of the strategic innovations implemented.

2.3 Strategic Innovation and Organization Performance

Kalay, and Gary (2021) researched on strategic innovations and firm innovation performance of manufacturing firms in Turkey's TRB2 zone. The study adopted descriptive survey research design and targeted 348 respondents but sampled 132 managers randomly. The study made use of many data which was gathered through questionnaires and analyzed descriptively and inferentially. Findings revealed that strategic innovations enhance innovation performance of manufacturing firms. A contextual gap existed as the study had been conducted in a different sector.

Kariuki (2021) studied strategic innovation and performance of mobile telecommunication firms in Kenya. The study used descriptive research design and targeted 4 mobile telecommunication firms. Data collected using questionnaires was analyzed descriptively and inferentially. Findings revealed that strategic innovation enhances performance of mobile telecommunication firms. A methodological gap existed as the study had not provided justification of the research design adopted.

Laban, and Deya (2019) researched on strategic innovations and the performance of ICT Firms in Nairobi. The study used descriptive survey research design and targeted 14 ICT firms while 98 respondents were sampled purposively. Data for the study was analyzed descriptively and inferentially. Strategic innovation was among the variables considered in the study. Findings on the construct revealed that strategic innovation has a significant impact on performance. The data analysis method adopted was not justified and therefore a methodological gap existed which the current study sought to address.

Shompa (2018) studied strategic innovations and organizational performance of Public Corporations in Kenya. The study was conducted at National Hospital Insurance Fund (NHIF). The target population was 76 workers drawn from 3 departments of NHIF. Data gathered was analyzed descriptively and inferentially. Strategic innovation was among the variables adopted in

the study and the findings on this construct revealed that the former enhanced the latter. The use of primary data alone was not justified.

Shisia, Sang, Matoke, and Omwario (2020) researched on strategic innovation and performance of public universities in Kenya. The study used explanatory research design and targeted 287 respondents while 103 respondents were sampled randomly. Data gathered was analyzed descriptively and inferentially. Findings revealed that the former enhanced the latter. The study had not provided justification for the sampling technic adopted and hence a gap in knowledge existed.

2.4 Empirical review and Research Gaps

The study has reviewed literature on strategic innovation process and firm performance. The studies presented are drawn worldwide. The literature reviewed revealed that knowledge gaps existed which include; contextual gaps, as well as methodological gaps among others as summarized in Table 2.1.

Table 2.1: Knowledge gap

Author	Title	Findings	Gaps
Kalay, and Gary (2021)	Impact of strategic innovations on firm innovation performance of manufacturing firms in Turkey's TRB2 zone.	Strategic innovations enhance innovation performance of manufacturing firms.	A contextual gap existed as the study had been conducted in a different sector.
Kariuki (2021)	Effect of strategic innovations on performance of mobile telecommunication firms in Kenya.	Findings revealed that strategic innovations enhance performance of mobile telecommunication firms.	A methodological gap existed as the study had not provided justification of the research design adopted.
Laban, and Deya (2019)	Effects of strategic innovations on the	Findings on the construct revealed	The data analysis method adopted was

	performance of Information Communication Technology Firms in Nairobi, Kenya.	that strategic innovations have a significant impact on performance of Information Communication Technology Firms in Nairobi, Kenya.	not justified and therefore a methodological gap exists which the current study sought to address.
Shompa (2018)	Effects of strategic innovations on organizational performance of Public Corporations in Kenya.	The findings on this construct revealed that strategic innovations has a substantial impact on performance of Public Corporations in Kenya.	The use of primary data alone was not justified and hence a methodological gap existed.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter comprises the study population, research design as well as data gathering and methodology adopted. The study aimed to examine how strategic innovations influence on performance of National Transport and safety Authority. The analysis involved analyzing relevant data related to the topic and helped guide on the study objectives.

3.2 Research design

A case study design was used in the research which is a qualitative approach employed to acquire comprehensive understanding of a complex scenario or specific phenomenon allowed for an in-depth analysis of the influence of strategic innovation on the performance of NTSA. Case study is a research design that allows the researcher to examine deeply into certain topics, events, and activities among others (Mishra, & Alok, 2022). The model allowed the researcher to explore the topic in a detailed manner.

3.3 Data collection

The researcher collected data primarily through qualitative method, specifically the study adopted face to face data collection. The face to face interview data collection method offered several distinct values such as richness of data since it provided an opportunity for in-depth and detailed responses from participants.

The information that was collected was on strategic innovations and performance. Using interview schedule primary was gathered for analysis. In this study, the target population was top level management staffs at NTSA, Nairobi office (HR records, 2023) to provide information on specific data concerning their respective departments. The top-level management staffs were drawn from the following functional areas; Motor vehicle registration, licensing department, legal department, procurement, finance, human resource, communications, motor vehicle inspection, strategy, ICT, compliance and road safety.

3.4 Data analysis

Data analysis refers summarization of collected data and it involves data interpretation using analytical as well as logical reasoning so as to determine patterns, relationships and/or trends (Pandey, & Pandey, 2021). In this study qualitative approach was used aligned with research objectives. Specifically, content analysis was used to provide a systematic and structured approach

to analyzing qualitative data or textual data. The content analysis ensured consistency and reliability in the analysis process. In this study, qualitative data was analyzed using content analysis where findings were presented using common thematic narratives.

CHAPTER FOUR: RESULTS/FINDINGS AND DISCUSSION

4.1 Introduction

This chapter covers results and discussion on strategic innovations and performance of NTSA. The underlying goal was to establish how strategic innovations influence performance of National Transport and Safety Authority, Kenya. The sections presented in this chapter comprises of presentation of findings based on themes established in the study. The themes are as follows; the importance of strategic innovations on performance, nature of the strategic innovations, types of strategic innovations adopted at NTSA, influence of strategic innovations on performance of NTSA, performance of NTSA, and policy on strategic innovations implemented.

4.2 Importance of Strategic Innovations on Performance

Using interview schedule, primary data was gathered, and content analysis used for analysis. The study first of all sought to determine whether NTSA require strategic innovations to enhance its performance. A total of twelve (12) top-level management staffs were drawn from the following functional areas; Motor vehicle registration, licensing department, legal department, procurement, finance, human resource, communications, motor vehicle inspection, strategy, ICT, compliance and road safety. The interviewees were asked to state whether strategic innovations are important in enhancement of performance of NTSA. All the respondents opined that performance improves when an organization is able to understand the market place and be able to offer new services that meet customer needs which strategic innovations has helped NTSA to achieve. Interviewees also revealed that for the performance of NTSA to improve, technology advances are required which strategic innovations adopted has helped the organization achieve. This is because the adoption of strategic innovations helps organizations utilize innovative technology concepts. In order to provide real-time information to clients that is an indicator of good performance, strategic innovations should be adopted. Interviewees stated that the adoption of free App on the Google play store is an indicator that adoption of strategic innovation has led to fast, simple and easy way for respondents to navigate and get timely information and hence NTSA achieve its core mandate as a result of that. They revealed that NTSA had launched mobile APP to boost service delivery. It is a self-service mobile application that offers a variety of services to its clients. The launch of

this mobile APP has helped clients to access services such as complaint management, TMS enquiries, and access information online which helps NTSA execute its core mandate”

Interviewees further stated that the adoption of strategic innovations is known to increase speed at which work is done and it also helps to minimize errors as well as service quality. For NTSA services to be offered online, the adoption of strategic innovations is required. Strategic innovations contribute to improvement in organizational productivity. It helps organizations exploit new opportunities as well as attain competitive advantage. At NTSA, the respondents interviewed revealed that strategic innovations have helped the organization exploit new opportunities which helps to enhance organizational performance. The interviewees revealed that strategic innovations inform tools, processes and techniques which its adoption enhance idea implementation. They also stated that strategic innovations help an organization forecast ways the success of an idea can be achieved. Lastly, the interviewees opined that the performance of NTSA improves when strategic innovations are adopted that helps the organization build loops to track progress and allocate resources in an optimal manner.

4.3 Nature of the Strategic Innovations

The study sought to determine the strategic innovations nature adopted at NTSA. NTSA has strong research orientation and first-mover advantage. Interviewees revealed that at NTSA, knowledge is accessed from a broad range of sources. They further stated that strategic innovations are radical that involves breakthroughs that change the nature of services. Interviewees stated that strategic innovations are incremental where constant technological or process changes have been adopted that lead to improvement in the performance of services provided. At NTSA, the interviewees revealed that incremental innovation with in-house applied research and development has been adopted, proven innovation and incremental innovators are used.

4.4 Types of Strategic Innovations

The respondents were questioned on the types of strategic innovations adopted at NTSA. Interviewees opined that service innovation has been adopted and it revolves around product or service process that has significantly improved in either new or existing markets. It involves new client interaction and a system that contributes to improvement in the transmission process and also a new solution in the client interface. Customers are services in a faster manner at the same

time in a manner that generates more value to customers. Interviewees also stated that process innovation has been adopted which involves the use of a combination of skills, technology, and service

Structure with which services are provided. New technology is used while improved process methods have been adopted that leads to time being saved and customers being served better. New technologies, devices or software, as well as structural changes adoption has helped to enhance effectiveness of processes at the organization. They also stated that technological innovations have been adopted where new or improved technologies are used which involves technological changes in regards to processes and services. Interviewees also opined that business model innovation has been adopted which provides a fundamental change in the way the organization provides value to its clientele. Interviewees opined that new marketing innovations have been adopted which have helped to improve customer relationships as well as engagement. Due to evolving technology and changes in customer preferences, the organization has adopted new marketing innovations with the intention to enhance new and existing services. Social innovation has been adopted through improvement in working conditions at NTSA.

4.5 Influence of Strategic Innovations on Performance

The respondents were asked to state the influence of strategic innovations on performance. Interviewees opined that strategic innovations are important in organizational success as they help the organization create its direction in-terms of deciding on the course of the organization's effort. Strategic innovations have also helped the organization coordinate well its operations and it has also helped the organization provide people with an easy way to understand the organization as well as provide consistency and reduce ambiguity all which enhances organizational performance. Interviewees revealed that strategic innovations help the organization to determine its planned path of action which act as a road map for handling circumstances and therefore performance keeps on being enhanced.

They postulated that strategic innovations help the organization apply more productive processes, and seek positive reputation in customer's perception about the services provided by the organization. All these have contributed to enhancement of the performance of the organization. Strategic innovations help the organizations overcome the problems they encounter while in the process of offering services to clientele and therefore it helps to improve the performance of the

organization. Interviewees further opined that the adoption of strategic innovations enhances generation of notable increase in productivity and it also drives down costs. Interviewees revealed that strategic innovations have helped the organization to achieve significant cost reduction demonstrate an increase in service quality, and accomplish other business goals. Adoption of strategic innovative strategies helps the organization record success through the use of creative as well as novel strategies that helps the organization develop their working processes as well as enhance their services. The respondents interviewed opined that in the last one decade, the adoption of strategic innovations has helped to enhance the performance of NTSA where the staffs have always been open to new ideas. This has helped the employees to develop creativity around their working approach which has led to the clients being served better.

4.6 Performance of NTSA

The study wanted to understand the performance of NTSA since the adoption of strategic innovations in the last 5 years. Interviewees stated that the organization tries to minimize loss of lives through road crashes. However, road safety in Kenyan roads is still a major concern to the government as well as other stakeholders. High cases of accidents and fatalities still happen on our roads. Efforts have been made towards offering dependable, efficient road transport service. Interviewees stated that at NTSA, vehicle registration and licensing has improved, road safety has been enhanced, and motor vehicle inspection has improved. The further stated that the organization has managed to put in place road regulations with the intention to minimize road accidents. Interviewees opined that road users' safety awareness has been enhanced, while its core mandate of conducting road safety audits on road safety projects performance is being done. Interviewees also stated that although the road safety audits on road safety projects performance conducted are yet to lead to zero loss of lives through road crashes.

4.7 Strategic Innovations Policy

When asked about strategic innovations at NTSA, the interviewees revealed that the strategic innovations policy is contained in the strategic plan 2022/2023 where for example on improvement of road safety and security the NTSA strategic innovations policy is prioritization of Road safety Audits, staffs should be trained on road safety audits and budget provision for road safety activities should be sustained and dedicated. The interviewees revealed that a strategic innovations policy

on enhancement of road network capacity and quality exist and it states that the research and innovation department should be operationalized and R&D strategy should be developed all with the intention to enhance road network capacity and quality through adoption of strategic innovations. Innovative approaches should be adopted to enhance service delivery and these innovative approaches include adoption of Performance Based Maintenance Contracts which helps in maintenance of high service levels while it reduces maintenance cost and Network Approach through adoption of Corridor Management that should help to improve the effectiveness of maintenance of major arterial roads. The Authority's processes should be automated and integrated through ERP as well as EDMS which helps to enhance service delivery. Technology should be adopted in management of the road network through installation of Virtual weigh stations that should help to enhance the surveillance, enforcement of Axle Load compliance as well as traffic data collection. GIS system should be utilized in management of the road assets which helps to monitor road network as well as storage & retrieval of inventory of road data.

4.8 Discussion of Research Findings

4.8.1 Importance of Strategic Innovations on Performance

The respondents had revealed that performance improves when an organization is able to understand the market place and be able to offer new services that meet customer needs which strategic innovations has helped NTSA to achieve. This implies that when strategic innovations are adopted, performance of the organization is able to improve attributed to be able to the offering of new services that meet customer needs. Findings are in-tandem with that of Jin et al. (2021) that are adoption of strategic innovations improves the performance of the organization attributed to offering of new services that meet customer needs. Interviewees had stated that the adoption of strategic innovations helps NTSA utilize innovative technology concepts which in-turn enhances organizational performance. The study agrees with that of Lin, and Chen (2018) that when strategic innovations are adopted, innovative technology concepts are used which leads to an improvement in the organization's performance.

Respondents stated that mplementation of strategic innovations facilitates provision of real-time information to clients which is an indicator of good performance. The study agrees with that of Djellal, and Gallouj (2023) that strategic innovations facilitate provision of real-time information to clients which improves the performance of an organization. Interviewees had stated that the

adoption of strategic innovations is known to increase speed at which work is done and it also helps to minimize errors as well as service quality. The study by Hult, Hurley, and Knight (2021) also revealed that adoption of strategic innovations improves performance attributed to increased speed at which work is done and also minimization of errors and enhancement of service quality. The adoption of strategic innovations helps an organization exploit new opportunities and attain competitive advantage. The study by Li, and Atuagene-Gima (2016) also revealed that the adoption of strategic innovations helps an organization exploit new opportunities and attain competitive advantage all which enhance the performance of the organization.

At NTSA, the respondents interviewed revealed that strategic innovations have helped the organization exploit new opportunities which helps to enhance organizational performance. The interviewees revealed that strategic innovations inform tools, processes and techniques which its adoption enhance idea implementation. The findings resemble that of Mitchell (2021) that strategic innovations adopted influences the tools, processes and techniques used during idea implementation which affects organizational performance. They also stated that strategic innovations help and organization forecast ways the success of an idea can be achieved. The study agrees with that of Mugo (2023) that strategic innovations help an organization to forecast ways the success of an idea can be achieved and therefore it helps to improve the performance of the organization. The interviewees opined that the performance of NTSA improves when strategic innovations are adopted that helps the organization build loops to track progress and allocate resources in an optimal manner. The study resembles that of Muia (2020) that strategic innovations help to improve performance. This happens when organizations build loops to track progress and allocate resources in a manner that is optimal. New insights are provided in regards to the ways adoption of strategic innovations can enhance performance of an organization. The findings are also consistent with current theories on the subject matter which reveals that adoption of strategic innovations enhance the performance of an organization. Findings are in tandem with literature reviewed on the subject matter and therefore the study fits into the existing body of knowledge on the subject matter.

4.8.2 Nature of the Strategic Innovations

Findings on nature of the strategic innovations revealed that at NTSA strategic innovations are radical that involves breakthroughs that change the nature of services. Interviewees also stated that

strategic innovations are incremental where constant technological or process changes have been adopted that lead to improvement in the performance of services provided. Findings are in agreement with that of Ngari and Muiruri (2018) that the nature of strategic innovations adopted sometimes is incremental where constant technological or process change. At NTSA, the interviewees revealed that incremental innovation with in-house applied research and development has been adopted, proven innovation and incremental innovators are used. Findings resemble that of Pedersen, Leif, Methlie and Thorbjornsen (2020) that organization adopt incremental innovation with in-house applied research and development, and proven innovation. New insights brought out by this study in regards to Pedersen et al. (2020) findings are incremental innovators which enhances organizational performance.

4.8.3 Types of Strategic Innovations

Interviewees had opined that service innovation has been adopted that involves product or service process. The service innovation adopted involves new client interaction as well as a system that contributes to improvement in the transmission process and also a new solution in the client interface. The study by Francesca, and Claeys (2017) also established that organizations adopt service innovation that involves new client interaction with the system that contributes to improvement in the transmission process. New insights brought out by this study is that service innovation provides a new solution in the client interface. Interviewees revealed that organizations adopt process innovation with the application of a combination of skills, technology, and service structure with which services are provided. Hicks, and Niehans (2020) also found that organizations adopt process innovation with the application of combination of skills, and technology. The current study adds service structure.

Findings revealed that technological innovations are adopted which comprises of the use of new or improved technologies that involves technological changes in both processes and services. The study agrees with that of Hult, Hurley, and Knight (2021) that organizations adopt technological innovations that comprises of the use of new or improved technologies. New insights provided by this study is adoption of technological changes both in processes and services. Interviewees opined that business model innovation has been adopted which provides a fundamental change in the way the organization provides value to its clientele. The study by Hurley, and Hult (2019) also opined that organizations adopt the business model innovation. This study further provides that as a result

of adoption of business innovation model, it helps organizations provide a fundamental change in the way the organization provides value to its clientele. Interviewees revealed that new marketing innovations have been adopted at NTSA which improves customer relationships and engagement. The study by Kim, and Maugborgne (2021) also revealed that organizations adopt new marketing innovations. This study adds that through adoption of new marketing innovations, it has helped to enhance new and existing services.

4.8.4 Influence of Strategic Innovations on Performance

Interviewees opined those strategic innovations are important in organizational success as they help the organization create its direction in-terms of deciding on the course of the organization's effort. The study by Kyalo (2016) revealed that strategic innovations enhance the performance of an organization. Strategic innovations have also helped the organization coordinate well its operations and it has also helped the organization provide individuals that have easy time to understanding the organization as well as provide consistency and reduce ambiguity all which enhances organizational performance. The study agrees with that of Kiptoo, and Koech (2019) that strategic innovations help an organization be able to coordinate well its operations, the end result being improvement in organizational performance. This study adds that more ways that organizational performance is enhanced, that is, through consistency enhancement and ambiguity reduction that enhances organizational performance.

Interviewees revealed that strategic innovations help to improve the performance of NTSA through provision of more productive processes, and seeking of positive reputation in customers' perception about the services provided by the organization. The study agrees with that of Guday, and Kilic (2021) that strategic innovations enhance organizational performance. Part of the reasons provide is provision of more productive processes, while the new insights provided by this study is seeking of positive reputation in customers perception about the services provided by the organization. Interviewees had opined those strategic innovations help the organizations overcome the problems they encounter while in the process of offering services to clientele and therefore it helps to improve organizational performance. The study by Micheline and Reinhilde (2018) also opined that strategic innovations help an organization overcome the problems associated with the process of offering services to clients which helps to enhance organizational performance.

Interviewees revealed that adoption of strategic innovations enhance generation of notable increase in productivity and it also drives down costs. It helps an organization achieve major significant process cost savings, record an improvement in terms of quality, service standards corporate goals. Findings resemble that of Nybakk, and Jenssen (2022) that strategic innovations help an organization achieve major process cost reductions, and improve quality of services provided. This study adds improvement in the quality of other business objectives and hence contributes to enhancement of the existing body of literature on the subject matter. Interviewees revealed that the adoption of strategic innovative strategies help the organization record success through the use of creative as well as novel strategies that help the organization develop their working processes as well as enhance their services. The study by Roberts (2021) also established that adoption of strategic innovative strategies enhances organizational success attributed to the use of creative and novel strategies that helps an organization improve both their working processes and services. Interviewees had stated that strategic innovations make the workforce open to new ideas that helps them develop creativity around their working approach which leads to clients being served better. The study by Sanchez et al. (2021) also established those strategic innovations enhance organizational performance by enhancing a workforce that is open to new ideas that helps them develop creativity around their working approach and hence it leads to the clients being served better.

4.8.5 Performance of NTSA

The study wanted to understand the performance of NTSA since the adoption of strategic innovations in the last 5 years. Interviewees stated that the organization tries to minimize loss of lives through road crashes. However, road safety in Kenyan roads is still a major concern to the government as well as other stakeholders. The study is in agreement with that of Lusi (2019) that NTSA tries to minimize loss of lives through road crashes, but road safety in Kenyan roads is still a major concern to the government as well as other stakeholders. Interviewees stated that at NTSA, vehicle registration and licensing has improved, road safety has been enhanced, and motor vehicle inspection has improved. The study by Hanti (2022) also revealed that the performance of NTSA has improved characterized by improvement in vehicle registration and licensing and road safety. Interviewees revealed that road users' safety awareness has been enhanced, while its core mandate of conducting road safety audits on road safety projects performance is being done.

Findings resemble that of Giathi, Abayo, and Muhoho (2021) that road users' safety awareness has been enhanced, and at NTSA the core mandate of conducting road safety audits on road safety projects performance is being done.

4.8.6 Strategic Innovations Policy

When asked about strategic innovations at NTSA, the interviewees revealed that the strategic innovations policy is contained in the strategic plan 2022/2023 where for example on improvement of road safety and security the NTSA strategic innovations policy is prioritization of Road safety Audits, staffs should be trained on road safety audits and budget provision for road safety activities should be sustained and dedicated. The study by Wanjiru (2021) also revealed that at NTSA there is a strategic plan 2022/2023 which details the strategic innovations policy among others aspects that NTSA intends to achieve and how it intends to achieve it within the stipulated timelines.

The interviewees revealed that a strategic innovations policy on enhancement of road network capacity and quality exist and it states that the research and innovation department should be operationalized and R&D strategy should be developed all with the intention to enhance road network capacity and quality through adoption of strategic innovations. Findings are in-tandem with that of Sawe, and Cheluget (2020) that at NTSA, road network capacity should be enhanced between 22/23 financial year through research and innovation. NTSA has a strategic innovations policy that states that NTSA's processes should be automated and integrated through ERP as well as EDMS which helps to enhance service delivery. Onsomu (2017) opined that NTSA has a policy that stipulates how automation and integration through ERP and EDMS should help enhance service delivery at the entity.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the summary of findings which have been presented with study goal was to ascertain how strategically sound the study was as well as how innovations affect performance of National Transport and Safety Authority, Kenya. Other sections covered include; conclusion, implications of the study, limits and recommendations for more research.

5.2 Summary of Findings

On importance of strategic innovations on performance, the study established that performance improves when an organization is able to offer new services that meet customer needs which strategic innovations has helped NTSA to achieve. For the performance of NTSA to improve, technology advances are required which strategic innovations adopted has helped the organization achieve. In order to provide real-time information to clients that is an indicator of good performance, strategic innovations should be adopted. The adoption of strategic innovations is known to increase speed at which work is done and it also helps to minimize errors and enhance service quality. Strategic innovations contribute to improvement in organizational productivity attributed to exploitation of new opportunities and attainment of competitive advantage. Strategic innovations inform tools, processes and techniques which its adoption enhance idea implementation that contributes to improvement in organizations performance. Strategic innovations help an organization build loops to track progress and allocate resources in an optimal manner.

On nature of the strategic innovations at NTSA, the study established that NTSA has strong research orientation and first-mover advantage. At NTSA, knowledge is accessed from a broad range of sources, strategic innovations are radical that involves breakthroughs that change the nature of services. Strategic innovations are incremental where constant technological or process changes have been adopted that lead to improvement in the performance of services provided. Incremental innovation with in-house applied research and development has been adopted, proven innovation and incremental innovators are used. On types of strategic innovations adopted at

NTSA, the study established that service innovation, process innovation, technological innovations, business model innovation, new marketing innovations and social innovations have been adopted at NTSA.

The study found that strategic innovations have an impact on performance, the study established that strategic innovations are important in organizational success. Strategic innovations help the organization create its direction in-terms of deciding on the course of the organization's effort. Strategic innovations help NTSA coordinate well its operations and hence it contributes organizational performance improvement. Strategic innovations help the organization provide people with an easy way to understand the organization and be able to provide consistency and reduce ambiguity. Strategic innovations help the organization to predetermined line of action which acts as a road map when handling circumstances and therefore it enhances performance.

The study established those strategic innovations helps NTSA apply more productive processes, and seek positive reputation in customer's perception about the services provided by the organization. Strategic innovations help the organizations overcome the problems they encounter while in the process of offering services to clients. Adoption of strategic innovations enhances generation of notable increase in productivity and it also drives down costs. Strategic innovations help an organization achieve major reductions in process cost, record an improvement in quality, service levels and other business objectives. The adoption of strategic innovations has helped to enhance the performance of NTSA where the staffs have always been open to new ideas. This has helped the employees to develop creativity around their working approach which has led to the clients being served better.

On performance of NTSA, the established that at NTSA, the organization tries to minimize loss of lives through road crashes. However, loss of lives is still a major concern to the government as well as other stakeholders. The entity has made efforts towards provision of safe, reliable and efficient road transport service. Vehicle registration and licensing has improved, road safety has been enhanced, and motor vehicle inspection has improved. The study established that NTSA has managed to put in place road regulations with the intention to minimize road accidents. Road users' safety awareness has been enhanced, while NTSA's core mandate of conducting road safety audits on road safety projects performance is being done. Findings also revealed that although road safety

audits on road safety projects performance conducted are yet to lead to zero loss of lives through road crashes.

On strategic innovations policy, findings revealed that NTSA has a strategic innovations policy that is contained in the strategic plan 2022/2023. On improvement of road safety and security the NTSA strategic innovations policy is prioritization of Road safety Audits, staffs should be trained on road safety audits and budget provision for road safety activities should be sustained and dedicated. Strategic innovations policy on enhancement of road network capacity and quality exist and it states that the research and innovation department should be operationalized and R&D strategy should be developed all with the intention to enhance road network capacity and quality through adoption of strategic innovations. Innovative approaches should be adopted to enhance service delivery and these innovative approaches include adoption of Performance Based Maintenance Contracts which helps in maintenance of high service levels while it reduces maintenance cost and Network Approach through adoption of Corridor Management that should help to improve the effectiveness of maintenance of major arterial roads. Technology should be adopted in management of the road network through installation of Virtual weigh stations that should help to enhance the surveillance, enforcement of Axle Load compliance as well as traffic data collection. GIS system should be utilized in management of the road assets which helps to monitor road network as well as storage & retrieval of inventory of road data.

5.3 Conclusion

On importance of strategic innovations on performance, the study concluded that performance improves when an organization is able to offer new services that meet customer needs. For the performance of NTSA to improve, technology advances are required. Adoption of strategic innovations helps an organization provide real-time information to clients. Adoption of strategic innovations helps to increase speed at which work is done. It also helps to minimize errors and enhance service quality. Adoption of strategic innovations contribute to exploitation of new opportunities and attainment of competitive advantage that contributes to improvement in organizational productivity. Strategic innovations inform the tools, processes and techniques and organization can use to implement an idea that enhances organizational performance. Strategic innovations help an organization build loops to track progress and allocate resources in an optimal manner.

On nature of the strategic innovations at NTSA, the study concluded that NTSA has strong research orientation and first-mover advantage. Strategic innovations that are radical involves breakthroughs that change the nature of services. Strategic innovations adopted are incremental in nature and it comprises of constant technological or process changes. Incremental innovation adopted involves in-house applied research and development. On types of strategic innovations adopted at NTSA, the study concluded that NTSA adopts service innovation, process innovation, technological innovations, business model innovation, new marketing innovations and social innovations.

The study found that strategic innovations help the organization create its direction in-terms of deciding on the course of the organization's effort. Strategic innovations help NTSA coordinate well its operations and provide people with an easy way to understand the organization, be able to provide consistency and reduce ambiguity. Strategic innovations help the organization to determine planned path that acts as reference for handling circumstances. Strategic innovations help NTSA apply more productive processes and seek positive reputation in customer's perception about the services provided by the organization. Strategic innovations help the organizations overcome the problems they encounter while in the process of offering services to clients. Adoption of strategic innovations enhances generation of notable increase in productivity and it also drives down costs. Strategic innovations help an organization action significant process cost reduction demonstrate and increase in service quality and accomplish other business goals.

On performance of NTSA, the established that at NTSA, the organization tries to minimize death toll through road crashes. Death toll is still a major concern to the government as well as other stakeholders. NTSA has made efforts towards provision of safe, reliable and efficient road transport service. NTSA has managed to put in place road regulations whose intention is to minimize road accidents. Road safety audits on road safety projects performance are conducted but are yet to lead to zero loss of lives through road crashes.

On strategic innovations policy, the study concluded that NTSA has a strategic innovations policy and according to the strategic plan 2022/2023, NTSA strategic innovations policy is prioritization of Road safety Audits, staffs should be trained on road safety audits and budget provision for road safety activities should be sustained and dedicated. It also involves enhancement of road network capacity and quality through adoption of R&D strategy that seeks to enhance road network

capacity and quality through adoption of strategic innovations. Innovative approaches should be adopted to enhance service delivery and these innovative approaches include adoption of Performance Based Maintenance Contracts which helps in maintenance of high service levels while it reduces maintenance cost and Network Approach through adoption of Corridor Management that should help to improve the effectiveness of maintenance of major arterial roads.

5.4 Implications of the Study

The study has enhanced on the Organizational Innovation Theory as appropriate when studies on strategic innovations are done. From this study findings, the study has established those strategic innovations informs the strategies an entity can adopt that can enhance organizational performance. This is in -tandem with Kalay, and Gary (2021) whose contribution to organizational innovation theory was that adoption of strategic innovations influences strategies chosen by an entity which helps to enhance organizational performance. It is a theory of strategic innovations and how the theory contributes to improvement in organizational performance. This study supports the use this theory on studies on strategic innovations as it states that the nature of strategic innovations adopted, and types of strategic innovations adopted influences the impact strategic innovations adopted have on organizational performance.

5.5 Limitations of the Study

The study adopted used interview schedule to collect data on strategic innovations and performance of NTSA. This implies that data collected was not comprehensive as it would have been if questionnaire were used to collect data on strategic innovations and performance. The study should have adopted a descriptive survey design that would have facilitated the use of both quantitative and qualitative data that would have led to collection of data using different data collection instruments. This would have facilitated triangulation that could have enhanced the data collected and study findings on the subject matter.

5.6 Suggestions for Further Research

The study had been conducted on strategic innovations and performance of NTSA. The report suggests that more research be done on strategic innovations practices adopted at NTSA and how

the various strategic innovations practices have affected performance of NTSA. The study also suggests studies should be done on NTSA offices at county levels and not only at the headquarters. This will help to understand the performance of respective NTSA offices in the 47 counties in Kenya in regards to the impact caused by the strategic innovations adopted.

REFERENCES

- Akinlabi, B., & Badiru, N. (2019). Strategic innovation and entrepreneurship development of selected SMEs competitiveness in Lagos State, Nigeria. *The Journal of Accounting and Management*, 9(2), 20-34.
- Avermaete, T., Viaene, J., & Crawford, N. (2020). Determinants of innovation in small food firms. *European Journal of Innovation Management*, 6(1), 8-17.
- Aziz, N. N. A., & Samad, S. (2022). Innovation and competitive advantage: Moderating effects of firm age in foods manufacturing firms in Malaysia. *Procedia Economics and Finance*, 35(1), 256-266.
- Bairagi, V., & Munot, M. V. (Eds.). (2019). *Research methodology: A practical and scientific approach*. England: CRC Press.
- Damanpour, F. & Gopalakrishnan, S. (2021). The dynamics of the adoption of product and process innovations in organizations. *Journal of Management Studies*, 38(1), 45-65.
- Damanpour, F., Walker, R. M., & Avellaneda, C. N. (2019). Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of Management Studies*, 46(4), 650-675.
- Guan, J., & Ma, N. (2022). Innovative capability and export performance of Chinese firms. *Technovation*, 23(2), 737-747.
- Guday, U. & Kilic, A. (2021). Effects of innovation types on firm performance. *A Journal of Management*, 2(1), 2-13.
- Gupta, A., & Gupta, N. (2022). *Research methodology*. New Delhi: SBPD Publications.
- Hanti, F. R. (2022). Effect of employee resourcing strategies on organizational performance: A case of National Transport and Safety Authority. *Global Journal of Advanced Research*, 3(1), 27-33.
- Hicks, D. & Niehans J. (2020). Financial Innovations, Multinational banking and monetary policy. *Journal of Banking and Finance*, 2(20), 537- 551.

- Kalay, F., & Gary, L. Y. N. N. (2021). The impact of strategic innovations on firm innovation performance. *Research Journal of Business and Management*, 2(3), 412-429.
- Kariuki, J.N. (2021). The effect of strategic innovations on performance of mobile telecommunication firms in Kenya. *International Journal of Advanced Research*, 3(1), 33-39.
- Karakaş, A., Öz, Y., & Yıldız, M. R. (2018). The effect of innovation activities on organizational performance: research on hotel businesses. *Journal of Recreation and Tourism Research*, 4 (1), 49-59.
- Lilly, L., & Juma, D. (2018). Influence of strategic innovation on productivity of Commercial Banks in Malaysia: The Case of Malaysia Commercial Bank in Kuala Lumpur County. *European Journal of Business Management*, 2(1), 336-341.
- Markides, C. (2018). Strategic innovation in established Companies. *Sloan Management Review Journal*, 2(1), 31-42.
- Micheline, G. & Reinhilde, V. (2018). Innovation strategies, process and product innovations and growth: Firm-level evidence from Brazil. *Global Journal of Business Studies*, 2(1), 55-61j
- Mintzberg, H., Ahlstrand, B. & Lampel, J. (2019). Strategy safari your complete guide through the wilds of strategic management. *Global Journal of Advanced Research*, 1(1), 9-15.
- Mishra, S. B., & Alok, S. (2022). *Handbook of research methodology*. New Delhi: SSDN Publishers & Distributors.
- Mitchell, F. (2021). Relationship between strategic innovations and performance of commercial banks. *International Journal of Business Studies*, 2(1), 51-57.
- Mugo, S. N. (2023). Innovations and performance of Kenya's wine industry. *Global Journal of Multidisciplinary Studies*, 3(3), 117-123.
- Muia, G. R. (2020). The Relationship between strategic Innovations and Performance of Commercial Banks in Kenya. *Journal of Business Management*, 2(1), 11-16.
- Olson, M., Walker, C. & Ruekert, W. (2017). Organizing for effective new product development: The moderating role of product innovativeness. *The Journal of Marketing*, 59(1), 48-62.

- Onsomu, E. M. (2017). The effect of management strategies by National Transport and Safety Authority on operations of Boda Boda in Nairobi, Kenya. *Global Journal of Management Studies*, 2(1), 14-21.
- Pandey, P., & Pandey, M. M. (2021). *Research methodology tools and techniques*. Nairobi: Bridge Center.
- Rajapathirana, R. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44-55.
- Ramanujam, V., & Mensch, G.O. (2020). Improving the Strategy-Innovation Link, in: *Journal of Product Innovation Management*, 45(2), 213-223.
- Roberts, W. (2021). Product innovation, product-market competition and persistent profitability in the US pharmaceutical industry. *Strategic Management Journal*, 20(7), 655-670.
- Rogers, E. M., & Rogers, R. A. (2015). *Communication in organizations*. Cambridge: The Free Press.
- Rosli, M. M., & Sidek, S. (2021). The impact of innovation on the performance of Small and Medium Manufacturing Enterprises: Evidence from Malaysia. *Journal of Innovation Management in Small and Medium Enterprise*, 1(1), 1-16.
- Sanchez, A., Ferras, X., & Ribera, J. (2021). Innovation management practices, strategic adaptation, and business results: Evidence from the electronics industry. *Journal of Technology Management & Innovation*, 6(2), 14-38.
- Sawe, B., & Cheluget, J. (2020). Technology operational efficiency and service delivery in the public sector: National Transport and Safety Authority in Kenya. *The Strategic Journal of Business & Change Management*, 7(4), 753-764.
- Young, O. U., Ediri, U. J., & Daniel, A. (2017). Strategic financial innovations and performance of oil firms in Nigeria. *International Journal of Economic Perspectives*, 11(1), 73-88.
- Youtie, M., & Roper, T. (2016). Innovation and profitability in Georgia Manufacturers. *Global Journal of Business Studies*, 3(1), 30-36.