

**INNOVATIVE STRATEGIES, TRANSFORMATIONAL LEADERSHIP AND  
PERFORMANCE OF KENYA TEA DEVELOPMENT AGENCY FACTORIES  
IN KENYA**

**DOROTHY CHEPNG'ETICH KOECH**

**A Thesis Submitted to the Board of Graduate Studies in Partial Fulfilment of the  
Requirements for the Conferment of the Degree of Doctor of Philosophy in  
Business Administration (Strategic Management)  
of the University of Kabianga**

**UNIVERSITY OF KABIANGA**

**FEBRUARY, 2022**

## DECLARATION AND APPROVAL

### Declaration

This thesis is my original work and has not been submitted for the conferment of a degree or for the award of a diploma in this or any other University.

**SIGNATURE .....** **DATE: 25 -02-2022**

**Dorothy Chepng'etich Koech**

**PHD/BSA/001/17**

### Approval

This thesis has been submitted with our approval as University Supervisors.

**SIGNATURE .....** **DATE: 25-02-2022**

**Dr. Lydia Langat**

Department of Management Science, Marketing, Tourism and Hospitality

University of Kabianga

**SIGNATURE .....** **DATE: 25 -02-2022**

**Dr. Alfred Bett**

Department of Management Science, Marketing, Tourism and Hospitality

University of Kabianga

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## **ACKNOWLEDGEMENT**

This thesis is a special project. I am deeply grateful to the almighty God for His sufficient grace, strength, and provision throughout this course.

I am grateful to my supervisors Dr. Lydia Langat and Dr. Alfred Bett for dedicating their invaluable time to offer guidance in ensuring that I complete my thesis successfully. I am also grateful to Dr. Naibei, the Dean, School of Business and Economics at the University of Kabianga who has been instrumental in my academic journey. I also want to thank the University staff and classmates who have supported me in one way or the other.

A special acknowledgment to my husband Mr. Philemon Langat for his support, patience, and understanding that I made it.

I would like to express great gratitude to my siblings (Lawrence, Ressy and Preston) father-in-law (Chumek), my mother-in-law (Tecla), relatives (Beatrice), friends (Moreen Tum), and Kericho County colleagues who were my greatest support during my work and study all this time.

Finally, to the Kenya Tea Development Agency employees/family who graciously gave their time to answer my research questions and all those whose enthusiasm gave me the energy to transform my vision into reality.

## **DEDICATION**

### **To my daughters**

Aviela and Netania who add sparkles to my world. My wish is to leave a better world for them.

### **To my grandparents**

The Late Mr. Reuben Mugun, Mrs. Priscilla Mugun, Late Mr. Towett, and Mrs. Alice Towett you laid a good foundation in education I will forever be indebted to you.

### **My parents**

Prof. Eric Koech and Mrs. Winnie Koech who encouraged and sacrificed greatly to start me out in life with an education that has set the foundation and the desire to achieve.

## ABSTRACT

Kenya Tea Development Agency is an organization whose primary role is to collect plucked tea, process and market tea products on behalf of farmers. Despite the crucial role KTDA plays in Kenya's economy, the tea sector faces various challenges such as high cost of production, fluctuations in the international market, and COVID-19 pandemic. To effectively improve the performance of the tea industry, innovative strategies are widely acknowledged as one of the key factors for improving productivity and competitiveness of the sector. Despite the ardent attention to innovative strategies, empirical studies linking innovative strategies and transformational leadership are limited in KTDA factories, Kenya. All these put into consideration; there is need to examine innovative strategies and transformational leadership on the performance of KTDA factories in Kenya. This study therefore sought to analyze the nexus between innovative strategies, transformational leadership, and performance of KTDA factories in Kenya. The specific objectives are to establish the relationship between product innovative strategies, process innovative strategies, market innovative strategies, management innovative strategies and performance of KTDA factories in Kenya. The moderating effect of transformational leadership on the relationship between innovative strategies and performance of KTDA factories in Kenya is also put on a scale. The study was premised on Schumpeterian theory of innovation, Dynamic capability theory, and Discovery theory. The study is significant to stakeholders in agricultural sector which includes the government, agricultural firms and small scale tea farmers. A correlational and cross-sectional research design was adopted in this study. The target population was 974 employees from 71 KTDA factories in Kenya. A sample of 283 respondents was drawn from four regions using a stratified sampling method. Data was collected using semi-structured questionnaire administered to employees of KTDA factories in Kenya. The questionnaire was pre-tested to ensure its validity and reliability. An aggregate Cronbach Alpha coefficient of above 0.7 was obtained for all variables, hence the data collection instrument was deemed reliable. Data collected was analysed by use of both descriptive and inferential statistics. Multiple linear regression and moderated regression models were used to test the hypothesis. Correlation analysis was utilized in the study to test the correlation between the variables. Study findings revealed that all the four types of innovative strategies; Product ( $\beta = 0.695$ ,  $R=0.748$ ,  $p<0.05$ ), Process ( $\beta= 0.530$ ,  $R=0.711$ ,  $p<0.05$ ), Market ( $\beta= 0.501$ ,  $r=0.746$ ,  $p<0.05$ ) and Management innovative strategies ( $\beta= 0.694$ ,  $R=0.686$ ,  $p<0.05$ ) had positive and significant relationship with performance of KTDA. The study also revealed that Transformational leadership had a significant moderating effect on the relationship between innovative strategies and organizational performance ( $\beta= 0.115$ ,  $R=0.857$ ,  $p<0.05$ ). The study recommends that the government, policy makers, the public sector, stakeholders and other interested parties should make policies that encourage improvement of product innovative strategies, process innovative strategies, marketing innovative strategies and management innovative strategies. To encourage innovative strategies, value creation and change management is fundamental. To drive this effort Transformational leadership has been found to be a must for any organization. Finally, new knowledge has been created, other researchers could prototype and use it as a guide for their research.

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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>ANOVA</b>	Analysis of Variance
<b>BMF</b>	Broken Mixed Fanning
<b>BP1</b>	Broken Pekoe one
<b>CEOs</b>	Chief Executives Officers
<b>CFU</b>	Continuous Fermenting Machine
<b>COVID-19</b>	Coronavirus disease of 2019
<b>CSE</b>	Corporate Social Entrepreneurship
<b>CSR</b>	Corporate Social Responsibility
<b>CTC</b>	Cut Tea Curl
<b>D1</b>	Dust One
<b>EWS</b>	Electronic Green Leaf Weighing Solution
<b>F1</b>	Fannings one
<b>GDP</b>	Gross Domestic Product
<b>GRM</b>	Global Reference Model
<b>ICT</b>	Information, Communication, and Technology
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>KTDA</b>	Kenya Tea Development Agency
<b>MRA</b>	Moderated Regression Analysis
<b>NACOSTI</b>	National Commission for Science Technology and Innovation
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>PD</b>	Pekoe Dust
<b>PF1</b>	Pekoe Fannings one
<b>R&amp;D</b>	Research and Development
<b>ROE</b>	Return On Equity
<b>SAPs</b>	Structural Adjustments Programs
<b>SCDA</b>	Special Crops Development Authority
<b>SDGs</b>	Sustainable Development Goals
<b>SEM</b>	Structural Model Modelling
<b>SMEs</b>	Small Medium Enterprises
<b>SPSS</b>	Statistical Package of Social Science

**STPs** Science and Technology Parks  
**VIF** Variance Inflation Factor

## OPERATIONAL DEFINITION OF TERMS

<b>Management innovative strategies</b>	means integrating all the sections using technology, documenting work processes, making use of own defined standards, recruiting and increasing the capacity of staff to meet organizations aims, and also making use of modern financial management systems.
<b>Market innovative strategies</b>	in this research are referred to as the use of new marketing methods that involve changes in the packaging of the product, the way it is designed, the strategy used in pricing, and how the product is placed.
<b>Organizational performance</b>	is an accomplishment of a given task in this case a project measured against known standards that have been set before such as precision, completeness, cost, and timeliness. In this research, it was gauged by reduction of costs, growth in organizations' revenue, customer satisfaction, product quantity and quality and market share
<b>Process innovative strategies</b>	in this research is where an organization uses new or significantly improved delivery of production methods by changing techniques, software, or equipment. It is meant to decrease unit costs of delivery and production, deliver new or to produce a new significantly improved products and increase quality.
<b>Product innovative strategies</b>	in this research means creating winning products, by improving existing or new products to stimulate markets which leads to a positive significant influence on firms' performance.
<b>Transformational leadership</b>	in this research is a process that changes individuals and transforms them through an exceptional type of influence that pushes them to accomplish more than is typically expected. It includes support from leadership, openness to tolerate and utilize new ideas, influence, motivate, inspire and also stimulate employees intellectually.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.0 Introduction**

This chapter focuses on the background of the study which comprised of innovative strategies, transformational leadership and performance KTDA factories. It outlines the background of the study, statement of the problem, objectives, significance, justification of the study, scope, limitation and assumption of the study.

### **1.1 Background of the Study**

Globalization brings opportunities as well as pressures for domestic firms in emerging markets forcing them to use innovative strategies to improve their competitive position. This research study considered four innovative strategies that are transforming the very foundations of global business and the firms that drive it; product innovative strategies, process innovative strategies, marketing innovative strategies and management innovative strategies. According to Thomas, Narayanan and Ramathan (2012), amidst globalization and stiff international competition, innovative strategies are pillars for survival and sustainable development. Baregheh, Rowley, and Sambrook (2012), argue that firms are forced to apply innovative strategies to meet consumer needs and wants which are rapidly changing. To take advantage of opportunities and meet consumer needs firms have had to use innovative strategies in their processes, products, markets and management.

The uncertainty being experienced individually and collectively present a difficult environment for decision making due to inadequate information and the ever changing

environment. There are innovative strategies that a firm must adapt itself with to survive in an uncertain and challenging environment. Emerging issues like COVID-19 pandemic, globalization, changes in customers tastes and preferences among others have had far reaching effects and unprecedented change on the performance of organizations (Wong, Ho, Cheung and Yeoh, 2020). The exportation of tea, coffee, fresh produce and cut flowers in East Africa have been greatly negatively affected by COVID-19 containment measures such as closing down of auctions and mass gatherings which have led to disruptions in the supply chains (Morton, 2020). Sudiartini, Wayan, Astari, Dhani (2020), envisioned a business model incorporating innovative strategies and the cooperation of stakeholders as being vital to capture the supply and demand of produce amid cut-throat competition. Likewise, this approach can guarantee an improved system in the distribution of the tea in the local and international market. One such innovative strategy can be by making use of online resources such as websites and selling online (Baum and Hai, 2020).

Scholars have questioned whether innovative strategies and transformational leadership leads to superior performance. According to Fleming (2006), leadership has various perspectives and leadership styles which have been grouped according to tasks, people oriented, autocratic leadership, democratic, transactional and transformational leadership. Scholars are in agreement that no one particular style of leadership suits all circumstances. The idea that has been widely accepted is that different leadership styles and dimensions can lead to different outcomes.

Transformational leadership is characterized by charisma (idealized influence), inspirational motivation, intellectual stimulation and individualized consideration.

Transformational leaders integrate creative insight, persistence and sensitivity to the followers in their leadership. The role of a transformational leader is to develop and inspire the subordinate to be more responsible and committed to the challenging goals. The visionary leader inspires and activates employees to perform beyond normal expected output depending on the vision presented by the leader. Based on the important characteristics of a transformational leader, this model is chosen in this study. Moreover, Gandolfi and Stone (2018) suggested that one of the important element of a leader is to be transformational to achieve high organizational performance.

Transformational leadership style has been associated with empowering human resource to be innovative and creative as well as providing an innovative environment (Esin and Ayse, 2018). According to Zahbiun and Yusefi (2007), transformational leadership style transforms the aspects of human lifestyle so drastically and increasingly that it compels organizations to innovate and synchronize in alignment to these changes in order to survive and keep their dynamism. Transformational leaders must exist to motivate employees, introduce innovative culture, psychological empowerment and foster organizational learning (Seyed and Omid, 2015). Charisma, consideration of employees, stimulation of intellect and inspirational motivation are some of the attributes of a transformational leader as identified (Rabia, Abid and Afsheen, 2009).

According to Tareq (2016), idealized influence, individual consideration, arousing employees' creativity, thoughts and imagination and inspiring confidence and a sense of purpose are characteristics of a transformational leader which influence

organization performance positively. Arif and Akram (2018), likewise found strong positive association between transformational leadership and the performance of an organization. Nguyen and Luu (2019), also pointed out that transformational leadership has significant influence on organization performance through organization culture, organization innovation and organization learning. Zhang, Zheng and Darko (2018), also found that transformational leadership has indirect relation with innovative climate through innovative behaviour.

On the other hand, Esin and Ayse (2018), identified that transformational leadership had indirect relationship with organization innovation where there was mediating effect of organization learning and knowledge management. Therefore, there is an interlinkage associated with organizational culture, organization innovation, knowledge management, organizational and transformational leadership on organizational performance. Transformational leadership is based on the foundation of higher level goals by penetrating goals, values, beliefs of their employees and having a great influence on them. Such leaders lead the change through their actions thereby creating trust and loyalty. Researchers have been bringing up the questions of whether innovative strategies, transformational leadership leads to superior performance. The study also utilized the following theories in developing its literature having found them to be the most relevant; Schumpeterian theory of innovation, Dynamic capability theory and Discovery theory. Thus there is a case for further research on the relationship between innovative strategies, transformational leadership and organization performance in KTDA factories in Kenya.

### **1.1.1 Innovative strategies**

Innovative strategies refer to a plan adopted by an organization to encourage advancements in technology or service to enhance its competitive advantage in the market (OECD, 2005). According to OECD, (2005) innovative strategies have different classifications one of the four types being; product innovative strategies, process innovative strategies, marketing innovative strategies and management innovative strategies. Research in Sweden municipalities has identified that innovative strategies assisted most organizations positively (Karlsson and Tavassoli, 2015). In adapting market, product, service or process and management innovative ideas, organizations have improved in performance (Nyambura, 2014). Innovativeness in mobile industry as researched by Nyambura (2014), has enabled Safaricom to pool more profit in a competitive market through marketing innovative strategy, product innovative strategy, service provision innovation and dynamic easy transfer of innovation from all human resource.

Currently, innovative strategies are required to ensure organizations are able to adapt, change and improve despite emerging issues that affect external environment of the business. Currently, the business external environment is faced with COVID-19 pandemic which has led to organization changing the normal production (Hamid, Abdul, Hosna, Waliul and Kamruzzaman, 2020). Majority of the organizations have adopted digitization process to reduce direct contact between employees and reduce spread of the contiguous virus. These changes have led to guidelines that affect the organization based on safety social rules that require innovativeness and technology to ensure organizational continuity (Ince, 2020). The organizations are expected to

address technological issues that would reduce the workforce at workplace and enable people to work at home using internet. According to Wong, Ho, Wong, Cheung, & Yeoh (2020), digitization of work is crucial to ensure other process can be done without employees necessarily going to the workplace. This requires innovative strategies and a shift of mind from normal to supernormal mainly among the leadership to think beyond the pandemic. Therefore, organizations should venture into appropriate technology as well as innovative strategies in product, process, marketing and management to enable them remain competitive.

A study by Therrien, Doloreux and Chamberlin (2011), found that in order to get great benefits from innovative strategies one has to come to the market early with new products before other organizations do so. Gunday, Ulusoy, Kilic and Alpkam, (2011) did a study on management innovative strategies, product innovative strategies, process innovative strategies and market innovative strategies in the manufacturing industry, they found that there is a positive relationship between product, process, marketing and management innovative strategies and organizations performance. Shqipe, Gadaf and Veland (2013), in their opinion, there are two different types of innovative strategies; which are radical and incremental innovative strategies. They opined that incremental innovative strategies are those that involve improvements of costs or features of products, services and processes that are already there. Radical innovative strategies on the other hand, however concentrates on unprecedented performance features in the products, services, and processes in an organization.

Ngirigacha and Bwisa (2013), did a study on small and medium enterprises market competitiveness and how it is affected by entrepreneurial innovation in Thika town in

Kenya. On the relationship between product innovative strategies and organization performance the study found evidence of a notable positive relationship between them. Soi (2016), found that product innovative strategies positively influenced the performance of the telecommunication industry in Kenya. Similar studies is therefore necessary for the tea sector in Kenya. There are different categories of innovative strategies and they are sub-divided into either technological or non-technological innovative strategies (OECD, 2005). According to the Oslo Manual (OECD, 2005), innovative strategies are grouped into four categories which include process innovative strategies, product innovative strategies, marketing innovative strategies and management innovative strategies.

Product innovative strategies can be termed as strategies where a good or service is greatly enhanced in terms of its elements and how it is to be used, it includes technological improvements in specifications of components and material and software that have been incorporated which may make the goods or service better in terms of how they are used and how they function generally. It can make use of technological advancements or knowledge or new found uses of a good or service or a combination of both existing technology and knowledge (Oslo,2005).

Oslo (2005), pointed out that product innovative strategies improve the characteristics of goods and services which is also associated with a new product. Technology's role in transformation of a product is very important. According to Oke, Prajogo and Jayara (2013), product innovative strategies involve improvement of the quality of a product which has positive significant influence on firms' performance. Lisbo and Yasin (2014), noted that from the different types of innovative strategies, product innovative

strategies affects organizations performance greatly. This was also pointed out by Ar and Baki (2011), who noted that the relationship between product innovative strategies and organizations performance is strong and positive.

There is need also to consider customer needs while developing a new product to ensure that product innovative strategies taken are efficient and effective (Polder, Leeuwen, Mohnen and Raymon, 2010). High creativity was identified as an important element in product innovative strategies as it aids in product quality improvement, according to Onikoyi (2017), this would ensure high performance. According to Montero, Pennano and Camilo (2017), it is essential to consider organization factors, development and process factors, market forces factors and strategic factors before adaptation of any process innovative strategies.

In studies conducted, financial gain has been identified as a major benefit to be derived from implementation of product innovative strategies (Cozza, Malerba, Mancusi, Perani and Vezzulli, 2012). Hernandez-Espallardo and Ballester (2009), also got the same results from research which was that, product innovative strategies had a positive influence on performance of organization. There are quite a number of studies that have been conducted in Kenya to show the relationship between product innovative strategies and organization performance such as Karanja (2014), conducted a study on innovative strategies and their influence on the competitive advantage. Letangule and Letting (2012), also conducted a research on innovative strategies in the telecommunication industry and found that the main innovative strategy that affected the industry was product innovative strategies which influenced the profitability of the organization greatly.

Process innovative strategies is the use of a new methods of delivery or production which has been greatly improved. The significant changes could be in terms of the equipment/machines, techniques or software used. The effect they have is to reduce the costs used in production or delivery and in turn increase their quality of delivery or product. Process innovative strategies can also be better use of workforce, different ways the information moves, different job description and different materials used as input in the production of goods and services (OECD, 2005). Process innovative strategies are aimed at making the production efficient and effective by improving or changing the way the organization does its work. Azis (2015), confirmed that process innovative strategies are about taking up a new production process that results in a much better delivery method. This also means a great change in the software, techniques used and also the equipment used in production.

Process innovative strategies aim at lowering the costs and time involved in the production of a product. This is through efficiency and effectiveness that is gained through improved product quality, less resources used and reduction of time used (Gunday, Ulusoy, Kilic and Alpan, 2011). El-Kassar and Singh (2019), found that process innovative strategies assisted in improving performance of organization. Similarly, Sintset, Nekoumanesh and Yang (2013), found that process innovative strategies is a step by step process that requires time and a change in organizational culture to enable organizational perform.

Rosli and Sidek (2013), found that the association between process innovative strategies and organization performance to be positive, in small and medium enterprises. Njeri (2017), found another view in which the study reports that some of

the impeding factors in process innovative strategies in small and medium enterprises include the inadequate trained manpower, inadequate finances, lack of adequate research and development. A research conducted in Kenya by Martin and Namusonge (2014), revealed that 75 percent of businesses used a strategy of investing in machineries in the production process even though SMEs found the implementation very expensive and demanding process. In the research, one of the findings was that, process innovative strategies contribute in terms of reduction of costs.

Market innovative strategies involves the implementation of new marketing methods which result in significant changes in product design or packaging, product placement or pricing strategy (Tidd, Bessant and Pavitt, 2005). Its target is to better meet customer' needs, to open up new markets, or to give the firm's products a new position in the market with the intention to increase sales income. Market innovative strategies are strongly related to pricing strategies, product offering, design properties, product placements and/or promotion activities (Oliveira, Cavalcanti, Paiva and Marques, 2014).

Market innovative strategies are associated with promotions, placement of products, redesigning, pricing, market campaigns, branding among other marketing strategies (Simiyu, 2013). Simiyu (2013), from the research he conducted in commercial banks, some of the market innovative strategies he found were through creating as well as nurturing strong brands, aggressive market campaigns against competitors, ensuring availability of resources and capabilities, creating product value through pricing, conducting environmental analysis, responding to changes in a quick manner, making sure the customers are satisfied and therefore retained. A study by Prifti and

Alimehmeti (2017), did market innovative strategies in relation with firm performance. Albania firms were sampled where 99 companies were empirically analysed using structural equation modelling techniques. The study revealed that responsiveness was a good indicator of market innovative strategies.

Karlsson and Tavassoli (2015), also pointed out packaging, product design, placement and pricing of products as some of the market innovative strategies. The strategies aim at improving the brand so as to create customer experience hence creating customer satisfaction and thereafter customer loyalty to the product (Hong and Lee, 2018). Therefore, market innovative strategies aim at creating competitive advantage of organizations product through creation of customer satisfaction translating to organization performance.

Management innovative strategies puts into perspective organizations models, which means, taking into account new mental models in the carrying out of organizations activities and the re-structuring of organizations workspace (Tidd, Bessant and Pavitt, 2005). The more current view of management innovative strategies consists of value addition and generation of more for the main stakeholders' thorough innovation. This is by creating better relationship with the customers, grouping the customers based on their similarities, client segmentation, maintaining of customer relationship, the association between the distribution channels and the enhancement of partnerships which contribute mainly to the structure of the organization (Teece, 2010; Foss and Saebi, 2018).

Other practices that may be derived from management innovative strategies may include knowledge codification through the establishment of databases of best practices, through tacit knowledge obtained and lessons derived from lessons learned, making sure that training programs are in place to enhance staff skills, or programs that can enhance the suppliers and develop customers. Management innovative strategies therefore is strongly associated with developing management routines related to administration activities, systems, procedures, mechanisms and policies which enhance employee teamwork, acquiring and sharing of information, collaboration and coordination with other arms is encouraged.

Seyed and Omid (2015), researched on management of organizational innovative strategies. The study found that innovative ideas can be managed to ensure that the organization benefit from the innovation however, it is slightly different from management innovative strategies. Empirical review indicated that incentive for innovativeness, participative management, capability and adoptability of management innovative strategies were examined through innovative strategies structural forms and core requirement for organizational innovative strategies. The study also considered transformational leadership as catalyst in organizational innovative strategies.

Management innovative strategies is grouped by some scholars in two groups that is managerial innovative strategies and organizational innovative strategies both whose aim is to improve management of the resources in the organization (Birkinshaw, Hamei and Moi, 2008). Yongan, Umair, Seoyeon and Madiha (2019), in their study found that there was direct interaction between management innovative strategies as well as technological innovative strategies on sustainability and organizational performance.

The role of sustainability between management and organization performance was realised to be partial and mediating.

Innovative strategies have been shown to play a crucial role in securing sustained competitive advantage. Therefore, organizational theorists and managers alike have long shown more interest in the role of innovative strategies in organizations. As organizations attempt to gain competitive advantage, they develop and/or adopt new products, processes, techniques, or procedures. There is no similar research that has been done on transformational leadership, innovative strategies and performance of KTDA factories in Kenya despite the challenges at the global level. This paper also aims to bridge the gap in the study by reviewing the different strategies adopted by KTDA factories in Kenya in respect to the global scenario. The study collected information about product and process innovative strategies as well as marketing and management innovative strategies. The aim of this study therefore was to investigate the transformational leadership, innovative strategies and performance of KTDA factories in Kenya.

### **1.1.2 Transformational leadership**

Transformational leaders are described as individuals with influence, are able to motivate employees, stimulate them intellectually and at the same time put their individual needs into consideration. Transformational leaders are able to identify creativity, their loyalty and persistence. The role of transformational leaders therefore is to inspire and bring out the best performance of employees by encouraging them to be responsible and committed to goals however challenging. Transformational leadership enshrines leaders who enable transformation of organization by inspiring

them, motivating, empowering them psychologically, through an innovative organizational culture and market innovation success (Seyed and Omid, 2015).

Transformational leadership is required in the current changing environment based on emerging issues. Continuously, most scholars are in agreement that there is no single leadership style that indicates the most appropriate style to all situations. COVID -19 pandemic is one of the world's rapid spreading diseases that have a devastating effect on organizations and business. The pandemic infected about 14 million people with over 200 thousand new infections by July 2020 (Camevale and Hatak, 2020). Tea manufacturing firms in the world have directly or indirectly been affected by COVID -19 Pandemic, this is because of lockdowns which has greatly affected the supply chains and the productivity of employees. The interruptions of the supply chains have created uncertainty in the tea industry and thus emergency response measures are being undertaken by management in the tea industry to try and mitigate.

Prior to the outbreak of COVID-19 Pandemic and its enormous direct and indirect impacts, governments all over the world were facing challenges regarding and not limited to achieving the SDGS and Vision 2030. By 2021, it was evident that having innovative strategies were an important component to enable organization survive the crisis of COVID-19 and other challenges. Organizations are increasingly seeking innovative strategies to improve performance and ways of working, with many establishing in-house teams, strategies and dedicated programs to achieve these goals (OECD, 2020).

The COVID-19 pandemic crisis led to change in the industry game rules, the initial impact was a drop in levels of outputs, layoffs and also supply chains became prone to disruptions (OECD, 2020). For firms to survive in this difficult conditions, continuous change and adaption of innovative strategies has become of paramount importance. In general, the creation or adaption of an idea or behavior that is new to the organization is innovation (Lam, 2005). Earlier contributions to organizational innovation focused on new changes within the business environment in the organization. Simao, Cavalho and Madeira (2021) defined management innovative strategies as use of a new idea whether formulated in the organization or borrowed from another organization in terms of a system, process, program, policy, product or service. Management innovative strategies in general refers to innovative behavior or implementation of innovative strategies in organizations.

According to Ince (2020), some of the challenges are temporary job termination, pending salaries, lower salary, retrenchment and reduction of employee performance which require transformational leadership to reduce the impact on organizational performance. The employee safety guidelines have also impacted on the cost of production leading to high overheads, these are some of the issues the manager encounters in managing the organization through a pandemic (Wong, Ho, Wong, Cheung and Yeoh, 2020). Transformational leaders continuously challenge the status quo by encouraging change from old ways of doing things to new ways, this is by encouraging innovativeness and creativity and thus solutions can be found. Culture is where transformational leadership and innovative strategies are embedded which help in creating better performance of the organization.

From the studies done before, it was found that leadership is one of the most important roles played in the organization which affects the implementation of innovative strategies (Jung, Chow and Wu, 2008). Leaders are the most important people who steer the organization through their actions towards innovativeness of their organizations. Leaders are involved in the initiation and implementation process of innovative strategies which enhances its effectiveness. Leaders play a central role in the innovative strategies implementation process through its influencing role in making decisions, procedures and policies and through crucial ways involved in implementing changes in the organizations that support innovative strategies (Prasad and Junni, 2016).

The value derived from leadership in implementation of innovative strategies has been established, but besides that having the right type of leadership is of paramount importance in driving innovative strategies in organizations (Oke, Munshi and Waloubwa, 2009). In different researches conducted on leadership, transformational leadership was found to be most effective in implementing innovative strategies than other styles of leadership (Jung, Chow and Wu, 2003, 2008; Bass and Riggio, 2006; Sarros, Cooper and Santora, 2008; Gmusluoglu and Ilsev, 2009; Hsiao, Chang and Tu, 2009).

Leaders with transformational leadership style should try to understand dynamic aspects of innovative strategies such as different combinations in technology and non-technology aspects such as product innovative strategies implemented to address needs and demand of customers. Jung *et al.* (2003), directly and indirectly through organizations employees innovative climate and empowerment they found that

transformational leadership had a significant positive relationship with organizations innovative strategies. Through observations it has been found that innovative behaviors are the foundation to change in organization and the main principle to management innovative strategies (Tsai and Chen, 2010). Therefore, a further advance over previous studies is that this research encourages organization support for innovative behavior and its interaction with transformational leadership and the behaviors associated in influencing innovation strategies in the organization.

Transformational leaders influence innovative strategy implementation through inspiration, motivation and encouraging organization's employees to be innovative as well as creative. Transformational leaders encourage individuals to be more creative by thinking outside the box and by creating new solutions and ideas that are concerned with practices, process and structures (Prasad and Junni, 2016). Feng, Huang and Zhang (2016), believed that to encourage innovative strategies and to keep up with the changes occurring transformational leadership is top priority in practice of leadership. Therefore it would be interesting to test the moderating effect of transformational leadership on innovative strategies and performance of KTDA factories. This research study was in the particular context of the tea sector in Kenya. The study also strives to enrich the extant literature by investigating the relationship between transformational leadership and innovative strategies in different ways.

### **1.1.3 Performance of tea industry**

Organizational performance is multifaceted component used to measure ability of the organization using cost cutting, quality of products, customer satisfaction and market share. According to Augusto, Lisboa and Yasin (2014) the quality of the product is

linked with product and process innovativeness that affect the end product. It plays an important role in customer satisfaction since majority of the customer are concerned with the quality of the product consumed. However, this should be done at lowest cost in order to make profit and create a competitive advantage. Santos and Brito (2012) also affirmed that the level of customer satisfaction can be measured by the number of repeated purchase and number of complaints. Maina (2016) also pointed out that performance of the organization can be measure by market sales earned over a period of time. The investors are always concerned about the market share increase or decrease which decides the competitiveness of the product.

Tea has been found to be consumed to a greater extent in the whole world compared to other beverages and it's the second only to water consumption (Chakravorty, Bhattacharya, Bhattacharya, Sarkar and Gachhui, 2019). The tea consumed has surpassed the number of cups of coffee consumed in the world and people are consuming more and more tea so the gap is widening (Dufrêne, 2012). The amount of tea produced in the past 20 years in the world has doubled to 5.3 million tons from 2.5 million tons. Consumption has also increased in correlation to production. It reached peak at \$2.62 per kilogram in 2010, the auction prices dropped slightly thereafter. There was a decrease in production from 43 percent to 34 percent in 2015 through the shares of exports.

China has been recorded as the greatest tea producer which accounts to 43 percent of world production which is followed by India's production which is a distant second with 23 percent share in production as at the year 2015. In Africa, Kenya is the leading producer with 8 percent world share this is due to the cost advantage it has against other

countries. The five exporters who top are, namely Kenya, China, Sri Lanka, India, and Vietnam who account for about 80 percent of world exports.

In Kenya, sixty-two percent of production of tea is accounted for by small scale tea farmers who are estimated to be about 560,000. Between 2001 and 2010, there has been significant increase in tea production by small scale tea farmers that is from 1.1 million ha to almost two million ha. In the same period, small scale tea farmers increased their production by 34% in, from 85 511 ha to 115 023 ha, and by 30% in Vietnam, from 101 884 ha to 132 000 ha (Munishi, Mgelwa and Guan, 2017).

Performance is the ability of tea factories to meet their financial obligation in the market. Tea factories measure their performances in terms of cost reduction, flexibility, quality products and customer services (Hajinoor, 2012). According to Begam (2013), firm performance is largely dependent on key performance indicators. Cost saving on modes of distribution, efficient mode of assembling and maximum sales makes a firm efficient and effective in response to the demands of their customers. Production cost reduction, value addition to products towards achieving maximum customer satisfaction and high returns on investment clearly define tea factories performance. Traditionally, performance was viewed in terms of finance only but recent scholars have established non-cost measures that can be used to determine performance. They include market share, product quality, company image among others. In this study therefore KTDA factories are seen to be performing when they are cost reduction, cutting their costs, providing high levels of customer satisfaction and producing products that are of high quantity and quality.

#### **1.1.4 KTDA in Kenya**

Tea companies are directly linked with KTDA holdings which includes KTDA Power Company for generation of hydropower generators, Chai trading company for storage, Majani Insurance for insurance and brokerage, Greenland Fedha for micro finance service, KTDA MS for tea cultivation, payment, processing and marketing and Kenya Tea Packers for tea blending and packaging. This inclusive model ensure that farmers are well trained, access finance, payment for tea plucked and access bonus. KTDA has financed the construction of new warehouses to handle storage and improve supply chain. These integration of innovation ensure high production, quality tea product and low cost of production (International Finance Corporation, 2013). KTDA have ensured innovation through technological advancement and research, marketing and publicity, ICT integration, improvement of green leaf quality and tea products (Christian Partners Development Agency, 2018). Also, majority of innovative strategies are adopted, implemented and utilized at factory level to ensure that the tea produced is within the required quality, standards and fetch the best price. Despite, high diffusion of innovation in manufacturing sector, KTDA factories receives different shares of profits that are normally converted to bonus from across different KTDA factories.

KTDA factories are spread across 14 Counties in the country. KTDA factories main specialty is producing black CTC tea. However, as result of innovative strategies KTDA factories have differentiated tea products. From the Black CTC there have been improvements in the grading of tea where Broken Pekoe one (BP1), Pekoe Fanning one (PF1), Pekoe Dust (PD), Dust One (D1) represent primary grades, whereas the

secondary grades are F1 – Fanning one, BMF - Broken Mixed Fanning, Dust. Some of the factories have ventured into new products such as green tea, white tea, purple tea and black orthodox tea. Green tea is made from a finer plucked green tea leaf. Green tea is brewed at lower temperatures to realize a sweet flavor. White tea is tea made from very fine two leaves and a bud or the bud from specifically selected clone. The tea is manufactured through natural sun drying. Purple tea is harvested from a specific purple tea plant. Black orthodox tea is oxidized tea produced through rolling machines. Black Orthodox grading is by leaf size, texture and style (KTDA, 2020). These specialized teas fetch more value in the market with high return as compared with black CTC tea. The tea products are either auctioned, directly sold overseas, repacked by KETEPA or factory door sales.

According to Kiai and Wambui (2015), KTDA factories are facing challenges of continuous increment of production cost translating to low returns of tea produce to small scale farmer. The companies have also faced a large number of intermediaries between the tea factory and the consumer. They include brokers, insurances, import duties, legal fees, exportation among many others. There is need to address the increasing cost through new strategies that reduce cost. Innovative strategies with appropriate leadership would reduce production, administration and operation cost in KTDA. However, based on current poor price of tea and thereafter low returns to farmers, it is important to investigate innovative strategies, transformational leadership and performance of KTDA in Kenya.

Climate change has significantly affected the production of tea. Inadequate rainfall as a result of drought, change in rainfall, increase in temperature and increased humidity.

Hail, cold conditions and frost beside inadequate rainfall have reduced tea production in KTDA (Bore, 2015). KTDA adaptation have developed mitigation measure at the small scale farm level, disaster risk reduction, improve packaging among long-term strategies (Kagira, Kimani, & Githii, 2012). COVID-19 pandemic are some other emerging challenges that have affected KTDA interfering the tea productivity. The pandemic has affected the production of tea because of interruption of the human resource and tea processing. There is need for prudent transformational leadership as well innovative strategies for enhancement of performance of KTDA.

The small holder sector factories are managed by Kenya Tea Development Agency (KTDA). In an effort to meet customers' demands and at the same time make profits tea processing organizations encounter many obstacles. Some of the challenges as highlighted by Abeysinghe (2013), include but are not limited to demand for higher pay by staff which is a major attribute to a high cost component, the cost of inputs is also high such as the costs used in fuel, costs of machinery and other costs associated to the agrochemicals; lately there has also been a drop in production levels in all processing factories, farmers are also shying away from planting new tea bushes thus there is mostly aging tea bushes and increase in large uneconomical tea lands; there is also a shortage of unskilled labor; global warming has caused a change in weather patterns; tea processing requires a lot of energy which has been hard to meet; there are many requirement for safety of food; many certificates have to be acquired and also several protocols to be fulfilled in hygiene for tea processing; the factories have to ensure workers safety requirements are adhered to; so as to be able to increase their share in local and international markets.

According to Nguyen and Luu (2019) the tea industry has involving processes in which huge resources and logistics are required. Due to inflation and interruptions in the supply chain due to the COVID-19 Pandemic, the costs of items supplied to KTDA has continued to increase. To mitigate the interruptions in the supply chains, which have led to cost challenges. KTDA has set its strategic plan (2021-2025) with one of the main objectives being to improve operational efficiency and also reduction of costs. Some of the innovative strategies used by KTDA are product innovative strategies, process innovative strategies, marketing innovative strategies and management innovative strategies.

KTDA introduced the Electronic green leaf weighing solutions (EWS) which are machines that allow data processing to be instant. Rayport and Benard (2001), found that implementation of EWS resulted in lower costs of raw materials (green leaf). Another innovative strategy adopted is continuous fermenting machine (CFU) that is automated and has taken the place of fermentation trolley to ferment tea. This is a great process innovative strategy that has resulted in reduction of workers by 40% (Kimathi and Muriuki, 2012). KTDA as an organization are continuously implementing innovative strategies and this is again scaled down to the different subsidiaries and factories.

## **1.2 Statement of the Problem**

Tea sector in Kenya contributes significantly to the economy (GDP, employment, foreign exchange through export etc), however it faces various challenges from low international prices, high tea field costs, competition, souring

manufacturing costs, distribution cost and the effect of COVID-19 pandemic. Some small scale farmers have chosen to uproot their tea farms and opt for other crops as their tea farms are no longer profitable. They point their troubles to low returns from their green tea produce. KTDA needs to convince farmers to keep their tea plantation by reducing their costs and increasing their returns leading to high organizational performance. The extent literature shows that organizations that adopt innovative strategies execute their duties differently and in a cost effective way and are guaranteed survival. Countries like Sri Lanka are producing less but are gaining more from their tea produce despite facing similar challenges as those faced in Kenya. There exist a wide room to improve tea performance in international market through diversifying to purple tea, white tea, orthodox tea and green tea as other countries like India and China have done. While previous studies have provided insights about the tea sector, they have shown little guidance on the relationship between innovative strategies, transformational leadership and performance of KTDA factories in Kenya. Previous research indicates that innovative strategies and a suitable type of leadership can improve the performance of organizations through improvements in revenue, cost cutting, products quality, quantity, market share, customer satisfaction among others. However little is known regarding the relationship between innovative strategies, transformational leadership and performance of KTDA factories in Kenya. Therefore, this study seeks to investigate the relationship between innovative strategies, transformational leadership and the performance of KTDA factories in Kenya.

### **1.3 Objectives of the Study**

The main and specific objective of the study were as follows;

#### **1.3.1 General objective**

The general objective of the study was to establish the relationship between innovative strategies, transformational leadership and performance of Kenya Tea Development Agency Factories in Kenya.

#### **1.3.2 Specific objectives**

The specific objectives of the study were to:

- i. Establish the relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.
- ii. Assess the relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.
- iii. Assess the relationship between market innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.
- iv. Determine the relationship between management innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.
- v. Establish the moderating effect of transformational leadership on the relationship between innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.

## **1.4 Hypotheses of the Study**

The study was driven by the following research hypotheses;

H<sub>0</sub>1: There is no significant relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.

H<sub>0</sub>2: There is no significant relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.

H<sub>0</sub>3: There is no significant relationship between market innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.

H<sub>0</sub>4: There is no significant relationship between management innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.

H<sub>0</sub>5: There is no significant moderating effect of transformational leadership on the relationship between innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.

## **1.5 Justification of Study**

The study adds value during this crucial time where nations are fighting COVID-19 pandemic which has affected most industries. In the tea industry in Kenya, some of the impacts of COVID-19 has affected workers where it has led to episodes of large numbers of prime-age adults being unavailable for work; this might apply to time-critical agricultural tasks like planting or harvesting, or potential short-term disruption to transport of the perishable produce. High mortality among older people in KTDA

factories might negatively affect the transmission of valuable indigenous knowledge. Responsibilities for caring for the sick might impact on women and girls who are part of the production team in KTDA operations.

To sustain the industry through the pandemic appropriate leaders and appropriate innovative strategies were required to ensure that all these factors affecting the organization are taken into consideration to ensure organization sustainability. In order to address this, Sudiartini, Wayan, Astari, Dhani (2020) envisioned a business model, which is innovative strategies as being vital to capture the supply and demand of produce amid cut-throat competition in this Covid world. One such innovative strategy can be market innovative strategies where making use of online resources such as websites and selling online can be beneficial (Baum & Hai, 2020). Therefore this study identified which of the innovative strategies apply to KTDA factories in specific.

The study is crucial in boosting the performance of tea industry and since there are limited data in the field about innovative strategies, transformational leadership on performance. Cross-sectional research design was appropriate to obtain information from all the KTDA factories. While correlational research design assisted in determining the relationship between innovative strategies, transformational leadership and organizational performance. Hence, it solves the issue associated with poor performance in tea industry.

The government has recently passed Tea Bill of 2018 which is intended to revive the Tea Board of Kenya, regulate the sector and market Kenya's tea abroad. However, such policies require appropriate leadership with appropriate innovative strategies in order to ensure the changes are incorporated for improved performance. The study was

appropriate for KTDA, other organizations and industries so they can overcome emerging challenges in the 21<sup>st</sup> Century.

### **1.6 Significance of the Study**

The study contributes to a better understanding of the innovative strategies, transformational leadership and performance of KTDA factories in Kenya. This information is useful to all stakeholders such as the government, organizations and small scale tea farmers. The study provides a basis for use of appropriate innovative strategies and transformational leadership to enhance organizations performance. KTDA will also benefit from the information of the study.

For the government of Kenya and its relevant arms that include Kenya Intellectual Property Institute, National Commission for Science Technology and Innovation and Ministry of Industrialization the study findings provide the knowledge necessary for the formulation of relevant and effective policies and legislation development. Other institutions and industries could use this information to understand the relationship between innovation strategies, transformational leadership and firm performance. Lastly the research could ignite further research in these areas of innovative strategies, transformational leadership and performance of KTDA factories to fill up any research gaps or to widen the scope.

### **1.7 Scope of the Study**

The study sought to investigate the relationship between innovative strategies, transformational leadership and performance of Kenya Tea Development Agency in Kenya. These innovative strategies included process innovative strategies, product innovative strategies, market innovative strategies and management innovative

strategies. The study also focused on transformational leadership in relation to the performance and its moderating effect on innovative strategies.

It focused on KTDA factories in Kenya. The study was geographically limited to Kenya, these KTDA factories are found in Embu, Kirinyaga, Kisii, Murang'a, Nandi, Kiambu, Meru, Nyamira, Tharaka Nithi, Nyeri, Trans-Nzoia and Kakamega Counties. The study was conducted within the period of July, 2021 and December, 2021.

### **1.8 Limitations of the Study**

The data collected was from KTDA factories in the whole country although sampling was done due to financial and time constraints. Due to limited time the study was done within the research period of July, 2021 and December, 2021. The researcher ensured that the information were collected using both physical and online questionnaires to optimize collection of data. The study was limited to correlational research design which is not used for indepth interrogation but commonly for testing relationship between variables. However, the study recommended further investigation that ensure more exploration of innovative strategies, transformational leadership and organizational performance. Information were limited to primary data based on insufficient secondary sources. The study had to adopt cross-sectional research design that enable the researcher to collect data within a snapshot of time. This also assisted in estimating prevalence since sample is take from the who population making it appropriate for the study.

### **1.9 Assumptions of the Study**

The assumptions of the study were that the KTDA factories have similar characteristics and that the employee had similar characteristics. That the findings from sampled

KTDA factories could be used for valid generalization by researchers and other manufacturing companies. It was assumed that the research objectives were obtained objectively and independently by engaging a research assist in data collection.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviewed the relevant literature by various scholars and researchers in the area of innovative strategies and transformational leadership with a specific focus on its effects on performance of KTDA factories in Kenya. It evaluated the theories, which in this case consisted of Schumpeterian theory of innovation, dynamic capability theory and discovery theory. The empirical literature covered both international and local studies to demonstrate that performance is considerably influenced by transformational leadership and innovative strategies. Transformational leadership was a moderating variable. By reviewing the literature, the knowledge gap was identified which formed the basis of the research. This section entailed theoretical review, conceptual review, empirical review, conceptual framework and identification of knowledge gaps.

#### **2.2 Theoretical Review**

Theories are assumptions put together, they could be facts that try to explain a relationship between two or more groups through observation of certain aspects (Zima, 2007). On the other hand, a group of similar ideas that give guidance to a project, thesis or business endeavor can be termed as a theoretical framework (Zima, 2007). The study was anchored on several theories that have evolved with time. According to Najmei (2010), innovative strategies are quite new in the area of strategic management it applies competitive advantage by adding value to products, creating uncontested markets and applying models that are new to the business, this enables the organizations to go beyond the traditional approaches and methods to be able to grow. The study is

based on the idea that the traditional approaches to strategic management are not enough to propel the organization forward and protect the organization from competition and ensure it makes enough revenue at the same time ensure its continuous survival.

According to OECD, 2005 innovative strategies can be termed as used of new of better improved goods and services, better processing methods, improved marketing ways also new management methods that include reorganization of the workplace and organizations relations to other organizations.

### **2.2.1 Schumpeterian theory of innovation**

Schumpeter theory was proposed by Joseph Schumpeter in 1911 (Sengupta, 2014). The theory propose that the role of entrepreneurship is to ensure adopt innovation that would create competitive advantage generating economic growth. Based on Schumpeter economic background the through points out that since economy is dynamic, there is need for enterprenuer to be creative and become an agent to innovation as a pivot to change (Guichardax & Pénin, 2021). Hence innovation is all about innovation in combining the existing factor of production to sustain the change in economic development.

Process innovative strategies is responsible to economic changes since it enable process development (Fontana, Martinelli, & Nuvolari, 2021). Technological regimes where dimensions of characteristics of innovation , institution adopting innovation activities and knowledge based innovation process has significant effect on the economic delivery. This enable the firm to adopt innovation that assist in developing competitive advantage over other firms.

The explanation put forward by Schumpeter of the process of innovation is the same that keeps being applied in modern day and its internationally driven economy (Carayannis and Ziemnowics, 2007). The theory puts forward a variety of reasons for being the reason that there is continuous change in both markets and economy. The changes in the economy in this case is innovative strategies which include products innovative strategies, process innovative strategies, market innovative strategies and management innovative strategies.

Schumpeter describes the leader entrepreneur as one who encourages use of innovative strategies and implementation of change (Schumpeter, 1939). According to Schumpeter, the world is so dynamic and innovative strategies and leadership are important for economic growth. In this case the role of a transformational leader deciding which factors of production to combine which according to him led to radical change which in turn leads to economic development. Schumpeter idea of development in terms of the economy is to apply innovative strategies which may include; the launch of a new product or modification of an already existing product; the application of new methods of production, opening of a new market; use of new sources of supply or raw material and the creation of a new industry structure (Van-Hemmen, Alvarez, Peros-Ortiz, & Urbano, 2015). Schumpeters' terms creative destruction as process where organization transformation which is the reason for a shift of an organization economically for example through innovative strategies.

In this theory responsibility lies on someone to allocating resources available to the most necessary and trying different combinations to be able to know which bring about

higher performance. One of the individuals who effect change in the economy in the present day is the transformational leader. According to this theory, finding out where new sources of supply and outlet of products from the organization is the change required to reorganize an industry (Schumpeter, 1939).

Creative destruction in this theory involves breaking old ways of doing things and creating new mental models which encourages introduction of new products and services (Schumpeter, 1942). Innovative strategies are thus strategies that leaders use to create new products, use new processes, new marketing and management methods. This theory supposes that the aim of innovative strategies is to create new processes or products which gives the organization a competitive edge against competitors. Schumpeter concludes that innovative strategies are not necessarily strategies that involve invention of new products but also involves coming up with new processing methods, maximizing the use of the available resources to come up with new products through use of new technologies (Schumpeter, 1942).

Schumpeter argued that firms which apply innovative strategies are able to get increased profits. Schumpeter's theory of innovation informs this study by emphasizing the role transformational leadership and innovative strategies play in economic development. For economic development to take place, transformational leaders have to implement innovative strategies leading to the process of creative destruction that adds value. The theory forms the basis of the research where the different innovative strategies can be applied to increase value (Schumpeter, 1939). Based on Schumpeterian theory, innovative strategies are the foundation for competitiveness and sustained economic growth.

### **2.2.2 Dynamic capability theory**

Teece and Pisano in 1994 proposed dynamic capability theory. This theory explains how firms achieve and sustain competitiveness based on the processes that take place in a firm to match the dynamic, volatile environment. The emergence of the theory was necessitated by the shortcoming of the resource based and action based theories in addressing dynamic economies (Lin & Wu, 2014). The Dynamic capability paradigm embraces entrepreneurship, innovation, organizational learning, and knowledge and change management (Teece, 2010). The ability of a firm to adjust to changes in the market through innovation is crucial for the competitiveness of firms. It is argued that the fundamental impulse that drives the capitalism stems from the innovation of new products, new methods of production, new markets and new forms of management (Schumpeter, 1942). Dynamic capabilities refer to a “firm’s capability that allows it to develop new products and processes in response to dynamic market situations” (Teece & Pisano, 1997). Dynamic capabilities include skills, procedures, organizational structures, and decision rules that can be employed by firms to create and capture value. The capabilities may stem from change routines ,product development and innovative managerial capabilities. They enable the firm to align their distinctive resources/competences to the changing business environment. Dynamic capabilities are critical to long-term profitability of firms (Teece, 2017). Dynamic capabilities enable firms to profitably organize its resources, competences, and other assets if the firm is to sustain itself in changing environments and markets (Teece, 2010). The capabilities are crucial in a dynamic environment of rapid change, prevailing in a growing of industries ( Teece, 2017). Innovative Strategies is

acknowledged as one of the critical firm capabilities that affect firm's sustained competitive advantage and superior performance (Albaladejo & Romjin, 2000).

Innovation capability allows firm's to use current resources to create new resources, products, process and systems as well as devise new ways of using new resources to gain a competitive advantage (Teece & Pisano, 1997). Innovation capability can be enhanced through learning and training, R&D, processes, firm organization and associations with other players that include customers, suppliers, public and research institutes and industry associations. Possession of dynamic capabilities also signify a firm's capability to solve market problems and to achieve a new and innovative form of competitive advantage( Teece, *et al.*, 2007) The approach emphasizes the capacity of a firm to renew competence as well as to integrate and reconfigure resources to match and create market change through innovation (Teece & Pisano, 1997; Eisenhardt & Martin, 2000). This theory informed the study of the relevance of a firm's dynamic capabilities that are crucial in achieving competitiveness in a dynamic volatile environment. Manufacturing SMEs operate in such environments and developing their dynamic capabilities that include innovation is critical for their survival and growth. The dynamic capability approach reflects a firm's ability to solve market problems and to achieve competitiveness (Teece *et.al*, 1997). The concept of dynamic capabilities provides a broader framework to help us understand how firms create value for competitiveness in a dynamic environment. This essential owing to changes in consumer needs, products, technology the competitive forces of other firms which can threaten a firm's existing position or open the possibility of a new or better one.

To form a striking balance in the economy today organizations are required to maximize the competition levels and co-ordination to survive in this dynamic global markets which requires certain strategic alliances to be formed (Teece 2017). Dynamic capabilities are noted to be machinery required to reorganize the resources, better the technological resources, strategies for learning, and make organization design flexible and structure and also to build a culture of trust (Eisenhardt and Martin, 2000; Teece and Pisano, 1994). Alves, Barbieux, Reichert, Tello-Gamarra and Zawislak (2017), they linked and associated development capabilities, management, operational and transaction capabilities to innovation and its performance, but this study has also missed the important element of the moderating element of transformational leadership on innovative strategies to the performance of KTDA factories in Kenya which is the main components of this study. Other similar studies have looked at innovative strategies elements in totality and tried to quantify them but these studies have not studied it in a comprehensive way as proposed in this study.

Knowledge management can be referred as the first element in dynamic capability which is studied in the framework (Teece, 2017). Transformational leadership and innovative strategies are among the main elements of this theory (Teece, 2010a). Process innovative strategies, product innovative strategies, marketing innovative strategies and management innovative strategies are considered of much importance but are not synchronized in the dynamic capability theory literature, thus this study tries to build a detailed model bringing them in a one research model.

The relevance of dynamic capabilities theory therefore is that all industries are facing turbulent times, changes or uncertainties like COVID-19. A different mindset such as

that of a transformational leader is needed in an organization especially in established companies that have been in operation for longer periods like KTDA. Such a leader can bring an entrepreneurial mindset in the organization by creating opportunities through innovative strategies and ensuring flexibility and constant adjustment according to situations.

### **2.3.3 Discovery theory**

Discovery theory was proposed by Kirzner in 1973. According to Kirzner the role of entrepreneur was to eliminate price discontinuities in the market through ensuring there is equilibrium market. Hence, the entrepreneur should be able to buy goods at lower prices and sell at higher price to motive profitability making the entrepreneur to be a price maker not a price taker. This implies that appropriate marketing innovation which must be couple with innovation in process, production and management that would enable the entrepreneur maintain low cost of production and gain more profits. According to this theory when there are market or industry imperfections an opportunity to produce new products or services exists (Barney, 1986; Kirzner, 1997; Porter, 1980). In Discovery Theory, competitive imperfections are assumed to arise from external factors, such as changes in technology, consumer preferences, pandemics or some other attributes of the context within which an industry or market exists (Kirzner, 1973).

According to Shane (2003), changes in political, regulatory, technology, social and demography are some of the things that cause disruption in the competitive equilibrium that is present in the industry or market, thereby making new opportunities for creation of new products, processes, marketing strategies and management methods. The focus

on this external factors create opportunities to produce new products or services, processes, marketing strategies and different management methods which leads to important implications. Shocks that take place such as COVID-19 pandemic that take place in an already existing industry or market causes alteration in how it operates thus leading to a new competitive environment, this could be through change in intent and purpose (Levinthal, 1997).

In discovery theory, leaders in organization become proactive by identifying the opportunities arising due to changes taking place in the environment and take advantage of them (Shane, 2003). Innovative strategies in Discovery theory, are assumed to be in existence before a transformational leader exploits them to gain maximum advantage from them. This means that these innovative strategies are there in the market or industry but the difference is whether there is awareness and also use of them.

Discovery theory views innovative strategies as looking to the environment for opportunities to take advantage of to be able to have new products or services, new processes, new marketing methods and new management methods. In environmental scanning, transformational leaders have to take into consideration the vision of the organization and therefore focus on the general direction the organization is driving at (Levinthal, 1997). If awareness of the opportunities was there to everyone, and all had skills required to exploit them then all organization would take advantage of them, however this is not the case for everyone (Barney, 1986; Schumpeter, 1939).

An explanation from Discovery theory as to why not everyone takes advantage of opportunities arising to produce new products and services is the fact that, it is assumed that transformational leaders have significantly higher abilities to see opportunities and

once they see them they are able to exploit for the good of their organizations (Kirzner, 1973; Shane, 2003). A variety of leadership styles have been identified as leading some to exploit opportunities when they become aware, while others do not exploit these opportunities, even when they are aware of them. Transformational leaders in this case have more tendency to exploit opportunities strategically while scanning the environment for opportunities and threats.

### **2.3 Innovative Strategies, Transformational Leadership and Performance Concepts**

Literature related with the concepts of innovative strategies, transformational leadership and organization performance were reviewed. These assisted in developing conceptual framework.

#### **2.3.1 Innovative strategies**

In the first half of the 20<sup>th</sup> century, Joseph Schumpeter, 1939 developed some innovation concepts which he anchored in economic cycle and creative destruction. According to Schumpeter (1939), innovation is a main driver to economic prosperity which is developed through an evolution process, which has the capability of removing the old models and replacing them with models which are new.

According to OECD, 2005 innovative strategies have different classifications one of the four types being; product innovative strategies, process innovative strategies, marketing innovative strategies and management innovative strategies. Utterback J. M and Abernathy (1975), described product innovative strategies to be the use of new technologies or a combination of several to serve new demands and market needs. Process innovative strategies on the other hand deals with using the employees in the

production channels in a different way, in terms of different job description, using different inputs as materials, use of another channel of information.

The OECD, 2005 also discussed market innovative strategies and management innovative strategies. Market innovative strategies is about the change or use of new ways an organization sells new goods and services. This makes it necessary for the organization to apply new marketing methods (OECD, 2005), which requires a significant amount of improvements in how the product is designed or packaged, the pricing of the product, how the product is distributed or promoted for sale. Tidd, Bessant and Pavitt, 2005 also considers market innovative strategies as new ways of selling goods and methods of product distribution (Oliveira, Cavalcanti, Paiva Junior and Marques, 2014). In addition, Gupta, Malhotra, Czinkota and Foroudi, 2016 did a research about the relationship between competitiveness and innovation in marketing where he found that market innovative strategies are a result of how competitive the brand and its resellers are.

Management innovative strategies, puts into perspective organizations model, which means, taking into account new mental model in the carrying out of organizations activities and the re-structuring of organizations workspace (Tidd, Bessant and Pavitt, 2005). Innovative strategies from the business perspective contributes addition of value and generation of competitive advantage to main stakeholders thorough innovative ideas which adds value through creating better relationship with the customers, grouping the customers based on their similarities, client segmentation, maintaining of customer relationship, the association between the distribution channels and the enhancement of partnerships which contribute mainly to the structure of organizations

(Teece, 2010; Foss and Saebi, 2018). The benefits that can be derived from these innovative strategies includes the increase in the performance of organizations through the reduction of costs in transaction and administration, ensuring the improvement of job satisfaction by employees, better labor productivity and accessibility to non-tradable assets, which include knowledge which is externally tacit and by reduction of costs derived from getting supplies externally.

According to Adams, Bessant and Phelps, 2006 the literature review on this specific matter reveals that definitions of innovative strategies are quite diverse. Innovative strategies involve the successful development, implementation and use of structurally improved or new products, processes, marketing and management innovative strategies (Eveleens, 2010). From the different literature it has been found that innovative strategies can be categorized differently depending on different circumstances. This research looks at the categorization of innovative strategies in terms of; technological or non-technological; depending on novelty degree; degree of impact it has; and the degree of control over the innovative strategies process.

The research being carried out is under the category of technological and non-technological innovative strategies. Product innovative strategies and process innovative strategies are classified in the first which is technological innovative strategies while market innovative strategies and management innovative strategies are classified under non-technological innovative strategies category.

The other classification is according to the degree of novelty, which is categorized into two; radical or incremental. The radical innovative strategy is one aimed at introducing something new in the current market, it is anchored in long term investment. Radical

innovative strategies provide exceptional features in products, processes and service offers. It includes traits and features which generate exceptional performance or reduction in costs through change in new or existing markets which give rise to addition of new value to the society (Chandy and Tellis; 1998, Stringer, 2000; Leiffer, O'Connor and Rice, 2002). On the other hand, incremental innovative strategies are done using the present technologies and knowledge to make the products that are presently in the market better or to improve process of production, making them relevant, not only for the additional results of the change therein but also for the versatility it generates (Utterback and Abernathy, 1975; Abernathy and Clark, 1985).

Hobday, (2005) posits that incremental innovative strategies can produce remarkable benefits in the productivity of a business and manufactured products quality, which includes processes that may consider the incorporation of capabilities and technologies. This insight broadens the notion of innovative strategies because it contemplates upgrades beyond the creation of new products and processes. According to the OECD, 2005 the minimum threshold to regard something as an innovative strategy is that the alteration brought forth has to be new to the organization. On the flip side, the other two notions can be foregrounded which is creating something that is new to the world or the market place.

In the classification according to the degree of impact an innovative strategy has to an organization. Under degree of impact, one is disruptive innovative strategy which are those that may impact an organization through change in the market structure, through creation of new markets or through making existing products redundant (Christen and Overdorf, 2000). For disruptive innovative strategy they mostly start in limited or

unattractive markets which after improvements and change of existing technology have a major impact on the markets and on the markets economic activity of the organization. Disruptive innovative strategy involves coming up with products which are charged lower prices but also their performance is lower. The products created still fulfil some of the needs of the customers as they are much simpler and more affordable. However, that does not mean that disruptive innovative strategy assumes that they deliver simplified versions of the organization main products.

Since it is quite impactful, it is much expected that it altered the organizations business model (Christensen, 1997). Chesbrough (2010), puts forward the importance of business models in that it is better to have a good business model with a mediocre technology that have it the other way round. Therefore, the concept of disruptive technology contrasts greatly from that of radical innovative strategies which is also known as revolutionary innovative strategies has the characteristic of changing in a great way the relationship between suppliers and consumers, in the economic aspects of the market restructure it, come up with completely original product categories and also for the existing market upset its stability (Feder, 2018). This classification puts forward more the innovative strategies based on degree of impact than that based on the degree of novelty of the innovative strategy.

In that one categorized as either open or closed, it is termed as degree of control and involves putting the organization in an advantageous position in the process. The open innovative strategy is the opposite of the traditional innovative strategy that dominated the twentieth century, also known as closed innovative strategy. In the traditional innovative strategies, organizations depended on research and development processes,

which was undertaken in their own laboratories inside the organization rather than both inside and outside to hold a consistent competitive advantage (Chesbrough, 2003). Open innovative strategy on its part is premised on the notion that in a universe where knowledge is spread and readily obtainable, organizations cannot entirely depend on their internal knowledge and own capabilities to innovate.

Open innovative strategies are anchored in various principles one of them being the recognition that the source for breakthrough in an organization can either be from inside knowledge or from outside sources. Knowledge from sources outside the organization can be more effective and broader in terms of driving innovative strategy efforts (Hussein, Singh, Farouk and Sohal, 2016; Natalicchio, Ardito, Savino and Albino, 2017). Therefore, there is a transition that is being observed on how organizations seek solutions to challenges from a research and development model that is closed to a research and development model that is open and interactive. The interactions between different organizations play a significant role as solutions can now be found either from within or outside the organization (Chesbrough, 2003).

Innovative strategies have affected both labour productivity and performance of organization. By making use of five waves of community innovative strategy in Sweden, the study by Karlsson and Tavassoli, (2015) has traced innovative behaviour from organizations within 2002 to 2012 to distinctive analysis innovative strategies, which constitute of Schumpeterian four types of innovative strategies product, process, marketing and management.

Nyambura, (2014) investigated on the effect of innovative strategies on performance of mobile Telecommunication firms in Kenya. Innovation is one of the strategies that is

critical in telecommunication industry for growth and profitability. Market position assist in providing competitive advantage as well as superior performance for high corporate performance. Innovative strategies adopted to ensure sustainability to create a disruptive effect to the competitors and create values for competitive dynamic market. Safaricom, Airtel, Orange and Yu (now Telkom) are the major players where Safaricom is the leader in Kenya market. The studies aim was to investigate how innovative strategies influences the performance of mobile telecommunication firms in Kenya. Descriptive cross-sectional research design was adopted in the study which target employee of the four Telecommunication Companies. Questionnaires were used in collection of primary data. It was found that innovative strategy has positive effect on performance of organization. The organizations had adopted innovative strategies on the products and services, processes, markets and management which have made the organization perform better. It recommended that mobile telecommunication organization should do more research and development in the area of innovative strategies to increase performance.

Nandwa, 2016 investigated on innovative strategies and their effect on financial performance of insurance firms. The study surveyed insurance firms in Eldoret, in this study the competitive environment and complex business environment enabled the organization adopt innovative strategies. The organization needs to formulate appropriate innovative strategies that would assist it in market dominance. The general objective was to establish innovative strategies effects on financial performance of insurance companies in the town of Eldoret. The study found that innovative strategies affected significantly financial performance of insurance firms. Promotion, price and

product innovative strategies affected positively the financial performance except the process innovative strategies. The recommendation it had on the insurance firms was that they should do market research with the intention of improving their product innovative strategies. From the literature gathered this studies main focus were on the four innovative strategies which include; product innovative strategies, process innovative strategies, marketing innovative strategies and management innovative strategies and their relationship with organizational performance.

### **2.3.2 Transformational leadership**

A moderator variable is another variable that has a contributing effect on the strength of the relationship between the dependent and independent variable. The strength and direction of dependent and independent relationship can be affected by a third variable that is known as a moderating variable and whose interaction can be measured statistically (Zainol and Ayadurai, 2011). The innovative strategies and organization performance relationship is affected by the presence or lack thereof of a transformational leadership. Transformational leadership in this case when used as a moderating variable strengthens the relationship between innovative strategies and performance.

Bryman, (2004) argued that leadership as a subject has been studied intensively however, it is still a little known field. Leadership therefore can mean the capability of impressing or inspiring followers by giving them purpose to fight for (Sichone, 2004). Leadership is a broad subject and there are different types of leadership but for this study our focus is on transformational leadership.

Transformational leadership can be defined as a loyalty process for realizing mission, vision and objectives of a firm through making some changes in attitudes of employees and stakeholders of the organization. This type of leadership, encourages the employees understand their value and value of their work first. Secondly the leader should have the organizational targets as priority number one and not employee's targets and finally the leader should be effective to lead employee's needs. Transformational leadership can therefore be argued to be the type of leadership where the leader is tasked to change value judgment, beliefs and the needs of the employees. Bass (1990), stipulates that this style of leadership provides for employees as individuals or in teams to be goal oriented by creating awareness of the organizations mission and vision. Besides, transformational leadership is characterized by leadership behaviors like inspirational motivation, idealized influence and intellectual stimulation. It is evident that transformational leadership creates a vision of change in an organization, ensures required resources are provided for, gives employees support and monitors improvements taking place. Transformational leadership is therefore very important and relevant to the study as it has been shown to link innovative strategies and performance of an organization.

### **2.3.3 Organizational performance**

The subject of innovative strategies and organizational performance has been of key interest to many economists and policy makers for many years. Although innovation is generally considered to increase the competitive advantage of an organization and thus improve its performance both locally and internationally, more research needs to be done on this linkage and the extent of their relationship. There is no single conventional

metric that can be said to be perfect for measuring the different innovative strategies on organizational performance as different situations call for different metrics. Organizational performance measures how well a firm is generating value for its stakeholders. The metrics used are either financial or non-financial. The metrics used include but not limited to marketability of the business, profitability of the business, growth of the business, customer satisfaction, market share of the organization and the quality of offered products and services.

Maina (2016), defines this as the percentage of markets total sales that is earned by an organization over a given period of time and is usually arrived at by tracking the organizations sales then divide this by the overall sales of the industry for the same period. This is used to inform on the general idea of a business size in relation to its competitors and the industry. It can be calculated through organizational level of dividend yielded, improvement of stock prices, earnings per share, volatility of stock prices or market values added (market value/equity). This parameter is important since potential investors are always on the lookout for market share increase or decrease in deciding competitiveness of an organizations output. Researchers in the past have asserted that every organization has a life cycle that they live through from inception, growth, maturity and finally decline as they grow they are faced with various challenges that they must address (Gupta, Guha and Krishnaswami, 2013). It is therefore every organizations focus to have a sustainable growth over time as no organization wishes to be pushed out of the market.

According to Kinyua, Omoro and Ikiro, (2014) corporate social entrepreneurship activities are done by organizations as a valuable commitment to the public towards

organizations management development. Through their study findings they argued that 11.0% firms particularly banks attain sustainable growth through their investments in Corporate Social responsibility (CSR) activities. Santos and Brito (2012), state that organizations growth can be measured through: growth in market share or net revenue, growth in number of employee, net income and assets.

According to Joung, Carrell, Sarkar and Feng (2013) this metric measures the ability of the organization to meet or surpass customers' needs with the products they sell. It is usually determined by brand loyalty, repeat customers or sales, referrals, customer feedback and customer assessment. Santos and Brito, (2012) also affirms this in their study, stating that the level of customer satisfaction can be measured by the number of repeat purchases, the product mix of an organization, number of complains registered, level at which the firm retains new customers, how many new products are launched and finally the general feeling of the customers.

Performance of an organization can either be financial or non-financial in nature. Innovative strategies implemented eventually affected the performance of an organization either directly or indirectly (Karlsson and Tavassoli, 2015). The innovative strategies introduced in different levels of the organization have differing effects. One of the common performance measures of most organization is increase in turnover. Another direct result also seen as important and direct is that innovation increases efficiency in an organization that is achieving more with less resources. Efficiency often leads to use of less resources in accomplishing the same task. For this to be made achievable leadership transparency and clarity in the process is important (Lee, 2001). Another indicator which is also important is the use of less time in

production process. Professionalism is a result that is found when an organization is better structured which can happen through management innovative strategies. A well-structured organization means better communication by making the organization less rigid and more aligned. This in turn has a consequence of better delivery of job assigned by employees.

Quality in the product or process is also a very important result to an organization. It means that leaders in organizations have to set high standards for the products process which then leads to the production of the best product possible (Augusto, Lisboa and Yasin, 2014). Organizations also aim for flexibility in their processes and thus be able to adjust quickly to changes required in their operations. This is more important for organizations who do product innovative strategies more often like that in the tea manufacturing industry. Product adjustment also requires an organizations flexibility in their business practices. Other performance indicators are sustainability of the organizations products or plants, providing good working environment for workers which enhances their ability and willingness to work. This also reduces the level of absenteeism of staff and minimal loss of staff. It further creates an environment where knowledge and information is shared freely hence better decision making.

In this study therefore profitability of the organization, the reduction of costs, growth in organizations revenue, customer satisfaction and product quantity and quality was used to gauge the organizations performance against innovative strategies and transformational leadership implemented.

## **2.4. Empirical Literature**

Innovative strategies; product, process, marketing and management innovative strategies and transformational leadership are empirically discussed in this section in relation with the performance of organizations. The empirical literature review is presented below:

### **2.4.1 Product innovative strategies and organizational performance**

Product innovative strategies takes place when a good or service has been greatly enhanced in terms of its elements and how it is to be used, the technological improvements in specifications of its parts and material and the software that might have been incorporated which may make the goods or service better in terms of how they are used and how they function generally (Oslo, 2005). It can make use of technological advancements or knowledge or new found uses of a good or service or a combination of both existing technology and knowledge (Bao, Chen and Zhou, 2012). Most product innovative strategies are driven by customer lifestyles which make customer demands to be different, a necessity to shorten product processes, market competition both locally and internationally this is by no means an easy process. For a product innovative strategy to be successful a strong interaction between organizations and also between suppliers and customers is required (Utterback and Abernathy, 1975).

Moreover, a product innovative strategy characteristic can distinguish a new product from competitive offerings and allow the product to get an exceptional position in the market (Im and Workman 2004). Lastly, product innovative strategy has a positive

influence through different instruments on new products thus resulting in increased profits and success of the market (Bao, Chen and Zhou, 2012). Gunday, Ulusoy, Kilic and Alpkan, (2011) measured product innovative strategies by establishing the changes in quality of the product, the changes in prices of manufacturing products, the rate of new products progresses leading to easy usage by the customers. Development of new products with various practical particulars and also development of goods and services with elements and materials which are different from the current products may be termed as product innovative strategies.

Jayaram, Oke and Prajogo, (2013) researched on 207 organization based in Australia and found that the relationship between product innovative strategies and product quality were positive to the way the organization performed. In the same light, Hall (2011) when he investigated product innovative strategy activities and productivity relationship found that there was a standard positive association. In the same case, Augusto, Lisboa and Yasin, (2014) researched on the association between organization performance and the different types of innovative strategies and found that the most important innovative strategies in promoting organization performance in the whole organization was product innovative strategy. In the research they conducted, they used factor and regression analysis to provide insights. To add further, Ar and Baki, (2011) in the research conducted between product innovative strategy and organization they found a strong and positive relationship. In the study, they used data from SME managers in the Turkish Science and Technology Parks (STPs) and used structural equation modelling (SEM) Method.

Polder, Leeuwen, Mohnen and Raymond, (2010) argued that product innovative strategies in organizations leads to efficiency and reflects on the type of strategy that the organization has taken. Due to the current high competitive environment, to survive, organizations have to come up with new strategies aimed at fulfilling customers' needs which can be through developing of new strategies. Onikoyi, (2017) study investigated product innovative strategies and organization performance. Information were extracted from quality and control, marketing, sales, research and development and production departments which were involved in product development. A sample of 340 employees were given questionnaires. Regression and correlation analysis were used to test the significance of the hypothesis. The results revealed that product innovative strategies had strong impact on the performance of the organization. This was contributed by creativity in product innovation process resulting to improvement of the quality of the product and performance of the firm. Therefore, recommending that organization should improve on human capital creativity in innovation.

Montero, Pennano and Camilo (2017) reviewed literature to determine why some innovative strategies were more successful than others. Their product innovative strategies were examined on the basis of organization factors, development and process factors, market forces factors and strategic factors. The study used meta-analysis of existing literature and found that efficacy and efficiency were used to measure product innovative performance. The study recommended more multi-dimension investigation be done to ascertain the impact of level of product innovative performance.

#### **2.4.2 Process innovative strategies and organizational performance**

Process innovative strategies is when you use new methods in carrying out delivery or production which has been greatly improved. The significant changes could be in terms of the equipment/machines, techniques or software used. The effect they have is to reduce the costs used in production or delivery and in turn increase their quality of delivery or product. Process innovative strategies can also be made better by use of workforce in a different way, the way the information moves, different job description and different materials used as input in the production of goods and services (OECD, 2005). Process innovative strategies is aimed at making the production efficient and effective by improving or changing the way the organization does its work. Azis (2015) confirmed that process innovative strategies are taking up a new production process that results in a much better delivery method. This also means a great change in the software, techniques used and also the equipment used in production.

Process innovative strategies aims at lowering the costs and time involved in the production of a product. This is through efficiency and effectiveness that is gained through improved product quality, less resources used and reduction of time used (Gunday, Ulusoy, Kilic and Alpkan, 2011). Minai and Lucky (2011) found that business process reengineering in process innovative strategies leads to less time used in production thus leading to low costs in production of a product. This can be achieved through innovative improvement of supply chain management, logistics, improvement in processing technology to ensure effective and efficient production. El-Kassar and Singh, (2019) found that process innovative strategies assisted in improving performance of organization. Similarly, Sintset, Nekoumanesh and Yang (2013) found

that process innovative strategies should be step by step process that require time and change in organizational culture to enable organizational performance.

Rosli and Sidek, (2013) found that the association between process innovative strategies and organization performance was positive, this research was done in small and medium enterprises. The same findings were confirmed by Olughor, (2015) in a research that revealed that process innovative strategies were an important feature in financial and market performance. Njeri, (2017) found another view in which she reports that some of the impeding factors in process innovative strategies in small and medium enterprises include the inadequate trained manpower, inadequate finances, lack of adequate research and development. A research conducted in Kenya by Martin and Namusonge, (2014) revealed that 75 percent of businesses found an enormous effort made in investments of current machineries used in the production process one of the strategies used in the production process even thou it was found that SMEs found the implementation very expensive and demanding process. In the research one of the findings was that the contribution made by process innovative strategies was cost reduction.

Honarpour, Jusoh and Nor, (2012) on total quality management efforts of an organization, they stated that there was a positive effect of process innovative strategies on performance. On cost reduction however, Peters, (2008) argues that not all process innovative strategies lead to savings gotten from a reduction in cost but some innovations make the organization be able to market their products at competitive prices. One can therefore conclude that other process innovative strategy indicators

such as better speeds, value addition, flexibility and efficiency in costs positively affects the performance of an organization (Gunday, Ulusoy, Kilic and Alpkam, 2011)

According to Minai and Lucky, (2011) business process reengineering and quality function deployment are what constitutes process innovative strategies. For a supplier to develop products of higher quality and at lower costs it requires them to be efficient and to work on the productivity of the products continuously. The cost reduction found therein might or might not be passed to customers through the reduction of prices. Thus, process innovative strategy has a benefit for both the supplier and also the consumers. Both the supplier and customers provide standards of quality that can be acquired and maintained. The process innovative strategies may include enterprise engaged consultancy, adoption of supply chain concepts and global reference model (GRM).

Sintset, Nekoumanesh and Yang, (2013) did qualitative study of Swedish municipalities to examine process innovative strategies impact on the performance of the organization. Majority of European Union programs focuses mainly in ensuring environment sustainable development which require innovative strategies. Process innovative strategies plays a significant role in management of waste to ensure sustainable environment. Qualitative approach was used to collect data from four Sweden's municipality by using grounded theories method. The results indicated that process innovative strategies had positive influence on financial and customer performances within the municipality. Similarly, Sintset, Nekoumanesh and Yang, (2013) found that process innovative strategies should be step by step process that require time and change in organizational culture to enable organizational performance.

El-Kassar and Singh, (2019) found that process innovative strategies assisted in improving performance of organization. Rosli and Sidek, (2013) researched on SMEs who agreed that process innovative strategies positively affected organization performance. Olughor, (2015) affirmed this finding in a study that revealed that in both market and financial performance, process innovative strategies was an important feature. On the other hand, Njeri, (2017) reported that the lack of finance, lack of skilled workforce, inadequate research and development are some of the things that hinder process innovative strategies in SME sector. Martin and Namusonge, (2014) carried out a study in Kenya which revealed that 75 percent of businesses made major investment efforts in purchase of modern machineries as a process innovative strategy, the findings further showed that SMEs found this difficult and expensive for them to cope with. In the study 56 percent agreed that process innovative strategies led to reduction in costs.

#### **2.4.3 Market innovative strategies and organizational performance**

Market innovative strategies involves implementation of new methods of marketing which require a significant alteration in how the products are designed, the placement of the products or their pricing (Tidd, Bessant and Pavitt, 2005). The target of marketing innovative strategies is to fulfil customers' needs better, to explore new markets or to give organizations products a new outlook in the market with the aim of increasing the sales incomes. They are related strongly with product design, pricing strategies, and product placement and promotion activities (Oliveira, Cavalcanti, Paiva and Marques, 2014).

Market innovative strategies are associated with promotions, placement of products, redesign, pricing, market campaign, branding among other marketing strategies

(Simiyu, 2013). Karlsson and Tavassoli, (2015) also pointed packaging, product design, placement and pricing of products as some of marketing innovative strategies. The strategies are aimed at improving the brand so as to create customer experience hence creating customer satisfaction and thereafter customer loyalty to the product (Hong and Lee, 2018). Therefore, marketing innovative strategies aims at creating competitive advantage of organization product through creation of customer satisfaction translating to organizational performance.

Through market segmentation, market innovative strategies of identified prospective markets is obtained (Walker and Warren, 1996). Market segmentation entails separation of markets, an entire prospective market is divided into smaller parts that are manageable to be able to serve those markets in a better way thus increasing the organizations profitability through more sales. When an organization does not market segment it means that it will not position itself optimally to place products according to target client's expectations hence leading to decline in sales and thus loss of market position.

Karlsson and Tavassoli, (2015) argued that marketing innovative strategies is comprised of new marketing methods and implementation models that would greatly transform the design or packaging of a product, pricing or even placement of a product. Some of the common innovative strategies include; design of properties, promotion activities, product placement, market pricing and product offers strategies. Such strategies help in the improvement of brand relationship as well as the experience with customers which has translated to organizations working on brand that are customer centered (Hong, 2015).

In a study on development procedures that are embraced by local and national radio stations in Kenya. Maina, (2016) found that in reception of systems whether aggressive or cooperative techniques is very crucial in overseeing advancements and developments and that the methodologies of advancing are equally important in any organization and as such they should set up such mechanisms at any cost since it will help the organization to understand their targets.

Simiyu, (2013) from the research he conducted in commercial banks, some of the market innovative strategies he found were through creating as well as nurturing strong brands, aggressive market campaigns against competitors, ensuring availability of resources and capabilities, creating product value through pricing, conducting environmental analysis, responding to changes in a quick manner, making sure the customers are satisfied and therefore retained. Other findings from the study were that commercial banks adopted product innovative strategies which boosted the banks' earnings more, it leads to faster growth of the business, more investments and also led to organizations overall productivity. The research also established that process innovative strategies was in the form of banks philosophy which is the way the bank does its things, vision, performance evaluation, shared commitment held by everyone in the organization and the clear channels and ways of communication. In the study it was also concluded that technological factors that affected how the innovative strategies were implemented in commercial banks were the cost implications, its complexity, their relative advantage, its image and compatibility with other parts of the organization. The recommendations that were made from the study were that for commercial banks to

increase their earnings, they needed to increase their customer share through more investments in the implementation of innovative strategies.

Aswani, (2013) did a study on innovative strategies in universities and found that it is done to a great extent by universities through branding and marketing activities. The results from the study revealed that there was a relationship between innovative strategic indicators and the performance of public universities. The relationship was a positive one and it was strong. The research therefore demonstrated that a large portion of the performance of public universities were as a result of a combined effect of innovative strategies.

A study by Prifti and Alimehmeti, (2017) did market innovative strategies in relation with firm performance. Albania firms were sampled where 99 companies were empirically analysed using structural equation modelling techniques. The study revealed that responsiveness was a good indicator of market innovative strategies. Intelligence dissemination and intelligence dissemination responsiveness were based on information gathered from the market. Therefore, accessing information from competitors, customers and other stakeholder accelerated innovativeness of product and service offered by the organization.

Mitroulis and Kitsios, (2014) assessed innovative strategies in relation to market innovative strategies on the performance of the organization. Management has always focused on short term efficiency over innovative strategies. Market innovative strategies can improve customer preference and create competitive advantage. Questionnaire were used to obtain information from SMEs where results were analysed using multi-criteria method. The findings indicated that market innovative strategies

led to competitive advantage of firms. Therefore, innovative strategies acted as link between customer satisfaction and organizational performance. Therefore, there is need to improve in marketing innovative strategies and capabilities in product innovative strategies to create competitive advantage.

#### **2.4.4 Management innovative strategies and organizational performance**

Management innovative strategies involves creativity and putting in place a management process, techniques of management, practice of management and organizational structures that is aimed at achieving organizations goals (Birkinshaw, Hamei and Moi, 2008). In this category of management innovative strategies, can be described in two categories, one being managerial while the other is organizational innovative strategies which when implemented creates a change in the organization in the way the firm is organized, the way it is structured and how the organization manages its processes (Birkinshaw, Hamei and Moi, 2008). Management innovative strategies are instrumental in the development of its processes, its products and the entire organization. The literature on management innovative strategies stress that the innovative strategies are quite different from technological innovative strategies, especially product innovative strategies (Alange, Jacobsson and Jarnehammar, 1998). The reason being that management innovative strategies do not deal much in artifacts but rather represents knowledge investments, procedures, relationships and behaviors. Typically, the nature of management innovative strategies is that they are tacit and therefore difficult to protect by way of patent (Teece, 2010). Their traits mean that they allow more levels of subjective interpretation on the part of the end users than those found in technological innovative strategies, with this it means that in management

innovative strategies there is emphasis on the importance of social and political processes (Birkinshaw, Hamei and Moi, 2008). It is also important to note that there is a limited number of organizations who have invested in experienced and established experts specialized in the field of management innovative strategies. In many cases product innovative strategies are organized in research and development laboratories, which does not work for management innovative strategies. The consequences of management innovative strategies are much higher than those of technological innovative strategies, this is because of their nature which is likely to cause uncertainty and ambiguity in an organization. For these reasons there is need to establish legitimacy by validating the innovative strategies independently from external sources, especially because the consequences of management innovative strategies are not so clear to both the employees and management of the organization.

The ultimate difference between management and technological innovative strategies therefore in summary are the roles of factors that are internal to the organization like the social, cultural and political aspects of the organization (Alange, Jacobsson and Jarnehammar, 1998). From the previous literature on management innovative strategies it did not clearly differentiate between the different types of innovative strategies in organizations (Kimberly and Evanisko, 1981; Damanpour, 1987). Recent studies however, have seen the importance of management innovative strategies and have started to research on it more in an ingrained manner (Sapprasert, 2010). An example is a study by Freitas, (2008) which shows the differences between managerial and organizational innovative strategies. We have therefore clearly outlined the two types of management innovative strategies which are managerial and organizational

innovative strategies. Managerial innovative strategies can be termed as those innovative strategies in knowledge management, management systems, and supporting activities. On the other hand, organizational innovative strategies refer to new management structures and relationships with external partners and also the organization of work. According to Wengel, 2000 he distinguished between managerial and organizational innovative strategies in the following ways: Managerial innovative strategies affects the organizations operations and procedures for example the specific responsibilities, what is contained in the commands and the flow of information and how it is dealt with. They are concerned with flexibility and the speed of production and how the products and production process is reliable. Organizational innovative strategies on the other hand deal with accountability, responsibility, command lines and flow of information. Its focus is on the functions of divisional structure, for example changing the number of hierarchical levels.

Management innovative strategies are to a large extent approved, but how they affect the performance of organizations in public setting is only slightly researched. Walker, Damanpour and Devece, (2019) did a research on management and organization performance. They found that the relationship between management and performance is complicated. The study examined the direct and indirect effect of management innovative strategies through performance management on organization performance. An important organizational process characteristic is performance management which is a concept arising from public management reform which itself directly influences performance. The study hypothesis uses structural equation models with data from three sources in English local governments. The findings indicated that performance

management positively affects organizational performance. It also indicated that management innovative strategies impact is not direct but mediated by performance management.

Yongan, Umair, Seoyeon and Madiha, (2019) did an investigation of the effect that management and technological innovative strategies has on performance of an organization. The objective of forming organizations is many including but not limited to service delivery and profitability through competitiveness and long-term survival. Sustainability is crucial to both non-business and business organizations toward superior performance. This sustainability can be achieved enough resources and capabilities. The research investigated on the effect of management and technological innovative strategies performance of an organization with the mediating role of sustainability.

On the empirical evidence extracted structural equation model was used in the research using the analysis moment structures (AMOS) from data of 304 top management and CEOs in Pakistani. Its findings pointed out that there was a significantly positive relationship between management and technological innovative strategies towards sustainability and performance of an organization. For the relationship between management innovative strategies and the performance of an organization sustainability plays a partial mediating role, this is the role it also plays in the relationship between technological innovative strategies and the performance of an organization. The study recommended that due attention be given to management and technological innovative strategies by top management and CEOs to encourage sustainability and survival of an organization in the long run.

Seyed and Omid (2015), researched on management of organizational innovative strategies. Innovative ideas can be managed to ensure that the organization benefit from the innovation however, it is a slightly different from management innovative strategies. Empirical review indicated that incentive for innovativeness, participative management, capability and adoptability of management innovative strategies were examined through innovative strategies structural forms and core requirement for organizational innovative strategies. The study also considered transformational leadership as catalyst in organizational innovative strategies.

#### **2.4.5 Transformational leadership and organizational performance**

During crisis such as the COVID-19 pandemic a transformational leader can identify the right strategies that can steer the organization in the right direction. Transformational leaders are able to make the right decisions given the different strategies in the prevailing environment thus reducing the impact of the diverse challenges on organizations.

Transformational leadership was found to play an important role in promoting intrinsic motivation, psychological empowerment, innovative organizational culture, market success of the innovative strategy and boundary spanning and entrepreneurship (Seyed and Omid, 2015). These factors enable the manager to transform the organization to be highly innovative and improve the performance. Transformational leadership is what a 21<sup>st</sup> century manager should provide to the management and leadership to ensure that the organization conform to ever changing technology. According to Rabia, Abaid and Afsheen, (2009) the organizational size act as significant moderator between a transformational leadership through the characteristics of charisma, individual

consideration, intellectual stimulation and inspirational motivation on organization innovative strategies. Therefore, transformational leadership has a positive significant influence on the organization innovative strategies. Innovative strategies and transformational leadership have been found to have significant influence on organizational performance (Sarminah, 2012). However, there is need to determine if their exists interaction between innovative strategies and transformational leader on the performance of organization. Based on the following empirical contribution review on transformational leadership and performance of organization some facts can be outlined.

Tareq, (2016) examined the impact of transformational leadership style on the performance of Jordanian organizations. The leadership style was associated with developing innovative environment and knowledge sharing for success of organization objectives. Transformational leadership was investigated based on four aspects that is individual consideration, intellectual stimulation, inspirational motivation and idealized influence based on three banks within Jordan. The study surveyed 249 employees of banks selected. In order to test the significance of hypothesis of study at 5% level regression analysis was deployed. Individual consideration, intellectual stimulation and inspirational attribute contributed 81.6% of the variance of organization performance. However, idealized influence did not have significant effect on the organization's performance. The study recommended that leadership should focus on individual consideration, intellectual stimulation and inspirational attribute to enhance performance of organization.

A study by Arif and Akram, (2018) investigated transformational leadership and organizational performance. The study also assessed the mediating role of organization innovative strategy or transformational leadership and organizational performance. Explanatory design was used based on manufacturing companies in Pakistan. A sample of 96 respondents were selected using convenience sampling on Islamabad based branch of MIA groups. According to the findings showed that transformational leadership had strong relationship with organization performance. Leadership motivation and encouragement were considering to be significant on performance of Pakistan organization to increase creativity and effectiveness for organizational success.

Organizational performance was analysed by Widodo, Silitonga and Ali, (2017) in relation with transformational leadership style as well as organization learning. The study deployed quantitative survey method. Offices and agencies of Jakarta Provincial Government were targeted. A census of 163 respondents were analysed using linear regression analysis. Transformational leadership style as well as organizational learning was found to have positive significant influence on organizational performance.

Raza and Aiza, (2018) examined the impact of transformational leadership and social interaction on organizational performance. It was an analysis of empirical study based on Pakistani banking sector using the perspective of knowledge management. The results were obtained from the 350 Pakistani banks' employees. Transformational leadership, social interaction, knowledge management had positive significant impact on the organizational performance. However, knowledge management acted as partial

mediator of the relationship between transaction leadership, social interaction and organizational performance.

An empirical investigation of Vietnam manufacturing firms by Nguyen and Luu, (2019) examined a link between transformational leadership and organizational performance. Mediating role of organizational learning, organizational culture and organization innovative strategies was analysed on the relationship between transformational leadership and performance of organization. A sample of 314 Vietnamese manufacturing firms were selected. Transformational leadership was found to significantly influence the organizational performance through organizational culture, organizational innovative strategies and organization learning. However, organizational culture and organization learning had a direct positive influence on the performance of organization as well as indirect through organization innovative strategies.

Zhang, Zheng and Darko, (2018) examined how transformational leadership could promote innovative strategies in construction. The study also analysed the mediating role of innovative climate and multilevel moderation role of project requirement. In order to achieve the aim of the study, a questionnaire survey of 300 professionals from the construction industry within China was conducted. Hierarchical linear model was used to test the hypothesis. Transformational leaders were found to be capable of nurturing innovative climate so as to motivate employees to be innovative. There existed an indirect link between transformational leadership and innovative behaviour through innovative climate. Therefore, leaders are required to be innovative as project

requirement for transformational leadership which had positive impact on the individual employee innovative behaviour leading to innovative climate.

Esin and Ayse, (2018) investigated transformational leadership and innovation based on empirical study of direct and indirect influence of organization learning and knowledge management in Turkish human resource. Small and Medium Size as well as large HR consulting organization in Istanbul were sampled. Structural equation modelling and bootstrapping was used to analyse data. Transformational leadership was found to have indirect influence on organization innovation, but direct influence on knowledge management. Knowledge management had direct influence on organizational innovative strategies, however, organizational learning had indirect influence to organization innovation. On the other hand, transformational leadership had indirect effect on organizational innovativeness through mediation of organization learning and knowledge management. The study recommended that transformational leadership style need to take to account organizational learning and knowledge management to ensure successful implementation of organizations innovative strategies.

#### **2.4.6 Innovative strategies and performance**

From several studies that have been done before, the findings have typically reported that there is a positive relationship between innovative strategies and organization performance. Studying the effect of innovative activities on organization performance, the models of the new generations focus has moved to the more complex innovative channels and processes through which the inputs of innovation are transformed into improved performance (Hashi and Stojčić, 2013). Roberts and Amit, (2003) describes

the significance of financial innovative strategy as a means that leads to a competitive advantage and financial performance of an organization that is superior. Innovative strategies are found in product, process, market and management (Lin, Peng and Kao 2008), the dimensions that have been researched more and are more familiar in innovative strategies are the first three (Johnes and Davies, 2000; Otero-Neira, Lindman and Fernández, 2009).

For innovators innovative strategies in general seemed to have positive influence in increasing organizations performance (Greenbaum and Thakor, 2015). Lööf and Heshmati, (2006) using a four model equation linked the innovative decision of organizations to how they performed as well as through finding the impact of innovative strategies input and output on increased performance and better productivity. Their research findings established that the relationship between innovative strategies and productivity was positive and it provided further evidence on the innovative strategies and size of the organization. Another major reason that led to innovative strategies are the difficulties that were experienced in the 80's such as an increase in international competition which forced the firms to also focus further on enterprise policies. Due to tough local and international competition currently, both individuals and organizations have begun to use and appraise innovative policies and attaining competitive advantage through entrepreneurial capabilities (Gunday, Ulusoy, Kilic and Alpan, 2011).

Geroski, (2005) did a research to find out the impact of innovative strategies on copyright of many organizations performance measures like rates of returns on investments, profitability and organizations growth and expansion. He saw how an organization was impacted in terms of performance by direct inventions and it was

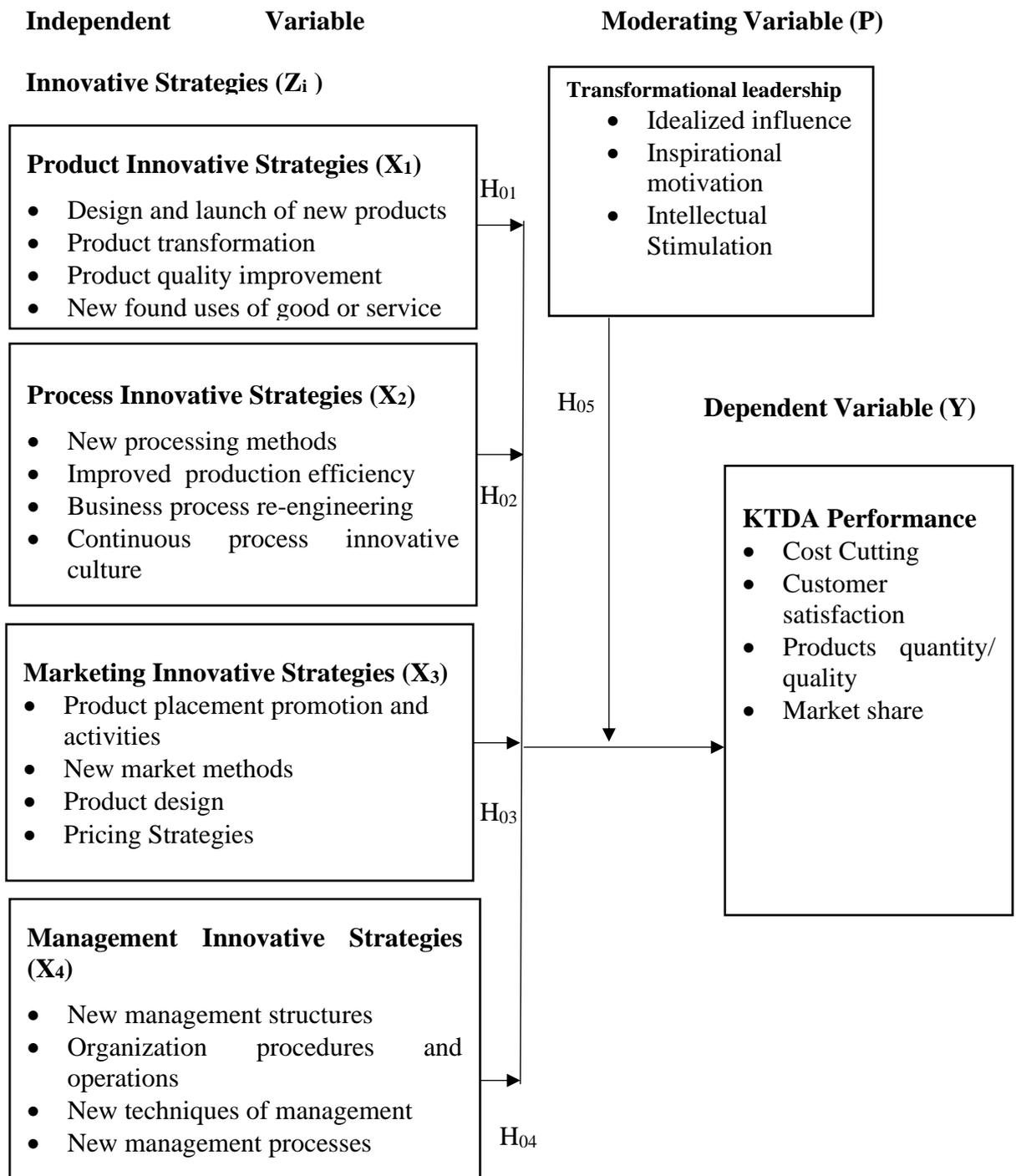
small compared to the profits that could accrue in directly from the inventions. McAdam and Keogh, (2004) researched on the awareness of the connection between innovative strategies and performance. They found that in the current competitive environment innovative strategies is important so that the organization can obtain a competitive edge against others. Therefore, for organizations that are innovative their vulnerability seems to be less affected by cyclical sectorial and other pressures that organizations that are not innovative. In addition to that, results found from research conducted previously found that when organizations are restructured it leads to managerial renewal which encourages other types of innovative strategies to take place. In the same way, Staropoli, (1998) stressed on the value of cooperation on organizational arrangements and techniques in harmonization to better technological innovative strategies in other sectors, while Germain's study, (1999) showed that characteristics that are structural to the organization might be a valuable indicator of process innovative strategies in the logistics industry. In a research done by Walter, 2008 on innovations, advertising and organizational relationship in the public sector they were found to be interconnected and they recommended for more research to be done to confirm the findings.

The conclusion from the literature was that there are various types of innovative strategies; product innovative strategies, process innovative strategies, marketing innovative strategies and management innovative strategies. Product innovative strategies attempt to create new products for the markets. Process innovative strategies on the other hand is the use of strategies to implement a new or considerably better production method, while marketing innovative strategies are strategies used to develop

a new marketing techniques that involve important changes in product design, product position, product promotion to meet market demands (Oslo manual, 2005). Lastly management innovative strategies involve the implementation of a management thought, idea, process, framework, and tools that are new to the firm and is intended to better performance of the organization (Damanpour, 1987).

## **2.5 Conceptual Framework**

A conceptual framework is a tool in research that is used by a researcher to understand and get information about a situation under study and communicate the same to interested parties. According to Bogdan and Biklen, (2003) a conceptual framework is a road map that entails analytical or synthetic, observational, experiential aspects of a process being conceived in abstract blocks. The outcomes expected are derived from a certain framework derived from interconnection of these blocks. The variable that is presumed to be affected or determined by an independent variable is a dependent variable. This variable can be altered as required, and the values obtained do not represent a problem requiring explanation in an analysis but are taken as they are (Dodge, 2003). The independent variables in this study are product innovative strategies, process innovative strategies, marketing innovative strategies and management innovative strategies. A dependent variable is measured in the study and what is affected during the study. The dependent variable changes in response according to the independent variable (Everitt, 2002). The dependent variable in this study is performance of KTDA factories in Kenya.



**Figure 2.1: Conceptual framework**

**Source: Adapted and modified from OECD, 2015**

## **2.6 Identification of Knowledge Gap**

Despite massive investments of management time and money, innovation remains a frustrating pursuit in many companies. The reasons go much deeper than the commonly cited cause: a failure to execute (Pisano, 2015). From the studies reviewed it is evident that organizations with strong innovative strategies have competitive advantage over others. From the literature we also find that only organizations that adopt innovative strategies to help in executing their duties differently and in a cost effective way are guaranteed survival. Based on the literature leadership is key in achieving any set goals in an organization but there is de-link between transformational leadership, innovative strategies and organizational performance. However, there are also geographical, methodological, contextual and conceptual gaps.

Innovative strategy studies that were done in other countries included Oke, Prajogo and Jayaram, (2013) in Australia, Ar and Baki (2011) in Turkey, Sintset, Nekoumanesh and Yang (2013) in Sweden, Prifti & Alimehmeti (2017) in Albania and Yongan, Umair, Seocheon and Madiha, (2019) in Pakistan. These studies reveal a difference geographical set-up with difference economic and technological capabilities. The current study was done Kenya with low economic and technological advancement. Similarly, transformational leadership were also affected by geographical gap with Tareq (2016) in Jordan, Arif and Akram (2018) in Pakistan, Widodo, Silitonga and Ali (2017) in India, Raza and Azia in Pakistan, Nguyen and Luu (2019) in Vietnamese, Zhang, Zheng and Darko (2018) in China and Esin and Ayse (2018) in Turkey. However, the current study bridged the gap and examine transformational leadership in Kenya.

There existed methodological gaps among empirical literature collected where some studies use meta-analysis of empirical studies (Montero, Pennano and Camilo, 2017). Other researchers did an empirical review of existing data in their studies (Prifti and Alimehmeti, 2017; Yongan, Umair, Seoyeon and Madiha, 2019; Seyed and Omid, 2015; Raza and Aiza, 2018; Nguyen and Luu, 2019; Esin and Ayse, 2018). The current study use primary data collected using questionnaires. Explanatory design was used by Arif and Akram (2018) and survey method was used by Widodo, Silitonga and Ali, (2017), the current study used correlation research design.

Contextual gaps were found in the studies since none of the study were done in tea factories. Innovative strategies and organizational performance were done on municipality management of waste (Sintset, Nekoumanesh and Yang, 2013). Financial institution was the contextual scope for Simiyu (2013) and Tareq (2016). Aswani (2013), on the other hand conducted a study which was based on a public University. SMEs were used in context of innovative management strategies by Mitroulis and Kitsios (2014). Arif and Akram (2018) on investigating transformational leadership focused on manufacturing companies. Based on the existing contextual gap the study then focused the study on KTDA factories in Kenya.

Conceptual gaps were found based on different focus on innovative strategies, transformational leadership and organizational performance. The following studies focused on product innovative strategies and product quality (Oke, Prajogo and Jayaram, 2013) as well as product innovative strategies and organization performance (Onikoyi, 2017). Also studies were conducted on process innovative strategies and quality function, process innovative strategies and organization performance (Sintset,

Nekoumanesh and Yang 2013). Market innovative strategies on firm performance was examined by Prifti and Alimehmeti (2017). Management innovative strategies were examined on organization performance (Walker, Damanpour and Devece, 2019; Yongan, Umair, Seoyeon and Madiha, 2019). Studies on transformational leadership and organization performance was studied by Tareq, 2016; Arif and Akram, 2018; Raza and Aiza, 2018; Nguyen and Luu, (2019). Based on these studies there exists different studies on product, process, market and management strategies on organization performance individually and some with different parameters. The current study focused on ascertaining direct relation of innovative strategies based on product, process, market and management strategies on organization performance. Finally, it focused on investigating moderating effect of transformational leadership on the relationship between innovative strategies and organizational performance in KTDA factories in Kenya.

From the literature above, innovative strategies are broadly seen as an essential component of competitiveness, embedded in the organizational structures, processes, products and services within an organization. Very little has been said and done about assessing the relationship of various categories of innovative strategies especially in light to KTDA factories performance. This is due to the fact that most researches attempt to measure the innovativeness of the organization rather than the consequences of innovative strategies. There is a clear consensus that innovative strategies are the reason for growth or decay of an organization, but there is a substantial lack of structured evidence concerning this. By identifying the relationships between innovative strategies and organization performance, the research seeks to find out

which innovative strategy is more important factor affecting the performance of the organization. Further, the research tried to find the moderating effect transformational leadership, innovative strategies and its performance of KTDA factories in Kenya.

**Table 2.1**

**Identification of Knowledge Gap**

<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>
Onikoyi (2017)	Product innovative strategies and organization performance.	Product innovative strategies had strong significant on the organizational performance.	Moderated multiple linear regression was used besides regression and correlation analysis.
Montero, Pennano and Camilo (2017)	It reviewed innovative strategies and organizational success.	The study found that efficacy and efficiency was used to measure product innovative strategy performance.	The study used descriptive, correlational and regression analysis rather meta-analysis.
Ar and Baki, (2011)	Product innovative strategy and firm performance.	Product innovative strategies had strong positive relationship with firm performance.	The study was done in Kenya rather than Turkey.
Oke, Prajogo and Jayaram, (2013)	Product innovative strategies and product quality performance.	Product innovative strategies and product quality performance were positive related firm performance.	The study was done in Kenya rather than Australia.

Minai and Lucky, (2011)	Process innovative strategies on business process reengineering and quality function.	Process innovative strategies offered quality standards as well cost reduction for low product price.	The study focused on organizational performance but no quality functions.
Gunday, Ulusoy, Kilic and Alpan, (2011)	Process innovative strategy and quality of manufacturing and logistic process.	Process innovative strategies ensured reduction of cost, new product development and new delivery strategies that improve quality of product.	The study focused on organization performance rather than quality of products.
Sintset, Nekoumanesh and Yang (2013)	Process innovative strategy impact on the performance of the organization	Process innovative strategies have a positive financial and customer performance in municipality.	Correlation and moderating regression analysis was used other than qualitative approach.
Simiyu (2013)	New market innovation strategies adopted in Commercial bank.	Process innovative strategies adopted vision, performance evaluation, shared commitment by everyone in the organization, clear Communication and Communications channels.	KTDA factories were used rather than commercial banks which was adopted.
Aswani (2013)	Strategic innovativeness in university.	Strategic innovative strategies had strong positive	The study focused on innovative strategies

		with public universities performance.	rather than strategic innovation.
Prifti and Alimehmeti (2017)	Market innovative strategies and firm performance.	Intelligence dissemination and intelligence dissemination responsiveness were based on information gathered.	The study focused on marketing innovative strategies as oppose to market orientation innovation.
Mitroulis and Kitsios (2014)	Innovative management strategies and market oriented on firm performance.	Market oriented innovative strategies had influence on competitive advantage of firms. Innovation led to customer satisfaction and organization performance.	Quantitative approach was used with descriptive and inferential statistics rather than multi-criteria method.
Walker, Damanpour and Devece, (2019)	Management innovative strategies and organization performance.	Management innovative strategy had no direct effect with organization performance but mediated by performance management.	Moderated regression analysis was used rather than structured equation models.
Yongan, Umair, Seoyeon and Madiha, (2019)	Management innovative strategies and technological innovative strategies on organization performance.	Management innovative strategies and technological innovative strategies had positive significant contribution to sustainability and organization performance.	Moderating regression analysis was used rather than structural equation model using analysis of a moment structure.

Seyed and Omid (2015)	Management of organizational innovative strategies	Innovative structural forms and core requirement for organizational innovative strategies. Transformational leadership as catalyst in organizational innovative strategies.	Primary data collection was done rather than empirical review.
Tareq (2016)	Transformational leadership style on the performance of Jordanian organizations.	Individual consideration, intellectual stimulation and inspirational attribute contributed 81.6% of the variance of organization performance.	It focused on moderating effect of transformational leadership on innovative strategies and organizational performance.
Arif and Akram (2018)	Transformational leadership and organizational performance.	Transformational leadership had strong relationship with organization performance.	Correlation design and cross-sectional survey research design was used rather than explanatory design.
Raza and Aiza (2018)	Transformational leadership and social interaction on organizational performance.	Transformational leadership, social interaction, knowledge management had positive significant impact on the organizational performance	Transformational leadership was used as moderating variable however knowledge management was used on transformational leadership and social

			interaction on performance.
Nguyen and Luu (2019)	Transformational leadership and organizational performance.	Transformational leadership had significant influence the organization performance.	KTDA tea manufacturing companies in Kenya was used rather Vietnamese manufacturing.
Zhang, Zheng and Darko (2018)	Transformational leadership promote implementation of innovative strategies in construction.	Transformative leadership which had positive impact on the individual employee innovative behaviour leading to innovative climate.	Moderated regression analysis was used instead of hierarchical linear model.
Esin and Ayse (2018)	Transformational leadership and innovative strategies of organization learning and knowledge management.	Transformational leadership was found to have indirect influence on organization innovative strategies, transformational leadership but direct influence on knowledge management.	The current study targeted employees while the study targeted SMEs in Istanbul.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter provides a detailed description and explanation of the methodological approach used in the study which includes the research design, location of the study, target population, sample and sampling procedures. It also discusses data collection instruments, data validity and reliability, data collection procedures, pilot testing, data analysis and presentation and any ethical issues.

#### **3.2 Research Design**

Research Philosophy is associated with creation and base on which knowledge is founded which creates predispositions and assumptions from which the study was based. The assumptions become the basis from which the researcher chooses the research methods and strategy to be used (Saunders, Lewis & Thorn hill, 2012). The researcher used a positivist research philosophy because it is based on the assumption that social reality is singular and doing an investigation on it does not affect its outcomes (Collis & Hussey, 2009). This philosophy stresses the importance of scientific methods to obtain and add knowledge.

In positivism, there is independence which implies that the researcher is not affect nor does not affect the subject under study. This has the implication to the research in that it is conducted in an impartial way, where the researcher is separate from the data collected thus the interference of the data is less (Collis & Hussey, 2009). This was ensured by using a research assistant to collect the data. This study find out the relationship between the variables (product, process, marketing, management innovative

strategies and transformational leadership) and this was operationalized in such a way that ensured the research was conducted quantitatively. In order to get generalizable results, an efficient sample was carefully as asserted by Saunders, Lewis & Thornhill, (2012).

Research design explains the procedures and plans that one has to decide when conducting a research this include broad assumptions to specific data collection and analysis methods (Creswell, 2014). The blue print for answering research objectives and testing hypothesis is research design (Saunders, 2010). This study adopted correlational as well as cross-sectional survey research design, correlation is associated with not only testing the hypothesis but utilizing inferential statistics comprising of correlation analysis and multiple linear regression (Saunders, Lewis, & Thornhill, 2011). This was appropriate since it used the quantitative approach to examine the moderating effect of transformational leadership to the relationship between innovative strategies and organizational performance.

Cross-sectional survey was also adopted based on the time dimension, reliance and randomization survey of elements. According to Creswell, (2014) cross-section is based on 'snapshot' where information is picked from a specific point in time. Cross-sectional design is adopted mainly when gaining immediate information such as those about COVID-19 pandemic, globalization and other challenges that face tea industry currently. Cross-sectional survey allowed information to be picked from different people in order to describe characteristics, opinion about the phenomenal using random sampling technique to obtain information. Cross-sectional survey allowed the researcher to use questionnaires to collect quantitative data for analysis to test

hypothesis. Therefore, correlational cross-section survey design combined the two concepts of testing relationship as well as obtain information at one point in time through probability or randomization.

### **3.3 Area of Study**

In this study the location of interest was KTDA factories in Kenya spread in 14 Counties; Bomet County, Embu County, Kakamega County, Kericho County, Kisii County, Kiambu County, Kirinyaga County, Meru County, Nakuru County, Nandi County, Nyeri County, Tharaka Nithi County, Murang'a County and Trans Nzoia County. These consist of 71 factories as listed (Appendix IV).

### **3.4 Population of the Study**

Target population in statistics is the specific population from which data is required. Orodho, (2013) explains target population to be a compilation of all cases that meet a certain group of specifics from which the research generalizes its findings. The target population was 974 employees from the four regions of KTDA factories, 308 employees were from region one, 198 employees from region two, 254 employees from region three and 214 employees from region four. In terms of employee level 71 were top level employees, 367 middle level employees and 536 lower level employees of KTDA managed factories as represented in Table 3.1. Saunders (2010) explained that the populations observable characteristics for which the researcher intends to generalize should have similarities.

**Table 3.1**

**Population of the Study**

<b>Stratums</b>	<b>Employee level</b>			<b>Sub-Total</b>
	<b>Top</b>	<b>Middle</b>	<b>Lower</b>	
Region 1	22	114	172	308
Region 2	15	79	104	198
Region 3	18	93	143	254
Region 4	16	81	117	214
Sub-Total	71	367	536	974

**Source: KTDA HR (2021)**

**3.5 Sampling Procedure and Sample Size**

Asiamah, Mensah and Oteng-Abayie, (2017) underscores the importance of selecting a representative sample through making a sampling frame which describes the list of all population units used in obtaining the sample. The study used the Yamen Tore formula (Thompson & Lange, 2011) to calculate sample sizes at 95% confidence level.

Yamen Tore formulae is given by;

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

Where, N= Target Population, n= Sample Size, e= standard error of 5%.

$$n = \frac{974}{1 + 974(0.05)^2}$$

Hence with target population of  $N = 974$  a sample of  $n=283$  is appropriate.

Stratified sampling method was used in selecting the respondents. According to Asiamah, Mensah and Oteng-Abayie, (2017) stratified proportionate random sampling technique produce estimates of overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population. Stratification aims to reduce standard error by providing some control over variance. The population was divide into sub-groups with common characteristics and the representative from each sub-group were part of the sample. Simple random sampling technique was used to pick the sample population from each sub-group. This ensured a significant sample was adopted to upheld central theory. The study grouped the population into three strata from top, middle and lower level employees as well as four regions in Table 3.2.

**Table 3.2****Sample Framework**

Stratums	Detail	Employee level			Sub-Total
		Top	Middle	Lower	
Region 1	Population	22	114	172	308
	Sample	6	33	50	89
Region 2	Population	15	79	104	198
	Sample	4	23	30	57
Region 3	Population	18	93	143	254
	Sample	5	27	42	74
Region 4	Population	16	81	117	214
	Sample	4	24	34	62
Sub-Total	Population	71	367	536	974
	<b>Sample (N)</b>	<b>20</b>	<b>107</b>	<b>156</b>	<b>283</b>

**Source: KTDA HR (2022)**

Table 3.2 represents the sample framework where all top, middle and lower level employees were considered as having information on transformational leadership and innovative strategies as well as organization performance in one way or another. They assisted in giving appropriate information about product innovative strategies, process innovative strategies, market innovative strategies, management innovative strategies, transformational leadership and organizational performance. This because the respondents are responsible in effecting or are affected by innovative strategies and transformational leadership.

### **3.6 Data Collection Instruments**

The study made use of primary data collected from the KTDA factories. Primary data was data collected in raw form directly from the respondents for a specific purpose. This tool was more systematic and structured which aims at obtaining information from respondents in a direct and open manner. Taherdoost (2016), points out that a questionnaire is structured, consisting of direct questions to obtain factual data or indirect that is, semi structured, allowing more flexibility on the part of the interviewer in setting questions in an indirect manner, or probing for answers. The questionnaire was divided into, Section A which provide general information and Section B which represent innovative strategies, Section C representing transformational leadership and Section D representing organizational performance.

### **3.7 Data Collection Procedure**

In collecting the data, the researcher first acquired a letter of research authorization from the University of Kabianga board of graduate studies(Appendix V), which was presented to the National Commission for Science, Technology and Innovation for a research permit before commencement of the research(Appendix VI). Finally, the researcher attached an introductory letter (Appendix I), that explained the purpose and significance of the research,requested for participation while giving an assurance for privacy,confidentiality and anonumity of the information collected.

Questionnaires were administered to the sampled respondents of KTDA using the drop and pick later method. Care and control was exercised to ensure all questionnaires issued to the respondents were received and to achieve this, the researcher maintained

a register of questionnaires, which were sent and signed against the records. The respondents were given a duration of two weeks to fill before they were collected. Research assistants were employed during the data collection process to ensure that all questionnaires distributed are collected and analyzed. Research assistants also helped to reduce the biasness of researcher interfering with data collection process. This has the implication to the research in that it is conducted in an impartial way, where the researcher is separate from the data collected thus the interference of the data is less (Collis & Hussey, 2009).

### **3.8 Validity and Reliability of the Research Instrument**

#### **3.8.1 Validity of the research instrument**

Validity refers to the degree to which results obtained from the analysis of data actually represent the phenomenon under study, while reliability refers to the extent to which an experiment, test, or any measuring procedure yields the same result on repeated trials (Taherdoost, 2016). There are four variants of validity that is face validity, content validity, construct validity and criterion validity. Face validity was established by the supervisors by reviewing the questionnaire. Content validity is a non-statistical method used to validate the content employed. The study achieved content validity by defining precise terms, and the question items sampled domain of the specific content that the questions assume to represent, and then determine how well the content is. The research instrument was also given to experts who are experienced to evaluate each item in the questionnaire. Construct validity was established by comparing the test to other tests that measure similar qualities. Criterion validity was examined by supervisors through

face value method where each question in questionnaire was evaluated with objective and conceptual frame.

### **3.8.2 Reliability of the research instrument**

In this study, reliability was ensured by piloting the research questionnaires to a sample of 15 staff from Kambaa Tea Factory in Kiambu County. It was piloted as the sample for being given an outstanding award in quality of tea by Tea Board of Kenya. This pilot sample was excluded in the main sample for the actual study. The instruments were then analyzed using the Cronbach Alpha coefficient to determine the extent of reliability. Reliability is the consistency of a measure of the degree to which a research instrument yields consistent results or data after repeated trials. The questionnaire from 15 staffs were entered to Statistical Package for Social Science and Cronbach Alpha calculated. If the 15 employees answer with similar output, it implies there exist internal consistency and the Cronbach Alpha coefficient was more than 0.7. This is because Cronbach Alpha reliability coefficient of 0.7 is adequate to declare the tools reliable (Bujang, Omar and Baharum, 2018). The summary of reliability was presented in Table 3.3.

**Table 3.3**

**Reliability Test**

<b>Items</b>	<b>Cronbach Alpha</b>	<b>No. Items</b>	<b>Remark</b>
Product innovative strategies	0.703	7	Accepted
Process innovative strategies	0.901	8	Accepted
Market innovative strategies	0.852	8	Accepted
Management innovative strategies	0.775	8	Accepted
Transformational Leadership	0.813	9	Accepted
Organizational Performance	0.767	9	Accepted

**Source: Research Data (2021)**

The results in Table 3.3 indicated that product innovative strategies, process innovative strategies, market innovative strategies, management innovative strategies, transformational leadership and organization performance all had Cronbach alpha above 0.7. This allowed the researcher to conduct further analysis.

**3.9 Data Analysis and Presentation**

Data collected was screened, coded, entered and analyzed with the use of Statistical Package of Social Science (SPSS). According to Orodho (2013), data analysis technique is the investigation of what has been collected in a research and making deductions and inferences. The choice of analysis procedures depends on how well the techniques are suited to the study and scale of measurement of the variable in question. Before processing the responses, the questionnaires were checked for completeness and

consistency. Data was coded to group the responses into various categories. Descriptive and inferential data analysis was conducted.

Inferential statistics used correlation analysis, simple linear regression analysis, multiple regression analysis and moderated multiple regression model so as to determine the relationship between innovative strategies, transformational leadership and the contribution of each of the variables in the study. Multiple regression analysis is a statistical method utilized to determine the relationship between one dependent variable and one or more independent variables (Hair, 2014). The multiple linear regression model not only indicated the relationship but also the strength of each variable. The results from the descriptive and inferential statistics was presented using tables, charts and bar graphs. Pearson product moment correlation coefficient represented by R was used to test the relationship between variables while coefficient of determination represented by R<sup>2</sup> was used to test percentage variation of dependent variable that is as result of independent variable based on percentage.

### **3.9.1 Simple linear regression models**

The study used the following models to determine the relationship between of each innovative strategy and the performance of KTDA factories in Kenya. Where product, process, marketing and management innovative strategies were examined in model 1 to 4 on organizational performance.

Simple regression model were given by;

$$Y = \beta_{01} + \beta_1 X_1 + e \dots \dots \dots \text{Model 1}$$

$$Y = \beta_{01} + \beta_1 X_2 + e \dots \dots \dots \text{Model 2}$$

$$Y = \beta_{01} + \beta_i X_3 + e \dots \dots \dots \text{Model 3}$$

$$Y = \beta_{01} + \beta_i X_4 + e \dots \dots \dots \text{Model 4}$$

Whereby: Y = Organizational Performance (Dependent Variable)

$\beta_{01}$  = Constant Term

$\beta_1, \beta_2, \beta_3, \beta_4$  = Beta coefficients

X<sub>1</sub> = Product innovative strategies

X<sub>2</sub> = Process innovative strategies

X<sub>3</sub> = Marketing innovative strategies

X<sub>4</sub> = Management innovative strategies

$\varepsilon$  = Error Term

### 3.9.2 Multiple linear regression models

Multiple linear regression models was used to examine innovative strategies on organizational performance. Multiple linear regression model was presented as;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \dots \dots \dots \text{Model 5}$$

Whereby: Y = Organizational Performance (Dependent Variable)

$\beta_0$  = Constant Term

$\beta_1, \beta_2, \beta_3, \beta_4$  = Beta coefficients

X<sub>1</sub> = Product innovative strategies

X<sub>2</sub> = Process innovative strategies

X<sub>3</sub> = Marketing innovative strategies

$X_4$  = Management innovative strategies

$\varepsilon$  = Error Term

Generated multiple regression model was used for testing the relationship between innovative strategies and organization performance which is given by Model 5. This equation is useful in examining direct relationship between product innovative strategies, process innovative strategies, market innovative strategies and management innovative strategies and organization performance. Model 7 is to introduce an interaction variable between innovative strategies and transformational leadership which is given by standardized product of innovative strategies and transformational leadership ( $Z_i * X_i$ ) as given in Model 7.

A summation of the scores of the regression analysis was then done as follows;

$$Y = \beta_0 + \beta_5 Z_i + e \dots \dots \dots \text{Model 6}$$

$$Y = \beta_0 + \beta_5 Z_i + \beta_6 P + \beta_7 Z_i P + e \dots \dots \dots \text{Model 7}$$

Whereby:  $Y$  = Organization Performance (Dependent Variable)

$\beta_0$  = Constant Term

$\beta_5, \beta_6, \beta_7$  = Beta coefficients

$P$  = Transformational Leadership

$Z_i$  = Innovative strategies [Composite mean  $f(x_1, x_2, x_3, x_4)$ ]

$Z_i * P$  = Interaction between innovative strategies and transformational leadership

$\varepsilon$  = Error Term

The summary of the model is given in Table 3.4 which reveals the objective with corresponding hypothesis, analytic model and hypothesis testing.

**Table 3.4**

**Summary of Data Analysis Techniques**

Objective(s)	Hypothesis	Analytical Model	Hypothesis Test
<p><b>Objective 1:</b> To establish the relationship between product innovative strategies and performance of Kenya Tea Development Agency factories in Kenya.</p>	<p>H<sub>01</sub>: There is no significant relationship between product innovative strategies and performance of Kenya Tea Development Agency factories in Kenya.</p>	$Y = \beta_0 + \beta_1 X_1 + e$ <p>Y =Organizational Performance, <math>\beta_0</math> = Constant Term, <math>\beta_1</math> =Beta coefficients, <math>X_1</math>= Product innovative strategies, <math>\epsilon</math> = Error term</p>	<p>H<sub>01</sub>: <math>\beta_1=0</math> Ha: <math>\beta_1\neq 0</math> Reject H<sub>01</sub> if p-value is <math>\leq 0.05</math>, Otherwise do not reject at 5% significance level</p>
<p><b>Objective 2:</b> To analyze the relationship between process innovative strategies and performance of Kenya Tea Development Agency in factories Kenya.</p>	<p>H<sub>02</sub>: There is no significant relationship between process innovative strategies and performance of Kenya Tea Development Agency in factories Kenya.</p>	$Y = \beta_{01} + \beta_2 X_2 + e$ <p>Y = Organizational Performance, <math>\beta_0</math> = Constant Term <math>\beta_2</math> = Beta coefficients <math>X_2</math> = Process innovative strategies <math>\epsilon</math> = Error term</p>	<p>H<sub>02</sub>: <math>\beta_2=0</math> Ha: <math>\beta_2\neq 0</math> Reject H<sub>02</sub> if p-value is <math>\leq 0.05</math>, Otherwise do not reject at 5% significance level.</p>
<p><b>Objective 3:</b> To find out the relationship between market innovative strategies and performance</p>	<p>H<sub>03</sub>: There is no significant relationship between market innovative strategies and performance</p>	$Y = \beta_{01} + \beta_3 X_3 + e$	<p>H<sub>03</sub>: <math>\beta_3=0</math> Ha: <math>\beta_3\neq 0</math> Reject H<sub>03</sub> if p-value is <math>\leq 0.05</math>, Otherwise do</p>

of Kenya Tea Development Agency in factories Kenya.	of Kenya Tea Development Agency in factories Kenya.	Y = Performance, $\beta_0$ = Constant Term, $\beta_3$ = Beta coefficients, $X_3$ = Marketing innovative strategies, $\varepsilon$ = Error term	not reject at 5% significance level.
<b>Objective 4:</b> To determine the relationship between management innovative strategies and performance of Kenya Tea Development Agency factories in Kenya.	H <sub>04</sub> : There is no significant relationship between management innovative strategies and performance of Kenya Tea Development Agency factories in Kenya.	$Y = \beta_{01} + \beta_4 X_4 + e$ Y = Organizational Performance, $\beta_0$ = Constant Term, $\beta_4$ = Beta coefficients, $X_4$ = Management innovative strategies, $\varepsilon$ = Error term	H <sub>04</sub> : $\beta_4=0$ Ha: $\beta_4\neq0$ Reject H <sub>04</sub> if p-value is $\leq 0.05$ , Otherwise do not reject at 5% significance level.
<b>Objective 5:</b> To assess the moderating effect of transformational leadership on the relationship between innovative strategies and performance of KTDA factories in Kenya.	H <sub>05</sub> : There is no significant statistical moderating effect of transformational leadership on the relationship between innovative strategies and performance of KTDA factories in Kenya.	$Y = \beta_0 + \beta_1 Z_1 + \beta_5 P + \beta_6 Z_1 P + e$ Where: Y= Performance, $\beta_0$ = intercept, $\beta_i, \beta_5, \beta_6$ = Beta Coefficients $Z_i$ =Innovative Strategies [mean $f(x_1, x_2, x_3, x_4)$ ] , $P$ = Transformational Leadership, $\varepsilon$ = Error term	H <sub>05</sub> : $\triangle R^2 =0$ Ha : $\triangle R^2 \neq 0$ Reject H <sub>03</sub> if p-value is $\leq 0.05$ , Otherwise do not reject at 5% significance level

Source: Author (2021)

### **3.9.3 Diagnostic tests**

To verify and test the various statistical assumptions in the linear and multiple regression analysis therein, various diagnostic tests were carried out (Field, 2009). The diagnostic tests appropriate to be verified include normality. Linearity, homoscedasticity (homogeneity of variance), autocorrelation and multi-collinearity tests.

#### ***3.9.3.1 Normality test***

For data to be termed reliable, normality test is one of the parametric tests that needs to be done. It tests whether data samples taken for tests has been drawn from a population that has been normally distributed. Normality tested skewness and kurtosis. The decision rule is that if skewness and kurtosis statistics are less than an absolute of 2.0 are normally distributed. The findings of normality test are presented in Table 3.5.

**Table 3.5:****Normality Test Results**

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Product innovative strategies	283	-.131	.145	-.207	.289
Process innovative strategies	283	-.473	.145	-.538	.289
Market innovative strategies	283	-.189	.145	-.189	.289
Management innovative strategies	283	.000	.145	-.371	.289
Transformational Leadership	283	.206	.145	.177	.289
Organizational Performance	283	.091	.145	-1.302	.289

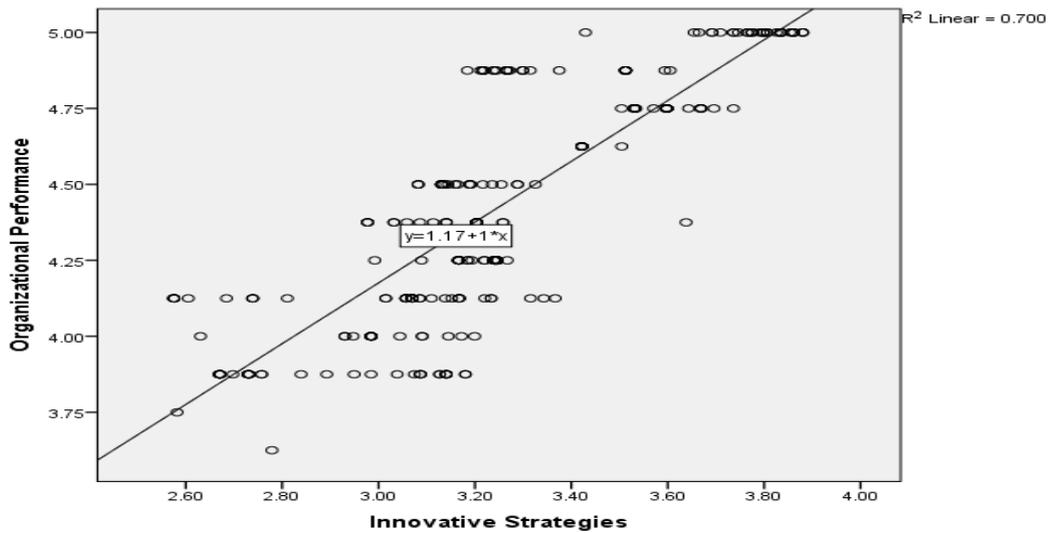
**Source: Research Data (2022)**

Table 3.5 indicated that skewness and kurtosis statistic had absolute statistic value less than 2.0. This revealed that product innovative strategies, process innovative strategies, market innovative strategies, management innovative strategies, transformational leadership and organizational performance were normally distributed as revealed by results. This implies that innovative strategies, transformational leadership and organizational performance were normally distribution.

### **3.9.3.2. Linearity test**

Linearity test represent the test of linear relationship between dependent and independent variable (Hair, 2014). The reason for testing linearity lies in the fact that many statistical methods require an assumption of linearity of data. Scattered plot graph

was used to test the linearity of the regression line between innovative strategies and organizational performance. The decision rule is that if plot point in scattered graph are spread along the regression line it implies that there exist linear relationship. Figure 3.1 revealed the relationship between innovative strategies and organizational performance.



**Figure 3.1: Linearity Testing**

**Source: Research Data (2022)**

Figure 3.1 indicated a positive linear relationship between innovative strategies and organizational performances. This implies that data can be used for further multiple regression analysis.

### **3.9.3.3. Homoscedasticity test**

Homoscedasticity (homogeneity of variance) refers to the assumption that the variance are equally distributed along linear regression line. Heteroscedasticity occurs when dependent variable exhibits unequal variance across the range for independent variables. Levene’s test for equality of variance was used to test for homogeneity of

variance. The Null hypothesis indicates equal variance hence the difference between the variance is zero. The decision rule is if Levene's test statistics significant's is greater than 0.05, the null hypothesis is accepted and therefore, the assumption of homoscedasticity is fulfilled (Hair, 2014). The results were presented in table 3.6.

**Table 3.6**

**Levene's Test of Equality of Error Variances**

<b>F</b>	<b>df1</b>	<b>df2</b>	<b>Sig.</b>
.892	117	165	.745

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Z + P + Z \* P

Dependent Variable: Organizational Performance

**Source: Research Data (2022)**

Table 3.6 had Levene's statistic F value of .892 with P value of 0.745 which is more than 5%. This implies that null hypothesis was accepted where the error variance of the dependent variable was equal across the groups. Therefore, innovative strategies, transformational leadership and interaction between innovative strategies and transformational leadership had uniform variance across organization performance. Hence, recommended further analysis to be conducted using multiple regression analysis.

### 3.9.3.4. Autocorrelation test

Autocorrelation was tested using Durbin-Watson who proposed that for null hypothesis where there is no autocorrelation the Durbin-Watson (d) coefficient should be between 1.5 and 2.5. The summary of results from simple linear regression, multiple linear regression and moderated multiple linear regression were given in table 3.7.

**Table 3.7**

#### Autocorrelation Test

Regression models	D	Decision Rule
Product Innovative Strategies*KTDA	1.640	No
Performance		Autocorrelation
Process Innovative Strategies*KTDA	1.720	No
Performance		Autocorrelation
Market Innovative Strategies*KTDA	1.856	No
Performance		Autocorrelation
Management Innovative Strategies*KTDA	2.106	No
Performance		Autocorrelation
		No
Multiple linear regression	1.603	Autocorrelation
		No
Moderated Multiple Linear regression	1.706	Autocorrelation

**Source: Research Data (2022)**

According to the Table 3.7, Durbin-Watson coefficient  $d$  were all between 1.5 and 2.5 therefore, null hypothesis was accepted that was there was no autocorrelation for simple, multiple and moderate multiple linear regression models ( $1.5 < d = 1.603 < 2.5$ ).

### ***3.9.3.5. Multi-collinearity test results***

Multi-collinearity can occur in multiple regression models in which one or more independent variables are significantly correlated among themselves. The assumption requires that independent variables should not be correlated. This is because when there is multi-collinearity the predictive power of the individual variables is reduced. It is tested using Tolerance and Variance Inflation Factor (VIF) which is calculated using SPSS. If VIF for all independent and dependent variable is less than 3 it indicates no multi-collinearity while a VIF of 10 or more ( $VIF \geq 10$ ) indicates a problem of multi-collinearity (Field, 2009).

Variance Inflation Factors (VIF) was used to test the null hypothesis that is there is no multi-collinearity. According to test criteria a threshold less 10 implied that there is no multi-collinearity between the innovative strategies and transformational leadership on organizational performance. A summary table of VIF and tolerance were used as collinearity test statistics as indicated in Table 3.8.

**Table 3.8****Multi-collinearity Test Results**

<b>Variable</b>	<b>Collinearity Statistics</b>	
	<b>Tolerance</b>	<b>VIF</b>
Product innovative strategies	.311	3.214
Process innovative strategies	.363	2.755
Market innovative strategies	.460	2.176
Management innovative strategies	.416	2.405
Transformational Leadership	.653	1.531

a Dependent Variable: Organizational Performance

**Source: Research Data (2022)**

Table 3.8 revealed that product innovative strategies, process innovative strategies, market innovative strategies, management innovative strategies and transformational leadership had no multi-collinear relationship on organizational performance ( $VIF < 10$ ). Hence null hypothesis was adopted since there were no multi-collinearity between independent and dependent variable.

**3.10 Research Ethics**

The researcher upheld ethical requirements of research by first seeking for authority to conduct research from the University of Kabianga and NACOSTI. The researcher cleared with Board of Graduate studies as required by University of Kabianga. Secondly, the research data collected from the respondents were treated with utmost confidentiality and for academic purposes only. The researcher ensured that

information communicated is consistent with the data collected from the field and avoid any form of manipulation. Anonymity was maintained by not taking or mentioning individuals name in the study.

## CHAPTER FOUR

### DATA ANALYSIS, INTERPRETATIONS AND DISCUSSIONS

#### 4.1 Introduction

This chapter presents the research findings of the empirical study on innovative strategies, transformational leadership and performance of KTDA factories in Kenya. It outlines the results from questionnaires divided into response rate, demographic information, descriptive analysis and inferential analysis. The results presented were analyzed using percentages, mean and standard deviation for descriptive analysis while correlation analysis, simple, multiple and moderated effect multiple regression model.

#### 4.2 Response Rate

The results of responded and non-responded questionnaires were summarized presented in Table 4.1.

**Table 4.1**

#### Response Rate

Questionnaires	Number	Percentage
Responded	283	100.0%
Non-responded	0	0%
Total (N)	283	100.0%

**Source: Research Data (2022)**

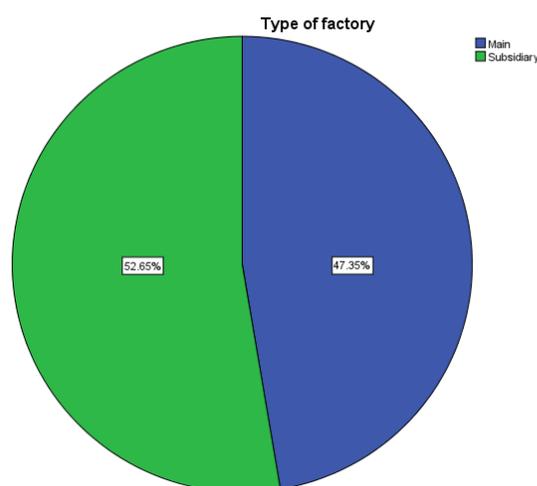
Table 4.1, indicated a 100% response rates.

### 4.3 Demographic Information

Type of factory, number of years the factory has been in existence, highest education level, employee category, length of working in the industry and department presented in charts and frequency table. Demographic information explains both factory and respondents' characteristics.

#### 4.3.1 Type of Factory

Type of factory was examined based on those which were developed as main factory and those that hold subsidiaries. The type of factories was presented in figure 4.1.



**Figure 4.1: Type of Factory**

**Source: Research Data (2022)**

Figure 4.1 indicated the mother factories represented 52.65% while subsidiaries were 47.35%. The main factories were slightly more than those subsidiary factories which indicate that factories have doubled from original number. According to the results the subsidiary have considerably grown from original tea factories indicating an increase

in productivity of tea over years. This is inline with the statistical data offered in 2021 by Faria (2020) which indicated that the tea industry is project to grow both in local and international market due to growth in demand of black tea.

#### 4.3.2 Number of years the factory has been in existence

According to the findings majority of main factories were mostly formed between 0-20 years. Number of years since existence of the factories was determined by the length of time since they were formed. This was presented in Table 4.2.

**Table 4.2**

#### Number of Years the Factory has been in Existence

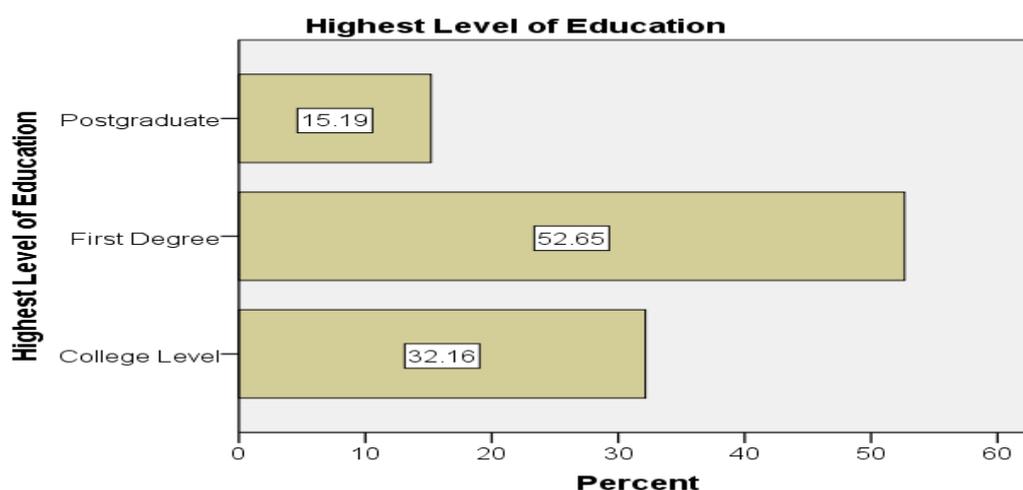
	Frequency	Percent	Valid Percent	Cumulative Percent
0-10 years	50	17.7	17.7	17.7
11-20 years	95	33.6	33.6	51.2
21-30 years	70	24.7	24.7	76.0
Over 30 years	68	24.0	24.0	100.0

**Source: Research Data (2022)**

Table 4.2 revealed that the number of years since existence of the factory was between 0-10 years, 11-20 years, 21-30 years and over 30 years which represent 17.7%, 33.6%, 24.7% and 24.0% respectively. The results indicated that slightly more than half were established below 20 years which indicated constant growth of KTDA factories. The tea industry has grown uniformly over years after the establishment of tea by colonials in Kenya according to this findings.

### 4.3.3 Highest level of education of the respondent

Highest level of education of the respondents were examined to determine the literacy level. This were presented in figure 4.2 with percentage of the literacy level of the respondents.



**Figure 4.2: Highest Level of Education**

**Source: Research Data (2022)**

Findings in figure 4.2 revealed high education literacy where 52.65% had bachelors, 32.16% had college level and 15.19% had Post graduate degree. This indicated that KTDA valued high literacy as part of management to enable adoption of innovative strategies. Education remain crucial in innovative strategies which has been adopted by major universities to ensure growth of Kenya tea industry. According to Kamotho, Mathenge and Kamiri (2020) pointed out in the international conference that the university are building human capacity that are sustainable in tea sector. This programmes cuts across the bachelors, masters and doctorate degree levels to enhance the performance of the tea industry. The results indicatedd the the tea industry is moving in the right tregetory with increase in bachleor and post graduate degrees employees.

#### 4.3.4 Employment level of the respondent

Employment level of the respondent represented the level of management and employment level. Table 4.3 is a presentation of the employment level of the respondents.

**Table 4.3**

#### **Employment Level of the Respondents**

	<b>Frequency</b>	<b>Percent</b>	<b>Valid</b>	<b>Cumulative</b>
	<b>(N)</b>		<b>Percent</b>	<b>Percent</b>
Operational/Field Employee	103	36.4	36.4	36.4
Middle Level Employee	151	53.4	53.4	89.8
Top Level Employee	29	10.2	10.2	100.0
<b>Total</b>	<b>N= 283</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Research Data (2022)**

Table 4.3 indicated that middle level employees were 53.4% followed by operational/field employee and top level employee representing 36.4% and 10.2% respectively. Despite the industry struggling with fluctuation of prices in international market. According to KIPPRA 2020 report, operation or field management plays an important role in ensuring that there is quality of tea through tea processing. The report indicated that is high labor cost based on the number of employee in the factory. However, it recommended that production of extension service by operational or field manager have enable the small scale farmers improve on the quality of tea production

and productivity. The field manager is essential in providing farmers with innovative idea, skills of increase productivity and training. While the middle are essential in ensuring that all the processing are done appropriately with in the require time and quality. Cost cutting measure only be done through deploying innovative strategies in process, product, management and marketing rather than scalling down the human capital. This is because all the human capital are import in ensuring quality and productivity of tea.

#### **4.3.5 Length of time the respondent has worked in KTDA factory**

Length of time the respondent has worked in KTDA factory was presented in frequency. Table 4.4 presents the length of time the respondents have worked in KTDA factory.

**Table 4.4**

#### **Length of Time the Respondent has Worked in KTDA**

	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Less than 1 year	29	10.2	10.2	10.2
2-3 years	64	22.6	22.6	32.9
3-5 years	93	32.9	32.9	65.7
5-10 years	92	32.5	32.5	98.2
Above 10 years	5	1.8	1.8	100.0
<b>Total</b>	<b>N=283</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Research Data (2022)**

Table 4.4 revealed 3-5 years, 5-10 years, 2-3 years, less than 1 years and above 10 years where 32.9%, 32.5%, 22.6%, 10.2% and 1.8%. This revealed that a majority of the respondents had less than 10 years of experience in KTDA. Despite liberalization of tea industry, the government still have control through Tea Board of Kenya which affect the employee as part of stakeholders (Gesimba, Langat, Liu, & Wolukau, 2005). As results the directors as well as employee are always affected directly by the government decision affective employee turnover in KTDA. The industry have emback in 5 year plans that ensure that tea becomes part of Kenya number one choice of beverage as well as enhance expansion of market.

#### **4.3.6 Department under which the respondent works**

This represents the department under which the respondent belonged in the organization. The departments in KTDA factories were grouped into; Production operations, Field services, ICT and Finance. The summary of departments was presented in Table 4.5.

**Table 4.5**

#### **Department under which the respondent works**

	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Production Operations	161	56.9	56.9	56.9
Field Services	53	18.7	18.7	75.6
ICT	13	4.6	4.6	80.2
Finance	56	19.8	19.8	100.0
<b>Total</b>	<b>N=283</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Research Data (2022)**

Table 4.5 indicated most employees were from production operations in the factory representing 56.9%. This were followed by employees from finance, field services and ICT representing 19.8%, 18.7% and 4.6% respectively. The result support Terer and Kipkorir (2019) who pointed out through departmentalization the KTDA factories would be able to improve performance through adoption of management practices like material management, total productive maintenance, lean production and balance score cards. Production operation has the largest share of employees since it remains to be the core business of KTDA factories in ensuring the tea product are of quality, timely produced and the right quantity with minimum cost.

#### **4.4 Descriptive Analysis of the Variables**

Descriptive analysis was adopted to examine summary characteristics contributing to product, process, market, management innovativeness respectively. It also examined transformational leadership and organizational performance. This was achieved by use of mean to explain the characteristics while standard deviation explain variation in the characteristics of the variable in different factories. Percentages were also adopted to assist providing the percentage distribution of frequencies from strongly agree which is 5 to strongly disagree which is 1.

##### **4.4.1 Product innovative strategies**

The first objective was to examine contribution of product innovative strategies to organizational performance. The summary of the result attained were presented in Table 4.6.

**Table 4.6****Descriptive Analysis of Product Innovative Strategies**

	<b>N</b>	<b>SA(5)</b>	<b>A(4)</b>	<b>N(3)</b>	<b>D(2)</b>	<b>SD (1)</b>	<b>Mean</b>	<b>Std. Deviation</b>
KTDA factories have the ability to design and launch new tea products to market	283	52.3%	40.6%	7.1%	0.0%	0.0%	4.4523	.624
Monitoring of latest tendencies in technology and adopting the appropriate for high product quality.	283	41.0%	54.8%	4.2%	0.0%	0.0%	4.3675	.564
The factories have the ability to adopt the appropriate technology for high production	283	50.9%	48.8%	0.4%	0.0%	0.0%	4.5053	.507
There are developed products with other organization.	283	8.1%	45.9%	37.1%	7.1%	1.8%	3.5159	.813
Continuous research and development activities are encouraged in the organization	283	38.5%	47.7%	13.8%	0.0%	0.0%	4.2473	.680
There are continuous innovation of products culture.	283	14.5%	66.8%	16.3%	2.5%	0.0%	3.9329	.635
The factories invests in capacity to meet scheduled initiatives and milestones	283	19.8%	65.7%	14.5%	0.0%	0.0%	4.0530	.584
There are business models used to create products that target new market segments	283	18.4%	37.8%	41.3%	2.5%	0.0%	3.7208	.787

**Source: Research Data (2022)**

Table 4.6 revealed that KTDA factories had the ability to design and launch new tea products to market where 52.3% strongly agree, 40.6% agreed and 7.1% were neutral (mean = 4.4523, standard deviation =0.62486). The study found that the factories were able to monitor the latest tendencies in technology and adopted the appropriate for high product quality where 41.0% strongly agreed, 54.8% agreed and 4.2% were neutral (mean = 4.3675, standard deviation =0.56424).

The factories were able to adopt the appropriate technology for high production as indicated by 50.9% who strongly agreed, 48.8% agreed and only 0.4% were neutral (mean of 4.5053, standard deviation =0.50789). However, product development was partially done with other organization as indicated by some KTDA factories where 8.1% strongly agreed, 45.9% agreed, 37.1% neutral, 7.1% disagreed and 1.8% strongly disagreed (mean = 3.5159, standard deviation =0.81362).

However, continuous research and development activities was encouraged in the organization which was revealed where 38.5% strongly agreed, 47.7% agreed and 13.8% were neutral (mean =4.2473, standard deviation =0.68075). This was supported by culture of continuous innovation of products supported by 14.5% respondents who strongly agreed, 66.8% agreed, 16.3% neutral and only 2.5% strongly disagreed (mean =3.9329, standard deviation =0.63504).

The result revealed that the factories invested in capacity to meet scheduled initiatives and milestones set which was strongly agreed, agreed and neutral by 19.8%, 65.7% and 14.5% respectively (mean of 4.0530, standard deviation =0.58408). Majority of the factories were able to adopt business models that created products for a target new

market segments where 18.4% strongly agreed, 37.8% agreed, 41.3% neutral and 2.5% disagreed (mean =3.7208, standard deviation =0.78764).

According to the open ended question 95% of the respondent described that the factories adopted majority of product innovative strategies from the top management and implement uniformly in the factories. However, more innovative transformative leaders are allow to send there proposal to top management through the directors which have made majority improve products produced in the tea industry.

#### **4.4.2 Process innovative strategies**

Process innovative strategies were examined using mean and standard deviation based on responses of the questionnaire. The characteristics obtained from analysis from descriptive statistics were based on results of percentages, mean and standard deviation. This were summarized in Table 4.7 representing descriptive statistics of process innovative strategies.

**Table 4.7****Descriptive Analysis of Process Innovative Strategies**

	N	SA(5)	A(4)	N(3)	D(2)	SD(1)	Mean	Std. Deviation
Operation utilize statistical data in controlling of process to ensure effective, quality and efficient tea processing.	283	38.2%	56.5%	4.9%	0.4%	0.0%	4.325	.583
There is constant adaptation of technology in processing of tea for reduction of cost and quick productions.	283	41.7%	47.0%	11.0%	0.0%	0.4%	4.296	.686
Logistics are efficient to ensure adequate stock of raw tea for processing purpose.	283	54.1%	43.1%	2.8%	0.0%	0.0%	4.512	.554
Effective innovation in management of production routines and programs.	283	29.7%	60.4%	9.9%	0.0%	0.0%	4.197	.598
Prompt delivery of tea due to enhanced logistical management	283	38.9%	45.6%	15.2%	0.4%	0.0%	4.229	.709
The factories are able to manage higher capacity of tea delivery within appropriate production time.	283	35.3%	56.2%	1.1%	7.4%	0.0%	4.194	.790
Utilization of modern technology to increase transparency in tea weighting and delivery.	283	58.7%	29.7%	11.7%	0.0%	0.0%	4.470	.695
Improving turnaround time for deliveries and processing time in the factory.	283	43.8%	42.0%	14.1%	0.0%	0.0%	4.296	.702

**Source: Research Data (2022)**

According to Table 4.7, the KTDA factories utilized statistical data in controlling of process to ensure effective, quality and efficient tea processing since there were 38.2% respondents who strongly agreed, 56.5% agreed, 4.9% were neutral and only 0.4%

disagreed (mean =4.3251, standard deviation =0.58374). Findings indicated that 41.7% strongly agreed, 47.0% agreed, 11.0% neutral and only 0.4% strongly disagreed that constant adaptation of technology in processes of tea for reduction of cost and quick productions (mean = 4.2968, standard deviation=0.68693).

KTDA factories was found to have efficient logistics that ensured adequate stock of raw tea for processing purpose where 54.1% strongly agreed, 43.1% agreed and 2.8% were neutral (mean =4.5124, standard deviation =0.55450). This was also attributed by effective innovation in management of production routines and programs where 29.7%, 60.4% and 9.9% of the respondent strongly agreed, agreed and neutral respectively (mean = 4.1979, standard deviation =0.59822).

According to response majority 45.6% agreed that there was prompt delivery of tea due to enhanced logistical management while 38.9% strongly agreed, 15.2% neutral and 0.4% disagreed (mean =4.2297, standard deviation =0.70979). The factories were able to manage higher capacity of tea delivery within appropriate production time as indicate by majority of 56.2% who agreed, 35.3% strongly agreed, 1.1% neutral and only 7.4% disagreed (mean=4.1943, standard deviation =0.79071).

Majority of the 58.7% respondents strongly agreed that utilization of modern technology has increased transparency in tea weighting and delivery while 29.7% agreed and 11.7% were neutral (mean =4.4700, standard deviation=0.69572). A response of 43.8% strongly agreed, 42.0% agreed and 14.1% were neutral on improvement turnaround time for deliveries and processing time in the factory (mean = 4.2968, standard deviation =0.70224).

#### 4.4.3 Market innovative strategies

Market innovative strategies was examined based on mean, standard deviation and percentage frequency. This provided the summary of characteristic of market innovative strategies within the KTDA factories. The summary was presented in table 4.8.

**Table 4.8**  
**Descriptive Analysis of Market Innovative Strategies**

	N	SA(5)	A(4)	N(3)	D(2)	SD(1)	Mean	Std. Dev
Formal market research are conducted to measure customer's satisfaction and gain market information.	28 3	37.5 %	30.0 %	28.6 %	3.9%	0.0%	4.010	.905
Negotiation teams are managed to enable competitive sustainable suppliers and customers	28 3	19.8 %	59.0 %	17.0 %	4.2%	0.0%	3.943	.731
The firm is able to negotiate for favourable prices for the tea products.	28 3	21.9 %	60.8 %	9.9%	7.4%	0.0%	3.971	.785
There is formal criterion in selecting suppliers, auctioneers and buyers in selling tea.	28 3	31.4 %	48.1 %	15.2 %	3.2%	2.1%	4.035	.886
Product promotion and marketing in both local and international market.	28 3	25.8 %	56.9 %	17.0 %	0.0%	0.4%	4.077	.674
There are numerous buyers of tea based on good marketing strategies adopted to improve tea prices.	28 3	30.4 %	48.4 %	21.2 %	0.0%	0.0%	4.091	.713
There exist international market to meet the demand for the tea due to marketing done overseas.	28 3	25.4 %	50.9 %	23.7 %	0.0%	0.0%	4.017	.701
Tea product are marketed locally to increase market share through marketing innovation.	28 3	32.5 %	43.8 %	16.3 %	0.0%	7.4%	3.982	1.02

**Source: Research Data (2022)**

Finding in table 4.8 revealed that the formal market research was conducted to measure customer's satisfaction and gain market information since 37.5% strongly agreed, 30.0% agreed, 28.6% neutral but 3.9% disagreed (mean =4.010, standard deviation=0.905). Majority of 59.0% agreed that negotiation team managed to gain competitive sustainable suppliers and customers while 19.8% strongly agreed, 17.0% neutral and 4.2% disagreed (mean =3.943, standard deviation =0.731).

Majority of 60.8% agreed that the firm was able to negotiate for favourable prices for the tea products, 21.9% strongly agreed, 9.9% neutral and 7.4% disagreed (mean=3.971, standard deviation =0.785). There was formal criterion in selecting suppliers, auctioneers and buyers in selling tea where 31.4% strongly agreed, 48.1% agreed, 15.2% neutral, 3.2% disagreed and 2.1% strongly disagreed (mean =4.035, standard deviation =0.886).

The factories were able to do product promotion and marketing in both local and international market which indicated 25.8% strongly agreed, 56.9% agreed, 17.0% neutral and 0.4% strongly disagreed (mean=4.077, standard deviation=0.674). There were numerous buyers of tea based on good marketing strategies adopted to improve tea prices where 30.4% strongly agreed, 48.4% agreed and 21.2% neutral (mean=4.091, standard deviation =0.713).

There existed international market to meet the demand for the tea due to marketing done overseas where 25.4% strongly agreed, 50.9% agreed and 23.7% neutral (mean=4.017, standard deviation =0.701). While the tea products were marketed locally to increase market share through marketing innovation as indicated by 32.5% of respondent who

strongly agreed, 43.8% agreed, 16.3% neutral and 7.4% strongly disagreed (mean =3.982, standard deviation=1.022).

The respondents from the open ended question indicated that all the factories are try repackaging their products for local market which has not been exploited. They have also adopted distribution centers at the factory and at major points to market their products to local market.

#### **4.4.4 Management innovative strategies**

Management innovative strategies were examined using descriptive analysis. Percentage, mean and standard deviation were adopted in summarizing the characteristics of management innovative strategies. Summarized descriptive analysis for management innovative strategies were presented in Table 4.9.

**Table 4.9****Descriptive Analysis of Management Innovative Strategies**

	<b>N</b>	<b>SA(5)</b>	<b>A(4)</b>	<b>N(3)</b>	<b>D(2)</b>	<b>SD(1)</b>	<b>Mean</b>	<b>Std. Deviation</b>
Management are able to develop and implement strategies developed.	283	47.0%	52.3%	0.7%	0.0%	0.0%	4.462	.513
Technology are well integrated in all the department to fit with organization strategies.	283	36.4%	48.8%	12.0%	2.8%	0.0%	4.187	.751
Management techniques and practice are deployed to obtain set organizational goals.	283	26.5%	64.0%	9.5%	0.0%	0.0%	4.169	.576
The employees are well trained to deliver organization goals.	283	44.5%	43.8%	11.7%	0.0%	0.0%	4.328	.674
Financial management practice and systems are used to ensure accountability and transparency in finance.	283	48.8%	46.6%	4.6%	0.0%	0.0%	4.441	.582

There is motivation to attract and retain highly qualified innovative staff by management	283	46.6%	44.5%	6.0%	2.8%	0.0%	4.349	.720
There is use of internal standards and documents for work procedures	283	53.0%	45.6%	1.4%	0.0%	0.0%	4.515	.528
Management makes a consideration of socio economic factors while establishing organizations innovation agenda	283	18.0%	77.0%	4.9%	0.0%	0.0%	4.130	.461

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**Source: Research Data (2022)**

Table 4.9 results indicated that management were able to develop and implement strategies developed where 47.0% strongly agreed, 52.3% agreed and 0.7% neutral (mean=4.462, standard deviation =0.513). Technology were well integrated in all the department to fit with organization strategies with 36.4% of respondents strongly agree, 48.8% agree, 12.0% neutral and 2.8% disagree (mean=4.187, standard deviation=0.751).

Majority of the 64.0% respondents agreed that management techniques and practice were deployed to obtain set organizational goals, however, 26.5% strongly agreed and

9.5% were neutral (mean =4.169, standard deviation =0.576). It was also strongly agreed with 44.5% of respondent that employees were well trained to deliver organization goals nevertheless, 43.8% agreed and 11.7% were neutral (mean=4.3286, standard deviation=0.674).

KTDA factories used financial management practices and systems to ensure accountability and transparency in finance since majority of 48.8% respondents strongly agreed, 46.6% agreed and 4.6% were neutral (mean=4.441, standard deviation=0.582). However, there was motivation to attract and retain highly qualified innovative staff by management where most 46.6% respondents strongly agreed, 44.5% agreed, 6.0% neutral and 2.8% disagreed (mean=4.349, standard deviation=0.720).

Findings was highly 53.0% strongly agreed, 45.6% agreed and 1.4% neutral on the use of internal standards and documents for work procedures in KTDA factories (mean=4.515, standard deviation=0.528). A majority of 77.0% respondents agreed, 18.0% agreed and 4.9% neutral that management made a consideration of socio-economic factors while establishing organizations innovation agenda in the factories (mean =4.130, standard deviation=0.461).

All the respondents indicated that there is management innovation however the claimed that this dependent on management style of the unit manager. This has assisted the firm to thrive in both local and international market. Where management that are keen to product quality from the source of raw material get high price for there produce.

#### **4.4.5 Transformational leadership**

The results for transformational leadership extracted from questionnaires were presented using descriptive statistics. The descriptive analysis of the 5 points Likert scale was presented in percentage frequency, mean and standard deviation. The summary results as presented in Table 4.10 provided characteristic of transformational leadership data collected.

**Table 4.10****Descriptive Analysis of Transformational Leadership**

	N	SA	A	N	D	SD	Mean	Std. Deviation
The organization appreciates and awards the innovative employees with innovative ideas	283	12.0%	66.4%	15.9%	5.7%	0.0%	3.84	.695
The leader inspires employees to work towards the same goal through work passion	283	31.4%	68.2%	0.4%	0.0%	0.0%	4.31	.471
The leader positively highlights the importance of the organizations goals and values in order to develop team attitude and spirit amongst employees	283	36.0%	55.8%	8.1%	0.0%	0.0%	4.27	.604
The leader focuses on giving consideration to each employee as part of the team	283	24.4%	64.7%	7.8%	2.8%	0.4%	4.09	.676
The leader supports and assists us to accomplish the creative ideas that supports organizations goals achievement.	283	22.3%	61.5%	16.3%	0.0%	0.0%	4.06	.618
The leader tolerates and respects different opinions	283	24.7%	67.5%	7.8%	0.0%	0.0%	4.16	.545
The organization advocates for new attempts and encourages learning from mistakes	283	29.7%	52.7%	17.7%	0.0%	0.0%	4.12	.678
In light of COVID 19 the leader is open to hear employees challenges and offer innovative alternative ways of dealing with issues	283	32.2%	60.4%	4.6%	2.8%	0.0%	4.21	.658

Leadership push subordinates to think about new solutions	283	18.4%	55.1%	26.5%	0.0%	0.0%	3.91	.666
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**Source: Research Data (2022)**

Table 4.10 revealed that majority of 66.4% respondents agreed, 12.0% strongly agreed, 15.9% neutral and 5.7% disagreed that the organization appreciates and awards the innovative employees with innovative ideas (mean = 3.84, standard deviation =0.69). It was also found that the leaders inspired employees to work towards the same goal through work passion where 31.4% strongly agreed, 68.2% agreed and 0.4% were neutral (mean =4.31, standard deviation=0.47). Hence the leaders positively highlighted the importance of the organizations goals and values in order to develop team attitude and spirit amongst employees since 36.0% strongly agreed, 55.8% agreed, and 8.1% remained neutral (mean=4.27, standard deviation=0.60).

According to the results the leaders focused on giving consideration to each employee as part of the team as indicated by majority of 64.7% who agreed, 24.4% strongly agreed, 7.8% neutral, however, 2.8% disagreed and 0.4% strongly disagreed (mean=4.09, standard deviation=0.67). The leaders in KTDA also supported and assists employees to accomplish the creative ideas that supports organizations goals achievement as revealed by majority of 61.5% who strongly agreed, 22.3% strongly agreed, and 16.3% were neutral (mean =4.06, standard deviation=0.61). However, the leaders tolerated and respected different opinions where 24.7%, strongly agreed, 67.5% agreed, 7.8% neutral (mean=4.16, standard deviation=0.54).

Findings further revealed that the organization advocated for new attempts and encouraged learning from mistakes whereas 29.7% strongly agreed, 52.7% agreed and 17.7% were neutral (mean=4.12, standard deviation=0.67). In light of COVID-19 the

leaders were open to hear employees' challenges and offer innovative alternative ways of dealing with issues as responded by 32.2% who strongly agreed, 60.4% agreed, 4.6% neutral and 2.8% disagreed (mean=4.21, standard deviation=0.65). Therefore, the leadership pushed subordinates to think about new solutions as revealed by 18.4% strongly agreed, 55.1% agreed and 26.5% neutral (mean=3.91, standard deviation =0.66).

**Table 4.11**

**Transformational leadership Encouragement of Innovative Strategies**

	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Moderate Extent	196	69.3	69.3	69.3
Great Extent	76	26.9	26.9	96.1
Very Great Extent	11	3.9	3.9	100.0
<b>Total</b>	<b>N=283</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Research Data (2022)**

According to Table 4.11, climate for innovative strategies was moderately encouraged by 69.3% while 26.9% and 3.9%, support to great extend and very great extend respectively. Hence, the leaders created a innovative environment.

**4.4.6 Organizational performance**

Organizational performance was examined using mean and standard deviation. Percentages of frequency were also used in describing organizational performance. The results were presented in Table 4.12.

**Table 4.12****Descriptive Analysis of Organizational Performance**

	<b>N</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>	<b>Mean</b>	<b>Std. Dev</b>
The factory has implemented cost cutting processes in production.	283	45.2%	50.9%	0.4%	3.5%	0.0%	4.378	.675
The factory has increased the customers for their products in local and international market.	283	37.8%	50.2%	12.0%	0.0%	0.0%	4.258	.658
The company has grown its revenue due to sale of tea products in both local and international market.	283	41.7%	52.3%	6.0%	0.0%	0.0%	4.356	.592
There is increased customer satisfaction based on the products of the firm.	283	51.2%	43.8%	4.9%	0.0%	0.0%	4.462	.590
The factory has improved the turnaround time during production and increased efficiency.	283	60.4%	33.6%	6.0%	0.0%	0.0%	4.544	.607
There is an increase in tea yield/quantity produced.	283	54.8%	42.0%	0.7%	0.0%	2.5%	4.466	.749

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There is an increase in tea products quality. 283 58.0% 42.0% 0.0% 0.0% 0.0% 4.579 .494

There is an increase in market share for tea products. 283 37.8% 56.2% 6.0% 0.0% 0.0% 4.318 .581

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**Source: Research Data (2022)**

Table 4.12 results indicated that the factories had implemented cost cutting processes in production since majority of 50.9% agreed, 45.2% strongly agreed but 3.5% were neutral (mean=4.378, standard deviation =0.675). According to the results KTDA factories had increased the customers for their products in local and international market as revealed by majority of 50.2% who agreed, 37.8% strongly agreed and 12.0% were neutral (mean=4.258, standard deviation =0.658).

Findings showed that majority 52.3% agreed that the company had grown its revenue due to sale of tea products in both local and international market while 41.7% strongly agreed but 6.0% were neutral (mean=4.356, standard deviation=0.592). It also found that there was an increased customer satisfaction based on the products of the firm where majority of 51.2% strongly agreed, 43.8% agreed and 4.9% were neutral (mean=4.462, standard deviation=0.590).

Majority of 60.4% respondents revealed that factories had improved the turnaround time during production and increased efficiency, 33.6% agreed and 6.0% were neutral (mean=4.544, standard deviation=0.607). Similarly, 54.8% strongly of the respondents revealed an increase in tea yield/quantity produced, 42.0% agreed, 0.7% were neutral but only 2.5% strongly disagreed (mean=4.466, standard deviation=0.749).

Findings further revealed that there is an increase in tea products quality as indicated by majority of 58.0% who strongly agreed and 42.0% agreed (mean=4.579, standard deviation =0.494). The results also revealed an increase in market share for tea products where 37.8% strongly agreed, 56.2% agreed and 6.0% were neutral (mean =4.318, standard deviation=0.581).

The result further revealed that there have been changes in innovation which has impacted positive to the performance of the KTDA. The innovation that have significantly had impact are process and produce while management and marketing followed. Innovation digital weight system and advancement in sorting, drying of tea, improved boilers and improvement in products produced by the factories were among the listed innovations.

#### **4.5 Inferential Statistics**

Correlation analysis was conducted to test interrelationship between innovative strategies, transformational leadership and organization performance. Finally, direct effect and moderated effect regression model were analyzed as part of testing the hypothesis.

##### **4.5.1 Correlation analysis**

Pearson product moment correlation coefficient (R) was used to test the interrelationship between product innovative strategies, process innovative strategies, market innovative strategies, management innovative strategies, transformative leadership and organizational performance. Correlation matrix adopted 5% significant level to test significance of the Pearson correlation between variable as summarized in Table 4.13.

**Table 4.13****Correlation Matrix**

		<b>PDI</b>	<b>PCI</b>	<b>MRI</b>	<b>MNI</b>	<b>TL</b>	<b>OP</b>
Product innovative strategies	Pearson	1					
	Correlation						
	Sig. (2-tailed)						
Process innovative strategies	N	283					
	Pearson	.751*	1				
	Correlation						
Market innovative strategies	Sig. (2-tailed)	.000					
	N	283	283				
	Pearson	.676*	.626*	1			
Management innovative strategies	Correlation						
	Sig. (2-tailed)	.000	.000				
	N	283	283	283			
Transformational Leader	Pearson	.717*	.644*	.622*	1		
	Correlation						
	Sig. (2-tailed)	.000	.000	.000			
Organizational Performance	N	283	283	283	283		
	Pearson	.467*	.527*	.472*	.578*	1	
	Correlation						
Organizational Performance	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	283	283	283	283	283	
	Pearson	.748*	.711*	.746*	.686*	.688*	1
Organizational Performance	Correlation						
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	283	283	283	283	283	283

\*. Correlation is significant at the 0.05 level (2-tailed).

*Key Words: N=283, PDI: Product Innovative Strategy, PCI: Process Innovative Strategy, MRI: Market Innovative Strategy, MNI: Management Innovative Strategy, TL: Transformative Leadership, OP: Organizational Performance.*

**Source: Research Data (2022)**

According to Table 4.13, product innovative strategies had strong positive and significant relationship with process innovative strategies, market innovative strategies, management innovative strategies and organization performance (R=.751, R =.676, R =.717 and R =.748 respectively). While process innovative strategies had strong positive and significant relationship with market innovative strategies, management innovative strategies and organizational performance (R =.626, R =.644 and R =.711

respectively). Market innovative strategies had strong positive and significant relationship with management innovative strategies and organizational performance ( $R = .622$  and  $R = .746$  respectively). Management innovative strategies had strong positive and significant effect on organizational performance ( $R = .686$ ). Transformational leadership had moderated positive relationship with product innovative strategies, process innovative strategies, market innovative strategies, management innovative strategies and organizational performance ( $R = .467$ ,  $R = .527$ ,  $R = .472$ , and  $R = .578$  respectively). Organizational performance had strong positive and significant effect with product innovative strategies, process innovative strategies, market innovative strategies, management innovative strategies and transformational leadership ( $R = .748$ ,  $R = .711$ ,  $R = .746$ ,  $R = .686$  and  $R = .688$  respectively).

#### **4.5.2 Hypotheses testing**

Simple linear regression analysis was utilized to determine the relationship between product innovative strategies and organizational performance which tested  $H_{01}$ . Similarly, simple linear regression tested the relationship between process innovative strategies and organizational performance representing  $H_{02}$ . Market innovative strategies and organizational performance as well as management innovative strategies and organizational performance used simple linear regression to analysis in examining the representing  $H_{03}$  and  $H_{04}$ . The simple linear regression used t-test at 5% significant level in testing the significance while  $\beta$  provided the strength of innovative strategies on performance of KTDA factories. Multiple linear regression model was used to test the overall effect of innovative strategies on performance of KTDA factories. Therefore, multiple linear regression assisted in generalization the relationship between

innovative strategies and organizational performance. Moderated multiple linear regression model was used to test the fifth hypothesis at 5% significance level. Simple, multiple and moderated multiple linear regression model also produced R, R square and F-value significance level which assisted in testing the strength, degree and significance of relationship respectively.

**4.5.2.1 Product innovative strategies and performance**

*H<sub>01</sub>: There is no significant relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.*

In order to examine the relationship between product innovative strategies and performance of KTDA factories simple linear regression was used.

This model was given as;

$$Y = \beta_0 + \beta_1 X_1 + e \dots \dots \dots \text{Model 1}$$

Y = Organizational Performance,  $\beta_0$  = Constant Term,  $\beta_1$  = Beta coefficients,  $X_1$  = Product innovative strategies and  $\epsilon$  = Error term. The results were presented in Table 4.14.

**Table 4.14****Product Innovative Strategies and Performance**

Model		Unstandardized		Standardized	T	Sig.	
		Coefficients		Coefficients			
		N	B	Std. Error			Beta
	(Constant)		1.530	.154	9.944	.000	
1	Product Innovative Strategies	283	.695	.037	.748	18.885	.000

a. Dependent Variable: Organizational Performance

**R =0.748**

**R<sup>2</sup> =0.599**

**F= 356.6**

**P<0.05**

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**Source: Research Data (2022)**

The results from Table 4.14 shows a summary of the regression model fitness. The finding indicated that there existed a strong positive relationship between product innovative strategies and organizational performance (R=0.748). The R<sup>2</sup> is the coefficient of determination which indicated that the explanatory power of independent variable was 0.599. This means that a variation of 59.9% performance of KTDA was associated to product innovative strategies while other factors contributed 40.1% (R<sup>2</sup> =0.599).

The findings further, indicated that  $\beta$  coefficient of 0.695 which implies that every unit increase of product innovative strategies contributes 0.695 increase in organizational performance. The results showed that the relationship between product innovative strategies and performance of KTDA factories in Kenya was significant ( $F=356.6$ ,  $p<0.05$ ). The null hypothesis that there is no significant relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya was rejected. Therefore, the alternate hypothesis that there is a significant relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. This results concurs with Onikoyi (2017), who found that there existed positive and significant relationship between product innovative strategies and organizational performance. Similarly, Ar and Baki (2011), also found that product innovative strategies had positive and significant relationship with organizational performance. Similarly, Oke, Prajogo and Jayaram (2013), pointed out that product innovative strategies affect the quality of performance of the product innovative strategies. Motero, Pennano and Camilo (2017), added that efficacy and efficiency was influenced by product innovative strategy.

#### ***4.5.2.2 Process innovative strategies and performance***

*H<sub>0</sub>2: There is no significant relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.*

A simple regression model was used to examine the relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. This model was given as;

$$Y = \beta_0 + \beta_2 X_2 + e \dots \dots \dots \text{Model 2}$$

Y = Organizational Performance,  $\beta_0$  = Constant Term,  $\beta_2$  = Beta coefficients,  $X_2$  = Process innovative strategies  $\varepsilon$  = Error term. This results were summaries in Table 4.15.

**Table 4.15**

**Process Innovative Strategies and Performance**

Model		Unstandardized		Standardized	T	Sig.
		Coefficients		Coefficients		
		N	B	Std. Error		
	(Constant)		2.131	.136	15.686	.000
1	Process Innovative Strategies	283	.530	.031	.711	16.968 .000

a. Dependent Variable: Organizational Performance

**R =0.711**

**R<sup>2</sup> =0.506**

**F= 287.9**

**p<0.05**

---

**Source: Research Data (2022)**

The finding indicated that there existed a strong positive relationship between process innovative strategies and organizational performance ( $R=0.711$ ). The  $R^2$  is the coefficient of determination which indicated that the explanatory power of independent variable was 0.506. This means that a variation of 50.6% performance of KTDA factories was associated to process innovative strategies while other factors contributed 49.4% ( $R^2 =0.506$ ). The findings further, indicated that  $\beta$  coefficient of 0.530 which implies that every unit increase of process innovative strategies contributes 0.530 increase in organizational performance. The results showed that the influence of process innovative strategies on performance of KTDA factories in Kenya was significant ( $F=287.9$ ,  $p<0.05$ ).The null hypothesis that there is no significant relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya was rejected. Therefore, the alternate hypothesis that there is a significant relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. Hence, process innovative strategies had strong positive relationship with the performance of KTDA.

Rosli and Sidek (2013), similarly found that process innovation positively affected organization performance. This was also supported Sintset, Nekoumanesh and Yang (2013), where there existed relationship between process innovative strategies on organization's performance. Current study found that process innovative strategies did affect directly the performance of organizations. Minai and Lucky (2011), process innovative strategies was achieved through continuous improvement of product development which concurs with current study. The study also pointed out the adoption

of supply chain concepts which was important in ensuring logistics management in the organization.

#### ***4.5.2.3 Market innovative strategies and performance***

*H<sub>03</sub>: There is no significant relationship between market innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.*

The model used to establish the relationship between market innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya was simple regression. The regression model was presented as;

$$Y = \beta_0 + \beta_3 X_3 + e \dots \dots \dots \text{Model 3}$$

Y = Organizational Performance,  $\beta_0$  = Constant Term,  $\beta_3$  = Beta coefficients,  $X_3$  = Marketing innovative strategies,  $\varepsilon$  = Error term. The findings were summarized in table 4.16.

**Table 4.16****Market Innovative Strategy and Performance**

Model	Unstandardized		Standardized	T	Sig.	
	Coefficients		Coefficients			
	N	B	Std. Error	Beta		
(Constant)		2.409	.108		22.27	.000
1					4	
Market Innovative Strategies	283	.501	.027	.746	18.78	.000
					9	

a. Dependent Variable: Organizational Performance

**R =0.746**

**R<sup>2</sup> =0.557**

**F= 353.0**

**p=0.000<0.05**

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**Source: Research Data (2022)**

According to the findings in Table 4.16, there existed a strong positive relationship between marketing innovative strategies and organizational performance (R=0.746). The R<sup>2</sup> is the coefficient of determination which indicated that the explanatory power of independent variable was 0.557. This means that a variation of 55.7% performance of KTDA factories was associated to marketing innovative strategies while other factors contributed 44.3% (R<sup>2</sup> =0.557).

The findings further, indicated that  $\beta$  coefficient of 0.501 which implies that every unit increase of marketing innovative strategies contributes 0.501 increase in organizational performance. The results showed that the relationship between marketing innovative strategies and performance of KTDA factories in Kenya was significant ( $F=353.0$ ,  $p<0.05$ ). The null hypothesis that there is no significant relationship between marketing innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya was rejected. Therefore, the alternate hypothesis that there is a significant relationship between marketing innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. Hence, marketing innovative strategies had strong positive significant relationship with the performance of KTDA factories. In related research Mitroulis and Kitsios (2014), market innovativeness had positive relationship with competitive advantage of the firm. The current study pointed out that there exists positive and significant relationship with organizational performance.

#### ***4.5.2.4 Management innovative strategies and performance***

*H<sub>04</sub>: There is no significant relationship between management innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.*

A simple regression model was used to examine the relationship between management innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. The model summary was given as;

$$Y = \beta_{01} + \beta_4 X_4 + e \dots \dots \dots \text{Model 4}$$

Y = Organizational Performance,  $\beta_0$  = Constant Term,  $\beta_4$  = Beta coefficients,  $X_4$ = Management innovative strategies and  $\varepsilon$  = Error term. The results were presented in Table 4.17.

**Table 4.17**

**Management Innovative Strategy and Performance**

Model		Unstandardized		Standardized	t	Sig.	
		Coefficients		Coefficients			
		N	B	Std. Error			Beta
	(Constant)		1.422	.191	7.464	.000	
1	Management Innovative Strategies	283	.694	.044	.686	15.79	.000
					6		

a. Dependent Variable: Organizational Performance

**R =0.686**

**R<sup>2</sup> =0.470**

**F= 249.5**

**p<0.05**

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**Source: Research Data (2022)**

The findings in Table 4.17 indicated that there existed a strong positive relationship between management innovative strategies and organizational performance (R=0.686). The R<sup>2</sup> is the coefficient of determination which indicated that the explanatory power of independent variable was 0.470. This means that a variation of 47.0% performance of KTDA factories was associated to management innovative strategies while other

factors contributed 53% ( $R^2 = 0.470$ ). The findings further, indicated that  $\beta$  coefficient of which implies that every unit increase of management innovative strategies contributes 0.694 increase in organizational performance. The results showed that the influence of management innovative strategies on performance of KTDA factories in Kenya was significant ( $F=249.5$ ,  $p<0.05$ ). The null hypothesis that there is no significant relationship between management innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya was rejected. Therefore, the alternate hypothesis that there is a significant relationship between management innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. Hence, management innovative strategies had strong positive relationship with the performance of KTDA factories.

Yongan, Umair, Seoyeon and Madiha, (2019) revealed that management and technological innovative strategies encourage sustainability and survival of an organization. The current research focused on management innovative strategies on organization performance which revealed an existence of positive significant relationship between the two variables. Damanpour and Devece (2019), found that management innovative strategies were mediated by performance management on organization performance. The current study revealed existence of direct relationship between management innovative strategies and organizational performance. Walker, Damanpour and Devece, (2019) management innovative strategies had both direct and indirect effect on organization performance. The current study pointed out that management strategies plays crucial role in organizational performance.

**4.5.2.5. Innovative strategies and performance**

Multiple linear regression was utilized to examine the relationship between innovative strategies and performance of KTDA factories in Kenya. This represents the general multiple regression model given as;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e.....\text{Model 5}$$

Y = Organizational Performance,  $\beta_0$  = Constant Term,  $\beta_1, \beta_2, \beta_3, \beta_4$  = Beta coefficients,  $X_1$ = Product innovative strategies,  $X_2$ = Process innovative strategies,  $X_3$ = Market innovative strategies  $X_4$ = Management innovative strategies and  $\varepsilon$  = Error term.

**Table 4.18**

**Multiple Linear Regression Results for Innovative Strategies and Performance**

Model		Unstandardized Coefficients			t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
		(Constant)	1.175	.149				7.881
Product strategies	innovative	.218	.054	.234	4.018	.000	.316	3.160
Process strategies	innovative	.155	.039	.208	3.992	.000	.398	2.514
Market strategies	innovative	.239	.032	.357	7.566	.000	.485	2.063
Management strategies	innovative	.164	.050	.162	3.268	.001	.438	2.285

a. Dependent Variable: Organizational Performance

**R = 0.837**

**R<sup>2</sup> = 0.696**

**F = 162.538**

**p<0.05 N=283**

**Source: Research Data (2022)**

According to Table 4.18 revealed that 69.6% of variation in performance of KTDA was due to innovative strategies ( $R^2=0.696$ ). However, 30.4% of variation in organizational performance was due to other factors. There existed a strong positive relationship between innovative strategies and organizational performance ( $R=0.837$ ). Therefore, innovative strategies had strong positive significant relationship between with the performance of KTDA factories ( $P<0.05$ ). Similarly, Greenbaum and Thakor, (2015) found that innovative strategies had positive influence in increasing organizations performance. The results showed that the relationship between innovative strategies and performance of KTDA factories in Kenya was positive and significant ( $F=162.538$ ,  $p<0.05$ ).

#### ***4.5.2.6. Innovative strategies, transformational leadership and performance***

*H<sub>05</sub>: There is no significant moderating effect of transformational leadership on the relationship between innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya*

Before the moderation was performed the necessary condition that transformational leadership had a significant relationship with organizational performance was first established. Moderated regression model was then utilized to assess the moderating effect of transformational leadership on the relationship between innovative strategies and organizational performance was examined. The model contained innovative strategies ( $Z$ ), transformational leadership ( $P$ ) and the interaction between innovative strategies and transformational leadership ( $Int(Z*P)$ ) on organizational performance. The summary model of moderating effect was presented in table 4.19.

In order to test moderating effect, the two models 6 and 7 were compared ;

$$Y = \beta_0 + \beta_5 Z_i + e \dots \dots \dots \text{Model 6}$$

$$Y = \beta_0 + \beta_5 Z_i + \beta_6 P + \beta_7 Z_i P + e \dots \dots \dots \text{Model 7}$$

Whereby: Y = Organization Performance (Dependent Variable),  $\beta_0$ = Constant Term,  $\beta_5, \beta_6, \beta_7$  = Beta coefficients, p= Transformational Leadership,  $Z_i$  = Innovative strategies [mean  $f(x_1, x_2, x_3, x_4)$ ],  $Z_i * P$  = Interaction between innovative strategies and transformational leadership and  $\varepsilon$  = Error Term.

**Table 4.19**

**Regression analysis for the Innovative Strategies, Transformational Leadership and Performance**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.847	.304		9.368	.000
Innovative Strategies	.470	.108	.394	4.373	.000
Transformational Leadership	.163	.063	.178	2.587	.000
Int(Z*P)	.115	.020	.716	5.755	.000

a. Dependent Variable: Organizational Performance

**R =0.857**

**R<sup>2</sup> =0.735**

**R<sup>2</sup> Change=0.035**

**F=257.465**

**p<0.05**

**N=283**

**Source: Research Data (2022)**

Table 4.19 revealed that a unit increase in transformational leadership led to 0.163 unit increase in performance of KTDA factories. The result indicated that there exist strong significant relationship that exist between innovative strategies, transformational leadership and interaction between innovative strategies and transformational leadership with organizational performance ( $R=0.857$ ). A variation of 73.5% in performance of KTDA factories was due to innovative strategy, transformational leadership and their interaction (innovative strategy\*transformational leadership). Hence, 26.5% of the variation in organizational performance was due to other factors ( $R^2=0.735$ ). Innovative strategies, transformational leadership and interaction between transformational leadership and innovative strategies had strong positive significant relationship with organizational performance ( $F=257.465$ ,  $\beta=0.115$ ,  $p<0.05$ ). The null hypothesis that there is no significant moderating effect of transformational leadership on the relationship between innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya was rejected. Therefore, the alternate hypothesis that there is a significant moderating effect of transformational leadership on the relationship between innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. This implied that there existed significant moderating effect of transformational leadership on the relationship between innovative strategies and performance of KTDA factories in Kenya.

**Table 4.20**

**Comparison Multiple Linear Regression and Moderated Multiple Regression Model**

	<b>Model 6 (Before Moderation) Innovative Strategies</b>	<b>Model 7 (After Moderation) Innovative Strategies and Transformational Leadership</b>	<b>Change after Moderatio n</b>
<b>R</b>	0.837	0.857	
<b>R<sup>2</sup></b>	0.700	0.735	0.035*
<b>F</b>	657.168*	17.957*	
Constant	1.175*	2.847*	
$\beta$ (Innovative Strategies)	1.000*	0.470*	
$\beta$ (Transformational Leader)		0.163*	
$\beta$ (Int(Z*P))		0.115*	

**\*p<0.05**

**Source: Research Data (2021)**

According to results a 3.5% variation in performance of KTDA factories was as results of the interaction between transformational leadership and innovative strategies

( $R^2$  change= 0.035,  $p < 0.05$ ). Transformational leadership with the right innovative strategies enables high performance of KTDA factories in Kenya. The null hypothesis was accepted which implies that there was significant moderating effect of transformational leadership on the relationship between innovative strategies and performance of KTDA factories in Kenya ( $p < 0.05$ ).

Esin and Ayse (2018), found that transformational leadership had indirect effect on organization innovativeness through mediation of organization learning and knowledge management. The results from Esin and Ayse, (2018) was not clear on the role of transformational leadership on organization performance while the current research showed a moderating role of transformational leadership on innovative strategies and organization performance. However, Zhang, Zheng and Darko, (2018) pointed out that transformational leadership had link with the relationship between innovative behaviour and innovative climate. The current study, built on the knowledge gap from Esin and Ayse, (2018) as well as Zhang, Zheng and Darko, (2018). Despite Raza and Aiza, (2018) pointed significant positive effect of transformational leadership on organization performance. The relationship did not consider the effect on the interaction of transformational leadership with innovative strategies. Which was similar to the finding of Arif and Akram, (2018) where there was strong relationship of transformational leadership with organizational performance. This is in agreement with the current finding where transformational leadership indicated positive and significant relationship on innovative strategies and organizational performance.

**Table 4.21****Summary of Data Analysis Techniques**

<b>Objective(s)</b>	<b>Hypothesis</b>	<b>Results</b>	<b>Conclusion</b>
<b>Objective 1:</b> To establish the relationship between product innovative strategies and performance of Kenya Tea Development Agency factories in Kenya.	H <sub>01</sub> : There is no significant relationship between product innovative strategies and performance of Kenya Tea Development Agency factories in Kenya.	$R=0.748$ $R^2 =0.599,$ $\beta=0.695$ $p<0.05.$	Reject null hypothesis
<b>Objective 2:</b> To analyze the relationship between process innovative strategies and performance of Kenya Tea Development Agency in factories Kenya.	H <sub>02</sub> : There is no significant relationship between process innovative strategies and performance of Kenya Tea Development Agency in factories Kenya.	$R=0.711$ $R^2 =0.506,$ $\beta = 0.539,$ $p<0.05.$	Reject null hypothesis
<b>Objective 3:</b> To find out the relationship between market innovative strategies and performance of Kenya Tea Development Agency in factories Kenya.	H <sub>03</sub> : There is no significant relationship between market innovative strategies and performance of Kenya Tea Development Agency in factories Kenya.	$R=0.746$ $R^2=0.557$ $\beta=0.501, p<0.05.$	Reject null hypothesis
<b>Objective 4:</b> To determine the relationship between management innovative strategies and performance of Kenya Tea Development Agency factories in Kenya.	H <sub>04</sub> : There is no significant relationship between management innovative strategies and performance of Kenya Tea Development Agency factories in Kenya.	$R=0.686$ $R^2 =0.470,$ $\beta = 0.694,$ $p<0.05.$	Reject null hypothesis
<b>Objective 5:</b> To assess the moderating effect of transformational leadership on the relationship between innovative strategies and performance of KTDA factories in Kenya.	H <sub>05</sub> : There is no significant statistical moderating effect of transformational leadership on the relationship between innovative strategies and performance of KTDA factories in Kenya.	$R= 0.857$ $R^2=0.735$ $R^2\text{Change}=0.035$ $\beta=0.115, p<0.05.$	Reject null hypothesis

**Source: Researcher (2021)**

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The chapter provides a summary of the study based on the results obtained in previous section. The summaries were used to extract conclusion and recommendation of the study. Suggested area for further studies were also provided in this section which entails the gaps that were not covered by the study.

#### **5.2 Summary**

The summary was provided as per objective in the subsection below;

##### **5.2.1 Product innovative strategies and performance of KTDA factories**

The first objective was to establish the relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. The findings revealed that KTDA factories were able to design and launch new tea product. The factories were able to monitor the latest tendencies in technology and adopt them in the product development. Also, the factories were able to network with other organization in developing new product to some extent. Due to continuous research and development the factories were able to continuously adopt an innovative culture in product development. The factories were able to invest in capacity to meet scheduled initiatives and milestones while ensuring that business models were used to create products that target different market segments.

The result further indicated that product innovative strategies had positive significant relationship with the performance of KTDA factories in Kenya. Hence, product

innovativeness strategies contribute to innovative strategies effect on performance of the organization.

### **5.2.2 Process innovative strategies and performance of KTDA factories**

Second objective analyzed the relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. According to the results KTDA factories had operations that used process statistical data to optimize effectiveness, quality and efficiency of tea processing. The factories have also reduced cost and improved on time through adaptation of emerging technologies. There is also an extensive improvement in efficiency in collection of green leaf based on logistic innovativeness which allows prompt delivery of tea. Due to improvement in scheduled routines and ability to manage high capacity of green leaves in the factory, the factories have improved production time. Modern technology has enabled the factories to enhance on transparency in weighting and improve the turnaround time for deliveries and processing time of green tea from sourcing the tea from farmers to processing.

The findings revealed that process innovative strategies had positive statistical relationship with performance KTDA factories. Therefore, process innovative strategies enhanced the performance of organization.

### **5.2.3 Market innovative strategies and performance of KTDA factories**

Third objective, was to find out the relationship between market innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. According to the results market innovative strategies was enhanced through formal market

research which are customer oriented. The results indicated that negotiation teams were managed to enable competitive sustainable supplier and customer for tea products based on the prices. The results indicated that there were various formal criterias that are followed in selecting suppliers, auctioneers and buyers in selling tea. Product promotions are done for both local and international marketing. The results also indicated that KTDA factories adopted good marketing strategies so as to improve tea prices. Tea products marketed internationally met the demand overseas since marketing innovative strategies have increased the market share.

#### **5.2.4 Management innovative strategies and performance of KTDA factories**

Fourth objective, determined the relationship between management innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. Management were able to develop and implement strategies development. The factories were able to integrate technology in to the organizational strategies as well as adopt management techniques and practice that ensure that the organization achieve their set goals. The employees were also trained and motivated to deliver the set goals and increase innovativeness. The results also indicated that financial management practices and systems used enabled the factories to be accountable and transparent. The factories used internal standard and documentation which had high impact among other management innovative strategies. Therefore, the management were able to include socio-economic factors in organizations' innovation agenda.

The result also revealed that management innovative strategies had positive significant effect on the performance of KTDA factories. Management innovative strategies

therefore, contributed positively as an innovative strategy to the performance of organizations.

### **5.2.5 Moderating effect of transformational leadership on the relationship between innovative strategies and performance of KTDA factories in Kenya**

Fifth objective, assessed the moderating effect of transformational leadership on the relationship between innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. The study hypothesized a positive and significant relationship. With the inclusion of transformational leadership there was a significant increase in performance of Kenya Tea Development Agencies Factories in Kenya. The role of transformational leadership moderating the relationship between innovative strategies and performance was confirmed from the study.

It was found that organization appreciates and awards innovative employees. Leaders inspired employees to work to their goals and direct the employees to understand the importance of these goals. It was found that the leader focused on providing equal consideration in terms of support, assistance and respect for their opinion. Hence, employees were able to be creative and learn from mistakes.

## **5.3 Conclusions**

### **5.3.1 Product innovative strategies and performance of KTDA factories**

The study concluded in the first objective that product innovative strategies had positive and significant relationship with performance of KTDA factories in Kenya. Product innovative strategies has contributed be the ability of the factory to design, launch tea products to different market segment, monitoring and adoption of latest trends in

technology, continuous research and develop, innovative product culture and meeting factories schedules initiatives and milestones.

### **5.3.2 Process innovative strategies and performance of KTDA factories**

Second objective concluded that process innovative strategies had positive statistical relationship with performance of KTDA factories in Kenya. The factories utilized statistical data in optimizing the control to ensure that there was quality, effectiveness and efficient tea processing. Technology was also adopted in logistic management in improving turnaround time, weighing technology, prompt delivery and processing of green tea. Time production was achieved through innovation in management of production routines and improvement of processing time.

### **5.3.3 Market innovative strategies and performance of KTDA factories**

The study concluded in the third objective that market innovative strategies had positive significant relationship with performance of KTDA factories in Kenya. There were numerous factors that contributed to market innovativeness which includes formal market research, negotiation strategies, formal criterion in selection buyers, supplier and auctioneers and promotion of product both in local and international market. Good marketing strategies were associated with improved prices. Hence, Kenyan tea from KTDA factories have met international demand as well as local market.

### **5.3.4 Management innovative strategies and performance of KTDA factories**

Fourth objective was concluded that management innovative strategies had positive statistical relationship with organizational performance. Management innovative strategies that had the highest contribution were developed and implemented, employee

training and motivation, financial management practices and systems as well as internal standard and documentation of work procedures. The firm also revealed that management supported socio-economic factors, used technology integration as well as management techniques and practices to achieve organization goals.

### **5.3.5 Innovative strategies, transformational leadership and performance of KTDA factories**

The study concluded in the fifth objective, that transformational leadership had positive significant moderating effect on the relationship between innovative strategies and organizational performance. This implies that through transformational leadership firms are able to leverage on innovative strategies to improve performance. Transformational leaders assist the employee to be inspired which increase innovativeness. The leaders were able to consider equitability in support, assistance and respects. It was also found that transformational leaders were able to increase creativity of the employees as well as encourage employees to learn from mistakes. This promoted innovative environment and culture in the organization.

### **5.4 Recommendations**

In the first objective the study recommends that KTDA factories should adopt flexible business models that allow each factory to be autonomous in product development since there is room for improvement. This will allow the factory to introduce new products that can add value to the factory which will encourage continuous innovation of product culture. The flexibility of development of products with other institution will enable the factories to integrate products that are differentiated through value addition.

On the second objective the study recommends that new production line should be increased for specialized tea besides the black tea. Since, there is efficiency in terms of logistic turnaround time and product innovation available. Using existing infrastructure in processing, tea products can be differentiated and hence improve the market through product differentiation.

In the third objective, the study recommends that KTDA factories should use appropriate marketing strategies in both local and international market. Since, there exist high competition from Sri Lanka, China, Pakistan and India KTDA should adopt product differentiation strategies with appropriate promotion for the new product. Kenya produces the highest quality black tea products which are used by other countries to blend with other products for value addition. Therefore, through value addition the firms will be able to improve on value of tea produced in Kenya.

From fourth objective, the study recommends that the organization should improve in technology integration and improvement of management technique. This will increase efficiency and smooth running of production of tea. Technology integration should be done in communication, automation and quality control to ensure that the optimal performance is achieved.

On the fifth objective, study recommends that the organization should consider employing leaders who are transformational since they are in a better position to implement innovative strategies. Innovative strategies alone are not sufficient to ensure optimum performance of the organization while transformational leadership alone provides insignificant effect on performance of organization. Hence, the direct effect

of innovative strategies and contribution of transformational leadership in creating innovative environment and culture result to a much higher performance.

The study further recommends that organizations consider implementing innovative strategies at a greater scale to enhance their competitiveness in the market, industry, country and the world. The study recommends that the government, policy makers, the public sector, stakeholders and other interested parties should make policies that encourage improvement of product innovative strategies, process innovative strategies, market innovative strategies and management innovative strategies. The findings could also be prototyped by other researchers and used as a guide for their research.

Lastly, for innovative strategies, value creation and change management has been found to be fundamental. To drive this effort transformational leadership has been found to be a must for any organization.

### **5.5 Suggestion for Further Studies**

The study suggests the following direction for further researchers. Given that this study focused on innovative strategies, transformational leadership and performance of KTDA factories in Kenya, the study recommends that a similar study be conducted focusing on the moderating effect of transformational leadership on individual innovative strategy (product, process, marketing and management innovative strategy) on performance of KTDA factories in Kenya. The study also suggests that since the research was limited in scope, a larger sample with a bigger population can be used for confirmatory analysis and validation.

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## APPENDICES

### Appendix i: Introduction Letter

Dorothy Chepng'etich Koech,  
University of Kabianga,  
P.O Box 2030 – 20200,  
Kericho, Kenya.

Dear Respondent,

#### Re: Collection of Data

My name is Dorothy Koech, a student at University of Kabianga pursuing a PhD in Business administration (Strategic Management). I am conducting a thesis research in partial fulfillment of my course requirements on *Innovative Strategies, Transformational Leadership and Performance of Kenya Tea Development Agency Factories in Kenya*.

I wish to request for your contribution towards this research by filling the questionnaire attached. The information that will be collected during the research will be treated with utmost confidentiality and used for the research purpose only.

Any additional information in terms of comments and suggestions in regard to this research will be very much appreciated. A copy of research findings will be availed to respondents upon request.

Thank you for your cooperation

Dorothy Koech  
REG. No PHD/BSA/001/17  
University of Kabianga

## Appendix ii: Questionnaire

Innovation is incorporation of value added novelty in products, services, new production processes and establishment of management systems. In this research the innovative strategies will include product, process, marketing and management innovative strategies.

### ORGANIZATION BIO-DATA

Name of KTDA factory.....

County.....

### SECTION A: GENERAL INFORMATION

1. Type of factory:

- Main [ ]
- Subsidiary [ ]

2. How long has the factory been in existence?

- 0 – 10 years [ ]
- 11 – 20 years [ ]
- 21 – 30 years [ ]
- above 30 years [ ]

3. Highest level of education?

- Secondary [ ]
- college level [ ]
- First degree [ ]
- Masters [ ]

4. In what employment category do you fit?

- Operational/Field employee [ ]
- Middle level employee [ ]
- Top level employee [ ]

5. What length of time have you worked with KTDA?

- Less than 1 year [ ]

- 2 – 3 years [ ]
- 3 – 5 years [ ]
- 5 – 10 years [ ]
- above 10 years [ ]

**Organizations Department Category**

KTDA is structured into four departments into which all employees fall under. Indicate by ticking the department under which you fall.

1.	Production whose functions include manufacturing and factory operations	
2.	Field Services whose functions includes leaf collection and tea extension services	
3.	ICT which is specifically concerned with information communication and technology functions	
4.	Accounting whose main function is the preparation of management and financial accounting information among other duties.	

**SECTION B: Innovative Strategies**

To what extent has the organization implemented process innovative strategies, product innovative strategies, marketing innovative strategies and management innovative strategies?

- Not at all
- Little extent
- Moderate extent
- Great extent
- Very great extent

## Product Innovative Strategies

How do you agree with the following statements: The rating scale indicates agreement levels as follows: 5 - Strongly Agree; 4 - Agree; 3 - Neither Agree nor Disagree; 2 - Disagree; 1 - Strongly Disagree.

CODE	Product Innovative Strategies	5	4	3	2	1
PDI1	KTDA factories have the ability to design and launch new tea products to market					
PDI2	Monitoring of latest tendencies in technology and adopting the appropriate for high product quality.					
PDI3	The factories have the ability to adopt the appropriate technology for high production					
PDI4	There are developed products with other organization.					
PDI5	Continuous research and development activities are encouraged in the organization					
PDI6	There are continuous innovation of products culture.					
PDI7	The factories invests in capacity to meet scheduled initiatives and milestones					
PDI8	There are business models used to create products that target new market segments					

How would you describe product innovative strategies at the tea factory at the moment?

---

## Process Innovative Strategies

How do you agree with the following statements: The rating scale indicates agreement levels as follows: 5 - Strongly Agree; 4 - Agree; 3 - Neither Agree nor Disagree; 2 - Disagree; 1 - Strongly Disagree.

CODE	Process Innovative Strategies	5	4	3	2	1
PCI1	Operation utilize statistical data in control of process to ensure effective, quality and efficient tea processing.					
PCI2	There is constant adaptation of technology in processing of tea for reduction of cost and quick productions.					
PCI3	Logistics are efficient to ensure adequate stock of raw tea for processing purpose.					
PCI4	Effective innovation in management of production routines and programs.					
PCI5	Prompt delivery of tea due to enhance logistical management					
PCI6	The factories are able to manage higher capacity of tea delivery within appropriate production time.					
PCI7	Utilization of modern technology to increase transparency in tea weighting and delivery.					
PCI8	Improving turnaround time for deliveries and processing time in the factory.					

## Marketing Innovative Strategies

How do you agree with the following statements: The rating scale indicates agreement levels as follows: 5 - Strongly Agree; 4 - Agree; 3 - Neither Agree nor Disagree; 2 - Disagree; 1 - Strongly Disagree.

CODE	Marketing Innovative Strategies	5	4	3	2	1
MRI1	Formal market research are conducted to measure customer's satisfaction and gain market information					
MRI2	Negotiation teams are managed to enable competitive sustainable suppliers and customers					
MRI3	The firm is able to negotiate for favorable prices for the tea products.					
MRI4	There is formal criterion in selecting suppliers, auctioneers and buyers in selling tea.					
MRI5	Product promotion and marketing in both local and international market.					
MRI6	There are numerous buyers of tea based on good marketing strategies adopted to improve tea prices.					
MRI7	There exist international market to meet the demand for the tea due to marketing done oversees.					
MRI8	Tea product are marketed locally to increase market share through marketing innovation.					

Have you noted any new marketing innovation in the industry? How does this marketing innovation assist the organization currently?

-----  
 -----

## Management Innovative Strategies

How do you agree with the following statements: The rating scale indicates agreement levels as follows: 5 - Strongly Agree; 4 - Agree; 3 - Neither Agree nor Disagree; 2 - Disagree; 1 - Strongly Disagree.

CODE	Management Innovative Strategies	5	4	3	2	1
MNI1	Management are able to develop and implement strategies developed.					
MNI2	Technology are well integrated in all the department to fit with organization strategies.					
MNI3	Management techniques and practice are deployed to obtain set organizational goals.					
MNI4	The employees are well trained to deliver organization goals.					
MNI5	Financial management practice and systems are used to ensure accountability and transparency in finance.					
MNI6	There is motivation to attract and retain highly qualified innovative staff by management					
MNI7	There is use of internal standards and documents for work procedures					
MNI8	Management makes a consideration of socio economic factors while establishing organizations innovation agenda					

Is there any management innovation in the industry? How does this management innovation assist the company currently?

.....

.....

**SECTION C: Transformational Leadership**

**Idealized Influence**

How do you agree with the following statements: The rating scale indicates agreement levels as follows: 5 - Strongly Agree; 4 - Agree; 3 - Neither Agree nor Disagree; 2 - Disagree; 1 - Strongly Disagree

<b>CODE</b>	<b>Idealized Influence</b>	5	4	3	2	1
TL1	The organization appreciates and awards the innovative employees with innovative ideas					
TL2	The leader inspires employees to work towards the same goal through work passion					
TL3	The leader positively highlights the importance of the organizations goals and values in order to develop team attitude and spirit amongst employees					

**Inspirational Motivation**

How do you agree with the following statements: The rating scale indicates agreement levels as follows: 5 - Strongly Agree; 4 - Agree; 3 - Neither Agree nor Disagree; 2 - Disagree; 1 - Strongly Disagree.

<b>CODE</b>	<b>Inspirational Motivation</b>	5	4	3	2	1
TL4	The leader focuses on giving consideration to each employee as part of the team					

TL5	The leader supports and assists us to accomplish the creative ideas that supports organizations goals achievement.					
TL6	The leader tolerates and respects different opinions					

**Intellectual Stimulation**

How do you agree with the following statements: The rating scale indicates agreement levels as follows: 5 - Strongly Agree; 4 - Agree; 3 - Neither Agree nor Disagree; 2 - Disagree; 1 - Strongly Disagree.

CODE	Intellectual Stimulation	5	4	3	2	1
TL7	The organization advocates for new attempts and encourages learning from mistakes					
TL8	In light of COVID 19 the leader is open to hear employees challenges and offer innovative alternative ways of dealing with issues					
TL3	Does leadership push subordinates to think about new solutions?					

To what extent has the organization created an innovative climate?

- Not at all
- Little extent
- Moderate extent
- Great extent
- Very great extent

**SECTION D: Performance of the Organization**

How do you agree with the following statements: The rating scale indicates agreement levels as follows: 5 - Strongly Agree; 4 - Agree; 3 - Neither Agree nor Disagree; 2 - Disagree; 1 - Strongly Disagree.

CODE	Organizational Performance	5	4	3	2	1
OP1	The factory has implemented cost cutting processes in production.					
OP2	The factory has increased the customers for their products in local and international market.					
OP3	The company has grown its revenue due to sale of tea products in both local and international market.					
OP4	There is increased customer satisfaction based on the products of the firm.					
OP5	The factory has improved the turnaround time during production and increased efficiency.					
OP6	There is an increase in tea yield/quantity produced.					
OP7	There is an increase in tea products quality.					
OP8	There is an increase in market share for tea products.					

Through the innovative strategies are there any benefits accruing? If any, please name them. What according to you are the two major innovative strategies from the four listed?

.....

.....

.....

*Thank You for Your Cooperation*

### **Appendix iii: List of Factories per County as per Four Regions**

#### **REGION 1**

##### **Kiambu County (5 factories)**

1. Theta Tea Factory (BPI, PFI, PD, DI, FI and DUST)
2. Mataara Tea Factory
3. Kagwe Tea Factory
4. Kambaa Tea Factory
5. Gachege Tea Factory

##### **Muranga County (10 factories)**

1. Gatunguru Tea Factory
2. Kanyenyaini Tea Factory
3. Kiru Tea Factory
4. Githambo Tea Factory
5. Ikumbi Tea Factory
6. Gacharage Tea Factory (BPI, PF1, PD, D1, FI, DUST)
7. Makomboki Tea Factory
8. Njunu Tea Factory
9. Nduti Tea Factory
10. Ngere Tea Factory (BPI, PF1, PD, TMF, FI, DUST and BMF)

##### **Nyeri County (5 factories)**

1. Chinga Tea Factory
2. Iriaini Tea Factory
3. Gitugi Tea Factory
4. Gathuthi Tea Factory
5. Ragati Tea Factory

## **REGION 2**

### **Kirinyaga County (5 factories)**

1. Kangaita Tea Factory (black tea (orthodox and CTC), green tea (orthodox and green CTC), oolong teas (CTC/Orthodox), specialized tea (White teas/silvery needles and purple tea)
2. Mununga Tea Factory
3. Thumaita Tea Factory
4. Kimunye Tea Factory
5. Ndimba Tea Factory

### **Embu County (3 factories)**

1. Kathangariri Tea Factory
2. Rukuriri Tea Factory
3. Mungania Tra Factory

### **Meru County (7 factories)**

1. Githogo Tea Factory
2. Kinoro Tea Factory
3. Kionyo Tea Factory
4. Imenti Tea Factory
5. Igembe Tea Factory
6. Kiegoi Tea Factory
7. Michimikuru Tea Factory

### **Tharaka Nithi County (1 factory)**

1. Weru Tea Factory

## **REGION 3**

### **Kericho County (6 factories)**

1. Chelal Tea Factory
2. Toror Tea Factory (BPI, PFI, PD, DI, FI, BMF and DUST)

3. Tegat Tea Factory
4. Kapkatet Tea Factory
5. Momul Tea Factory
6. Litein Tea Factory (BPI, PFI, PD, DI, FI and DUST).

**Bomet County (7 tea factories)**

1. Motigo Tea Factory (BP1, PF1, PD, D1, TMF, TM2, F1 and Dust tea grades)
2. Kobel Tea Factory
3. Tirgaga Tea Factory
4. Kapkoros Tea Factory
5. Rorok Tea Factory (BPI, PFI, PD, DI, FI and DUST)
6. Mogogosiek Tea Factory
7. Kapset Tea Factory

**Nandi County (2 factories)**

1. Kaptumo Tea Factory
2. Chebut Tea Factory

**Nakuru County (1 factory)**

1. Olenguruone Tea Factory (BPI, PF1, PD, D1, FI, DUST)

**REGION 4**

**Kakamega County (1 factory)**

1. Mudete Tea Factory

**Kisii County (6 factories)**

1. Rianyamwamu Tea Factory
2. Ogembo Tea Factory
3. Nyamache Tea Factory (Primary grades – BP1, PF1, PD, D1, Secondary grade: F1, Dust, BMF, Special teas RPL, TMF2, TMF, Black CTC tea)
4. Kiamokama Tea Factory

5. Itumbe Tea Factory
6. Eberege Tea Factory

**Nyamira County (6 factories)**

1. Tombe Tra Factory (BPI, PF1, PD, FI, DUST and BMF)
2. Sanganyi Tea Factory
3. Nyansiongo Tea Factory
4. Nyankoba Tea Factory
5. Kebirigo Tea Factory
6. Gianchore Tea Factory (BPI, PF1, PD, FI, DUST and BMF)

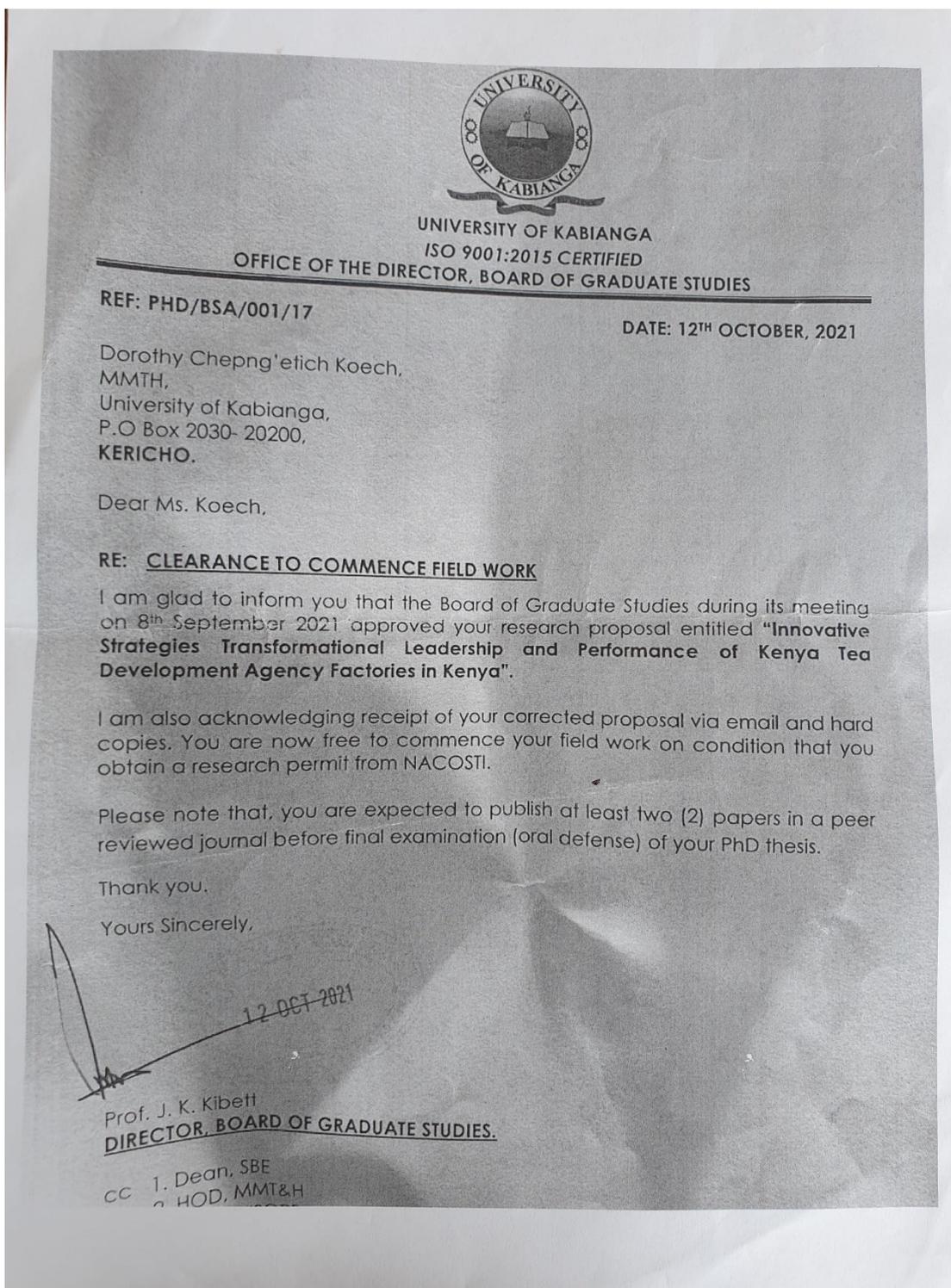
**Trans Nzoia County (1 factory)**

1. Kapsara Tea Factory

**Appendix iv: Map of KTDA Factories Zones in Kenya**

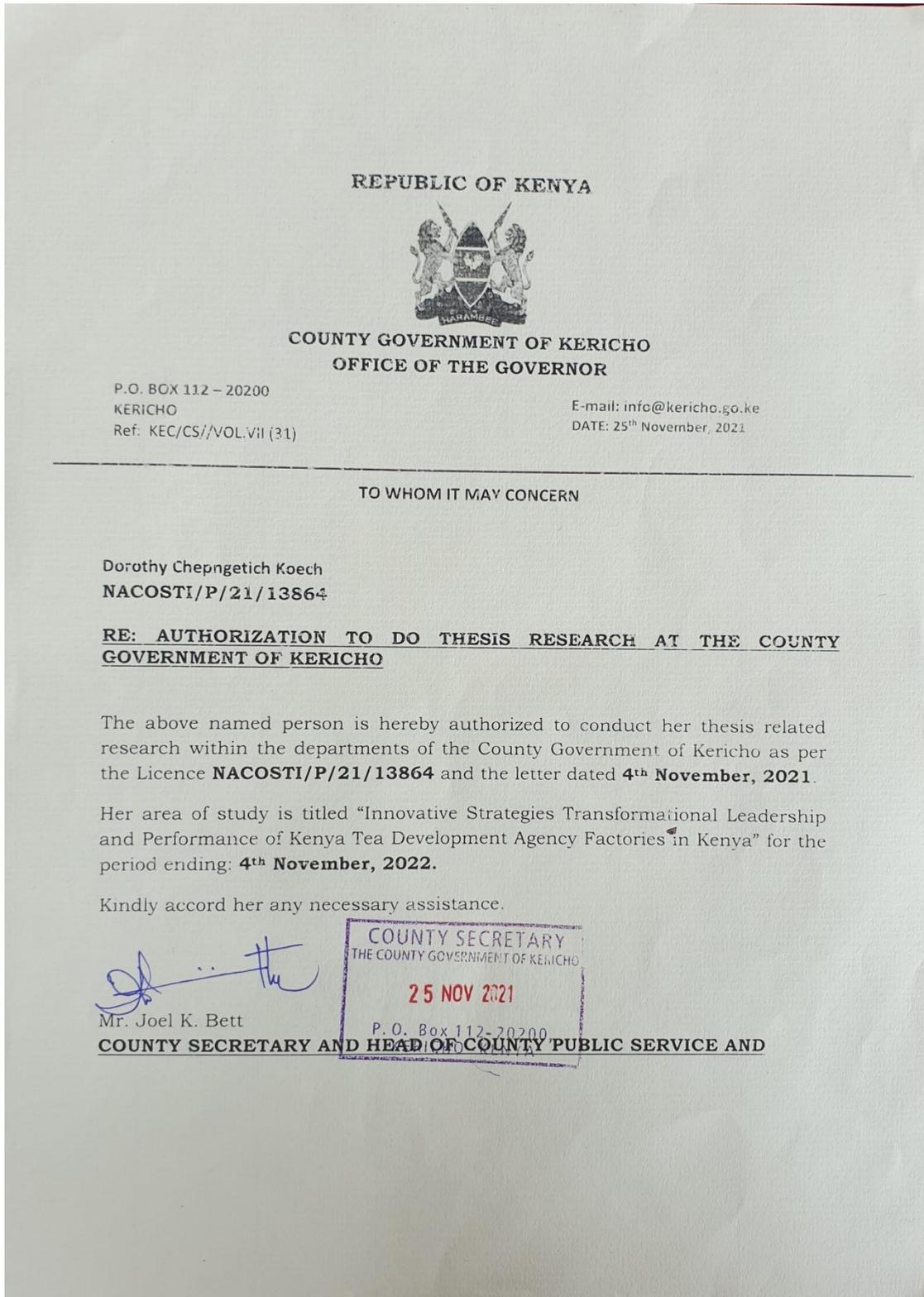


## Appendix v: Research Authorization Letter





**Appendix vii: Authorization by the County**



## Appendix viii: Authorization by Ministry of Education



REPUBLIC OF KENYA  
MINISTRY OF EDUCATION  
State Department of Early Learning and Basic Education

Email: cdekerichocounty@gmail.com  
When Replying Please Quote:

County Education Office  
P.O BOX 149  
KERICHO

Ref: KER/C/ED/RC/VOL.III/10

23<sup>rd</sup> November, 2021

**TO WHOM IT MAY CONCERN.**

**RE: RESEARCH AUTHORIZATION: MS. DOROTHY CHEPNGETICH KOECH LICENCE  
NO.NACOSTI/P/21/13864.**

I refer to the Director General NACOSTI Letter Ref: No. 313740 dated 4th November, 2021 granting the above student authority to proceed for field work. Her area of study is titled: **"INNOVATIVE STRATEGIES, TRANSFORMATIONAL LEADERSHIP AND PERFORMANCE OF KENYA TEA DEVELOPMENT AGENCY FACTORIES IN KENYA"** for the period ending 04/11/2022.

This is to request your office to accord her the necessary support during the data collection process.

Thank you.



ROSE K SAGARA  
COUNTY DIRECTOR OF EDUCATION  
**KERICHO COUNTY.**



**Appendix ix: Authorization by Ministry of Interior and Co-ordination of National Government**



**OFFICE OF THE PRESIDENT  
MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT**

Telegrams: .....  
Telephone: Kericho 20132  
When replying please quote  
[kerichocc@yahoo.com](mailto:kerichocc@yahoo.com)

THE COUNTY COMMISSIONER  
KERICHO COUNTY  
P.O. BOX 19  
KERICHO

REF: MISC 19 VOL.VII (203)

23<sup>rd</sup> November, 2021

**TO WHOM IT MAY CONCERN**

**RESEARCH AUTHORIZATION – MS. DOROTHY CHEPNGETICH KOECH - REF.NO:  
313740**

I am pleased to inform you that you are authorized to undertake research as per the licence No. NACOSTI P/21/13864 dated 4<sup>th</sup> November 2021 on "*Innovation strategies, transformational leadership and performance of Kenya Tea Development Agency Factories in Kericho County*" for a period ending 4<sup>th</sup> November, 2022.

J.N. NYAMWAMU  
FOR: COUNTY COMMISSIONER  
**KERICHO COUNTY**

## Appendix x: First Journal Publications



THE RELATIONSHIP BETWEEN PROCESS INNOVATIVE STRATEGIES AND PERFORMANCE OF KENYA TEA DEVELOPMENT AGENCY FACTORIES IN KENYA

Koech, C. D., Bett, A., & Langat L.

THE RELATIONSHIP BETWEEN PROCESS INNOVATIVE STRATEGIES AND PERFORMANCE OF KENYA TEA DEVELOPMENT AGENCY FACTORIES IN KENYA

<sup>1</sup>Koech, C. D., <sup>2</sup>Bett, A., & <sup>3</sup>Langat L.

<sup>1</sup> University of Kabianga, Kericho, Kenya

<sup>2,3</sup> Doctor, University of Kabianga, Kericho, Kenya

Accepted: January 20, 2022

**ABSTRACT**

Kenya Tea Development Agency's primary role is to collect plucked tea, process and market tea products on behalf of farmers. Despite the crucial role it plays in Kenya's economy, the tea sector still faces various challenges such as high cost of production, fluctuations in the international market and emerging issues such as COVID-19 pandemic. To effectively improve the performance of the tea industry, product innovative strategy practices are widely acknowledged for improving productivity and competitiveness in the sector. This study examined process innovative strategies and performance of KTDA factories in Kenya. It was premised on Schumpeterian theory of innovation and Discovery theory. A correlational and cross-sectional research design was adopted in this study. The target population was 974 employees from 71 KTDA factories in Kenya. A sample of 283 respondents was drawn from four regions using a stratified sampling method. The main instrument of data collection was a semi-structured questionnaire administered to top, middle, and lower-level employees of KTDA factories in Kenya. The questionnaire was pre-tested to ensure its validity and reliability. An aggregate Cronbach Alpha coefficient of 0.901 was obtained. Multiple linear regression and model was employed to determine the significance of the hypothesis. The findings revealed that process innovative strategies ( $\beta = 0.530$ ,  $R = 0.711$ ,  $p < 0.05$ ), had a positive and significant relationship with performance of KTDA. The study recommended that stakeholders and interested parties in the industry should make policies that goes toward operationalizing process innovative strategies. The study also recommended improving infrastructure in tea processing for improved tea products. The findings might be useful to the industry stakeholders in formulating process innovative strategies that would help improve their fortunes.

**Key Words:** Process Innovative Strategies, Organization Performance, Tea Industry

**CITATION:** 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.

## INTRODUCTION

Currently, innovative strategies are required to ensure organizations are able to adapt, change and improve despite emerging issues that affect external environment of the business. Currently, the business external environment is faced with COVID-19 pandemic which has led to organization changing the normal production (Hamid, Abdul, Hosna, Waliul and Kamruzzaman, 2020). Majority of the organizations have adopted digitization process to reduce direct contact between employees and reduce spread of the contagious virus. Therefore, organizations should venture into appropriate technology as well as process innovative strategies to enable them remain competitive.

Process innovative strategies is the use of a new methods of delivery or production which has been greatly improved. The significant changes could be in terms of the equipment/machines, techniques or software used. The effect they have is to reduce the costs used in production or delivery and in turn increase their quality of delivery or product. Process innovative strategies can also be better use of workforce, different ways the information moves, different job description and different materials used as input in the production of goods and services (OECD, 2005). Process innovative strategies are aimed at making the production efficient and effective by improving or changing the way the organization does its work. Suroso and Azis, (2015) confirmed that process innovative strategies are about taking up a new production process that results in a much better delivery method. This also means a great change in the software, techniques used and also the equipment used in production.

These strategies aim at lowering the costs and time involved in the production of a product. This is through efficiency and effectiveness that is gained through improved product quality, less resources used and reduction of time used (Gunday, Ulusoy, Kilic and Alpkan, 2011). El-Kassar and Singh (2019), found that process innovative strategies assisted in improving performance of organization. Similarly, Sintset, Nekoumanesh and Yang (2013), found that

process innovative strategies is a step by step process that requires time and a change in organizational culture to enable organizational perform.

Rosli and Sidek (2013), found that the association between process innovative strategies and organization performance to be positive, in small and medium enterprises. Njeri (2017), found another view in which the study reports that some of the impeding factors in process innovative strategies in small and medium enterprises include the inadequate trained manpower, inadequate finances, lack of adequate research and development. A research conducted in Kenya by Martin and Namusonge (2014), revealed that 75 percent of businesses used a strategy of investing in machineries in the production process even though SMEs found the implementation very expensive and demanding process. In the research, one of the findings was that, process innovative strategies contribute in terms of reduction of costs.

According to Nguyen (2009), the tea industry has involving processes in which huge resources and logistics are required. Due to inflation and interruptions in the supply chain due to the COVID-19 Pandemic, the costs of items supplied to KTDA has continued to increase. To mitigate the interruptions in the supply chains, which have led to cost challenges. KTDA has set its strategic plan (2021-2025) with one of the main objectives being to improve operational efficiency and also reduction of costs. KTDA as an organization are continuously implementing process innovative strategies and this is again scaled down to the different subsidiaries and factories.

### Problem Statement

Tea sector in Kenya contributes significantly to the economy, however it faces various challenges. KTDA needs to convince farmers to keep their tea plantation by reducing their costs and increasing their returns. While previous studies provided insights about the tea sector, they showed little guidance on the relationship between process innovative strategies and performance of KTDA

factories in Kenya. Previous research indicated that process innovative strategies can improve the performance of organizations through improvements in revenue, cost cutting, products quality, quantity, market share, customer satisfaction among others. However, little is known regarding the relationship between process innovative strategies and performance of KTDA factories in Kenya. Therefore, this study investigated the relationship between process innovative strategies and the performance of KTDA factories in Kenya.

#### **Objective of the Study**

The objective of this study was to analyze the relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.

#### **Literature Review**

The study utilized the following theories in developing its literature having found them to be the most relevant; Schumpeterian theory of innovation and Discovery theory. The schumpeterian theory of innovation theory is part of the innovative strategies based models put forward by Joseph Schumpeter a renowned economist of the twentieth century (Schumpeter, 1939). The explanation put forward by Schumpeter about the process of innovation is the same that keeps being applied in modern day and its internationally driven economy (Carayannis and Ziemnowics, 2007). The theory puts forward a variety of reasons for being the reason that there is continuous change in both markets and economy. The changes in the economy in this case is process innovative strategies.

Schumpeter idea of development in terms of the economy is to apply innovative strategies which may include the application of new methods of production, (Schumpeter, 1939). He terms creative destruction as process where organization transformation which is the reason for a shift of an organization economically for example through innovative strategies.

Creative destruction in this theory involves breaking old ways of doing things and creating new mental models which encourages introduction of new products and services (Schumpeter, 1939). Innovative strategies are thus strategies that leaders use to come up touse new processes methods. This theory supposes that the aim of innovative strategies is to create new processes which gives the organization a competitive edge against competitors. Schumpeter concludes that innovative strategies involves coming up with new processing methods(Schumpeter, 1939). Based on Schumpeterian theory, innovative strategies are the foundation for competitiveness and sustained economic growth.

According to discovery theory when there are market or industry imperfections an opportunity to produce new products or services exists (Barney, 1986 and Kirzner, 1997). In Discovery Theory, competitive imperfections are assumed to arise from external factors, such as changes in technology, consumer preferences, pandemics or some other attributes of the context within which an industry or market exists (Kirzner, 1973). According to Shane (2003), changes in political, regulatory, technology, social and demography are some of the things that cause disruption in the competitive equilibrium that is present in the industry or market, thereby making new opportunities for creation of new products, processes, marketing strategies and management methods. The focus on this external factors create opportunities to produce new products or services, processes, marketing strategies and different management methods which leads to important implications.

Discovery theory views innovative strategies as looking to the environment for opportunities to take advantage of to be able to have new products or services, new processes, new marketing methods and new management methods. If awareness of the opportunities was there to everyone, and all had skills required to exploit them then all organization would take advantage of them, however this is not

the case for everyone (Barney, 1986; Schumpeter, 1939).

The significant changes associated with process innovative strategies are in terms of the equipment/machines, techniques, or software used. The effect they have is to reduce the costs used in production or delivery and in turn increase their quality of delivery or product. Process innovative strategies can also be made better by the use of workforce in a different way, the way the information moves, different job description and different materials used as input in the production of goods and services (OECD, 2005). Process innovative strategies are aimed at making the production efficient and effective by improving or changing the way the organization does its work. Suroso and Azis, (2015) confirmed that process innovative strategies are taking up a new production process that results in a much better delivery method. This also means a great change in the software, techniques used, and also the equipment used in production.

Process innovative strategies aim at lowering the costs and time involved in the production of a product. This is through efficiency and effectiveness that is gained through improved product quality, fewer resources used and reduction of time used (Gunday, Ulusoy, Kilic and Alpkan, 2011). Minai and Lucky (2011) found that business process reengineering in process innovative strategies leads to less time used in production thus leading to low costs in the production of a product. This can be achieved through innovative improvement of supply chain management, logistics, improvement in processing technology to ensure effective and efficient production. El-Kassar and Singh, (2019) found that process innovative strategies assisted in improving performance of organization. Similarly, Sintset, Nekoumanesh and Yang (2013) found that process innovative strategies should be step by step process that require time and change in organizational culture to enable organizational performance.

Rosli and Sidek, (2013) found that the association between process innovative strategies and organization performance was positive, this research was done in small and medium enterprises. The same findings were confirmed by Olughor, (2015) in a research that revealed that process innovative strategies were an important feature in financial and market performance. Njeri, (2017) found another view in which she reports that some of the impeding factors in process innovative strategies in small and medium enterprises include the inadequate trained manpower, inadequate finances, lack of adequate research and development. A research conducted in Kenya by Martin and Namusonge, (2014) revealed that 75 percent of businesses found an enormous effort made in investments of current machineries used in the production process one of the strategies used in the production process even though it was found that SMEs found the implementation very expensive and demanding process. In the research one of the findings was that the contribution made by process innovative strategies was cost reduction.

Honarpour, Jusoh and Nor, (2012) on total quality management efforts of an organization, they stated that there was a positive effect of process innovative strategies on performance. On cost reduction however, Peters, (2008) argues that not all process innovative strategies lead to savings gotten from a reduction in cost but some innovations make the organization be able to market their products at competitive prices. One can therefore conclude that other process innovative strategy indicators such as better speeds, value addition, flexibility and efficiency in costs positively affects the performance of an organization (Gunday, Ulusoy, Kilic and Alpkan, 2011)

According to Minai and Lucky, (2011) business process reengineering and quality function deployment are what constituents of process innovative strategies. For a supplier to develop products of higher quality and at lower costs it requires them to be efficient and to work on the

productivity of the products continuously. The cost reduction found therein might or might not be passed to customers through the reduction of prices. Thus, process innovative strategy has a benefit for both the supplier and also the consumers. Both the supplier and customers provide standards of quality that can be acquired and maintained. The process innovative strategies may include enterprise engaged consultancy, adoption of supply chain concepts and global reference model (GRM).

In the study different municipalities in Sweden were studied, it investigated how waste management department applied process innovative strategy. In the research qualitative study was used in the four municipalities that were under study, also grounded theories method was applied to investigate the impact process innovative strategies had in waste collection process on the performance of municipalities in Sweden. Under this study, the findings were that, the use of process innovative strategies had a positive implication on the financial and customers' performance of municipalities. It was also discovered that in process innovative strategies step by step process was important for a successful process innovative strategy adaptation rather than the use of a big bang change. There was also a positive relation in municipalities' performance when corporate social responsibility was applied in an organization as a self-regulating mechanism which also contributed to organizations environmental sustainability.

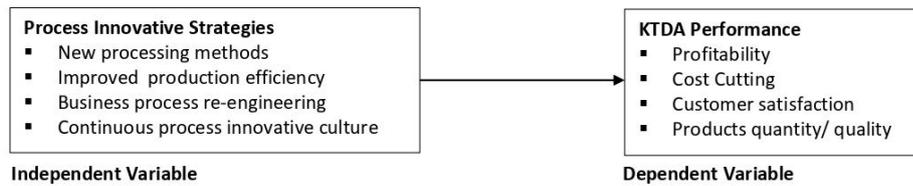
Sintset, Nekoumanesh and Yang, (2013) did qualitative study of Swedish municipalities to examine process innovative strategies impact on the performance of the organization. Majority of European Union programs focuses mainly in ensuring environment sustainable development which require innovative strategies. Process innovative strategies plays a significant role in management of waste to ensure sustainable environment. Qualitative approach was used to

collect data from four Sweden's municipality by using grounded theories method. The results indicated that process innovative strategies had positive influence on financial and customer performances within the municipality. Similarly, Sintset, Nekoumanesh and Yang, (2013) found that process innovative strategies should be step by step process that require time and change in organizational culture to enable organizational performance.

El-Kassar and Singh, (2019) found that process innovative strategies assisted in improving performance of organization. Rosli and Sidek, (2013) researched on SMEs who agreed that process innovative strategies positively affected organization performance. Olughor, (2015) affirmed this finding in a study that revealed that in both market and financial performance process innovative strategies was an important feature. On the other hand, Njeri, (2017) reported that the lack of finance, lack of skilled workforce, inadequate research and development are some of the things that hinder process innovative strategies in SME sector. Martin and Namusonge, (2014) carried out a study in Kenya which revealed that 75 percent of businesses made major investment efforts in purchase of modern machineries as a process innovative strategy, the findings further showed that SMEs found this difficult and expensive for them to cope with. In the study 56 percent agreed that process innovative strategies led to reduction in costs.

#### **Conceptual Framework**

In this study the dependent variable was KTDA performance measured by Profitability, Cost Cutting, Customer satisfaction and Products quantity/ quality while Process Innovative strategies is indicated by New Processing Methods, Improved production efficiency, Business Process Re-engineering and Continuous Process Innovative Culture as indicated in figure 1.



**Figure 1: Conceptual Framework**

From the literature above, innovative strategies are broadly seen as an essential component of competitiveness, embedded in the processes, within an organization. There is a clear consensus that process innovative strategies are the reason for growth or decay of an organization, but there is a substantial lack of structured evidence concerning this. By identifying the relationships between process innovative strategies and organization performance, the research seeks to find out its effect on the performance of the organization.

**METHODOLOGY**

The study adopted correlational as well as cross-sectional survey research design, correlation is associated with not only testing the hypothesis but utilizing inferential statistics comprising of correlation analysis (Saunders, Lewis, & Thornhill, 2011). In this study the location of interest was KTDA factories in Kenya spread in 14 Counties. These consisted of 71 factories. The target population was 974 employees from top level employees, middle level employees and lower level employees of KTDA managed factories. The main instrument of data collection was a semi-structured

questionnaire administered to top, middle, and lower-level employees of KTDA factories in Kenya. The questionnaire was pre-tested to ensure its validity and reliability. An aggregate Cronbach Alpha coefficient of 0.901 was obtained which was above the threshold of 0.7. Data collected was screened, coded, entered, and analyzed using inferential statistics where multiple linear regression was employed to determine the significance of the hypothesis.

**Process Innovative Strategies and Performance of KTDA factories in Kenya**

*H<sub>0</sub>: There is no significant relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.*

A simple regression model was used to examine the relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. This model was given as;

$$Y = \beta_0 + \beta_1 X_1 + e \dots \dots \dots \text{Model}$$

Y = Performance,  $\beta_0$  = Constant Term,  $\beta_2$  = Beta coefficients,  $X_2$  = Process innovative strategies,  $\epsilon$  = Error term. This results were summaries in Table 1.

**Table 1: Process Innovative Strategies and Performance**

Model	N	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
(Constant)		2.131	.136		15.686	.000
1 Process Innovative Strategies	283	.530	.031	.711	16.968	.000

a. Dependent Variable: Organizational Performance  
**R = 0.711**  
**R<sup>2</sup> = 0.506**  
**F = 287.9**  
**p < 0.05**

Source: Research Data, (2022)

The finding indicated that there existed a strong positive relationship between process innovative strategies and organizational performance ( $R=0.711$ ). The  $R^2$  is the coefficient of determination which indicated that the explanatory power of independent variable was 0.506. This means that a variation of 50.6% performance of KTDA was associated to process innovative strategies while other factors contributed 49.4% ( $R^2 =0.506$ ). The findings further, indicated that  $\beta$  coefficient of 0.530 which implies that every unit increase of process innovative strategies contributes 0.530 increase in organizational performance. The results showed that the influence of process innovative strategies on performance of KTDA factories in Kenya was significant ( $F=287.9$ ,  $p<0.05$ ). The null hypothesis that there is no significant relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya was rejected. Hence, process innovative strategies had strong positive relationship with the performance of KTDA.

Rosli and Sidek (2013), similarly found that process innovation positively affected organization performance. Current study found that process innovative strategies did affect directly the performance of organizations. Minai and Lucky (2011), process innovative strategies was achieved through continuous improvement of product development which concurs with current study. The study also pointed the adoption of supply chain concepts which was important in ensuring logistics management in the organization.

#### **CONCLUSIONS AND RECOMMENDATIONS**

The objective analyzed the relationship between process innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. According to the results KTDA factories had operations that used process statistical data to optimize effectiveness, quality and efficiency of tea processing. The factories have also reduced cost and improved on time through adaptation of emerging technologies. There is also an extensive

improvement in efficiency in collection of green leaf based on logistic innovativeness which allows prompt delivery of tea. Due to improvement in scheduled routines and ability to manage high capacity of green leaves in the factory, the factories have improved production time. Modern technology has enabled the factories to enhance on transparency in weighting and improve the turnaround time for deliveries and processing time of green tea from sourcing the tea from farmers to processing.

The findings revealed that process innovative strategies had positive statistical relationship with performance KTDA factories. Therefore, process innovative strategies enhanced the performance of organization.

The objective concluded that process innovative strategies had positive statistical relationship with performance of KTDA factories in Kenya. The factories utilized statistical data in optimizing the control to ensure that there was quality, effectiveness and efficient tea processing. Technology was also adopted in logistic management in improving turnaround time, weighing technology, prompt delivery and processing of green tea. Time production was achieved through innovation in management of production routines and improvement of processing time.

The study recommended that new production line should be increased for specialized tea besides the black tea. Since, there is efficiency in terms of logistic turnaround time and product innovation available. Using existing infrastructure in processing, tea products can be differentiated and hence improve the market through product differentiation.

#### **Suggestion for Further Studies**

The study also suggested that since the research was limited in scope, a larger sample with a bigger population can be used for confirmatory analysis and validation.

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## Appendix xi: Second Journal Publications

International Journal of Scientific Research and Management (IJSRM)

||Volume||10||Issue||02||Pages||EM-2022-3024-3031||2022||

Website: www.ijssrm.in ISSN (e): 2321-3418

DOI: 10.18535/ijssrm/v10i2.em02

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### The relationship between Product Innovative Strategies and Performance of Kenya Tea Development Agency Factories in Kenya

Koeh Chepngetich Dorothy<sup>1</sup>, Langat Lydia, Phd<sup>2</sup>, Bett Alfred, Phd<sup>3</sup>

University of Kabianga, Kericho- Kenya

#### Abstract

Kenya Tea Development Agency's primary role is to collect plucked tea, process and market tea products on behalf of farmers. Despite the crucial role it plays in Kenya's economy, the tea sector still faces various challenges such as high cost of production, fluctuations in the international market, and emerging issues such as COVID-19 pandemic. To effectively improve the performance of the tea industry, product innovative strategy practices are widely acknowledged for improving productivity and competitiveness in the sector. This study aimed at establishing the relationship between product innovative strategies and performance of KTDA factories in Kenya. It was premised on Schumpeterian theory of innovation and Discovery theory. A correlational and cross-sectional research design was adopted in this study. The target population was 974 employees from 71 KTDA factories in Kenya. A sample of 283 respondents was drawn from four regions using a stratified sampling method. The main instrument of data collection was a semi-structured questionnaire administered to top, middle, and lower-level employees of KTDA factories in Kenya. The questionnaire was pre-tested to ensure its validity and reliability. An aggregate Cronbach Alpha coefficient of 0.703 was obtained. Multiple linear regression and model was employed to determine the significance of the hypothesis. The findings revealed that product innovative strategies ( $\beta = 0.695$ ,  $R=0.748$ ,  $p<0.05$ ) had a positive and significant relationship with performance of KTDA. The study recommends that stakeholders and interested parties in the industry should make policies that goes toward operationalizing product innovative strategies. The findings may be useful to the industry stakeholders in formulating product innovative strategies that will help improve their fortunes.

**Key Words:** Product Innovative Strategies, Organization Performance, Tea Industry

#### Introduction

Globalization brings opportunities as well as pressures for domestic firms in emerging markets forcing them to use product innovative strategies to improve their competitive position. According to Thomas, Narayanan and Ramathan (2012), amidst globalization and stiff international competition, innovative strategies are pillars for survival and sustainable development. Baregheh, Rowley, and Sambrook (2009), argue that firms are forced to apply innovative strategies to meet consumer needs and wants which are rapidly changing. To take advantage of opportunities and meet consumer needs firms have had to use innovative strategies in their processes, products, markets and management.

Emerging issues like COVID-19 pandemic, globalization, changes in customers tastes and preferences among others have had far reaching effects and unprecedented change on the performance of organizations (Wong, Ho, Cheung and Yeoh, 2020). The exportation of tea, coffee, fresh produce and cut flowers in East Africa have been greatly negatively affected by COVID-19 containment measures such as closing down of auctions and mass gatherings which have led to disruptions in the supply chains (Morton, 2020).

Innovative strategies refer to a plan adopted by an organization to encourage advancements in technology or service to enhance its competitive advantage in the market (OECD, 2005). Product innovative strategies can be termed as strategies where a good or service is enhanced in terms of its elements and how it is to be used, it includes technological improvements in specifications of components and material and software that have

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Koeh Chepngetich Dorothy, IJSRM Volume 10 Issue 02 February 2022 [www.ijssrm.in] EM-2022-3024



The small holder sector factories are managed by Kenya Tea Development Agency (KTDA). In an effort to meet customers' demands and at the same time make profits tea processing organizations encounter many obstacles. Some of the challenges as highlighted by Abeysinghe (2013), include but are not limited to demand for higher pay by staff which is a major attribute to a high cost component, the cost of inputs is also high such as the costs used in fuel, costs of machinery and other costs associated to the agrochemicals; lately there has also been a drop in production levels in all processing factories, farmers are also shying away from planting new tea bushes thus there is mostly aging tea bushes and increase in large uneconomical tea lands; there is also a shortage of unskilled labor; global warming has caused a change in weather patterns; tea processing requires a lot of energy which has been hard to meet; there are many requirements for safety of food; many certificates have to be acquired and also several protocols to be fulfilled in hygiene for tea processing; the factories have to ensure workers safety requirements are adhered to; so as to be able to increase their share in local and international markets. KTDA as an organization are continuously implementing innovative strategies and this is again scaled down to the different subsidiaries and factories.

### **Problem Statement**

Tea sector in Kenya contributes significantly to the economy (GDP, employment, foreign exchange through export etc), however it still faces various challenges from low international prices, high tea field costs, competition, soaring manufacturing costs, distribution cost and the effect of COVID-19 pandemic. Extant literature indicates that organizations that have adopted product innovative strategies are able to execute their duties better, reduce the cost of operation and are guaranteed survival. While a number of studies have been done in the tea industry there is little demonstration on the relationship between product innovative strategies and performance of KTDA factories in Kenya. Further, empirical literature reviewed indicates that product innovative strategies can improve the performance of organizations through improvements in cost cutting, products quality and quantity among others. However little has been presented regarding the relationship between product innovative strategies and performance of KTDA factories in Kenya. This study therefore sought to investigate the relationship between product innovative strategies and performance of KTDA factories in Kenya.

### **Objectives of the Study**

To establish the relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.

### **Literature Review**

According to OECD, 2005 product innovative strategies can be termed as use of new or better improved goods and services. The study utilized the following theories in developing its literature having found them to be the most relevant; Schumpeterian theory of innovation and Discovery theory.

Schumpeterian theory of innovation is part of the innovative strategies based models put forward by Joseph Schumpeter a renowned economist of the twentieth century (Schumpeter, 1939). He is believed to be a beginning point for modern growth theory whose basis is innovation and a byproduct of the development process. The explanation put forward by Schumpeter of the process of innovation is the same that keeps being applied in modern day and its internationally driven economy (Carayannis and Ziemnowics, 2007). The theory puts forward a variety of reasons for being the reason that there is continuous change in both markets and economy. The changes in the economy in this case is product innovative strategies.

Schumpeter idea of development in terms of the economy is to apply product innovative strategies which includes the launch of a new product or modification of an already existing product (Schumpeter, 1939). He terms creative destruction as process where organization transformation which is the reason for a shift of an organization economically for example through product innovative strategies. Creative destruction in this theory involves breaking old ways of doing things and creating new mental models which encourages introduction of new products and services (Schumpeter, 1939). This theory supposes that the aim of product innovative strategies is to create new products which gives the organization a competitive edge against competitors.

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Schumpeter argued that firms which apply product innovative strategies are able to get increased profits. Based on Schumpeterian theory, product innovative strategies are the foundation for competitiveness and sustained economic growth.

According to discovery theory when there are market or industry imperfections an opportunity to produce new products or services exists (Barney, 1986 and Kirzner, 1997). In discovery theory, competitive imperfections are assumed to arise from external factors, such as changes in technology, consumer preferences, pandemics or some other attributes of the context within which an industry or market exists (Kirzner, 1997). According to Shane (2003), changes in political, regulatory, technology, social and demography are some of the things that cause disruption in the competitive equilibrium that is present in the industry or market, thereby making new opportunities for creation of new products.

The focus on this external factors create opportunities to produce new products or services which leads to important implications. Shocks that take place such as COVID-19 pandemic that take place causes alterations in an already existing industry or market on how it operates thus leading to a new competitive environment, this could be through change in intent and purpose (Levinthal, 1997). Discovery theory views product innovative strategies as looking to the environment for opportunities to take advantage of to be able to have new products or services.

Product innovative strategies takes place when a good or service which have been greatly enhanced in terms of its elements and how it is to be used, the technological improvements in specifications of its parts and material and the software that might have been incorporated which may make the goods or service better in terms of how they are used and how they function generally (Oslo, 2005). It can make use of technological advancements or knowledge or new found uses of a good or service or a combination of both existing technology and knowledge (Bao, Chen and Zhou, 2012). Most product innovative strategies are driven by customer lifestyles which make customer demands to be different, a necessity to shorten product processes, market competition both locally and internationally this is by no means an easy process. For a product innovative strategy to be successful a strong interaction between organizations and also between suppliers and customers is required (Utterback and Abernathy, 1975).

Moreover, a product innovative strategy characteristic can distinguish a new product from competitive offerings and allow the product to get an exceptional position in the market (Im and Workman 2004). Lastly, product innovative strategy has a positive influence through different instruments on new products thus resulting in increased profits and success of the market (Bao, Chen and Zhou, 2012). Gunday, Ulusoy, Kilic and Alpkan, (2011) measured product innovative strategies by establishing the changes in quality of the product, the changes in prices of manufacturing products, the rate of new products progresses leading to easy usage by the customers. Development of new products with various practical particulars and also development of goods and services with elements and materials which are different from the current products may be termed as product innovative strategies.

Jayaram, Oke and Prajogo, (2013) researched on 207 organization based in Australia and found that the relationship between product innovative strategies and product quality were positive to the way the organization performed. In the same light, Hall (2011) when he investigated product innovative strategy activities and productivity relationship found that there was a standard positive association. In the same case, Augusto, Lisboa and Yasin, (2014) researched on the association between organization performance and the different types of innovative strategies and found that the most important innovative strategies in promoting organization performance in the whole organization was product innovative strategy. In the research they conducted, they used factor and regression analysis to provide insights. To add further, Ar and Baki, (2011) in the research conducted between product innovative strategy and organization they found a strong and positive relationship. In the study, they used data from SME managers in the Turkish Science and Technology Parks (STPs) and used structural equation modelling (SEM) Method.

Polder, Leeuwen, Mohnen and Raymond, (2010) argued that product innovative strategies in organizations leads to efficiency and reflects on the type of strategy that the organization has taken. Due to the current high competitive environment, to survive, organizations have to come up with new strategies aimed at

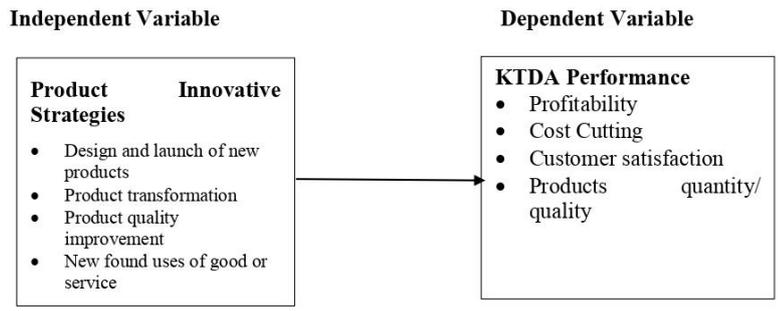
fulfilling customers' needs which can be through developing of new strategies. Onikoyi, (2017) study investigated product innovative strategies and organization performance. Information were extracted from quality and control, marketing, sales, research and development and production departments which were involved in product development. A sample of 340 employees were given questionnaires. Regression and correlation analysis were used to test the significance of the hypothesis. The results revealed that product innovative strategies had strong impact on the performance of the organization. This was contributed by creativity in product innovation process resulting to improvement of the quality of the product and performance of the firm. Therefore, recommending that organization should improve on human capital creativity in innovation.

Montero, Pennano and Camilo (2017) reviewed literature to determine why some innovative strategies were more successful than others. Their product innovative strategies were examined on the basis of organization factors, development and process factors, market forces factors and strategic factors. The study used meta-analysis of existing literature and found that efficacy and efficiency were used to measure product innovative performance. The study recommended more multi-dimension investigation be done to establish the level of effect product innovative strategies have on performance.

From the literature above, product innovative strategies are broadly seen as an essential component of competitiveness, products and services within an organization. The following studies focused on product innovative strategies and product quality (Oke, Prajogo and Jayaram, 2013) as well as product innovative strategies and organization performance (Onikoyi, 2017). Most studies on product innovative strategies were from different countries and different sectors. This study was focused in the tea sector in Kenya. Very little has been said and done about establishing the relationship of product innovative strategies in relation to performance of KTDA factories in Kenya.

**Conceptual Framework**

In this study the dependent variable is KTDA performance measured by Profitability, Cost Cutting, Customer satisfaction and Products quantity/ quality while Product Innovative strategies is indicated by Design and launch of new products, Product transformation, Product quality improvement and New found uses of good or service as indicated in figure 1.



**Figure 1: Conceptual framework**

**Source: Adapted and modified from OECD, 2015**

**Research Methodology**

The study adopted correlational as well as cross-sectional survey research design, correlation is associated with not only testing the hypothesis but utilizing inferential statistics comprising of correlation analysis (Saunders, Lewis, & Thornhill, 2011).

In this study the location of interest was KTDA factories in Kenya spread in 14 Counties. These consist of 71 factories. The target population was 974 employees from top level employees, middle level employees and lower level employees of KTDA managed factories. The main instrument of data collection was a semi-

structured questionnaire administered to top, middle, and lower-level employees of KTDA factories in Kenya. The questionnaire was pre-tested to ensure its validity and reliability. An aggregate Cronbach Alpha coefficient of 0.703 was obtained which was above the threshold of 0.7. Data collected was screened, coded, entered, and analyzed using inferential statistics where multiple linear regression was employed to determine the significance of the hypothesis.

**Product Innovative Strategies and Performance of KTDA factories in Kenya**

*There is no significant relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya.*

This model was given as;

$$Y = \beta_0 + \beta_1 X_1 + \epsilon$$

Y = Performance,  $\beta_0$  = Constant Term,  $\beta_1$  = Beta coefficient,  $X_1$  = Product innovative strategies and  $\epsilon$  = Error term.

The results were presented in Table 1.

**Table 1: Product Innovative Strategies and Performance**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		N	Beta	Std. Error			Beta
	(Constant)		1.530	.154		9.944	.000
	Product Innovative Strategies	28 3	.695	.037	.748	18.885	.000
<b>R =0.748</b>							
<b>R<sup>2</sup> =0.599</b>							
<b>F= 356.6</b>							
<b>P&lt;0.05</b>							

**Source: Research Data (2022)**

The results from Table 1 shows a summary of the regression model fitness. The finding indicated that there existed a strong positive relationship between product innovative strategies and organizational performance (R=0.748). The R<sup>2</sup> is the coefficient of determination which indicated that the explanatory power of independent variable was 0.599. This means that a variation of 59.9% performance of KTDA was associated to product innovative strategies while other factors not captured by the model contributed the variance of 40.1%.

The findings further, indicated that  $\beta$  coefficient of 0.695 which implies that every unit increase of product innovative strategies contributes 0.695 increase in organizational performance. The results showed that the influence of product innovative strategies on performance of KTDA factories in Kenya was significant (F=356.6, p<0.05). The null hypothesis that there is no significant relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya was rejected. This results concurs with Onikoyi (2017), who found that there existed positive and significant relationship between product innovative strategies and organizational performance. Similarly, Ar and Baki (2011), also found that product innovative strategies had positive and significant on organizational performance. Similarly, Oke, Prajogo and Jayaram (2013), pointed out that product innovative strategies affect the quality of performance of the product which affect significantly on the performance of the firm. Motero, Pennano and Camilo (2017), added that efficacy and efficiency was influenced by product innovative strategy.

### Summary

The objective was to establish the relationship between product innovative strategies and performance of Kenya Tea Development Agency Factories in Kenya. The findings revealed that KTDA factories were able to design and launch new tea product. The factories were able to monitor the latest tendencies in technology and adopt them in the product development. However, the factories were able to network with other organization in developing new product to some extent. Due to continuous research and development the factories were able to continuously adopt an innovative culture in product development. The factories were able to invest in capacity to meet scheduled initiatives and milestones while ensuring that business models were used to create products that target different market segments.

The result further indicated that product innovative strategies had positive significant relationship with the performance of KTDA factories in Kenya. Hence, product innovativeness strategies contribute to innovative strategies that impact on performance of the organization.

### Conclusions

The study concluded that product innovative strategies had positive and significant relationship with performance of KTDA factories in Kenya. Product innovative strategies has contributed by the ability of the factory to design, launch tea products to different market segment, monitoring and adoption of latest trends in technology, continuous research and develop, innovative product culture and meeting factories schedules initiatives and milestones.

### Recommendations

The study recommends that KTDA should adopt flexible business models that allow each factory to be autonomous in product development since there is room for improvement. This will allow the factory to introduce new products that can add value to the factory which will encourage continuous innovation of product culture. The flexibility of development of products with other institution will enable the factories to integrate products that are differentiated through value addition.

### Suggestion for Further Studies

The study also suggests that since the research was limited in scope, a larger sample with a bigger population can be used for confirmatory analysis and validation.

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