# EFFECT OF INNOVATION STRATEGIES ON PERFORMANCE OF TEA FIRMS IN NANDI COUNTY, KENYA

**ONGUSO MISUKO JULIUS** 

# A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE AWARD OF MASTERS DEGREE IN BUSINESS ADMINISTRATION (STRATEGIC MANAGEMENT) OF KENYA METHODIST UNIVERSITY AUGUST 2022

# DECLARATION

This research thesis is original copy of my work and no copy of this work should be submitted to any other examination body without the consent of Kenya Methodist University

Name:	Signature	Date
Julius M. Onguso		
BUS-3-4510-3/2013		

This research thesis has been submitted for examination with our approval as university supervisors.

Name:	Signature	Date
Dr. Dorothi Kirimi		
School of business and Economi	cs	
Department of business Adminis	stration	
Kenya Methodist University		
Name:	Signature	Date
Mr. Erick Njeru		
School of business and Economi	cs	
Department of business administ	tration	
Kenya Methodist University		

# DEDICATION

I wish to dedicate this thesis to my family who have been very supportive by sharing their love, word of encouragement, memories and experiences with me when I used to spend most of the evenings in class and sleepless nights away from them.

#### ACKNOWLEDGEMENT

I would like to express my special thanks to my supervisors Dr. Kirimi Dorothy Gatwiri and Erick Njeru for having accorded me the opportunity to write on this developing topic and having helped me to synthesize and organize my ideas so as to successfully complete the research thesis on time. With profound gratitude, I wish to thank all lecturers for their support throughout my course period. Finally, I extend my sincere thanks to my classmates, workmates and my loving family for their support and encouragement throughout my academic journey. Thank you and God bless you.

### ABSTRACT

An innovation strategy is a clearly-defined plan of structured steps a person or team must perform to achieve the growth and future sustainability goals of an organization. An explicit innovation strategy helps organizational managers to design a system to match their specific competitive needs. Therefore, without an innovation strategy, different parts of an organization can easily wind up pursuing conflicting priorities even if there's a clear business strategy. The study purpose of this study was to investigate the effect of innovation strategies on the performance of Tea firms in Nandi County, Kenya. Specifically, the study aimed to attained the following specific research objectives; to determine the effect of technological innovation strategies on the performance of tea firms in Nandi County, Kenya; to establish the effect of product innovation strategies on the performance of tea firms in Nandi County, Kenva: to establish the effect of market innovation strategies on the performance of tea firms in Nandi County, Kenya; to determine the effect of process innovation strategies on the performance of tea firms in Nandi County, Kenya. A descriptive research approach was employed in this study. The management staff among the 9 tea firms in Nandi County who total to 87 formed the target population for this study. For the study, the requisite primary data was collected by the use of a questionnaire as its key instrument. SPSS version 25 then aided in analyzing data as it was most apposite and user-friendly for analyzing attitudinal responses that are management related. Descriptive and inferential statistics were the models used in the research to do the data analysis of the data collected and presented through frequency distribution tables and figures. Results were analyzed using descriptive and inferential statistics. The study established that there're exist a positive, significant link between product innovation strategies and tea firm's performance in Nandi County, Kenya (r = 0.339; *p-value* < 0.05), there was a positive, significant link between process innovation strategies and firm performance (r = 0.490, p < 0.05). Further, the results indicate that there is a positive, significant link between market innovation strategies and firm performance (r = 0.224, p < 0.05). And lastly, the results indicate that there is a positive, significant link between technological innovation strategies and Firm Performance (r = 0.430, p < 0.05). The study therefore concluded that innovations strategies for organization performance, customer needs, and technological development and act accordingly to stay at par with rivals. The study therefore recommended that in order to enhance firm performance the management of microfinance ought to focus on the firm activities aligned towards renewing routines, procedures and processes in an innovative manner in a firm. This will positively improve the performance of microfinance.

TABLI	E OF (	CONTENTS

DECLARATION	
DEDICATION	
ACKNOWLEDGEMENT	
ABSTRACT	v
LIST OF FIGURES	. ix
LIST OF TABLES	
LIST OF ACRONYMS AND ABBREVIATIONS	
CHAPTER ONE	
INTRODUCTION	
1.1 Background of the study	
1.2 Statement of the problem	
1.3 Objectives of the study	
1.4 Research hypotheses	
1.5 Justification of the study	
1.6 Limitation of the study	
1.7 Scope of the study	
1.8 Significance of the study	
1.9 Assumptions of the study	
1.10 Operational definition of terms	
CHAPTER TWO	
LITERATURE REVIEW	21
2.1 Introduction	
2.2 Theoretical review	
2.3 Empirical review	
2.4 Conceptualization	47
2.5 Research gaps	48
CHAPTER THREE	
RESEARCH METHODOLOGY	
3.1 Introduction	
3.2 Research design	
3.3 Target population	
3.4 Sampling Procedure	51
3.5 Methods of data collection	51
3.6 Instrumentation	
3.7 Validity and Reliability of the research Instrument	52
3.8 Data Analysis	
3.9 Ethical consideration	
CHAPTER FOUR	
RESULTS AND DISCUSSIONS	
4.1 Introduction	
4.2 Response rate	
4.3 Test of instrument	
4.4 Background information	
4.5 Descriptive Analysis	
4.6 Inferential analysis	65

CHAPTER FIVE	70
SUMMARY, CONCLUSION, AND RECOMMENDATIONS	70
5.1 Introduction	70
5.2 Summary of findings	70
5.3 Conclusion	72
5.4 Recommendations	72
5.5 Suggestion for further study	74
REFERENCES	75
APPENDICES	83
Appendix I: Letter of Introduction	83
Appendix II: Questionnaire	84
Appendix III: University Approval Letter Error! Bookmark not define	ed.
Appendix IV: Research Permit	87

LIST	OF	TAF	BLES
------	----	-----	------

Table 3. 1: Target population	. 51
Table 4. 1: Response Rate	. 55
Table 4. 2: Reliability Results	. 56
Table 4. 3: Gender Distribution	. 56
Table 4. 4: Age Distribution	. 57
Table 4. 5: Education Level of the Respondents	. 57
Table 4. 6: Years of Service	. 58
Table 4. 7: Descriptive Analysis for Technological Innovation Strategies	. 59
Table 4. 8: Descriptive Analysis for Product innovation strategies	. 60
Table 4. 9: Descriptive Analysis for Market Innovation strategies	. 62
Table 4. 10: Descriptive Analysis for Process Innovation Strategies	. 63
Table 4. 11: Descriptive Analysis for Firm Performance	. 65
Table 4. 12: Pearson Correlation Coefficient Matrix	. 66
Table 4.13: Model Summary	. 67
Table 4.14: Analysis of Variance (ANOVA)	. 67
Table 4. 15: Regression Analysis Results	. 68

# LIST OF FIGURES

Figure 2. 1: Theoretical Framework	. 27
Figure 2. 2: Conceptual Framework	. 47
Figure 2. 3: Operational Framework	. 48

# LIST OF ACRONYMS AND ABBREVIATIONS

GDP	:	Growth Domestic Product
ICT	:	Information Communication and Technology
MS	:	Microsoft
R&D	:	Research and Development
SPSS	:	Statistical package for social sciences
NPD	:	New Product Development

#### CHAPTER ONE

# **INTRODUCTION**

#### 1.1 Background of the study

Innovation is the practical implementation of ideas that result in the introduction of new goods or services or improvement in offering goods or services. The purpose of innovation is to come up with new ideas and technologies that increase productivity and generate greater output and value with the same input (Rahi, 2017). An innovation strategy is a common innovation mission and a detailed plan that aims to create new value, for which customers are willing to pay. It includes a set of policies or behaviors geared toward achieving future organizational growth.

Innovation plays an important role not only for large firms, but also for SMEs (Adams, 2016). Michael Porter argues that innovation is one of the most important competitive weapons and generally seen as a firm's core value capability (Erboz, 2020). The global competition, which became particularly tough after 1980's, forced the company's focus on their business strategies, especially on innovations. Recently, due to the tough global competition, both individuals and companies begin to evaluate and apply innovative strategies and entrepreneurial abilities with the purpose of gaining competitive advantage as well to advance organizational efficiency, profitability and productivity (Martín-Rios & Ciobanu, 2019).

Product innovation provides differentiated competitiveness in terms of quality and function, which offers incentives for customers to choose. This allows companies to win competition, secure a market-leading position, and create market performance by attracting new customers (Akcigit, & Kerr, 2018). Firms have an option to choose an innovation strategy involving

product, process, and market as well as technology (Schmuck & Benke, 2020). In this context, firm performance of tea firm is the outcomes achieved in meeting internal and external goals of tea firm through appropriately and effectively utilizing process, market and technological innovation strategies (Duhaylongsod & De Giovanni, 2018). Process innovation is the process of reengineering and improving internal operation of business processes while market innovation deals with the market mix and market selection in order to meet a customer's buying preference (Barney, 2018).

On the other hand, product innovation Process Innovation Strategy Market Innovation Strategy Technology innovation strategy Firm Performance Independent Variable Dependent Variable involves the creation of a new product from new materials (totally new product) or the alteration of existing products to meet customer satisfaction (improved version of existing products) (Hahn, 2019). Thus, this paper argues that improving the performance and productivity of a firm significantly depends on the effective usage of innovative strategies involving process, market and technology (Chaoji, & Martinsuo, 2019).

The degree to which tea companies achieve a competitive edge is determined by how long that advantage can be sustained (Flach & Irlacher, 2018). In the tea industry, innovation is defined as the capacity to develop and market new goods. Because of three key trends: quickly changing technology, market trends, and globalization, which has increased the degree of competition, inventiveness has acquired a lot of traction. In Kenya's tea industry, innovative ability contributes to economic progress and long-term competitiveness (Maina, 2018).

According to Silvestre and Îrcă (2019), innovation is an important component of strategy execution. According to Drucker, innovation is a prerequisite for certain strategy. Innovation

aids in the formation of new enterprises, the production of value, and the risk reduction, all of which aid organizations in remaining competitive. Strategic innovation boosts an organization's success in terms of share of the market growth and productivity.

As a result, businesses seeking a competitive edge might do so by implementing good strategic innovations (Duraković & Cosic, 2019). Changes in customer tastes and preferences across the world necessitate companies in any sector to be creative in order to develop new goods and modes of doing business for a long-term competitive edge. In conclusion, a company is considered to be innovative if it can readily convert knowledge into commercial value by enhancing efficiency and effectiveness, resulting in a competitive edge (Kumaraswamy et al., 2018).

#### **Global Perspective of Innovation and Performance**

Globalization and competition are becoming increasingly dependent on innovation (Gorodnichenko, et al., 2010). As internationalization and international rivalry become more intense, technology becomes increasingly important to a company's performance in both the home and foreign market. Tea has seen a lot of rivalry and variation in client needs and tastes all around the world. The use of technology solutions to simplify operations has prompted tea companies to look for new methods to compete in this market.

Akcigit and Kerr (2018) maintains that the tea sector in the United Kingdom has seen a significant degree of innovation. The utilization of innovation approaches has helped the UK tea industry to preserve a competitive advantage that is heavily dependent on the ability of businesses to integrate the benefits of creative activity (Srensen, 2017). The City of Los Angeles Innovation and Performance Commission is dedicated to improving the

responsiveness, efficiency, and quality of City services. The Commission makes recommendations on the use of the Innovation Fund and sponsors awards that recognize Innovation within the City. Both theoretically and empirically the relationship between performance and innovation has been established through research. Calntone et al. (2002), for example, the US organizations, there is a correlation between organizational learning, corporate innovation, and firm performance (Duraković, & Cosic, 2019).

Carole and Marvis (2007) examined the link between Taiwanese tea manufacturers' organizational innovation and organizational performance. Performance was assessed in terms of firm revenue. In a study of 1,901 Spanish tea enterprises, Paus (2020) discovered proof of a positive relationship between three innovation categories (product, operations, and leadership) and effectiveness. According to Foster et al. (2018), firm-related demand fluctuations, not technical efficiency, are the most important element in predicting firm longevity and have a positive impact on assessed productivity.

Product innovation must be more closely linked to changes in firm-related demand, while process innovation is anticipated to have an impact on technical effectiveness. Utilizing just a sample of service and manufacturing organizations in France. Product innovation is the most important driver of worker productivity, according to the researchers, whereas process innovation was found to be both economically and statistically not significant (Chen, 2021).

Akcigit et al. (2018) claim that companies are more inclined to participate in formal related inventive initiatives, and that product related innovation is driven by demand, whereas process innovation is driven by supply, after researching a firms' sample in European nations. Process innovation, according to these writers, only improves productivity in France, but product innovation is much more significant and increases output in Spain, France and the United Kingdom. Aliasghar et al. (2019) discovered that product innovation, not process innovation, has a significant impact on productivity. In conclusion, the preceding research in this session tends to show that process innovation is a larger driver of firm performance in developing nations, such as Bangladeshi, Pakistani, and Syria, but in industrialized economies (e.g., European nations), the contrary is typically observed.

In addition, Greco et al., (2017) point out that in Europe, local, national and European public subsidies for company R & D activities contribute to promoting open innovation, increasing the efficiency of innovation. A peculiar aspect emphasized by the authors indicates that the excess of collaboration diminished the positive effect in the generation of the innovation, being necessary to have a balance in the forms of collaboration. Oura et al., (2016) found that the performance of small- and medium-sized Brazilian enterprises was more strongly influenced by international experience than by capacity for innovation.

In Chinese provinces, foreign direct investment has been found to have a positive effect on innovation performance when it is modulated by the following variables: absorption capacity, presence abroad, and intensity of competition in the market (Li et al., 2016). In Europe, Greco et al. (2017) point out that public incentives from government to business contribute to increasing innovation as well as promoting innovation. The authors emphasize the creation of public policies that identify the best way to allocate public resources, so that innovation in companies is promoted, and that the collaborations made are functional for innovation projects. The information presented so far indicates the gaps that remain in the literature. Generalizations about the relationship between innovation and performance, which motivates this study, cannot be made (Hahn, 2019).

To ensure sustainability innovation should be a continuous process and the firm should allocate adequate resources both human and physical resources (Prange & Pinho, 2017). Innovation promotes economic growth by making firms more competitive in a global dynamic environment that is why in the United States of America innovation has been placed at the Centre of U.S. policies and in Europe it is one of the main pillars of Europe 2020 priorities (Zimmermann et al., 2019). A study of SMEs in Australia, showed an increase in performance of the SMEs that embraced the close linkage between strategy and innovation throughout the innovation process in the firms (Auslooset al., 2018).

# **Regional Perspective of Innovation strategies and Performance**

African countries such as Egypt, Namibia, Nigeria, and Lesotho, among others, have acknowledged the current fierce competition in the tea sub-sector and have also been forced to adopt creative approaches in order to compete. Apart from competitions, effective innovative ways result in higher levels of productivity (Aliasghar et al., 2019). In Nigeria, Ibidunni et al. (2021) discovered a favorable and substantial relationship between technological innovation and tea business employee performance. This improved client retention and happiness, as well as the firm's overall success. Tea companies are the backbone of Nigeria's economy, accounting for approximately 2.4 percent of the country's GDP (GDP).

While Zakir (2017) examines the Ethiopian tea industry, he finds that innovation has had a beneficial influence on the tea industry's investment returns. Any company that employs ICT as an innovative approach has been able to outperform its market competitors. The extent to which tea companies achieve a competitive edge is determined by how long that advantage can be sustained. In the financial industry, innovation is defined as the capacity to develop and market new goods (Liao *et al.*, 2019). Today, three key factors have heightened the

importance of innovation: quickly changing technology, market dynamics, and globalization, which has increased the level of competitiveness. In Africa's tea industry, innovative ability contributes to economic progress and long-term competitiveness (Aksoy, 2017).

### Local Perspective of Innovation strategies and Performance

Increased regional and global rivalry has prompted businesses to seek out ways via innovation, establish or retain a competitive edge. In order to thrive in a fast-changing environment with frequent sudden adjustments, businesses must improve their capacity to innovate (Zimmermann et al., 2019). The influence of diverse innovation requirements on business performance has sparked academic attention, notably in studies of the impact of various innovation specifications on firm performance. Kenyan tea firms have acknowledged the current intense competition in the tea industry, prompting them to explore innovative strategies to stay in the game. Successful innovative strategies result in greater high performance besides competitiveness (Van Holt, et al., 2020).

# **Innovative strategies**

Innovation as a strategy consists of implementation of a new product or improvement of existing business practices such as the marketing method, organizational culture, workplace organization practices or external relations with customers (Zhao et al., 2019). One major concern of innovation is to explore new technological capabilities. Fundamentally, innovation differs from incremental innovation whose main concern is exploring existing technological capabilities. Radical innovation on the other hand refers to the features of products with unprecedented performance. Radical innovation could also mean related

features offering potential of significant improvement in costs and performance in general (Liao et al., 2019).

Edeh et al. (2020) classified innovation as an invention, improvement of existing service and product or process improvement and better implementation of ideas developed elsewhere. Innovation by invention allows or enables differentiation of firm's products or services from rivals, therefore playing a critical role in the firm's superiority and gaining competitive advantage (Edeh et al., 2020). Most firm's innovation strategies are in improving the existing product or process and better adoption of ideas developed elsewhere (Lu et al., 2020). Organizations need innovation management to develop the process of innovation, innovation strategy definition, and most importantly, creation of an innovation culture (Lopes, et al., 2019).

There are a number of steps during innovation in that ideas of organizations are converted into refined and modern services, procedures or outcomes (Seclen-Luna et al.2021). This helps an organization to advance challenge or differentiate itself in the market (Bronkhorst et al., 2019). According to Wang et al., (2019), there are several forms of innovation strategies but the main ones included market innovations, process innovations, organizational innovations and service or product innovations.

Product innovation is the launching of a critically updated or current services and goods (Onufrey & Bergek, 2021). Such products are updated in terms of user friendliness, component parts, specifications, design, usage among other aspects (Schmuck & Benke, 2020). Marketing innovation is the use of improved methods of marketing for example changes in promotion, pricing, packaging, design and placement of products (Rahi, 2017). Marketing innovation geared towards meeting the expectations and needs of clients and

establishment of new markets among others for competitive advantages. Process innovation involves use of updated methods of producing and delivering products to the market. Process innovation can be made deliberately for increased quality, decreased delivery prices, strengthening of quality or production of products that are generally upgraded (Onufrey & Bergek, 2021).

The main focus of market innovation is to improve the mix of target markets and how to serve the market even better (Karlsson & Tavassoli,). The market of an organization significantly influences innovation of an organization. Market innovation can be improved through SWOT analysis and emphasis on quality of products offered to the market (Rahi, 2017). Innovations need to be centered on meeting the evolving needs of customers if it is to improve the competitiveness of an organization. There should be a link between innovation strategies and the whole innovation goals of organization for competitive advantage (Schmuck & Benke, 2020).

Innovation strategies need to give a description of how to convey significant innovations in an organization and the customers so as to enhance easy acceptance and diffusion (Schmuck & Benke, M2020). Innovations help businesses gain competitive advantage while at the same time defending their competitive positions in an industry. Proactive methods of innovation can be taken by organizations in gaining strategic market positioning or reactive approaches of innovation in order to retain their market shares from innovative competitors (Martín-Rios & Ciobanu, 2019).

Process innovation includes the deployment of business process reengineering and quality functions so as to change the process of production to optimally satisfy customers (Nzewi et al., 2016). It involves equipping an organization by adopting new technological

advancements, implementing new processes, market mix intelligences and developing new competitive products in which the enterprise has a competitive advantage (Noorani, 2014). The better process innovation strategy that can result leads to higher market value and performance.

Technology innovation is the key innovation where new technologies are discovered and incorporated in the management of internal affairs of an organization with the aim of improved organizational effectiveness (Kiragu, 2016). This involves discovering new technologies and ensuring that they are implemented for smooth operations. Today, rapid change in information technologies has changed the manner which operations of most businesses are done. One of the rapid change in I & T is the adoption of electronic commerce where consumers access real time information while buying products of an organization on the internet (Nzewi et al., 2016).

If a company wants to enhance its competitiveness, it needs to focus its innovations on fulfilling the changing demands of customers. For a competitive edge, there should be a relationship between innovation initiatives and an organization's overall innovation goals. To improve easy adoption and dissemination, innovation plans must describe how to communicate major innovations inside a company and to customers (Xie et al., 2019). Businesses may use innovations to obtain a competitive edge while also protecting their positions in the industry. Organizations might employ proactive innovation strategies to gain strategic market placement or reactionary innovation techniques to maintain market share against creative competition (Ungerman et al., 2018).

10

Back, Parboteeah and Nam (2014) argued that innovation propels growth irrespective of the larger economic condition. Researches have enumerated the significance of new ideas and innovation as stimulants of economic growth and advanced that competition due to new products is hugely considerable than altering prices of products that are in the market already. As the creative destruction phenomenon submits, successful entrepreneurs who introduce revolutionary services and products are the central forces that drive continued long-term growth of economy while destroying the power of established organizations and institutions in the short-term (Freel, 2017). The implication is that companies need to be innovative somehow so as to grow and last. Ferreira et al. (2015) observe that effective innovative processes amounts to decline product development cost and also decrease in market time.

According to Hashi and Stojčić (2013) innovation has influence on organizational performance and have significantly interested policymakers and economists for a long time. At the level of the organization, innovation process is associated strongly with the learning process of the firm and refers to its ability to implement in addition to acceptance of new ideas, generate, processes, products or services. Similar studies in the past have reported a relationship that is positive between performance of the organization and innovation (Gunday et al., 2011).

According to Thomas and Wood (2014) innovation deals with means of improving the performance and competitiveness of the organization even though this relationship lacks clear empirical support. Additionally, Camisón and Villar López (2012) noted several studies have discussed the consequences of applying innovation to the organization and those that have done so are limited in scope. Therefore, this research was an evaluation of the effect that

technological innovation, product innovation, market innovation and process innovation strategies on the performance of tea firms in Nandi County, Kenya.

#### Tea companies in Kenya

As per a 2010 World Trade Organization study, Kenya has seized the lead in tea export in terms of volume and quality, while it is next in tea production behind Sri Lanka. Sri Lanka charges greater per kilogram tea rates than Kenya, allowing it to make more money on the market. Despite this, Kenya dominates in terms of quantity. Kenya, for instance, got US\$ 1.23 billion in 2010 from tea exports of 441 million kilograms, whereas Sri Lanka earned US\$ 1.37 billion (or 10% more) with tea exports of 314 thousand tons (or 29 percent lower volumes). As a result, Sri Lankan pricing in the international market are higher than Kenyan prices. Therefore, in 2010, Sri Lanka charged US dollar 4.30 per kg on average, relative to US dollar 2.80 on average in Kenya, culminating in a value realization differential of 35 percent (Titus & Cheruiyot, 2016).

As a result, Sri Lankan pricing in the international market are higher than Kenyan prices. Therefore, in 2010, Sri Lanka charged US dollar 4.30 per kg on average, relative to US dollar 2.80 on average in Kenya, culminating in a value realization differential of 35 percent (Koech et al., 2022). Kenya accounted for 31% of the total value of tea shipped in US dollars, followed by Sri Lanka and India. In terms of non-bulk teams, Sri Lanka, the United Kingdom, India, and the United Arab Emirates lead the list, while Kenya is absent. Kenya lags behind Bangladesh, India, and the United Arab Emirates, owing to poor performance of Kenyan tea companies.

According to the Tea Board of Kenya study from 2014, the reason Kenya charges cheaper rates than other competing countries in the process is attributed to tea firm management. The tea industry's significant growth may be credited to the assistance of two important institutions in the tea business (Momanyi et al., 2020). The economic climate is changing quicker than ever before, and according to Boston Consulting Group data, over a third of US firms are expected to cease operations in the next five years. Greater competition is driving this trend. For example, in the tea industry, there is rivalry from competing enterprises that make high-quality tea goods at a lower cost, allowing them to charge a low price. There's also the issue of shifting consumer demands, which means that customers' tastes and preferences change over time. Having strategic leaders throughout an organization is one of the methods to make it more efficient and successful (Maina, 2018).

The majority of inhabitants in Nandi County rely on tea as a cash crop and a source of income. The concentration of tea firms in the County, both local and global, demonstrates this. Nevertheless, the Annual KTDA report for 2015/2016 shows that tea production in Nandi County is facing several problems. In the past, tea output in Nandi County has fluctuated dramatically. Despite efforts by tea firms and farmers to create methods and tactics to resist it, the tendency has continued. Because farmers rely significantly on tea production as their primary source of income, this situation has hampered economic growth in Nandi County, according to the Ken Tea Board report of 2011. Furthermore, tea-producing enterprises in the county confront the issue of falling tea prices as production costs rise.

#### **1.2 Statement of the problem**

Innovation is new combination of the production function; the major yard stick used to measure business success is increased revenues and minimized labour costs (Elert et al., 2017). In spite of this innovation, Tea companies in Nandi County have failed to meet their projected growth targets due to a lack of innovation strategies. As a result, the businesses have failed to adequately support Nandi County's social-economic development goal (Onguso et al., 2021). These businesses appear to be having problems in terms of innovation and performance. There isn't much information available to explain the reasons of these problems. Tea companies, as a growth driver, are particularly essential in poverty alleviation. One approach to improve their performance is to innovate. However, an absence of data on innovation, defined as the development of better or more effective goods, processes, technologies, services or ideas that are easily available to marketplaces, authorities, and community, has caused businesses to fall short of their projected performance and growth. There haven't been many studies that effectively address this topic. The need to identify the essential innovative features that stymie success among tea businesses in Kenya's Nandi County is crucial. This is significant since the Tea sector's competitiveness is crucial for a country such as Kenya that is aiming to modernize by 2030 (Chikamai & Makhamara, 2021). The goal of this research was to see how tea companies might use innovation to achieve the desired growth and performance.

Locally, studies that have been carried out on innovation strategies include: innovation processes and the perceived role of the CEO in the banking industry (Chege et al., 2020); innovation strategies at the Standard Chartered Bank (Maina, 2018); a survey on the determinants of financial innovation and its effects on banks performance in Kenya (Chipeta

& Muthinja, 2018) and the application of innovation in developing strategy at Safaricom Ltd (Kanyuga, 2019). None of these studies focused on the relationship between innovation strategies and organizational performance. This is despite the fact that the firms are being affected adversely by the changing operating environment calling for adoption of innovation strategies to enhance a competitive edge in the markets. There is therefore a research gap that needed to be filled by carrying out an investigation into the impact of innovations on the performance of tea businesses in Kenya's Nandi County.

#### **1.3 Objectives of the study**

# 1.3.1 General objective

To investigate the effect of innovation strategies on the performance of Tea firms in Nandi County, Kenya.

### **1.3.2 Specific Objectives**

The specific objectives were as follows:

- i. To determine the effect of technological innovation strategies on the performance of tea firms in Nandi County, Kenya.
- ii. To establish the effect of product innovation strategies on the performance of tea firms in Nandi County, Kenya.
- To establish the effect of market innovation strategies on the performance of tea firms in Nandi County, Kenya.
- To determine the effect of process innovation strategies on the performance of tea firms in Nandi County, Kenya.

### **1.3 Research hypotheses**

The study sought to test the following null hypotheses:

- Ho1 Technological innovation strategies have no significant effect on the performance of tea firms in Nandi County, Kenya.
- Ho2 Product innovation strategies have no significant effect on the performance of tea firms in Nandi County, Kenya.
- Ho3 Market innovation strategies have no significant effect on the performance of tea firms in Nandi County, Kenya.
- Ho4 Process innovation strategies have no significant effect on the performance of tea firms in Nandi County, Kenya.

#### **1.5 Justification of the study**

Innovation is one of the most important aspects for a company's success, long-term competitive edge, and longevity, and it is defined as a body of knowledge about how to do things much better than that of the current state of the art. From a business standpoint, innovation can be defined as a complex process regarding the creation, transformation, and establishment of innovative combinations of ideas, understanding, innovations, capacities, and assets with the goal of developing a new concept or actions that has the possibility to I increase a profitability of the firm, (ii) decrease its costs of distribution, and/or (iii) increase its market share (Liao et., 2019; Hahn, 2019; Rahi, 2017).

This study made a noble contribution in terms of investigating the innovation strategies adopted by the tea firms and their effect on performance. The study also shows important relationship between both performance measures and other innovative indicators. The Marketing Theory, The RBV Theory, Diffusion of Innovation Theory and Evolutionary Theory of Economic Change, were reviewed to provide sufficient understanding of how different innovations strategies affect performance especially among tea firms in Nandi County, Kenya.

#### **1.6 Limitation of the study**

The researcher encountered various limitations that hindered access to information sought by the study. Time was a major constraint given that the preferred data collection method was questionnaires administered to the respondents. In this case most of the respondents had busy schedules, some of them were not available, hence a "drop and pick" method of questionnaires administration was used. The respondents approached were reluctant to give information fearing that the information sought might be used to intimidate them or print a negative image about them or the company. The researcher had to clarify to the respondents that the study was strictly meant for academic purposes and that the information they provided would be treated with utmost confidentiality.

#### **1.7 Scope of the study**

The research looked at how technical, product, market and process innovation strategies influenced tea company performance in Kenya. The study's perspective was that the tea industry in Kenya was becoming more competitive as a result of new regulations, obstacles provoked by the international economic meltdown, advances in technology, incredibly diverse customers, data excessive workload, latest regulatory standards, and global economic liberalization, all of which created a level playing field for all businesses. As a result, the study will focus on 19 tea companies in Nandi County. Managers at the top, medium, and lower levels of management were among the target responders. The research was conducted in the year 2021. The research took place from March to May.

### 1.8 Significance of the study

The proceeding stakeholders may benefit from this research.

# 1.8.1 Policy makers

The study will be useful to policymakers because it will provide them a better knowledge of the impact of innovation strategy on the success of tea companies. The findings of this study will help the regulating body develop a framework and initiatives to encourage higher growth.

#### **1.8.2** The management

The study might provide insight into how the tea business is performing in respect to the general economy, as well as how their firms are doing in regard to the sector. It will assist them in identifying the constructs that have the most influence on improving performance, concentrating their strategic objectives on them, and allocating more efforts to their implementation in order to achieve better levels of performance.

#### **1.8.3** Academicians and researchers

Because information builds up over time, the results of this research can be utilized to add to the body of information that scholars can draw on when doing more research or testing ideas. Student scientists can also utilize the findings of this study to conduct a literature review.

### **1.9 Assumptions of the study**

The research was founded on the main assertions: a large number of respondents expressed their opinions and information in a more impartial and honest manner. That the data collected from the chosen area was a fair representation that could be repeated. That the replies represent a real and honest understanding of the facts on the field.

#### **1.10 Operational definition of terms**

**Technological Innovations Strategies:** In this study technological innovation strategies refer to the strategies involved in the process through which technological advances are produced. The innovation process includes a set of activities that contribute to increase in the capacity to produce new goods and services (product innovations) or to implement new forms of production (process innovations) (Martín-Rios & Ciobanu, 2019).

**Product Innovation:** Product innovation strategies refer to strategies that facilitate old product development, which involves updating and improving existing products, and new product development, which involves a greater degree of innovational challenge (Schmuck, & Benke, 2020).

**Process innovation strategies:** Process innovation strategies refer to the strategies that a firm adopts in creation and optimization of process that goes beyond tools and practices. The strategies involve process differentiation logic views of how people connect in the work-flow of a process, carry out tasks, and define the outcomes benefit experiences, and where and how value happens, what are likely obstacles or pitfalls, eventually how it produces (and retains) a sustainable value for competitive advantage (Lopes et al., 2019).

**Innovation:** According to Hahn (2019) innovation is a continuous process, for whenever innovation occurs, change results and those affected by the change must in turn innovate in order to respond. In this study innovation is defined as a multi-stage process whereby organizations transform ideas into new or improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace (Flach, & Irlacher, 2018).

**Marketing Innovation Strategy:** Market innovation strategies refer to the strategies concerning the continuous improvement of the target markets mix and how chosen markets are best served. Its purpose is to identify better (new) potential markets; and better (new) ways to serve target markets (Duraković & Cosic, 2019).

**Performance:** Refers to a company's ability to carry out its activities successfully and efficiently in order to meet a contractual obligation (Paus, 2020).

#### **CHAPTER TWO**

### LITERATURE REVIEW

#### **2.1 Introduction**

This chapter focuses on theories relevant to the study and review empirical related literature. It also describes the conceptual framework and highlights the variables under consideration. The study also provides the operational framework and discussed the gaps of the study.

#### 2.2 Theoretical review

Theories are constructed within the constraints of the major limiting assumptions to explain, forecast, and interpret events, as well as to examine and extend present knowledge in a variety of contexts (Paus, 2020).

#### **2.2.1 Marketing theory**

Marketing theory was created by Philip Kotler's 1967. According to him, marketing is a social and management process through which groups and individuals acquire what they want and need by developing, supplying, and exchanging items of value with everyone. A basic marketing theory states that to maximize sales, a company must position its products or services in the marketplace in such a way that consumers believe they need a particular product for service or that a product or service they need has a particular benefit. This is also known as creating an image or brand. (Maier, 2018).

The marketing mission of a company is to identify the requirements, needs, and interest of market segments and to achieve the intended objectives more efficiently and effectively than rivals while preserving or improving the customer's or society in general well-being. Profit incentives are connected to the fulfillment of consumer desires and the well-being of society.

To market effectively, Maier (2018) thinks that the marketing goal of improving customer satisfaction must be placed at the center of business strategy and implemented by all management. Organizations are competing strategically within a market to differentiate themselves in terms of service and quality. With investments in people, technology, human resource management, and pay schemes for their workers, successful businesses strongly focus on the service model. This is critical since the attitude of employees can have a significant impact on the service quality (Bernyte, 2018).

(Langroodi's perspective into physical goods and services resulted in the expansion of the 4ps to incorporate three more essential factors: process, people, and physical proof, which make up the services promotional mix and therefore the 7Ps of marketing. Brand awareness and promotional innovation are usually seen as two separate issues: advertising researchers take product development for granted and are unconcerned well about investment decision in it, whereas economists make the assumption that any new product is successful, regardless of the effort put forth to offer it to customers (Langroodi, 2021).

The degree of substitutability, the number of rivals, and market size are all variables that impact businesses' marketing and product innovation decisions. Product innovation marketing reduces as the degree of product substitutability and the number of rival's rise, but it improves as the size of the market grows. The size of the market has a positive and substantial impact on businesses' willingness to offer product innovation as well as their marketing efforts (Bernyte, 2018).

Promote concentration only has a positive influence on product innovation and has no influence on the efforts required to market the brand awareness (Bernyte, 2018). The large percentage of participants in this research stated that their businesses had produced innovative

brands in the past 5 years, which happens to agree with Kotler's (1967) claim that product was a vital part of an economy and that requirement was effected not just by cost but by marketing, promotional activities, sales force, mailings, and numerous intermediaries such as agencies, retail chains, and distributors. As a result, this concept is connected to particular aim number two, which is the impact of product innovation approach on tea business performance in Nandi County.

#### 2.2.2 The resource-based theory

The RBV theory (Penrose, 1959), which asserts that competitive edge is derived from resources and abilities that underpin and define a firm's potential for innovativeness, is an exceptional theory in innovation research. A company is thought of as a coordinated collection of resources with the potential to use those resources as a source of long-term competitive advantage (Barney, 2018). Distinctive bundles of assets that are uncommon, valuable, inimitability, and sustainable provide firms with a competitive edge. Human, social, technical, information, geographical, and financial resources are all assets tied semi-permanently to a company (Barney, 2018).

The resource of a company gives a far more stable environment in which to create innovation and affect the market (Barney, 2018). Firms that have precious, uncommon, and difficult-tocopy resources have a long-term competitive edge, which is usually manifested in the form of inventive new goods. The existence of various organizational resources and competencies has a beneficial impact on a company's innovation process and capability.

Organizational resources offer the input, which is integrated and converted into innovation through capabilities. Financial resources are one of a firm's most significant bundles or resources. They may be utilized to enhance a firm's ability to support creative activities, particularly R&D, but inadequacy of financial resources can be a hurdle to innovation. External finances are less favorable to R&D operations than internal financial resources (Barney, 2018). The resource-based approach focuses on the relationship between a business's resources and innovation, as well as how the resources impact the firm's capacity to innovate and how the organization is organized to maximize the resources and improve performance.

#### **2.2.3 Diffusion of innovation theory**

In 1962, Everett Rogers created the diffusion of innovations hypothesis, which aims to explain why, how, and how quickly fresh ideas and technology spread (Sartipi, 2020). As per Rogers, diffusion is passed down through a social system's members over time. Rogers goes on to explain that four essential variables affect the spread of a novel phenomenon: the innovation itself, communication, time, channel and societal structure, and that this procedure is heavily reliant on HRs. The innovation ought to be widely accepted in order to be sustained (Hahn, 2019).

According to Rogers, the features and characteristics of the invention are crucial in influencing how it spreads and how quickly it is adopted (Sartipi, 2020). He emphasizes, drawing on the work of Thomas and Znaniecki (1927) cited in Scott and McGuire (2017), that what matters is what adoption agencies see as the qualities of an invention. In the case of technical innovation, which encompasses virtually all of the inventions investigated, the rate at which it is implemented is critical for organizational growth and development.

Rogers (1995) cited in Okour et al., (2021) identifies two factors to consider: According to Rogers, the features and characteristics of the invention are crucial in influencing how it spreads and how quickly it is adopted (Nipo et al., 2018). He emphasizes, drawing on the

work of Thomas and Znaniecki (1927), that what matters is what adoption agencies see as the qualities of an invention. In the case of technical innovation, which encompasses virtually all of the inventions investigated, the rate at which it is implemented is critical for organizational growth and development. Sasaki (2018) identifies two factors to consider: According to Scott and McGuire (2017), technical innovation and the rate at which it is implemented are critical for organizational development and growth.

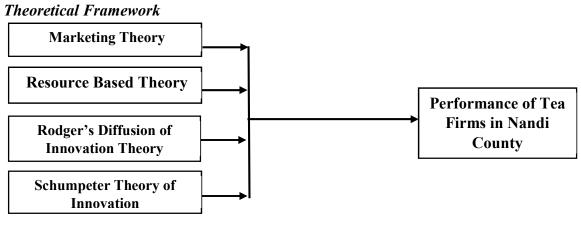
#### **2.2.4 Schumpeter Theory of Innovation**

According to Schumpeter (1934), cited in Bodrožić and Adler (2018) innovation is the structural refurbishments and modification of business operations which occurs progressively. The author identifies 5 types of innovations; applying current methods of selling or producing a product that has not been seen anywhere in the field, launch of new products or additions of features to an already existing product, introduction of current markets with no prior representation in an industry, seeking for updated sources of inventories and modern industry composition by creating or destroying the dominant position. Any profit seeking organization should be innovative since innovation is a significant engine of economic growth and development. An organization that fail to innovate would soon realize its products are outdated in the market and therefore financial collapse (Schumpeter, 1912 cited in Langroodi, 2021).

Schumpeter (1934) cited by Langroodi (2021) identifies dimensions of innovation that is; diffusion, invention, imitation and innovation. According to the theory, possibilities of traders to draw up on the findings of originators and investors may result into investments and employment creation. The phase of invention possess reduced level of significance wile diffusion and imitation activities greatly affect economic states. Therefore, innovative entrepreneurs establish new avenues of generating more profits.

Soon, an innovation is rendered as a new product in the market place that followers and competitor copy as a result of supernormal profits the originator of the idea enjoys. The theory strives to differentiate between businesses with revolutions that establish profitable conditions for modern businesses and those business owners generating loans for financing establishment and growth of new business ventures (Schumpeter, 1939 cited in Langroodi, 2021). The theory is relevant to the study as it showcases the value an organization obtains by being technologically innovative. It showed how technological innovations of the banks' influence their product and processes for competitive advantage.

# Figure 2.1:



Source: Researcher (2022)

# **2.3 Empirical review**

Empirical review is the review of many aspects of an empirical study that hold some levels of significance to the study being conducted.

# 2.3.1 Technological Innovation

A technological innovation is a new or improved product or process whose technological characteristics are significantly different from before (Manohar et al., 2019). Implemented technological product innovations are new products (product innovations) or processes in application (process innovations) that have been brought to market. Technological innovation brings benefits. It increases productivity and brings citizens new and better goods and services that improve their overall standard of living. The benefits of innovation are sometimes slow to materialize. They often fall broadly across the entire population (Paus, 2020).

Technological innovation provides the life-blood of economic activities. Technological innovation is a tool for economic growth and the application of those inventions to meet emerging business opportunities, and to meet social needs, and environmental challenges

(Bernyte, 2018). For any organization to be able to compete, it must be technologically innovative. Technological innovation and core competitiveness enjoy symbiotic relationship (Hilman & Kaliappen, 2015). Technological Innovation Capability (T.I.C) is an important component of the core competitiveness of the manufacturing industry, and core competitiveness play a role in promoting or influencing technological innovation. Technology should be so designed to be able to match the marketing capability of the organization and be seen as reflecting in the strategic plan of the firm and its overall success. Innovation should match resources inputs, technology and market (Rahi, 2017).

Chaoji and Martinsuo (2019) published a study on assessing long-term technological innovation. The findings allowed the key benefit of technical advancement to be articulated, which is that stakeholders do not begin from zero and do not start with anything. Every company has a knowledge base that it shares in order to attain a shared purpose. In the instance of micro insurance, for example, the ability to utilize an existing payment mechanism was a key success element.

Leading to a shortage of infrastructure and a desire to save costs, the rapid penetration of mobile technology in developing economies was especially essential. Each stage of innovation brings with it dangers, problems, and possibilities for businesses, which must adjust and explicitly outline their plans. Even so, the reality that interested parties do not have to start from scratch but can build a foundation by leveraging current information accelerates the pace of innovation and reduces the risk of heading where nobody has gone previously, as well as the risk of not revolutionizing, and in this scenario would leave a huge market underserved. Adams (2016) see integrating marketing innovation as a crucial industrial driving force. To them, when firms are successful in introducing new ways to

market their products, they can spark a burst of buyer's interest, widen industry demand, increase product differentiation and lower limit cost, any or all of which can alter the competitive positions of several firms and force strategy revision.

According to Aksoy (2017) a synergy between technological change, product innovation and marketing innovation are good enough driving force to propel a firm to have competitive edge over their competitors. There is need for these technological innovation capabilities (which serve as the driving force) and strategic plan capabilities. Marketing capabilities are prerequisites to sound strategy marketing. This synergy is a dynamic situation as it combines necessary innovative capabilities to respond to the environment. According to Barney (2018) an organization need to possess dynamic capabilities to adjust in order to respond to the external environment. The fall-out of above analysis is to create value for our product to be better priced and purchased in the market. To innovate is to create value. The essence of innovation is to create value (Bianchi et al., 2017). And to value innovate, companies must be able to offer radically superior value and ensure that the target market is accessible to the price and this is what management of Nestle product assumes to be doing by packaging its product for the affordability of the market. Haiyun et al., (2021) conclude that value innovation involves new product concept or new way of developing a business opportunity using the existing technologies and knowledge. This is the essence of strategic marketing derived from the corporate strategic planning capabilities.

Karlsson and Tavassoli (2016) was using the Study of Corporate Strategy (SBS), a companylevel panels data set of Spanish manufacturing businesses covering the years 1990 to 2005, to experimentally assess the influence of technical innovation effectiveness on firm performance. According to the findings, using innovation output without taking into account the work required to produce them may overestimate their impact on company success. The findings revealed that the Spanish manufacturing sector has few efficient businesses, suggesting that there is significant space for increasing the efficiency of the technological innovation process. The findings also suggest that assessing technical innovation efficiency as a driver of business performance is more important than just include innovative outputs and inputs (Flach & Irlacher, 2018).

Technological innovation is more and more important for an organization in a competitive and dynamic environment. Technology, as an intangible asset, is becoming a critical factor for the survival and competition among companies. Rahi (2017) suggest that technological innovation may have an impact on the industry's structure or competitive advantage, as well as being an important edge for a company willing to challenge a well-established competitor. Therefore, the widespread application of technology can be an important factor in structuring an industry, technological innovation can provide a competitive advantage for a company or even increase the profitability of all the companies within the industry (Bronkhorst et al., 2019). For any organization to succeed, it should be able to compete within its market, and attempt to rub shoulders with other competitors in the international frontiers. The organization must imbibe the culture of innovation because of its importance as confirmed in many studies (Edeh et al., 2020).

While the economists of innovation believe that technological "trajectories" make some innovation paths more likely than others (Rahi, 2017), the complex interplay between technological supply and market demand cannot be captured strictly with reference to the characteristics of technology. Even in the literature on technology and organization structure,

which has argued for the strongest links between the nature of technology and organizational forms, there is a recognition that technological change serves as an occasion for restructuring. According to Schmuck and Benke (2020), the same technology can occasion quite different organizational outcomes. Technological innovation cycles between periods of stability and change. A wide range of technological innovation research suggests that the innovation process fluctuates between periods of relative stability and periods of relative change (Martín-Rios & Ciobanu, 2019). Research on innovation and business strategy in particular has argued that the nature of innovation changes over time. Periods of more incremental innovation, in which technology appears to develop along well understood paths, are then abruptly followed by periods of more radical innovation, in which the certainties of the past era are abandoned (Rahi, 2017).

#### **2.3.2 Product innovation**

Product innovation deals with the creation of a new product from new materials i.e. totally new product or the alteration of existing products to meet customer satisfaction i.e. improved version of existing products (Wang et al., 2019). It also concerned with the introduction of new products or services in order to create new markets or customers, or satisfy current markets or customers (Schmuck & Benke, 2020). It is one of the most important sources of competitive advantage to the firm. With product innovation, quality of products could be enhanced, which in turn contributes to firm performance and ultimately to a firm's competitive advantage (Lopes et al., 2019). Shreds of empirical studies proved product innovation had a positive and significant relationship with organizational performance (Duhaylongsod & De Giovanni, 2018). Different terminologies have been used to categories and describe product development. Ramus et al., (2018), for example, embraces two distinct activities: old product development, which involves updating and improving existing products, and new product development, which involves a greater degree of innovational challenge. Hahn (2019) similarly categorized product development into primary and secondary innovations. Primary innovations were broadly concerned with the development of new markets and relate to instances where there is a high degree of technical originality and a commensurate change in consumer behaviour. Secondary innovations, on the other hand, are basically business or company focused and typically involve improvements to an existing market (Hahn, 2019).

According to Liao et al., (2019), product innovation provides the most obvious means for generating revenues. Process innovation, on the other hand, provides the means for safeguarding and improving quality and also for saving costs. Improved and radically changed products are regarded as particularly important for long-term business growth (Duraković & Cosic, 2019). The power of product innovation in helping companies retain and grow competitive position is indisputable. Products have to be updated and completely renewed for retaining strong market presence.

Product innovation is the introduction of a good or service that is new or significantly improved regarding its characteristics or intended uses; including significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics (Duraković & Cosic, 2019). Product innovation is inevitable if businesses are to remain relevant and sustainable. There are various theories that have been developed that tend to bring out the relationship between product innovation and organizations performance.

According to Paus (2020) in his theory the product life cycle theory, a product goes through stages in life where at some point unless modifications are done, the product becomes obsolete and irrelevant. It is important that businesses invest highly on market research programs in order to identify changes in consumer needs as the product advances through its productive life (Chen, 2021). He argues that like any living being, products go through various stages in their productive lives from invention, maturity to decline stage forming a unique cycle in the product life. These stages are characterized by specific features which determine the length of time a product spends in one stage depending on the marketing strategies applied (Chen, 2021).

If not nurtured through continuous improvements the products decline and die naturally like any living being. With this understanding, product innovations are expected to be a continuous and deliberate strategic approach if organizations expect to sustain profitability and growth (Azar & Ciabuschi, 2017). This theory has proven that products do not survive forever. Aggressive marketing strategies have to be applied to prolong product life in any stage of the product life cycle. These strategies may include differentiation strategies, modifications and product positioning techniques including new innovations all together (Sartipi, 2020).

Chen (2021) conducted research on product differentiation. According to this research, the firm distinguishes its goods in order to extend the lifecycles of current items on the market or to capitalize on the benefits that come with a well-known brand name. Product differentiation strategy includes altering existing goods or developing new, related, and comparable items for marketing to existing customers through existing channels. Because of their firsthand

experience with the firm's offering, pleased clients are drawn to new goods by product difference (Chen, 2021).

Product innovation contains elements in differentiated products in form of enhanced product offerings, in link with the use wherein the product lines are to be place, to me individual tastes, put, inventory levels, how well the institution interacts with other companies, and credibility, FitzPatrick (2019) research on globalization, product diversification, and income disparity. It also differs in terms of rarity and the likelihood of being copied or imitated. For businesses to leverage product innovation as a source of competitive edge, they must guarantee that consumers get the products they desire, like they do have distinct requirements and desires, and that the established competitive landscape is not disrupted competitor products do not meet this expectation.

In a study done in Germany, Barbieri et al. (2020) discovered that a major portion of the lack of knowledge of service innovation may be ascribed to the informal character of research and development (R&D) in New Service Development (NSD). R&D activities, such as R&D expenditures, numerous workers, patents, revenues of imitative and inventive goods, and new product launches, are frequently used to measure innovation. A regression analysis was carried out. The computed R-value as 0.507, according to the results.

In Jordan's banking industry, Langroodi (2021) looked at the relationship between innovation and the achievement of competitive advantages. According to the findings, the environment and conditions around company are extremely increasingly competitive, which has impacted organizational financial performance. According to the findings, innovation has a clear and optimistic impact on competitiveness. As a result, financial institutions must be creative in all aspects of their operational activities and businesses. Martín-Rios and Ciobanu (2019) discovered that the optimal utilization of scarce resources to optimize the value necessitates concentrating on relationship-oriented consumers and strong, long-term retaining customers in their research on the impact of product innovation on consumer loyalty and satisfaction in the construction sector in Iran. They discovered that self-reports from service personnel are commonly used to assess client orientation. Customer service orientation has also been found to improve performance. They discovered that one of the most significant problems in the construction business is enhancing client satisfaction (Onufrey & Bergek, 2021).

Hahn (2019) analytical framework provides a typology that allows us to analyze more modest innovations and at the same time predict their impact in terms of both competition and the marketplace. Although this typology focuses primarily on product innovations it can be equally applied to service and process innovations. At the heart of Henderson and Clark's analytical framework is the recognition that products are actually systems. As systems they are made up of components that fit together in a particular way in order to carry out a given function. Bodrožić and Adler (2018) point out that, to make a product normally requires two distinct types of knowledge, namely, component and system knowledge.

Component knowledge which is knowledge of each of the components that performs a welldefined function within a broader system that makes up the product. This knowledge forms part of the 'core design concepts' Abubakar et al. (2019) embedded in the components. System knowledge which is knowledge about the way the components are integrated and linked together. This is knowledge about how the system works and how the various components are configured and work together. FitzPatrick (2019), refer to this as architectural knowledge.

#### 2.3.3 Market innovation

Market innovation deals with the market mix and market selection to meet a customer's buying preference (Koech, 2022). Continual market innovation needs to be done by a firm because state-of-the-art marketing tools, particularly through the Internet, make it possible for other competitors to reach potential customers across the globe at light speed. Rodriguez Cano and his associates affirmed market innovation plays a decisive role in fulfilling market needs and responding to market opportunities (Paus, 2020). In this deference, any market innovation has to be oriented towards meeting customers' demands and satisfaction.

Manohar et al. (2019) discovered that market innovation has a positive effect on the sales growth of a firm. Liao et al. (2019) also examined the influence of strategic innovation on performance of commercial banks in Kenya. They established market innovation has positive and significant impact to the performance of commercial banks. As to Sartipi (2020), market innovation would boost sales through the increasing demand for products, which in turn yields an additional profit to innovative firms (Sartipi, 2020).

Langroodi (2021) also stated that, market innovation is concerned with improving the mix of target markets and how chosen markets are best served. Its purpose is to identify better (new) potential markets; and better (new) ways to serve target markets. Market segmentation, which involves dividing a total potential market into smaller more manageable parts, is critically important if the aim is to develop the profitability of a business to the full (Langroodi, 2021).

Incomplete market segmentation will result in a less than optimal mix of target markets, meaning that revenues, which might have been earned, are misread (Sartipi, 2020). It is the prime responsibility of marketing specialists to provide such insights. Sometimes this responsibility is seen to cover solely the identification of present and likely future

geographical market opportunities (Sartipi, 2020). Geography is, however, only one simple way for segmenting markets. A very wide range of possible criteria exists for segmenting, stretching from objective criteria based on demographic data through to subjective criteria based on life style interpretations of consumer and business buying behaviour. In recent years, "benefit segmentation" has become more widely used (Manohar et al., 2019).

The wide range of innovation studies has encouraged some authors to provide a comprehensive definition of innovation. For example, Langroodi (2021) define innovation as "an idea, product or process, system or device that is perceived as new to a person, group of people or firms, or a society as a whole". In simple terms, innovation can be defined as introducing a new thing (Manohar et al., 2019). Innovation is a very big challenge for any business, but it is also the force behind the creation of sustainable values. Innovation can be understood as a creative opening to exceptional ideas, as a task of creating new products or improved products, and not ultimately as a business strategy (Paus, 2020). An organization's innovations do not only influence it, but they can shape the whole market - customer needs, the structure of the participants, the channels that bind them, the rules that they act on. Marketing adds value to the sales interface and innovative performance of the company.

Market innovation focuses on developing the mix of a target market, while determining how companies can serve the best target markets. It is also described as a breakthrough in the marketing mix (Onufrey, & Bergek, 2021). However, innovation and marketing must go hand in hand. Innovation reveals the buyer's needs beyond the product, while marketing innovation needs to assess customer value perceptions and generate opportunities for unsatisfied customers' needs, on the basis of which companies can offer new innovative products (Flach, & Irlacher, 2018).

Innovation in marketing refers to significant changes in the way the enterprise's outlets accept changes in design and major changes in product design and packaging, new methods in product promotion and distribution, new branding, new methods of selling, new methods in pricing policies, new presentation methods, opening of new markets, etc. (Liaoet al., 2019).

First of all, marketing innovation must provide value to customers. If marketing innovation cannot satisfy customers or provide value to customers, it cannot be considered as a marketing innovation. Then, marketing innovation must be useful to competition and must be effective for the company (Lopes et al., 2019). Companies should not make marketing innovation just for the aspiration of innovation. Every innovation program must be able to bring profit to the company, now or in the future. It is very important that marketing innovation be sustained. Fierce competition in the market is changing rapidly and compels companies wishing to survive to continue to innovate (Duhaylongsod & De Giovanni, 2018). In addition to product, price, promotion and channel, public relations strategy must also be innovated. New public relations must promote marketing innovation programs through cooperation between businesses, the community, government, intermediaries and the media. What is most important in the public relations strategy is launching on the market the marketing plan according to the clients' emotional requirements to stimulate the acquisition (Hahn, 2019). Another important aspect is the organization's innovation. In order to provide the best environment for marketing innovation, changing organizational structure and human resources will sometimes be necessary and useful (Hahn, 2019). The positive relationship between marketing innovation and market performance is supported by a vast literature, starting from the idea that marketing innovation is an integral component of company success. SME marketing performance focuses on marketing innovation as a key to competitiveness.

SMEs adopt marketing in a competitive environment (Chaoji, & Martinsuo, 2019). Given their size, innovation is the most important factor that can be used by SMEs to address disadvantages. When SMEs continue to develop their current products and services to meet customer needs and focus on market performance, they face market-based innovations. As such, SMEs should introduce marketing strategies for innovation to deliver better results (Haiyun et al., 2021).

Chepkorir and Ann (2018) investigated if social media enterprises were more cost efficient than other businesses. The study found out that the operational functions of an organization to achieve performance i.e. productivity. The study discovered that an institution's operational activities help it attain efficiency, or productivity. The future survival and success of most enterprises is a big issue. Developing new marketing strategies for a company's products allows it to acquire a competitive edge. The survey also found that social networking platforms and media are now widely used (Schmuck & Benke, 2020).

In a research on the impact of innovation processes in business strategy, Karlsson and Tavassoli (2016) found a new service performance connection. According to the study, market innovation places a premium on improving the current market mix. Prospective markets are easily identified in connection with the development of innovative ways to service target markets. According to the findings of the study, businesses use market segmentation strategies to separate their target audiences into several categories based on their differences. Because the demands of various market groups are handled throughout marketplaces, this helps to guarantee maximum company productivity.

Using a viable method, Bernyte (2018) performed a study on the promises and difficulties of marketing and sales innovation and discovered that a significant proportion of European

companies use organizational and advertising innovations to attain economic success and competitive advantage. However, their economic impacts are much more probable to be noticeable as indirect impact in aspects of "enablers" and "entry requirements" for innovation despite the highly complicated nature and powerful link to relevant areas of product development (in the case of marketing) and scientific innovation strategy (in the context of network innovation). Nonetheless, the data demonstrate that marketing and sales innovation may help businesses improve their immediate economic performance by increasing sales and profits. The results find that various organizational metrics have distinct links to different economic performance characteristics, based on the examination of chosen organizational ideas. The goal of this study was to see how much variance in insurance penetration could be accounted by market innovation strategy. A regression analysis was used to evaluate the variance in insurance penetration described by market innovation approach, and it was discovered that 35.5 percent of the relevant variance in insurance penetration may be justified by a shift in market innovation tactic.

# **2.3.4 Process innovation**

Commonly, process innovation is concerned with reengineering and improving the internal operation of the business processes and units (Haiyun et al., 2021). This process involves many aspects of a firm's functions, including technical design, Research and Development, manufacturing, management and commercial activities (Xie et al., 2019). It is also concerned with the creation of or/and improvement in techniques and the development in processes or systems (Caille et al., 2019).

In a production activity, it can be referred to as new or improved techniques, tools, devices, and knowledge in making a product (Mikalef & Krogstie, 2020). Crucial to the manufacturing

industry, process innovation should be stressed by a firm as its primary distinctive competence for competitive advantage (Mikalef & Krogstie, 2020). Langroodi (2021) in his empirical research entitled "Relationship between innovation capability, innovation type, and firm performance" found that product and process innovation has significant and positive impact on firm performance (Sartipi, 2020).

More specifically, such innovation is positively associated with firm growth (Maier, 2018). Several other recent empirical shreds of evidences reconfirmed the positive and significant influence of product and process innovation on firm performance (Maier, 2018). Process innovation focusing on improving the efficiencies and effectiveness of production and also improve or change the way firm perform (Bodrožić & Adler, 2018).

Process innovation is a significantly improved delivery method or adoption of a new production process Thus also includes a significant change in equipment and software and techniques (Mikalef & Krogstie, 2020) Process innovation is divided into three different categories. These were: service process innovation, incremental process innovation and radical process innovation (Maier, 2018).

Service innovation refers to making changes to intangible products which influences to a high degree the customer demand and interaction. The incremental process innovation is referred to as the making of minor changes or improvements in firms' elements of internal process but will have no effect to industry (Manohar et al., 2019). Radical process innovation involves levels of change whether these major improvements or new changes on the firms' elements of internal process are related to industry (Chen, 2021). The incremental on process and product from technological innovation helps improve firm competiveness with the main justification being to increase organization value or productivity which is important to the

manufacturing sector and that process innovation should be encouraged as a major strength for achieving competitive advantage to the firm (Flach & Irlacher, 2018).

Process innovations are also a solution to the rising needs for synchronization within departments for example the marketing and manufacturing department which allows a company to produce only what the client needs (Chen, 2021). The process innovation strategies are developed from industry knowledge that has been acquired which works as a solution to the company's weak internal capabilities (Bodrožić & Adler, 2018).

Process innovation is a new and desirable approach to transforming organizations and improving their performances. It includes incremental improvements rather than radical changes (Langroodi, 2021). It has been presented that a clear approach to process innovation is really important. Process innovation does not take place in a casual and offhand manner. The process actually includes the pressure of day to day business, creating a vision, understanding the existing process and designing new process and organization in detail.

Information also is a powerful tool for enabling and implementing process innovation (Sartipi, 2020). It is clear that accurate and real-time information on process performance is a prerequisite for effectiveness and therefore many processes have as their primary objective the creation of information. Organization and human resources are also crucial in order to have a successful process innovation and its implementation. How people are organized and the degree which they are motivated to do their works is critical to the success of process design. It can be said that process innovation must occur within a strategic context (Sartipi, 2020).

A vision for process innovation should be closely tied to the organization's strategy (Langroodi, 2021). A tight connection between corporate strategy and process vision can

make process innovation initiatives a primary vehicle for implementing strategy, and with strategy implementation becoming an important source of competitive differentiation, organizations that are successful at process innovation are likely to be successful in the marketplace (Sartipi, 2020).

Innovation is assumed as key to the organization's financial performance since it makes organizations grow faster and more profitable (Manohar et al., 2019). According to Paus et al., (2020), successful factors of innovation can be divided into two major capabilities of organization: technological capability and commercial capability. Technological capability consists of organization-related factors and project-related factors while commercial capability includes Product-related factors and market-related factors (Karlsson & Tavassoli, 2016).

With process innovations, performance is measured using details of the production process which include indicators of cost reduction, flexibility and capacity improvement (Liao et al., 2019). The firms implementing the process innovation strategy have been seen to rely on acquired knowledge outside its boundaries to solve their internal issues which is a big difference form the legacy research and development product innovation strategies (Paus, 2020).

The incremental on process and product from technological innovation helps improve firm competiveness with the main justification being to increase organization value or productivity (Zimmermann et al., 2019). This is important to the manufacturing sector and that process innovation should be encouraged as a major strength for achieving competitive advantage to the firm (Hahn, 2019). More than 87% of the total respondents agreed that Costs reduction was very important in fueling the organization performance which agrees with similar studies

on effect of innovation strategies on performance in the telecommunications the study by (Ramus et al., 2018).

Innovativeness is one of the primary tools of growth which increases the existing market share and provides the company with a competitive advantage (Liao, et al., 2019). It has the actual potential to enhance the organization's performance in several aspects. Particularly, it has been mentioned in the literatures that there are three different performance dimensions which innovation has an impact on (Koech, 2022).

Private organizations have successfully applied strategic planning for a long time. Similarly, strategic planning can be used in public organizations to improve public services, enhance customer satisfaction and manage limited resources in a more rational and equitable manner (Onufrey & Bergek, 2021). Public organizations, including police agencies, aim to deliver services that meet the needs and interests of people and businesses. However, police agencies have become a notable issue in many countries and have confronted rising criticisms by practitioners and scholars Schmuck and Benke, (2020) due to weakly organized and ineffective serious plans for development (Onufrey & Bergek, 2021). This has led to inefficiency and ineffectiveness, which are reflected negatively in the quality of services delivered, which, in turn, has led to decreased satisfaction of stakeholders. The poorly performance of these organizations has had an impact on many parties, with negative longterm consequences for the economy and its development and growth (Karlsson & Tavassoli, 2016). It cannot be denied that these organizations have a vital role and responsibility for the economic development of any country, and poor strategic planning only leads to poor performance (Haiyun et al., 2021). Bernyte (2018) examined the effects of product innovativeness on the sustainable profitability of firms with a longitudinal research in the

U.S. pharmaceutical industry. He found support for the expected relationship between high product innovation propensity and sustained superior profitability.

Azar and Ciabuschi (2017), developed a framework for studying the relationships between learning orientation, firm innovativeness and firm performance in the U.S. manufacturing and service industries. Their study revealed that firm innovativeness is positively related to firm performance. Al Khajeh (2018) examined the relationship between innovativeness, quality, growth, profitability and market value at the firm level in the U.S. finance industry by using structural equation modeling method. Their study indicated that innovativeness mediates the relationship between quality and growth, quality mediates the relationship between innovativeness and profitability.

# 2.3.5 Organizational performance

According to Singh et al. (2018), process innovation embraces quality function deployment and business process reengineering. It is a type of innovation, which is not easy, but its purpose is now well understood. An efficient supplier who keeps working on productivity gains can expect, over time, to develop products that offer the same performance at a lower cost. Such cost reductions may, or may not, be passed on to customers in the form of lower prices (George et al., 2019). Process innovation is important in both the supply of the core product as well as in the support part of any offer. Both components of an offer require quality standards to be met and maintained. In the case of services, which by their very nature rely on personal interactions to achieve results, the management of process innovation is a particularly challenging activity (Chen, 2021).

The notion of organizational performance is affiliated with the success of an organization (Momanyi et al., 2020). Organizational performance enhances the ability of an enterprise to

accomplish its mission through sound management, strong governance and a persistent dedication in achieving specific goals over a given period (Lopes et al., 2019). Previous studies by Schmuck and Benke (2020) submitted that organizational performance is vital in keeping an organization afloat. Similarly, Rahi (2017) postulated that organizational performance is a key player in the increase of the market value of an organization.

Furthermore, Karlsson and Tavassoli (2016) decomposed organizational performance into market share, growth and profitability. Performance is described as a company's ability to carry out its activities efficiently and effectively to meet its obligations. Therefore, internal processes and procedures, enough daily activities of the business, organizational structures, attitudes, and the corporation's reaction to the circumstances, among other things, are used to assess performance. Organizational performance is therefore the ability of an organization to fulfill its mission through sound management, strong governance and a persistent rededication to achieving results (Karlsson & Tavassoli, 2016).

Bodrožić and Adler (2018) proposed that firms delivering services must broaden their examination of productivity from the conventional company-oriented perspective to a dual company-customer perspective. This broadened approach can help reconcile conflicts or leverage synergies between improving service quality and boosting service productivity (Bernyte, 2018). This research considers organization performance relative to the competition from multiple organizational perspectives including quality, productivity, market share, profitability, return on equity, and overall firm performance. An innovation strategy, then, becomes a source of competitive advantage for firms that strive to achieve a high level of innovation (Barney, 2018).

Aksoy (2017) conducted one of the few studies that investigate organizational advantages of formal diversity practices. They found that the adoption of formal diversity practices reduced turnover. While there was not a main effect of these practices on return on earnings, a strategic contingency relationship was supported: diversity practices correlated with improved productivity and market performance for firms following innovation strategies.

# 2.4 Conceptualization

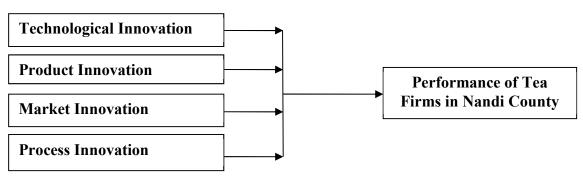
As shown in Figure 2.2 below, a conceptual model for the current research will illustrate the link between innovation strategies and the performance of tea businesses in Nandi County, Kenya. In this study, the independent variables are product, process, marketing, and technological innovations while the dependent variable is the Performance of Tea Firms in Nandi County.

# Figure 2. 2:

# **Conceptual Framework**

# **Independent Variables**

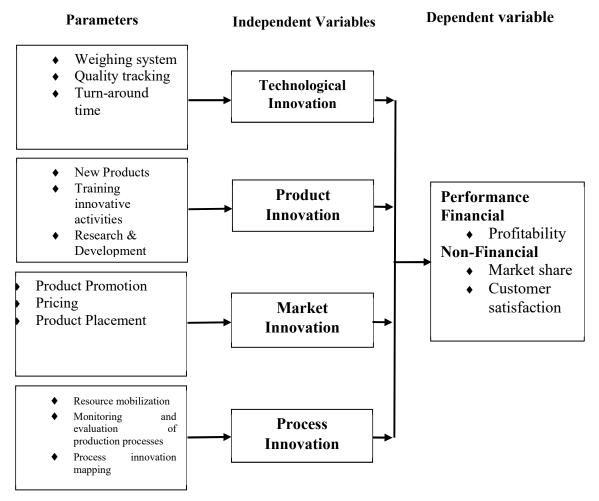
**Dependent variable** 



Source: Researcher, 2022

# Figure 2.3:

# **Operational Framework**



Source: Researcher, 2022

# 2.5 Research gaps

Consumer orientation has a beneficial influence on performance, according to a research by Sharma (2021) on the effect of product innovation on customer contentment and commitment in the Iranian construction sector. However, the previous study focused on the building business in the Islamic Republic of Iran, whereas the present study focuses on the insurance sector in Kenya. In their research on the benefits and drawbacks of institutional and advertising innovation on European firms, Persaud et al., (2021) discovered that a significant number of businesses use organizational and marketing innovations to achieve economic prosperity and competitive edge.

Clausenand and Fichter (2019) concluded that technological innovation is critical to the performance of businesses in their research on micro insurance and the necessity of a holistic culture in service innovation in Germany. Chege et al. (2020) discovered that innovativeness could be effectively in use for comprehending structural ambiguities and uncontrollable variables in rapidly changing markets, based on their research into the roles of customer leverage (CL) on innovativeness and the connections to performance. All of these research was conducted in advanced economies, but none of them focused specifically on the impact of innovations on business performance in Kenyan tea companies. The research was conducted in a developing nation, which differs from developed countries.

# **CHAPTER THREE**

#### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the research methodology which was applied in the study for collecting data. It highlights the research design, the population both the target and final sample size of the study. It also shows the data collection method that was applied and then incorporates the data analysis procedure and presentation of findings.

# 3.2 Research design

According to Bloomfield and Fisher (2019), research design refers to the overall strategy utilized to carry out research that defines a succinct and logical plan to tackle established research question through the collection, interpretation, analysis, and discussion of data. A descriptive research approach was employed in this study. A descriptive research design is a type of research design that aims to obtain information to systematically describe a phenomenon, situation, or population. More specifically, it helps answer the what, when, where, and how questions regarding the research problem, rather than the why. Pertinent data was gathered using quantitative approaches through self-administered questionnaires. This was done for better understanding and analysis of the problem.

# 3.3 Target population

Target population refers to elements of major interest to the researcher for drawing appropriate conclusions and inferences as it regards the features of the whole population (Dahabreh & Hernán, 2019). The management staff among the 9 tea firms in Nandi County who total to 87 formed the target population for this study. Unit of observation were the 9 tea factories in Nandi County while the unit of analysis were all management employees in top,

middle and lower level management from each of the 9 firms. Because they function as strategic leaders, the target demographic included top, medium, and lower-level managers of tea firms in Nandi County. Each tea firm in Nandi County had one top-level management, two middle-level managers, and three lower-level managers as responders. The objective, based on a 2020 forecast by Kenya's tea board.

# **Table 3. 1:**

Target population		
Levels of Management	Population	Percentage
Top Level Management	15	17
Middle Level Management	27	31
Lower Level Management	45	52
Total	87	100

Source: Kenya's Tea Board 2020

#### **3.4 Sampling Procedure**

Sampling techniques include a variety of approaches to help minimize the amount of data obtained by only taking data from a subgroup and not any possible cases or elements into account. A population of less than 100, a census is recommended (Dahabreh & Hernán, 2019). The study therefore used a census of 87 managers to participate in the study.

# 3.5 Methods of data collection

Data gathering, according to Mazhar et al. (2021), is the collecting of data in order to service or prove some truths. In this study emphasis was given to primary data. The primary data was collected using a questionnaire with open ended questions. Questionnaires were used because they allowed the study to collect firsthand information. Questionnaires were easy to code and analyze in Statistical Package for Social Sciences SPSS. Before data collection, permission was sought from all the Tea Firms in Nandi and Kenya Methodist University. Each questionnaire had an introduction letter from the University. A drop and pick latter method was adopted while distributing questionnaires. Use of drop and pick latter methodology gave respondents sufficient time to answer questions at their free time. This did not interfere with their daily operations.

# **3.6 Instrumentation**

Regarding its effect of innovation strategies on the performance of Tea firms in Nandi County, Kenya, questionnaires with closed options in Likert scale as well as open choices were used. The questionnaire constructed to capture the study objectives as reflected in study specific objectives (Appendix II). To ensure that the data collected is relevant to the study's objectives, the data collection instrument must be carefully chosen to avoid collecting extraneous data. (Chen & Jiang, 2021). Questionnaires provide for more consistency in the way questions are answered, resulting in more consistent replies.

#### **3.7** Validity and Reliability of the research Instrument

This section looks into the pilot test, how it was carried out, validity and reliability. These are discussed in detail below:

# **3.7.1 Pilot study**

The questionnaire used for data collection were pre-tested to determine whether the questions and directions are clear to and whether the respondents were able to understand what is required from them (Lowe, 2019). This enabled the researcher to fine tune the questionnaire for objectivity and efficiency of the process. Pre-testing was conducted on ten managers from tea companies in Kitale County because the researcher believes to similar operations like that of Tea Factories in Nandi County. Pretesting helped to assess whether respondents were able and willing to provide the needed information. Any changes in the pilot test resulted to changes in the research instrument (Bousquet et al., 2018).

#### 3.7.2 Validity

The degree which the inferences drawn by the researcher are meaningful and accurate defines validity (FitzPatrick, 2019). Validity is the degree to which study results as obtained from data analysis actually portray the true intent under study. Validity is said to exist if the collected data actually measures what it was supposed to measure. The norm in establishing content validity of research instruments is to appoint an expert in the particular field where the study intends to study. In this particular study, the study readily sought the opinion of the research Tea firm's managers so to assess the validity of the research instruments.

# 3.7.3 Reliability

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. The study used the test- retest method to establish the reliability of the instruments. A test-retest involves administering the same instruments twice to the same group of subjects, but with a time lapse in between. In this case, a two weeks' time difference was preferred. The study made a comparison between responses or results obtained in the test-retest questionnaires. Cronbach Alpha Coefficient was used to determine reliability of the research instruments. FitzPatrick (2019) established that when the coefficient of Cronbach Alpha is 0.7 or greater, then the research instruments used were reliable.

# **3.8 Data Analysis**

Before being processed, the filled surveys were reviewed for completeness and uniformity. The data was then encoded in classifying the responses. The data collected was quantitative. To investigate quantitative data, descriptive analysis was utilized. Once the data was gathered it was subjected to data cleaning, processing and analysis. SPSS Version 26 software (Statistical Package for The Social Sciences) was used in processing and analyzing the collected data. Analyzing the collected data entailed use of descriptive statistics. Descriptive statistical tools which were used in this study included frequency, percentage, mean and standard deviations. To summarize replies for further study and comparison, tables and figures were employed. The following regression model guided the study:

 $Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ 

Where: Y is organizational Performance,  $\beta 0$  is Constant, X<sub>1</sub>= Technological Innovation Strategies, X<sub>2</sub>= Product Innovation Strategies, X<sub>3</sub>= Market Innovation Strategies, X<sub>4</sub>= Process Innovation Strategies

 $\beta$ 1,  $\beta$ 2,  $\beta$ 3 are Regression coefficients of Independent variables

The significance of the relationship between each of the four independent variables (technological innovation strategies, product innovation strategies, market innovation strategies, process innovation strategies) and performance of tea firms in Nandi County was determined using the f-test. The significance level was 0.05. The contribution of the financial innovations towards performance of tea firms in Nandi County under study was determined using the coefficient of determination (r2).

#### **3.9 Ethical consideration**

Before travelling to the field to gather data, the researcher received authorization from the NACOSTI. The researcher will avoid doing anything that may damage the participants physically or emotionally. When it came to publishing the study's findings, the researcher made sure that the study report correctly reflected what the participants had seen or reported after a thorough examination of all the data.

# CHAPTER FOUR

# **RESULTS AND DISCUSSIONS**

# 4.1 Introduction

This research investigated the effect of innovation strategies on the performance of Tea firms in Nandi County, Kenya. Data presentation was arranged in line with the specific study objectives. The study focused on the following innovations strategies which includes product, process, marketing, and technological innovations.

# 4.2 Response rate

Data were collected between June 2019 and July 2019 using a questionnaire. Eighty-seven (87) questionnaires were issued. Seventy-two (72) were returned representing seventy point five percent response rate (82.7%) as showed in Table 4.1.

# **Table 4.1:**

#### Response Rate

	Frequency	Percentage
Questionnaires Issued	87	100.0%
Questionnaires Returned	72	
Response Rate (%)		82.7
Source: Researcher 2022		

Source: Researcher, 2022

Blumenberg and Barros (2018) argue that a response rate of 50% is adequate 60% is good and 70% and above very good for analysis. This shows that the 82.7 percent response rate from this study was very appropriate for data analysis.

# 4.3 Test of instrument

Following the pre-testing sessions, a revised set of questionnaire was designed. The tools were evaluated for validity and reliability to verify whether the measures generated in the instrument were appropriate and relevant.

# 4.3.1 Results of reliability and validity of the instrument

The instruments' validity and reliability were determined by how well the field's responses matched the empirical and theoretical data of other researchers who had researched similar constructs. The Likert-scale questionnaire was the primary data gathering instrument. Cronbach's alpha test was used to examine and assess the instrument by academic specialists in statistics and management. A Cronbach's alpha test validates the consistency and reliability of a Data collecting Instrument, according to FitzPatrick (2019). Table 4.2 summarizes the outcomes of the test.

# **Table 4. 2:**

# **Reliability Results**

Variables	Coefficient	No of items		
Technological Innovation	0.7222	6		
Product Innovation	0.7146	3		
Market Innovation	0.7022	3		
Process Innovation	0.7124	4		

Source: Researcher, 2022

The research tool consistently yielded high scores that averaged 0.7, which is generally acceptable because a Cronbach's alpha coefficient of exceeding 0.7 validates an instrument as consistent and reliable (FitzPatrick, 2019) The results are presented in Table 4.2.

# 4.4 Background information

# 4.4.1 Gender Distribution

Both gender participated in the study. The results indicate that there was a fair balance of

gender participation in the study as shown below Table 4.3.

Gender	Population	Percentage
Male	41	56.9%
Female	31	43.1%
Total	72	100.0%

Tab	ole 4	<b>4. 3</b> :	
-			

Source: Researcher, 2022

The results in Table 4.3 shows majority of the respondents (56.9%) were male while (43.1%) of the respondents were female. This is a good distribution which depicts a fair balance of gender. Gonzalez et al. (2020) asserts that a ratio of at least 1:2 in either gender representation in the study is representative enough.

# 4.4.2 Age Distribution

The study sought to establish the age of the respondents and the results are as shown in Table 4.4 below.

**Table 4. 4:** 

Age	Population	Percentage
26-30 Years	2	2.8%
31-35 Years	12	16.7%
36-40 Years	26	36.1%
Over 40 Years	32	44.4%
Total	72	100.0%

Source: Researcher, 2022

The results in Table 4.4 shows most of the respondents (44.4%) were over 40 years of age, 36.1% were aged between 36 and 40 years, 16% were aged between 31 and 35 years while

2.8% were aged between 26 and 30 years.

# 4.4.3 Education Level of the Respondents

It was important to establish the education level held by the study respondents in order to ascertain whether they understood the objective of the study. The results are as shown below Table 4.5.

Table	4.	5:
-------	----	----

Educational Level	Population	Percentage
Diploma	2	2.8%
Bachelor degree	52	72.2%
Post Graduate	14	19.4%
Others	4	5.6%
Total	72	100.0%

Education Level of the Respondents

Source: Researcher, 2022

Table 4.8 shows the level of education of respondents was sought and majority (72.2%) had undergraduate degree level, 19.4% had post graduate degree level, 5.6% had other level of academic qualifications while only 2.8% had diploma level education. These findings implied that most of the respondents were qualified to understand the nature of the study problem.

## 4.4.4 Years of Service

The study determined the working experience held by the respondents in order to ascertain the extent to which their responses could be relied upon to make conclusions on the study problem using their working experience. The results as shown in Table 4.6 below.

#### **Table 4.6:**

Varue of Comises

Years in Service	Population	Percentage
6-10 Years	6	8.3%
11-15 Years	8	11.1%
16-20 Years	29	40.3%
21-25 Years	13	18.1%
Over 25 years	16	22.2%
Total	72	100.0%

Source: Researcher, 2022

From the findings in Table 4.6, most of the respondents (40.3%) indicated to have a working experience of 16-20 years, 22.2% had a working experience of over 25 years, 18.1% had a working experience of 21-25 years, 11.1% had a working experience of 11-15 years while 8.3% had a working experience of 6-10 years. These findings were in line with Bodrožić and Adler (2018) that respondents with a high working experience assist in providing reliable data on the study problem since they have technical experience on the problem being investigated by the study.

# **4.5 Descriptive Analysis**

This section presents results based on study objectives.

#### 4.5.4 Technological innovation strategies

The goal of the survey was to find out how respondents agreed with the assertion that technological innovation strategies had affected tea company performance. The results are as shown in Table 4.7.

#### **Table 4.7:**

		SD	D	Ν	Α	SA	Mean	Std
								dev
Tea quality tracking has been	n	17	11	12	20	12	3.0	1.44
enabled as a result of the	%	23.6	15.3	16.7	27.8	16.7		
innovation process, which has								
resulted in a reduction in turn-								
around time.								
The weighing system has	n	6	20	14	19	13	3.2	1.26
increased the transaction number	%	8.3	27.8	19.4	26.4	18.1		
by allowing for faster delivery of								
precise green leaf fields weight								
data to arrive at the plant.								
The interval between journeys is	n	7	17	14	24	9	3.2	1.21
shortened, resulting in less green	%	9.7	23.6	19.4	33.3	12.5		
leaf damage and plant rejection.								
Tea supply has been more	n	11	13	23	15	10	3.0	1.26
efficient in Nandi County because	%	15.3	18.1	31.9	20.8	13.9		
to the plants weighing platform,								
which has improved overall								
quality and reduced damage								
costs.								

Descriptive Analysis for Technological Innovation Strategies

Source: Researcher, 2022

When asked if the innovation process strategies have enabled quality tracking of tea and therefore reduced turn-around time, 20 (27.8%) agreed, 12 (16.7%) disagreed, another 12 (16.7%) did not reply, and 17 (23.6%) severely disagreed. "The weighing system has enabled speedier transfer of precise green leaf field weights information to the plant, resulting in an

increase in the number of transactions," says the respondent. Twenty-seventeen percent (27.8%) disagreed, while twenty-seventeen percent (26.4%) agreed. All of the technical innovation metrics had mean scores ranging from 3.0 to 3.2, indicating the wide range of businesses' innovative technologies.

# 4.5.2 Product innovation strategies

The participants were queried for their opinions on the effect of product innovation on the performance of tea firms, and the results are summarized in Table 4.8.

# **Table 4. 8:**

	· ·	D 1 /	• ,•	
<b>Descriptive</b> Analy	sis tor	' Proauct	innovation	strategies

		SD	D	Ν	Α	SA	Mean	Std
								dev
Sales have increased as a result of	n	7	20	21	10	14	3.1	1.27
the launch of innovative services and	%	9.7	27.8	29.2	13.9	19.4		
products.								
Sales have increased as a result of	n	12	14	20	23	3	2.9	1.16
the addition of high inputs and raw	%	16.7	19.4	27.8	31.9	4.2		
materials.								
Sales have risen as a result of	n	5	26	20	7	14	3.1	1.22
enhancements to current services	%	6.9	36.1	27.8	9.7	19.4		
and goods.								
Introduction of new Products and	n	6	17	19	15	14	3.2	1.25
services has led to increasing in	%	8.3	23.6	26.4	20.8	19.4		
profits								
Profits have risen as a result of the	n	16	11	13	24	8	3.0	1.36
use of high-quality inputs and raw	%	22.2	15.3	18.1	33.3	11.1		
materials.								
Composite mean							3.0	
Source: Researcher, 2022								

On whether the introduction of new products and services led to an increase in sales, twentyone (29.2%) did not give any opinion, 20(27.8%) disagreed, 14(19.4%) strongly agreed with the sentiment. On whether improvements on existing goods and services led to an increase in sales, 26(36.1%) disagreed, 20(27.8%) were neutral and only 14(19.4%) agreed. As to whether the sales have increased as a result of the addition of high inputs and raw materials, 24(33.3%) agreed, 16(22.2%) strongly disagreed while 13(18.1%) did not give any opinion.

On whether the introduction of new products and services led to an increase in sales, twentyone (29.2%) did not give any opinion, 20(27.8%) disagreed, 14(19.4%) strongly agreed with the sentiment. On whether improvements on existing goods and services led to an increase in sales, 26(36.1%) disagreed, 20(27.8%) were neutral and only 14(19.4%) agreed. As to whether the sales have increased as a result of the addition of high inputs and raw materials, 24(33.3%) agreed, 16(22.2%) strongly disagreed while 13(18.1%) did not give any opinion.

On whether the introduction of new products and services led to an increase in sales, twentyone (29.2%) did not give any opinion, 20(27.8%) disagreed, 14(19.4%) strongly agreed with the sentiment. On whether improvements on existing goods and services led to an increase in sales, 26(36.1%) disagreed, 20(27.8%) were neutral and only 14(19.4%) agreed. As to whether the sales have increased as a result of the addition of high inputs and raw materials, 24(33.3%) agreed, 16(22.2%) strongly disagreed while 13(18.1%) did not give any opinion.

On whether the introduction of new products and services led to an increase in sales, twentyone (29.2%) did not give any opinion, 20(27.8%) disagreed, 14(19.4%) strongly agreed with the sentiment. On whether improvements on existing goods and services led to an increase in sales, 26(36.1%) disagreed, 20(27.8%) were neutral and only 14(19.4%) agreed. As to whether the sales have increased as a result of the addition of high inputs and raw materials, 24(33.3%) agreed, 16(22.2%) strongly disagreed while 13(18.1%) did not give any opinion.

All of the product innovation measures had mean scores ranging from 2.9 to 3.1, illustrating the differences in the degree to which businesses' employees innovate goods. The analysis

concludes that, based on the mean, "Introduction of new products and services has led to increasing in profits" (mean of 3.2) and "Improvements on existing goods and services has led to an increase in sales" (mean of 3.1). These findings imply that tea firms in Nandi County, Kenya have introduced new products and services, and also improved existing goods and services to increase their growth as noted by Chaoji and Martinsuo (2019).

# 4.5.3 Market innovation

The goal of the survey was to find out how respondents agreed with the assertion that market innovation strategies had affected tea company performance and the results are summarized in Table 4.9.

#### **Table 4. 9:**

<b>Descriptive</b> Analys	sis for	Market	Innovation	<b>Strategies</b>
---------------------------	---------	--------	------------	-------------------

¥		SD	D	Ν	A	SA	Mean	Std dev
Quality of the product has significantly improved of new better production procedures, as have sales and earnings.	n %	7 9.7	17 23.6	14 19.4	24 33.3	9 12.5	3.2	1.21
Revenue has grown as a result of the advent of new channels of distribution for goods and services.		11 15.3	13 18.1	23 31.9	15 20.8	10 13.9	3.0	1.26
The implementation of new communication methods with consumers and suppliers has resulted in the company's expansion.	n %	9 12.5	23 31.9	14 19.4	16 22.2	10 13.9	2.9	1.27
Composite mean							3.0	

#### Source: Researcher, 2022

The respondents were asked whether product quality has improved as a result of new enhanced production processes, as have revenue and earnings., 24(33.3%) agreed, 14(19.4%) were neutral and 17(23.6%) disagreed with the sentiment. On whether Profitability has grown

as a result of the development of new intermediaries for products and services., 23(31.9%) did not give any opinion 15(20.18%) agreed with the sentiment while 13(18.1%) disagreed. On whether the adoption of enhanced communication methods with consumers and suppliers has resulted in the company's expansion., 23(31.9%) were in disagreement with the sentiment, 16(22.2%) were in agreement and a few 10(13.9%) strongly agreed.

Looking at the mean, the study infers that "New improved methods of production has improved quality of products and increased sales and profits" (Mean 3.2), "Profitability has grown as a result of the development of new intermediaries for products and services." (Mean 3.0). These findings imply that majority of tea firms in Kenya are neither developing new products and market them nor are have they introducing new channels of distribution and communication.

#### **4.5.4 Processes innovation strategies**

The goal of the survey was to find out how respondents agreed with the assertion that innovation processes had affected tea company performance. The results are as shown in Table 4.10.

#### Table 4. 10:

		SD	D	Ν	Α	SA	Mean	Std
								dev
Process innovations are always	n	5	26	20	7	14	3.0	1.24
geared towards improving				27.8	9.7	19.4		
operational effectiveness								
New processes in form of machines	n	9	17	15	20	10	3.1	1.27
and equipment have led to increased	%	12.5	23.6	20.8	27.8	13.9		
sales and profits								
Composite mean							3.0	

#### **Descriptive Analysis for Process Innovation Strategies**

The respondents were asked whether process innovations are always geared towards improving operational effectiveness, 26(36.1%) disagreed, 20(27.8%) did not give any opinion while 14(19.4%) strongly agreed with the sentiment. As to whether new processes in form of machines and equipment have led to increased sales and profits, 20(27.8%) did not give any opinion, 17(23.6%) agreed while a few 8(11.1%) strongly agreed.

All of the metrics of the innovation process had mean scores ranging from 3.0 to 3.1, indicating the differences in the degree to which businesses use the innovation process strategies. The analysis concludes that, based on the mean, "new processes in form of machines and equipment has led to increased sales and profits" (Mean of 3.1), "New processes in form of machines and equipment has led to increased" (Mean 3.0) These findings imply that majority of tea firms in Nandi County, Kenya moderately employed new processes and new methods to improve firm performance.

#### 4.2.5 Firm performance

The research determined tea firm's performance in percentage for the last half a decade. The results are tabulated in Table 4.11.

## Table 4. 11:

As a results of innovation strategies:		<10%	10- 20%	20- 30%	30- 40%	Above 50%
The firm has increased sales over the	n	7	17	14	24	9
past five years	%	9.7	23.6	19.4	33.3	12.5
Over the last five years, the	n	11	13	23	15	10
company's output has grown.	%	15.3	18.1	31.9	20.8	13.9
Over the last five years, the company	n	8	19	19	15	11
has grown in terms of personnel numbers.		11.1	26.4	26.4	20.8	15.3
Over the last five years, the company	n	11	15	14	25	7
has upped the size of suppliers.	%	15.3	20.8	19.4	34.7	9.7

#### **Descriptive Analysis for Firm Performance**

#### Source: Researcher, 2022

Table depicts that 24 (33.3 percent) of respondents said their company had expanded production by 30-40 % of innovation in the last 3 years, 14 (19.4 percent) said 20-30 percent, and Seventeen (23.6 percent) said 10-20 percent. When asked if innovation has increased production over the last five years, 23 (31.9%) said it has improved by 20-30%, 15 (20.8%) said it has grown by 30-40%, and Thirteen (18.1%) said it has improved by 10-20%.

# 4.6 Inferential analysis

The inferential analysis seeks to give inference about study a population regarding the disparities across populations on any given parameter or between variables. This research used correlation and regression analysis.

#### 4.6.1 Pearson correlation coefficient matrix

To determine the degree and direction of the association between the research constructs, the researchers used Karl Pearson's coefficient of correlation. Table 4.12 displays the results of a 95% level of confidence.

#### Table 4. 12:

		IP	IPr	IM	IT	PER
IP	r	1				
	P-value					
IPr	r	.644(**)	1			
	P-value	.000				
IM	r	.346	.509(**)	1		
	P-value	.052	.003			
IT	r	.587(**)	.268	.136	1	
	P-value	.000	.138	.456		
	Sig. (2-tailed)	.686	.192	.784		
PER	r	.339	.490(**)	.224	.430	1
	P-value	.037	.004	.217	.000	

#### **Pearson Correlation Coefficient Matrix**

\*\* Correlation is significant at the 0.01 level (2-tailed), N = 72

*Key: IP* = Product Innovation strategies; *IPr* = Process innovation strategies; *IS* = Market innovation strategies; *IT* = Technological innovation strategies; *PER*= Firm Performance According to Table 4.12 it was established that a positive, significant link between product innovation strategies and tea firm's performance in Nandi County, Kenya (r = 0.339; *p-value* < 0.05), there was a positive, significant link between process innovation strategies and firm performance (r = 0.490, p < 0.05). Further, the results indicate that there is a positive, significant link between market innovation strategies and firm performance (r = 0.224, p < 0.05). And lastly, the results indicate that there is a positive, significant link between technological innovation strategies and Firm Performance (r = 0.430, p < 0.05).

# 4.6.2 Regression Analysis

The study aimed at finding out the overall effect of the independent variables that is product innovation strategies; process innovation strategies; market innovation strategies and technological innovation strategies on performance of tea firm's performance in Nandi County. The model  $Y = \beta_0 + \beta_1 X_i + \beta_2 X_{2+} \beta_3 X_3 + \beta_4 X_4 + \epsilon$  explained 65.32% of the variations in tea firms performances shown in Table 4.13. This showed that product innovation strategies; process innovation strategies; market innovation strategies and technological innovation strategies explained 65.32% of the variation in and tea firm performance.

#### **Table 4.13:**

N	Aodel r		r Se	r Square		Adjusted r Square		of the te
1		.8157	0.0	6754	0.6	532	0.11443	1
a.	predictors:	product	innovation s	trategies:	process	innovation	strategies:	market

a. predictors: product innovation strategies; process innovation strategies; market innovation strategies and technological innovation strategies

Further, the F-calculated (67.7415) was more than the P (0.05) which shows that the model was fit in predicting the influence of the independent variables on the dependent variable. This implies that product innovation strategies; process innovation strategies; market innovation strategies and technological innovation strategies jointly have a significant and positive combined effect on tea firm's performance in Nandi County.

Table 4.14 shows the overall significant test results for the hypothesized research model.

Analysis o	of Variance (A	NOVA)				
		Sum of		Mean		
Model		Squares	df	Square	F	Sig.
1	Regression	57.702251	4	6.7415	64.778	.000 <sup>a</sup>
	Residual	1.4690584	67	0.0052		
	Total	59.1713094	71			

#### Table 4.144:

#### 4.7.3 Regression Analysis Results – Regression Coefficients

Table 4.15 shows the overall significant test results for the hypothesized research model

#### Table 4. 15:

	Unstandardized Coefficients					t	Sig.
	В	Stu. Error	Beta				
(Constant)	1.370	3.83		2.925	.000		
Technological innovation strategies	.498	.241	.476	1.928	.000		
Product Innovation Strategies	.687	.126	.693	3.658	.022		
Market Innovation Strategies	.359	.228	.332	2.982	.000		
Process Innovation Strategies	.375	.181	.286	2.058	.000		

**Regression Analysis Results** 

a Dependent Variable: Tea Firms performance

The regression model below shows the interpretations of the findings. When these beta coefficients are substituted in the equation, the model becomes:

 $Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ 

Therefore,

 $Y = 1.370 + 0.498X_1 + 0.687 X_2 + 0.359X_3 + 0.375 X_4$  where

Y = Technological innovation strategies,  $X_1$  = Product Innovation Strategies,  $X_2$  = Market Innovation Strategies,  $X_3$  = Process Innovation Strategies,  $X_4$ .

According to the findings, there is a positive significant relationship between Technological innovation strategies and organizational performance of Tea firms in Nandi County as shown by a regression coefficient of 0.498. The p-value (0.000) was less than the significance level (0.05), hence the relationship was significant. The results also indicate that there is a positive relationship between product innovation strategies and organizational performance of Tea

firms in Nandi County as shown by a regression coefficient of 0.687. The relationship was found to be significant as the p-value (0.000) was less than the significance level (0.05). Further, Market innovation strategies and organizational performance of Tea firms in Nandi County as shown by a regression coefficient of 0.359. The results also indicate that there is a positive relationship between the relationship was found to be significant as the p-value (0.022) was less than the significance level (0.05). Lastly, the results show that there is a positive significant relationship between process innovation strategy and performance of microfinance banks in Nairobi City County as shown by a regression coefficient of 0.375. This relationship was significant as the p-value (0.000) was less that of the significance level (0.05).

Out of the four variables investigated, Technological innovation strategies, Product Innovation Strategies and Process Innovation Strategies were the most important since to generate one unit of performance 0.687 units of product innovation strategies, 0.498 units of technological innovation strategies and 0.385 units of process innovation strategies must be increased. Therefore, Tea firms in Nandi County ought to focus more on product innovation strategies, technological innovation strategies and process innovation strategies.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSION, AND RECOMMENDATIONS

#### **5.1 Introduction**

This section outlines the research results. The research investigated the effect of innovation strategies on the performance of Tea firms in Nandi County, Kenya. The chapter concludes the findings and makes recommendations on how tea firms in Kenya can improve and increase their performance. For every objective, a description of the results, conclusions, and recommendations have been provided. Lastly, the chapter makes recommendations for further investigation.

## 5.2 Summary of findings

#### 5.2.1 Technological innovation and firm performance

Descriptive analytics revealed that the average mean was more than 3.0, indicating that the majority of respondents agreed with claims on product innovation in their companies. Product innovation was reported to be significantly predict firm performance in multiple regression analysis, with a unit change in product innovation causing 0.498 units of change in firms' performance as represented by the regression coefficient. Furthermore, the studies found that there exists a positive and significant relationship between Technological innovation and Tea firm performance (r = 0.498; p-value < 0.05).

#### **5.2.2 Product innovation and firm performance**

Descriptive analytics revealed that the overall mean was more than three, indicating that the majority of participants agreed with claims on innovative products in their companies. Product innovation was reported to be statistically significant in predicting performance of the firm, in multiple regression analysis, with a unit change in product innovation causing

0.488 units of change in firm performance as represented by the regression coefficient. Furthermore, the studies found that product innovation strategies influenced tea firms' performance (r = 0.687; p-value < 0.05). This finding agrees with Chaoji and Martinsuo (2019) findings who investigated the assessment of factors affecting the growth of tea firms in Ethiopia. According to the findings, there is a favorable and strong link between innovation product and performance (r = 0.435; p-value < 0.05).

#### 5.2.3 Market innovation and firm performance

Descriptive analytics revealed that the average mean was more than 3.0, indicating that the majority of respondents agreed with claims on product innovation in their companies. Product innovation was reported to be significantly predict firm performance in multiple regression analysis, with a unit change in product innovation causing 0.488 units of change in firms' performance as represented by the regression coefficient. Furthermore, the studies found that there exists a positive and insignificant relationship between market innovation and firm performance (r = 0.359; p-value < 0.05).

#### 5.2.2 Innovation process and firm performance

Descriptive analytics revealed that the average mean was more than 3.0, indicating that the majority of respondents agreed with claims on product innovation in their companies. Product innovation was reported to be significantly predict firm performance in multiple regression analysis, with a unit change in process innovation strategies causing 0.375 units of change in firms' performance as represented by the regression coefficient. Furthermore, the studies found that 0.375 units to change in Firm Performance as indicated by the regression coefficient. The correlation analysis further revealed that there exists a positive and

significant relationship between processes innovation strategies and Firm Performance (r = 0.375; p-value < 0.05).

#### **5.3** Conclusion

The study filled the gaps that was identified and concludes that product innovation strategies influence the firm performance of tea firms in Nandi County, Kenya, for the majority of the firms, the introduction of new products, services, quality inputs, and raw materials did not lead to a significant increase in sales or profits. Also, innovation process strategies influenced the firm performance of tea firms in Nandi County, Kenya, for most firms, the introduction of new did not lead to a significant increase in sales or profits. Also, services for most firms, the introduction of new did not lead to a significant increase in sales neither did new technologies in form of machines and equipment led to a significant increase in sales and profits.

Further, market innovation strategies were found to influence the firm performance of tea firms in Nandi County, for most of the firms, new improved methods of production did not significantly improve the quality of products and increase sales and profits, the adoption of more improved communication modes with suppliers and customers did not lead to growth of the business and also the introduction of new distribution channels for services and goods did not result to increased profitability. Lastly, the study concludes that technological innovation strategies influence Firm Performance, for most of the firms; the introduction of new processes did not significantly lead to an increase in sales. However, the introduction of new technologies in form of machines and equipment led to increased profits, market share and customer satisfaction.

#### **5.4 Recommendations**

Innovation plays an important role not only for large firms, but also for Tea firms. It is also one of the most important competitive weapons and generally seen as a firm's core value capability. Thus, it is considered as an effective way to improve firm's productivity due to the resource constraint issue facing firms'. Based on this ground, it was necessary to examine the role of innovative strategies in improving the firm's performance and productivity by taking Heineken Beverage Industry. Accordingly, the research findings illustrate that the product innovation strategies; process innovation strategies; market innovation strategies and technological innovation strategies are effective enough to enhance tea firms performance. The study therefore recommended that technological innovation methods were shown to be statistically significant in predicting firms' performance in the research. The government should establish a policy framework to promote and sustain innovative technologies, according to this research, in order to provide appropriate support for the link between technological innovation strategies and economic growth. Tea companies that thrive in new technologies must be identified and recognized by the government.

The study confirmed that product innovation strategies were statistically significant in explaining Firm Performance. The state should establish a regulatory framework for promoting and maintaining creative goods, according to this study, in order to make product innovation more closely related to company performance. In addition, tea companies in Kenya's Nandi County should develop and expand their capability for new goods. This would allow tea businesses in Kenya's Nandi County to make positive adjustments to physical goods that will help them satisfy customer needs while also reducing harsh rivalry.

Also, the study found that market innovation strategies were statistically significant in explaining Firm Performance. This study recommends that the Kenyan government can establish a policy structure that aims at promoting and maintaining innovation services, stimulate adaptation and use of ICT in market innovation, and enhance the business environment. Tea companies in Kenya's Nandi County should be aim at being adaptable and reach out to other businesses to share market innovation expertise and improve their overall performance.

Finally, the study established that innovation process strategies were statistically significant in explaining tea firms' performance. This study recommends that to achieve a sufficient relationship between innovation processes and firm performance, the state administration should initiate initiatives to expand and grow human resources for innovation processes, as well as to continuously improve efficiency and productivity per unit labor, raw material, and electricity. The research also suggests that tea companies in Kenya's Nandi County can improve their innovation processes by using more methodologies and procedures. All stakeholders should take part in establishing, strengthening and maintaining effective innovation strategy systems; so that organization objectives can be meet.

#### **5.5 Suggestion for further study**

Whereas this research effectively investigates the factors, it also paves the way for future research in a number of other areas. The current research was limited to the tea business. It would be helpful to do a comparable study across a variety of businesses, such as building and banking, for example. The tea companies in Nandi, Kenya, were the subject of this research. It would be beneficial to do similar study across East Africa and elsewhere to determine whether the same findings could be repeated. This is because studies have revealed that foreign businesses dominate the tea sector in emerging countries, particularly in Africa.

#### REFERENCES

- Abdulkader, B., Magni, D., Cillo, V., Papa, A. & Micera, R. (2020), "Aligning firm's value system and open innovation: a new framework of business process management beyond the business model innovation", *Business Process Management Journal*, 26(5), 999-1020. https://doi.org/10.1108/BPMJ-05-2020-0231
- Abubakar, A. M., Elrehail, H., Alatailat, M. A., & Elçi, A. (2019). Knowledge management, decision-making style, and organizational performance. *Journal of Innovation & Knowledge*, 4(2), 104-114.https://doi.org/10.1016/j.jik.2017.07.003
- Adams, C.A. (2016). Internal organizational factors influencing corporate social and ethical reporting: Beyond current theorizing, *Accounting, Auditing & Accountability Journal*, 15 (2), 223-250. https://doi.org/10.1108/09513570210418905
- Akcigit, U., & Kerr, W. R. (2018). Growth through heterogeneous innovations. Journal of Political Economy, 126(4), 1374-1443. https://doi.org/10.1086/697901
- Aksoy, H. (2017). How do innovation culture, marketing innovation, and product innovation affect the market performance of small and medium-sized enterprises (SMEs)? *Technology in Society*, *51*(4), 133-141. DOI: 10.1016/j.techsoc.2017.08.005
- Al Khajeh, E. H. (2018). Impact of leadership styles on organizational performance. Journal of Human Resources Management Research, 8(4), 1371-1388. DOI: 10.5171/2018.687849
- Aliasghar, O., Rose, E. L., & Chetty, S. (2019). Where to search for process innovations? The mediating role of absorptive capacity and its impact on process innovation. *Industrial Marketing Management*, 82(2), 199-212. https://doi.org/10.1016/j.indmarman.2019.01.014
- Amir-Behghadami, M., Gholizadeh, M., & Janati, A. (2020). Methodological Issues on the Importance of Instrument Validation in Cross-Sectional Health Research. *Bulletin of Emergency and Trauma*, 8(1), 49-50. DOI: 10.29252/beat-080109.
- Ausloos, M., Bartolacci, F., Castellano, N. G., & Cerqueti, R. (2018). Exploring how innovation strategies at time of crisis influence performance: a cluster analysis perspective. *Technology Analysis & Strategic Management*, 30(4), 484-497. https://doi.org/10.1080/09537325.2017.1337889
- Azar, G., & Ciabuschi, F. (2017). Organizational innovation, technological innovation, and export performance: The effects of innovation radicalness and extensiveness. *International Business Review*, 26(2), 324-336. https://doi.org/10.1016/j.ibusrev.2016.09.002
- Barbieri, L., Bragoli, D., Cortelezzi, F., & Marseguerra, G. (2020). Public funding and innovation strategies. Evidence from Italian SMEs. *International Journal of the*

*Economics of Business*, 27(1), 111-134. https://doi.org/ 10.1080/13571516.2019.1664834

- Barney, J. B. (2018). Why resource based theory's model of profit appropriation must incorporate a stakeholder perspective. *Strategic Management Journal*, 39(13), 3305-3325. <u>https://doi.org/10.1002/smj.2949</u>
- Beltramino, N.S., García-Perez-de-Lema, D. & Valdez-Juárez, L.E. (2020), "The structural capital, the innovation and the performance of the industrial SMES", *Journal of Intellectual Capital*, 21(6), 913-945. https://doi.org/10.1108/JIC-01-2019-0020
- Bernyte, S. (2018). Sustainability marketing communications based on consumer values and principles. *Regional Formation and Development Studies*, *26*(3), 26-35. DOI: http://dx.doi.org/10.15181/rfds.v26i3.1807
- Bianchi, M., Di Benedetto, A., Franzò, S. & Frattini, F. (2017). Selecting early adopters to foster the diffusion of innovations in industrial markets: Evidence from a multiple case study, *European Journal of Innovation Management*, 20(4), 620-644. https://doi.org/10.1108/EJIM-07-2016-0068
- Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses Association*, 22(2), 27-30. https://doi.org/10.33235/jarna.22.2.27-30
- Blumenberg, C., & Barros, A. J. (2018). Response rate differences between web and alternative data collection methods for public health research: a systematic review of the literature. *International journal of public health*, 63(6), 765-773. https://doi.org/10.1007/s00038-018-1108-4.
- Bodrožić, Z., & Adler, P. S. (2018). The evolution of management models: A neo-Schumpeterian theory. *Administrative Science Quarterly*, 63(1), 85-129. https://doi.org/10.1177/0001839217704811
- Bousquet, J., Devillier, P., Arnavielhe, S., Bedbrook, A., Alexis Alexandre, G., van Eerd, M., ... & Yorgancioglu, A. (2018). Treatment of allergic rhinitis using mobile technology with real world data: the MASK observational pilot study. *Allergy*, 73(9), 1763-1774. https://doi.org/10.1111/all.13406.
- Bronkhorst, J., Schaveling, J., & Janssen, M. (2019). Commoditization and IT product innovation strategies from an IT firm perspective. *Information Systems Management*, 36(2), 126-140. <u>https://doi.org/10.1080/10580530.2019.1587575</u>
- Caille, S., Cui, S., Faul, M. M., Mennen, S. M., Tedrow, J. S., & Walker, S. D. (2019). Molecular complexity as a driver for chemical process innovation in the pharmaceutical industry. *The Journal of Organic Chemistry*, 84(8), 4583-4603. https://doi.org/10.1021/acs.joc.9b00735

- Chaoji, P. & Martinsuo, M. (2019). Creation processes for radical manufacturing technology innovations, *Journal of Manufacturing Technology Management*, 30(7), 1005-1033. https://doi.org/10.1108/JMTM-08-2018-0233
- Chege, S. M., Wang, D., & Suntu, S. L. (2020). Impact of information technology innovation on firm performance in Kenya. *Information Technology for Development*, 26(2), 316-345. https://doi.org/10.1080/02681102.2019.1573717
- Chen, B., & Jiang, Z. M. (2021). A survey of software log instrumentation. ACM Computing Surveys (CSUR), 54(4), 1-34. https://doi.org/10.1145/3448976
- Chen, C. L. (2021). Cultural product innovation strategies adopted by the performing arts industry. *Review of Managerial Science*, 15(5), 1139-1171. https://doi.org/10.1007/s11846-020-00393-1
- Chepkorir, B. M., & Ann, S. (2018). Yield Response of Tea to Integrated Soil Fertility Management in Timbilil Tea Estate in Kericho, Kenya. *International Journal of Environment, Agriculture and Biotechnology* 3 (6), 2140 – 2145. http://dx.doi.org/10.22161/ijeab/3.6.24
- Cherrafi, A., Garza-Reyes, J. A., Kumar, V., Mishra, N., Ghobadian, A., & Elfezazi, S. (2018). Lean, green practices and process innovation: A model for green supply chain performance. *International Journal of Production Economics*, 6 (4), 79-92. https://doi.org/10.1016/j.ijpe.2018.09.031
- Chikamai, M. M., & Makhamara, F. (2021). Influence of leadership competencies on performance of Tea Companies in Nandi County, Kenya. European Journal of Economic and Financial Research, 5(1)5-14.
- Chipeta, C., & Muthinja, M. M. (2018). Financial innovations and bank performance in Kenya: Evidence from branchless banking models. South African Journal of Economic and Management Sciences, 21(1), 1-11. https://doi.org/10.4102/sajems. v21i1.1681
- Clausen, J., & Fichter, K. (2019). The diffusion of environmental product and service innovations: Driving and inhibiting factors. *Environmental Innovation and Societal Transitions*, 31(5), 64-95. https://doi.org/10.1016/j.eist.2019.01.003
- Dahabreh, I. J., & Hernán, M. A. (2019). Extending inferences from a randomized trial to a target population. *European Journal of Epidemiology*, 34(8), 719-722. https://doi.org/10.1007/s10654-019-00533-2
- Duhaylongsod, J. B., & De Giovanni, P. (2018). The impact of innovation strategies on the relationship between supplier integration and operational performance. *International Journal of Physical Distribution & Logistics Management*. 14(3), 779-832. https://doi.org/10.1108/IJPDLM-09-2017-0269

- Duraković, B., & Cosic, A. (2019). Impact of quality and innovation strategies on business performance of Bosnian B2B and B2C companies. *Sustainable Engineering and Innovation*, 1(1), 24-33. https://doi.org/10.37868/sei.v1i1.96
- Edeh, J. N., Obodoechi, D. N., & Ramos-Hidalgo, E. (2020). Effects of innovation strategies on export performance: New empirical evidence from developing market firms. *Technological Forecasting and Social Change*, 15(8), 120-167. https://doi.org/10.1016/j.techfore.2020.120167
- Elert, N., Henrekson, M., & Stenkula, M. (2017). Institutional reform for innovation and entrepreneurship: An agenda for Europe. Springer Nature. Strategic Journal of Business & Change Management. 8 (1), 421 – 434. DOI 10.1007/978-3-319-55092-3
- Erboz, G. (2020). A qualitative study on industry 4.0 competitiveness in Turkey using Porter diamond model. *Journal of Industrial Engineering and Management*, 13(2), 266-282. DOI:10.3926/jiem.2915
- FitzPatrick, B. (2019). Validity in qualitative health education research. *Currents in Pharmacy Teaching and Learning*, *11*(2), 211-217.' https://doi.org/10.1016/j.cptl.2018.11.014.
- Flach, L., & Irlacher, M. (2018). Product versus process: Innovation strategies of multiproduct firms. American Economic Journal: Microeconomics, 10(1), 236-77. https://doi.org/10.1257/mic.20150272
- George, B., Walker, R. M., & Monster, J. (2019). Does strategic planning improve organizational performance? A meta□analysis. *Public Administration Review*, 79(6), 810-819. <u>https://doi.org/10.1111/puar.13104</u>.
- Gonzalez, L. S., Fahy, B. G., & Lien, C. A. (2020). Gender distribution in United States anaesthesiology residency programme directors: trends and implications. *British Journal of Anaesthesia*, 124(3), e63-e69. https://doi.org/10.1016/j.bja.2019.12.010
- Hahn, K. (2019). Innovation in times of financialization: Do future-oriented innovation strategies suffer? Examples from German industry. *Research Policy*, 48(4), 923-935. https://doi.org/10.1016/j.respol.2018.10.016
- Haiyun, C., Zhixiong, H., Yüksel, S., & Dinçer, H. (2021). Analysis of the innovation strategies for green supply chain management in the energy industry using the QFD-based hybrid interval valued intuitionistic fuzzy decision approach. *Renewable and Sustainable Energy Reviews*, 14(3), 110844. https://doi.org/10.1016/j.rser.2021.110844
- Hilman, H., & Kaliappen, N. (2015). Innovation strategies and performance: are they truly linked?. World Journal of Entrepreneurship, Management and Sustainable Development. 2 (1), 11-20. https://doi.org/10.1108/WJEMSD-04-2014-0010

- Kanyuga, L. (2019). Influence of strategic innovation on performance of telecommunication firms: A case of Safaricom Company. *Journal of strategic Management*, 3(1),15-28. https://stratfordjournals.org/journals/index.php/journal-of-strategicmanagement/article/view/263
- Karlsson, C., & Tavassoli, S. (2016). Innovation strategies of firms: What strategies and why? *The Journal of Technology Transfer*, 41(6), 1483-1506. https://doi.org/10.1007/s10961-015-9453-4
- Koech, C. D., Bett, A., & Langat L. (2022). The relationship between process innovative strategies and performance of Kenya Tea Development Agency factories in Kenya. *The Strategic Journal of Business & Change Management*, 9 (1), 198 205. https://strategicjournals.com/index.php/journal/article/viewFile/2173/2077
- Kutsenko, E., Islankina, E., & Kindras, A. (2018). Smart by oneself? An analysis of Russian regional innovation strategies within the RIS3 framework. Φορcaŭm, 12(1), 25-45. https://doi.org/10.17323/2500-2597.2018.1.25.45
- Langroodi, F. E. (2021). Schumpeter's Theory of Economic Development: a study of the creative destruction and entrepreneurship effects on the economic growth. Journal of Insurance and Financial Management, 4(3),55-75. http://dx.doi.org/10.2139/ssrn.3153744
- Liao, S., Fu, L., & Liu, Z. (2019). Investigating open innovation strategies and firm performance: the moderating role of technological capability and market information management capability. *Journal of Business & Industrial Marketing.* 6(1), 1-17 https://doi.org/10.1108/JBIM-01-2018-0051
- Lopes, J., Ferreira, J. J., & Farinha, L. (2019). Innovation strategies for smart specialization (RIS3): Past, present and future research. *Growth and Change*, 50(1), 38-68. https://doi.org/10.1111/grow.12268
- Lowe, N. K. (2019). What is a pilot study? Journal of Obstetric, Gynecologic & Neonatal Nursing, 48(2), 117-118.
- Lu, C., Yu, B., Zhang, J., & Xu, D. (2020). Effects of open innovation strategies on innovation performance of SMEs: evidence from China. *Chinese Management Studies*. 5 (1), 24-43 https://doi.org/10.1108/CMS-01-2020-0009
- Maier, D. (2018). Product and process innovation: a new perspective on the organizational development. *International Journal of Advanced Engineering and Management Research*, 3(6), 132-138. https://www.ijaemr.com/uploads/pdf/archivepdf/2020/ijaemr\_01\_333.pdf
- Maina, E. W. (2018). Influence of Strategic Management Practices on Competitiveness of Kenyan Tea [Doctoral dissertation, Jomo Kenyatta University of Agriculture and Technology], COHERED. http://hdl.handle.net/123456789/4772

- Manohar, S., Mittal, A., & Marwah, S. (2019). Service innovation, corporate reputation and word-of-mouth in the banking sector: A test on multigroup-moderated mediation effect. *Benchmarking: An International Journal*, 27(1), 406-429. https://doi.org/10.1108/BIJ-05-2019-0217
- Martín-Rios, C., & Ciobanu, T. (2019). Hospitality innovation strategies: An analysis of success factors and challenges. *Tourism Management*, 70(5), 218-229. https://doi.org/10.1016/j.tourman.2018.08.018
- Mazhar, S. A., Anjum, R., Anwar, A. I., & Khan, A. A. (2021). Methods of data collection: A fundamental tool of research. *Journal of Integrated Community Health*, 10(1), 6-10. https://medicaljournalshouse.com/index.php/ADR-CommunityHealth/article/view/631
- Mikalef, P., & Krogstie, J. (2020). Examining the interplay between big data analytics and contextual factors in driving process innovation capabilities. *European Journal of Information* https://doi.org/10.1080/0960085X.2020.1740618
- Momanyi, G. W., Armurle, G., & Nyaboga, Y. (2020). The Relationship Between Intellectual Capital, Research and Development and Organizational Performance of Tea Processing Firms in Kenya. *International Journal of Academic Research in Business and Social Sciences*, 10(11), 360-383. http://dx.doi.org/10.6007/IJARBSS/v10-i11/8101
- Muthinja, M. M., & Chipeta, C. (2018). What drives financial innovations in Kenya's commercial banks? An empirical study on firm and macro-level drivers of branchless banking. *Journal of African Business*, 19(3), 385-408. https://doi.org/10.1080/15228916.2017.1405705
- Okour, M. K., Chong, C. W., & Fattah, F. A. M. A. (2021). Knowledge management systems usage: application of diffusion of innovation theory. *Global Knowledge, Memory and Communication.* 70 (8/9) 756-776 https://doi.org/10.1108/GKMC-08-2020-0117
- Onufrey, K., & Bergek, A. (2021). Transformation in a mature industry: The role of business and innovation strategies. *Technovation*, 10(5), 102190. https://doi.org/10.1016/j.technovation.2020.102190
- Paus, E. (2020). Innovation strategies matter: Latin America's middle-income trap meets China and globalisation. *The Journal of Development Studies*, 56(4), 657-679. https://doi.org/10.1080/00220388.2019.1595600
- Persaud, A., Wang, S., & Schillo, S. R. (2021). Assessing industry differences in marketing innovation using multi-level modeling. *Journal of Business & Industrial Marketing*. 15(3) 87-103. https://doi.org/10.1108/jbim-12-2019-0532

- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5. <u>https://doi.org/10.4172/2162-6359.1000403</u>
- Ramus, T., La Cara, B., Vaccaro, A., & Brusoni, S. (2018). Social or commercial? Innovation strategies in social enterprises at times of turbulence. *Business Ethics Quarterly*, 28(4), 463-492. <u>https://doi.org/10.1017/beq.2017.55</u>
- Sartipi, F. (2020). Diffusion of innovation theory in the realm of environmental construction. *Journal of Construction Materials*, 1(4), 2-4. https://doi.org/10.36756/JCM.v1.4.2
- Sartipi, F. (2020). Diffusion of innovation theory in the realm of environmental construction. *Journal of Construction Materials*, 1(4), 2-4. DOI:10.36756/JCM.v1.4.2
- Sasaki, M. (2018). Application of diffusion of innovation theory to educational accountability: the case of EFL education in Japan. *Language Testing in Asia*, 8(1), 1-16. DOI:10.1186/s40468-017-0052-1
- Schmuck, R., & Benke, M. (2020). An overview of innovation strategies and the case of Alibaba. *Procedia Manufacturing*, 5(11), 1259-1266. https://doi.org/10.1016/j.promfg.2020.10.176
- Scott, S., & McGuire, J. (2017). Using Diffusion of Innovation Theory to Promote Universally Designed College Instruction. International Journal of Teaching and Learning in Higher Education, 29(1), 119-128. https://www.researchgate.net/publication/321170278\_Using\_Diffusion\_of\_Innovatio n\_Theory\_to\_Promote\_Universally\_Designed\_College\_Instruction
- Seclen-Luna, J. P., Moya-Fernández, P., & Pereira, Á. (2021). Exploring the effects of innovation strategies and size on manufacturing firms' productivity and environmental impact. Sustainability, 13(6), 3289. https://doi.org/10.3390/su13063289
- Sharma, N. (2021). How core, technical and social components of business relationship value drive customer satisfaction and loyalty in high tech B2B market. *Journal of Business & Industrial Marketing*. 23(7), 76-89 https:// doi/10.1108/JBIM-12-2020-0554/full/html? skip Tracking=true
- Singh, S., Tabassum, N., Darwish, T. K., & Batsakis, G. (2018). Corporate governance and Tobin's Q as a measure of organizational performance. *British journal of* management, 29(1), 171-190. https://doi.org/10.1111/1467-8551.12237
- Van Holt, T., Statler, M., Atz, U., Whelan, T., van Loggerenberg, M., & Cebulla, J. (2020). The cultural consensus of sustainability driven innovation: Strategies for success. *Business Strategy and the Environment*, 29(8), 3399-3409. https://doi.org/10.1002/bse.2584

- Von Krogh, G., Netland, T., & Wörter, M. (2018). Winning with open process innovation. *MIT Sloan Management Review*, 59(2), 53-56. https://www.academia.edu/44612319/Yapa\_et\_al\_2018\_Improving\_innovation\_perfo rmance through convergence
- Wang, W., Cao, Q., Qin, L., Zhang, Y., Feng, T., & Feng, L. (2019). Uncertain environment, dynamic innovation capabilities and innovation strategies: A case study on Qihoo 360. Computers in Human Behavior, 9(5), 284-294. https://doi.org/10.1016/j.chb.2018.06.029
- Xie, X., Huo, J., & Zou, H. (2019). Green process innovation, green product innovation, and corporate financial performance: A content analysis method. *Journal of business research*, 20(10), 697-706. https://doi.org/10.1016/j.jbusres.2019.01.010
- Zhao, Q., Tsai, P. H., & Wang, J. L. (2019). Improving financial service innovation strategies for enhancing china's banking industry competitive advantage during the fintech revolution: A Hybrid MCDM model. Sustainability, 11(5), 141-194. https://doi.org/10.3390/su11051419
- Zimmermann, R., Ferreira, L. M. D., & Moreira, A. C. (2019). Strategic fit between innovation strategies and supply chain strategies: A conceptual study. *International Journal of Value Chain Management*, 10(3), 258-273. 10.1504/ijvcm.2019.10022071.

# **APPENDICES**

# **Appendix I: Letter of Introduction**

# P.O Box 21528-00100

# NAIROBI

# Dear Respondent,

# **REQUEST TO FILL THE QUESTIONNAIRE**

Kenya Methodist University is where I am pursuing my master's degree. My area of expertise is strategic management, and I'm presently working on a study to see how innovation affects the success of tea companies in Nandi County. The study is solely for academic purposes. Participation in this research is completely voluntary, and filling it out or not filling it out will have no impact on the participant's work. It takes around 20 minutes to finish the activity. To make the research more useful, more information is recommended. All information supplied will be treated with the greatest discretion. I value your support and efforts in doing this research; a final document will be sent to you upon request.

Thank you, Yours faithfully Julius Onguso (0722366660) Email:

# **Appendix II: Questionnaire**

The questionnaire below has been set in relation to the objectives of the study. All the questions are in relation to project management practices. Please answer all the questions. Any issue that may need any clarification will be discussed when the researcher calls to pick the completed questionnaire.

# SECTION A: BACKGROUND CHARACTERSITICS

- 1. Tea firm (Optional).....
- 2. Gender Categories

Male [ ] Female [ ]

3. Age Bracket:

18- 25 Years [ ] 26-30 Years [ ] 31-35 Years [ ]

```
36-40 Years [ ] Over 40 Years [ ]
```

4. Educational Level

Diploma [ ] Bachelor degree [ ] Post Graduate [ ] Others [ ]

5. Years of Service

```
6-10 Years [ ] 11-15 Years [ ] 16-20 Years [ ]
```

21-25 Years [ ] Over 25 years [ ]

# **SECTION B: Innovation Strategies**

# Part A: Technological Innovation Strategies

6. To what extent do you agree with the following statements related to Technological Innovation Strategies in your company? Use a scale of 1 to 5 where 1 = strongly agree; 2= agree; 3= neutral; 4= disagree 5 = strongly disagree.

	Technological Innovation Strategies	1	2	3	4	5
INNO1	Technological innovations are always geared towards improving operational effectiveness					
INNO2	New processes in form of machines and equipment have led to increased sales and profits					
INNO3	My organization has highly skilled IT experts					
INNO4	My organization has strengthened Integrated IS that enhances the development of new products					

# **Part B: Product Innovation Strategies**

7. To what extent do you agree with the following statements related to product innovation strategies in your company? Use a scale of 1 to 5 where 1 = strongly agree; 2= agree; 3= neutral; 4= disagree 5 = strongly disagree

	Product Innovation Strategies (PROD)	1	2	3	4	5
PROD1	The introduction of new products and services has led to an increase in sales					
PROD2	The introduction of quality Inputs and raw materials has led to an increase in sales					
PROD3	Improvements on existing goods and services have led to an increase in sales					
PROD4	The introduction of new products and services has led to increasing in profits					

# **Part C: Market innovation strategies**

8. To what extent do you agree with the following statements related to Market innovation strategies in your company? Use a scale of 1 to 5 where 1 = strongly agree; 2= agree; 3= neutral; 4= disagree 5 = strongly disagree

	Market innovation strategies (MRKT)	1	2	3	4	5
MRKT1	New improved methods of production have improved the quality of products and increased sales and profits					
MRKT2	The introduction of new channels of distribution for goods and services has increased profitability					
MRKT3	The introduction of improved modes of communication with customers and suppliers has led to the growth of the business					
MRKT4	This organization conducts aggressive anti- competitors marketing campaigns					

# Part D: Process Innovation strategies

9. To what extent do you agree with the following statements related to Market innovation strategies in your company? Use a scale of 1 to 5 where 1 = strongly agree; 2= agree; 3= neutral; 4= disagree 5 = strongly disagree

Process Innovation strategies (Proc) 1 2 3 4 5
--

PROC1	The innovation process has enabled quality tracking of tea and thus reducing turn-around time.		
PROC2	The weighing system has enabled faster transmission of accurate green leaf field weights information to reach the factory thus increasing the number of transactions.		
PROC3	Turnaround time between trips is reduced thus reducing green leaf waste and rejection at the factory.		
PROC4	Due to the weighing platform in the factory tea delivery has been efficient improving overall quality and reducing damage cost in Tea firms in Nandi County.		
PROC5	Process innovation plays a critical role in Tea Production Field Costs reduction in Tea firms in Nandi County.		

# **PART F: Organizational Performance (PERF)**

10. To what extent do you agree with the following aspects of Organizational Performance in your organization? Where 1= Strongly disagree, 2 = Disagree, 3= Neutral, 4 = Agree, 5 = Strongly disagree

		<10%	10- 20%	20- 30%	30- 40%	Above 50%
PERF1	Increased sales over the past three					
	years					
PERF2	Increased revenue over the past three					
	years					
PERF3	Increased number of employees over					
	the past three years					
PERF4	Increased number of suppliers over the					
	past three years					
PERF5	Increased production over the past					
	three years					

In your opinion, what do you think should be done concerning innovation strategies adopted to enhance your organization's performance?

.....

END

			1	
latiz	37		S,	1 101
0	13.	189	C.	Ø
Q	Es.		A.	2
E		Really	Alere ?	3
Vatio	HA	RAMBI	E.	h foi
REF	UBLI	C OF	KEN	IYA

ience, Technology and Innovatio ience, Technology and Innovatio ience, Technology and Innovatio

ational Commision for Science, Technology and Innovati ational Commision for Science, Technology and Innovati ational Commision for Science, Technology and Innovati Ref No: **786872**  National Commision National Commision National Commision



N ATION AL COMMISSION FOR SCIEN CE,TECHN OLOGY & IN N OVATION

Date of Issue: 09/September/2021

#### **RESEARCH LICEN SE**



This is to Certify that Mr.. Julius Misuko Onguso of Kenya Methodist University, has been licensed to conduct research in Nandi on the topic: EFFECT OF INNOVATION STRATEGIES ON PERFORMANCE OF TEA FIRMS IN NANDI COUNTY, KENYA for the period ending : 09/September/2022.

national commistence, accuracy, and interaction-
P/21/12838 mision for Science, Technology and Innovation -
National Commision for Science, Technology and Innovation -
National Commision for Science, Technology and Innovation -
National Commision for Science 1. March Inovation -
National Commision for Science National Commision -
National Commision for Science, Technology and Innovation -
Director General NATIONAL COMMISSION FOR
National Commision for SCIENCE, TECHNOLOGY & novation
National Commission for Science INNOVATION and Innovation -
National Commision for Science, Technology and Innovation -
National Commision for Scienc Verification QR Code
National Commision for Science, Technology and Innovation -
National Commission for Sci and Commission for Sci
National Commission for Sc.
National Commission for Sci
National Commision for Sc
National Commission for Sc.
National Commission for Sc. 2010 Con-
of this document, on for Science, recording, and importants
National Commision for Science, Technology and Innovation -
National Commision for Science, Technology and Innovation -

#### THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

- 1. The License is valid for the proposed research, location and specified period
- 2. The License any rights thereunder are non-transferable
- 3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
- 4. Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
- 5. The License does not give authority to tranfer research materials
- 6. NACOSTI may monitor and evaluate the licensed research project
- 7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one year of completion of the research
- 8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation off Waiyaki Way, Upper Kabete, P. O. Box 30623, 00100 Nairobi, KENYA Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077 Mobile: 0713 788 787 / 0735 404 245 E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke Website: www.nacosti.go.ke



# KENYA METHODIST UNIVERSITY

O. Box 267 Meru - 60200, Kenya I: 254-064-30301/31229/30367/31171 Fax: 254-64-30162 Email: info@kemu.ac.ke 13<sup>TH</sup> AUGUST 2021

ur ref: NAC/MBA/1/2021/4

ommission Secretary, ational Commission for Science, Technology and Innovations, D. Box 30623-00100, AIROBI.

ar Sir/ Madam.

# : JULIUS ONGUSO MISUKO BUS-3-4510-3/2013

s is to confirm that the above named is a bona fide student of Kenya Metho versity undertaking a MBA in BUSINESS ADMINISTRATION. He is conduction arch titled EFFECT OF INOVATION STRATEGIES ON PERFORMANCE OF MS IN NANDI

# UNTY, KENYA ..

confirm that his thesis proposal has been defended and approved by the unive

is regard, we are requesting your office to issue a permit to enable him colle is masters dissertation.

assistance accorded to him will be appreciated.

faithfully.Dean 2021