RELATIONSHIP BETWEEN STRATEGIC CHANGE INTERVENTIONS AND PERFORMANCE OF COMMERCIAL STATE CORPORATIONS IN KENYA

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Relationship between Strategic Change Interventions and Performance of Commercial State Corporations in Kenya

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university

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DEDICATION

I'm grateful to God for giving me a supportive family that taught me good virtues specifically my late dad; Aser Musanye and my late mum Rahel Habini. The Key values that they equipped me with, of continuous struggle and being determined in my endeavours, and above all putting God as my shield have continued being my reference point in my life time. I appreciated the long journey of pursuing my doctorate which utilized so much time that I had in my very busy daily schedules. I dedicate this thesis to my family that made immense sacrifice, particularly my best friend; my husband, Norbert, words are inadequate to express my appreciation. Thank you for your support and encouragement in the challenging but exciting journey.

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LIST OF ABBREVIATIONS & ACRONYMS

AOS - Adaptive Organization Structure

CEO - Chief Executive Officer

DES - Dynamic Environmental Scan

GoK - Government of Kenya

IT - Information Technology

OP - Organizational Performance

PSI - Participatory Stakeholders Involvement

ROA - Return on Assets

RBT - Resource Base Theory

RBV - Resource Base Value

RoK - Republic of Kenya

SC - State Corporation

SPSS - Statistical Package for Social Sciences

TA - Technology Adoption

DEFINITION OF TERMS

Commercial State Corporation	Is an entity that is exclusively or has majority share owned by the government or government agents for commercial purposes normally driven by a competitively driven market and/or serves strategic economic functions. (RoK,2013)
Strategic Change	It involves fulfilling the changing wants of the marketplace, reducing risk, being more environmentally sensitive, improving the quality, raising consumer satisfaction, and staff retention (East, 2011).
Strategic Change Interventions	Involves increasing competitiveness of the business and how it continuously adapts various unstable environmental levels (Du Toit, Knipe, Van Niekerk, Van der Waldt, & Doyle, 2002).
Technology Adoption interventions	To accept and use technology for firm's success. Woodside and Biemens (2005)
Participatory Stakeholders Interventions	Actively involving people, groups or organizations within or outside an organization who influence the organizational or have an effect in the daily events and organizational performance (Pearce & Robinson, 2014)
Dynamic Environmental Scan interventions	This constitutes monitoring, assessing, and distributing of information obtained in a constantly changing internal and external environment to various key areas in the organization (Kazmi, 2008).
Adaptive Organizational Structure interventions	Refers to the reorganization of the internal pattern of relationships, authority and communication of the organization (Tran & Tian, 2013).
Board Composition	This is the number of board members and their demographics as per whether insiders/outsiders, males/females,

	foreigners/locals and the degree of attachment they have with the organizations (Zandstra, 2002)
State Corporation	This is a government owned entity created as a legal entity for the purpose of undertaking commercial activities with the aim of developing and indigenizing the economy and ensuring the provision of important services to the citizens of a country (RoK, 2013).
Performance	This is the actual output of a firm given expressed through measurements using certain indicators; in this case measured by profitability, Sales growth, market share among others (Richard, Devinney, Yip & Johnson, 2009)

ABSTRACT

For organizations to remain in operation, they have to be in a state of change. This is done with the view to balance with the environment. Researches have shown that managers who fail to adopt changes will ultimately be forced to shut down their operations. The purpose of the study was to determine the relationship between strategic change interventions and performance of commercial state corporations in Kenya. Specific objectives were to establish the relationship between technology adoption, dynamic environmental scan, participatory stakeholder involvement and adaptive organization structure interventions and performance of commercial state corporations in Kenya. The last objective was to investigate the moderation effect that Board composition has towards the relationship between strategic change interventions and performance of commercial state corporations in Kenya. The study adopted a cross section survey research design. The target population was fifty five (55) commercial state corporations in Kenya. A sample of forty eight (48) commercial state corporations was used for the study. These were obtained through stratified random sampling. The respondents of this study constituted CEO's, Finance Managers and HR Managers of each of the sampled commercial state corporations. The correspondents of the study totaled to one hundred and forty four (144). Collection of data was conducted with the aid of questionnaires and interviews. Questionnaires were hand delivered to the respondents in the respective institutions by the help of research assistants. The research assistants self-administered the questionnaires to the 144 respondents of the sampled commercial state corporations. Data was analyzed using SPSS version 24 and Microsoft Excel. Regression models were fitted and hypothesis testing was carried using standard F and t tests. The study found that technology adoption interventions have a significant positive influence on performance of commercial state corporations in Kenya. Further, dynamic environmental scan interventions were found to have significant positive influence on performance and therefore, this means that State corporations that respond to dynamic and hostile environment will have a competitive edge and hence better performance. Participatory stakeholder involvement interventions were also found to have positive and significant influence on performance in the commercial state corporations in Kenya. When stakeholders are involved in activities they are further encouraged to support all the activities of the organizations. Additionally, adaptive organization structure interventions were found to positively and significantly influence performance of commercial state corporations in Kenya. Board composition was found not to have a significant moderating influence on the relationship between strategic change interventions and performance. Overall, strategic change interventions were found to have a significant positive influence on performance of commercial state corporations in Kenya. The study concludes that to enhance performance of commercial state corporations, these strategic change interventions should be adopted. Therefore, from the findings the study concludes that the greater the adoption of strategic change interventions in the corporations, the greater the effect on their performance. The study recommends enhanced use of strategic change interventions that are geared towards improving performance of commercial state corporations in Kenya. The study adds new knowledge on strategic change interventions from the context of commercial state corporations and the role of Board composition in the relationship between strategic change interventions and performance of commercial state corporations in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Strategic management is a set of actions and varied decisions which lead to design, execution and control of plans which are geared towards the achievement of an organizations strategy, vision and objectives (Chiuri, Gakure & Ogutu (2015). Strategic management operates on the premise of a changing world. This will require appropriate strategic change interventions to be put in place. A few strategies to manage the change have to be factored in. Strategic change involves the changes incorporated in the organization's strategy as determined by the scope, competitive advantage and resource deployment. Strategic change interventions involves the specific ways through which strategy is implemented. The ability to implement the right strategies successfully is important to any organization. Despite the importance of the strategic change interventions within strategic management, this is an area of study often overshadowed because there is too much concentration on the process of strategy formulation.

Managing of strategic change interventions effectively and efficiently is the main challenge that businesses face today. According to Carter, Ulrich and Goldsmith (2012), the ability to respond to the pace of change is the major difference between successful and failed organizations. As such, the external environments of organizations have to constantly be monitored and scanned but also anticipating and adapting to continuous change it is imperative to note that institutions and individuals that opt to intervene in turbulent times will find survival very difficult. Other than Strategy execution being a very big challenge that organizations face today it has also not been explained satisfactorily. According to Bossidy, Charan, and Burck (2011) Strategy execution has inadequate literature hence making the topic of significant academicians especially in less developed countries.

Organizations have endeavored to improve performance in the recent past globally (Chemengich, 2013). This has especially been noted in the public sector where modes of operation have shifted taking cognizance of accountability and transparency. The public has as such remained a central conduit for both developed and developing countries of development. Many countries have adopted strategic changes with impressive performance in service delivery. New Zealand for example, experienced a drastic decline in its fortunes in the 1970s and early 1980s, due to basic flaws in its traditional model of centralized government management and decision-making. The most important feature in strategic change according to Zhang and Rajagopalan (2010), is performance metrics which measures the processes right from their start to completion and thereafter monitors it continuously. Public organizations globally from empirical examination, are faced with having to implement organizational change frequently. They further emphasize that the use of strategic management models by public entities are on the increase which was traditionally more associated with corporations in the private sector.

In the recent past, organizations tend to seek creating more flexibility in the organization to respond to turbulence in the environment by shifting from structures which are hierarchical to flatter ones (Balogun & Johnson, 2004). Delayering and decentralization in organizations have sometimes been known to occur due to power, resources and even responsibility. With intensification in the competitive environment, it is often emphasized that the successful implementation of marketing strategies, the continuing emphasis on the well-accepted factors of strategy implementation such as organization structure are the crucial determinants in the success and, doubtlessly, the survival of the firm. For example, the study by Kang'ethe, Bwisa, Muturi and Kihoro (2018) emphasized the importance of processes and organizational structure in strategy implementation.

Studies conducted in specific socio-economic perspectives such as those in developing economies (e.g. Latin American as in Brenes *et al.*,2007) or specific countries (e.g. China as in Wu *et al.*, 2004) refer to strategy implementation as systematic execution. The above scholars consider work and information system, Organizational structure as important implementation factors. They also emphasize

the important point that the extent to which an organization succeeds in establishing a priority system for each implementation action. The public service environment in developing nations within which they have been operating is always changing and this means adaptation for those in charge to the changes that need be achieved through transformations in the organizations (Andersson, Zbirenko & Medina, 2014).

Organizations operate in environmental conditions which are usually dynamic, hence necessitating the need to develop strategies to enable gaining of competitive advantage by businesses over their rivals. Performance is of paramount importance today for all organizations be they private, profit or non-profit and even public. The reasons why some organizations perform better as compared to others, have been studied by researchers and practitioners for quite a number of years (Ogollah, Bolo and Ogutu, 2011). Management is at the core of the success and survival of any organization hence the inevitability of change in modern day firms which is very important in management in the field of organizational development. Besides the significant changes in the environment that an organization operates, are other fundamental factors which impact on the organizations within their business operations. One of the most outstanding change perspective was demonstrated by Kotter (2008) where he illustrated that organizational change approaches went through three phases. Unfreezing existing behaviour is the first one which is then followed by shifting to a new behavior and finally refreezing the new behavior to acquire new status position.

The process of redesigning and rearranging an organization's activities (change intervention) is intended to meet the varying needs of customers by keeping abreast of any challenges (Walala, Waiganjo, & Njeru, 2015). Change interventions are defined by Johnson, Scholes and Whittington (2008) as the deliberate and coordinated measures done to change a firm to achieve its objectives by overcoming its environmental challenges. This means strategic changes are undertaken by organizations with the intention of aligning the business strategies to be in synchrony with the environment they operate in. There is now need for institutions to install systems of technology that are in tandem with change interventions (Kario & Ngugi, 2017).

Change interventions can influence an organization's performance which leads to enormous competency contribution in an organization further leading to enhanced innovativeness. Business Maximization of performance in organizations is associated with change intervention existence (Kakucha, Simba & Anwar, 2019). Organizations are constantly seeking due to intense competition for new ways for products which have a short life span or markets and products in volatile environments to make them more appealing compared to those of their rivals. One of the most competitive ways that has great prospects of revolutionizing an organization's destiny is change intervention. (Kihara, Bwisa & Kihoro, 2016).

To sustain its business position, an organization needs to change to enable it adapt with changes in its environment. Change interventions need to be adopted by organizations as key activities in a fast changing environment by managers who are competent and skilled in environmental scanning to ensure a competitive edge. The importance of practicing change management capability cannot be more emphasized now like never before. Whereas it has been verified that the future is uncertain, there is need for alertness and responsiveness to rapid changes by organizational managers or else their survival in the realm will be in jeopardy.The need for continuous monitoring of the environment by organizations is thus critical to enable them adapt to any changes that may occur (Andersson, *et al*., 2014).

Public sector organizations the world over as observed by Chemengich (2013), are under immense pressure to provide improved and integrated services whereas having to improve their efficiency at the same time. The public sector has remained critical in both the developed and developing world as an avenue of deliverance, designed for effectiveness, competitiveness, security, justice and realization of equality. Effectiveness and efficiency remain the main emphasis in many countries in the manner in which public organizations are managed. They are thus expected to operate efficiently and effectively. For the last two decades the public sector in Kenya has however, gone through turbulent times leading to low profits which has also more or less been the trend in most of the commercial state corporations (Mutua, Karanja & Namusonge 2012).

Mutua, *et al.* (2012) further noted that Public Organizations will be compelled to search for methods to improve their activities. Organizations operating in an ever changing global economy, must devise new competencies as old ones that were acquired can easily be rendered obsolete due to changes in the environment. Organizations as such cannot be oblivious to the need for change interventions. Understanding of the system dimension is critical for the performance of an organization. The performance of an organization depends on thorough knowledge of a system's operation. Coming up with strategies that will complement business operations, real life experiences have shown that no matter how evolved businesses are, the greatest task is maintaining growth stability and ensuring they are effective. (Haynes & Rees, 2006). Almost all organizations go through phases of transformations which may cause stressful situations, hence to achieve success embracing change is inevitable (Kario & Ngugi, 2017)

The environment in which business organizations tend to operate has changed so much that it is not easily predictable apart from being highly turbulent and complex (Van Tonder, 2004). Survival in the market would be only possible for organizations that will be effective in responding to the varying environmental conditions. Increased global competition coupled with different government and international regulations, economic restructuring and technological innovations are believed to be some of the major causes of environmental changes. Then considering the ecological dilemma with excessive attention of the influence of environment on organizational practices there has been shifting patterns in stakeholder and customers' expectations. Most of the change initiatives that occurred in the past in Kenya public sector in the past two decades were initiatives by the World Bank as part of the Structural Adjustments programs (Chemengich, 2013).

Some of the greatest changes that took place in the Public sector of Kenya recently, were due to the impact of the concept called New Public Management (NPM) which was propelled by economic, social, political and technical forces in the pursuit to have delivery of quality services to the Kenyan citizens in the most cost effective way (Hamdok, Adejumobi, Mangué, Demeksa, Ranaivomanana & Tchoumavi, 2010).State corporations in Kenya today have a number of objectives as spelt out by

the Presidential taskforce (RoK, 2013). Some of the functions performed include; manufacturing and commerce, financial intermediaries and development of infrastructure through service provision, regional development, environmental conservation, education and training as well as regulation of the economy. State corporations are bestowed with the responsibility of provision of employment opportunities, provide access to water electricity and sanitation hence alleviate. The existing governance structures have raised concerns if they are adequate to develop long term strategies for meeting these multiple obligations. The taskforce hence among others recommended environmental scan activities, adequate stakeholder participatory activities, technology adoption and design of organization structure to be aligned with the changing trends to enable state corporations better their performance.

There have been many studies that focused on change interventions of organizations given the contributions they make to the global economy (Huselid, 2005; Appelbaum, 2000; Lagos & Wright, 2005; Schuler & Jackson, 2001). The goal for change management has been for long a crucial area in the field of strategic management A potential new framework that has emerged for the analysis of sources of sustainability of change interventions in the modern world, has been the configurationally theory. In the field of Change interventions the characteristics of the environment and the organization have a great influence on organizational performance. Despite external environmental characteristics determining demand and competition in the (Armstrong, 2009).

Framework for the implementation of development objectives and goal is done through the public sector in developing countries. (World Bank, 2006). Change initiatives involve putting development as the core agenda in business activities. Positive development which is catalyzed by economic, political, social, and technological factors has been the goal for the presence of strategic changes in the public sector of developing countries. Due to the ever fluctuating environmental changes faced in the public sector in the provision of public services, it has necessitated for the search for ways of applying appropriate strategic change interventions to cope with the changes. Organizational transformations activities

which involve large scale strategic planned and administrative changes are the strategic adaptations that are made to the dynamic environment. Several public sector reforms of the public sector in African countries have been conducted since the 80s with the objective of bringing positive changes to these economies. (Chemengich, 2013).

State corporations, are means through which both social and economic needs of the citizens are met. Kenyan corporations therefore play a key role in the successful implementation of crucial Government programmes to enable the achievement of objectives. The Kenyan government using sessional paper no. 10 of 1965 established state corporations by an act of parliament for purposes of addressing commercial as well as social objectives. The corporations were established to deal with market failure for purposes of exploiting social and political goals, provision of health, education, and redistribution of income and development of marginal areas. Through performing the role some problems are experienced by the state corporations. The paper recommended the necessity for reforms in these corporations so as to reap high economic growth. According to the sessional paper state corporations in Kenya are characterized by reduced productivity, inefficiencies, and transparency and accountability issues towards delivering desired results over time. The Kenyan Vision 2030 aims to make Kenya a middle income country, newly industrialized, through providing quality life for all its citizens (KNBS, 2008). Since corporations are very crucial for economic prosperity it is strongly suggested that proper management strategies be carried out in these organizations to improve their performance (Olayo, Simiyu, & Mukulu, 2018).

Due to the position held by Corporations in Kenya being a cornerstone of socio-economic agenda, there has been great concern of their performance (Kobia & Mohamed, 2006). As per the Productivity Policy Report (2010), contribution of corporate organizations in Kenya has stagnated at 12% for the last decade. This stagnation can partly be explained from concentration on a few commodities, namely the processing of food commodities and refining of petroleum products. Development of the Country has been possible through the major role of provision of public services by state corporations. Many Kenyan state corporations have

experienced major performance challenges as witnessed by some of the following commercial state corporations; Kenya Railways Corporation, Numerical Machining Complex (NMC), Kenya Planters Co-operative Union, refurbished New Kenya Co-operative Creameries Limited and all the Government owned Sugar companies that continue to post very poor performance; due to weak management, these include Chemelil, and Sony Sugar companies. This trend makes state corporations fail to accomplish their targeted performance (Koech, Namusonge & Mugambi, 2018)

State corporations are strong entities in Kenya and very vital organs to promoting development. They perform varied functions: spanning manufacturing through service provision, environmental conservation to education and training as well as research and Maritime. State corporations is expected to earn very high Gross Domestic Product to Kenya, provide employment opportunities to both the formal and informal sectors of the economy (RoK, 2013). Commercial state corporations are state entities charged with the responsibility of revenue generation or profit generation. State entities were instituted with the anticipation of earning surpluses to realize societal goals and production of goods and services considered crucial for development. They are also deemed necessary for engagement in projects that demand large capital expense, those services that though they are vital but are not impressive to the private sector (Muriuki, Iravo & Karanja, 2016)

1.2 Statement of the Problem

Public organizations have repeatedly been faced with the need to change in order give more efficient and better services to their citizens. In the ever changing business environment organizations tend to look for new opportunities on the market where they can develop and maintain their competitive advantage and outdo their rivals. . According to Muriuki, *et al*. (2016) organizations mostly focus heavily on the performance contract thereby neglecting many aspects of strategic change interventions which are embodied in the implementation process. Rumelt (2011) stated that only 10% or less of suitably formulated strategies get effectively executed. Cobbold (2010) further in his study noted that 80% of directors interviewed who had the right strategy only 14% of them thought the strategies were well implemented.

State Corporations play an important role in enabling economic and social conversion of economies where they establish their operations, improve the delivery of public service in addition to creating goods and extensive job opportunities in various fields, while being vital in building of strong international partnerships (RoK 2013). A report by The Public Investment Committee (PIC) indicated that; from the one hundred and thirty (130) reports scrutinized by the Auditor General it was only twenty three (23) State Corporations that were viable. The report released by the Government for 2011/2012, eleven (11) commercial State Corporations incurred losses in comparison with twelve (12) in 2010/2011 and sixteen (16) in the period 2009/2010. The loss accounts for 21%, 23% and 31% respectively for commercial entities owned by the Government. According to Miringu (2011) state corporations in Kenya have experienced a series of challenges leading to some of them winding up or undergoing privatization. Additionally, in 2011 /12 financial year a total of eleven commercial state corporations made losses (RoK, 2013).This is opposite to expectations because Corporations restructuring has been going on for purposes of improving service delivery and performance. This was encouraged by the fact that the state corporations have been underperforming and the public have demanded for better service delivery (Lankeu & Maket, 2012).

The New Public Management (NPM) as one of the change programs was brought forward in order to bring up a performance-oriented culture where the needs of both government and citizens are catered for through enhanced delivery of services. These public services are geared to bring down poverty, uphold good governance and improve livelihoods of citizens as a result public organizations were to operate in a more efficient and effective manner. (RoK, 2013). This however has not been realized. As per the sessional paper (2014) of the Government of Kenya on reforms and operational efficiency of Ministries, established that the failure to realize effective change implementation was as a result of low adoption of strategic change practices among ministries in Kenya. The State corporations Advisory Committee in consultation with the office of the president released guidelines on terms and conditions of service for the state corporations in November 2011 emphasized that state corporations must embrace and practice modern business practices.

According to East (2011), in the highly demanding business world today, an organizations competitive edge depends on the strategic changes it undertakes, many strategic alteration specialists pledge to the view that amend is an everyday occurrence in an organization; that there is no such obsession as the status quo in a business that needs survival. Experiencing such a challenging competitive global and regional context, it is evident that state corporations in Kenya must implement the right change strategies in order to improve productivity and effectiveness in their organizations. Every business organization today despite the size, capital size and their market niche is affected by intense competition as a result of strategic adaptability and flexibility brought by globalization and other factors (Jaros, 2010). There was still a need to boost strategies to achieve the sustained 10 percent desired growth rate as articulated by Vision 2030.

Njuguna and Muathe (2016) stresses that Organizations are continually confronting challenges and that in order to continue being successful and yet competitive, they have to frequently relook their structures, processes, strategies, operations, policies and culture in place. In Kenya, many studies (Kakucha,*et al.*,2019;Kihara, *et al*,2016; Kibicho, Iravo & Karanja,2015; Chiuri, Gakure & Waititu, 2015) have been conducted on influence of Strategic implementation on some organizations, but failed to address commercial state corporations. For instance, Kakucha *et al* (2019) in their study addressed determinants of Strategic Change Management in Mombasa County.

Studies that dealt on State corporations (Githaiga, Namusonge & Sakwa, 2019; Muriuki, *et.al.* 2019; Olayo *et al.* (2018); Sasaka, Namusonge & Sakwa, 2016; Komora, Wario & Odhiambo, 2016; Goga (2014), Mugambi & Ngugi, 2016; Miring'u, 2011) concentrated on different issues other than strategic change interventions and performance among commercial state corporations. Hence, these studies failed to identify the strategic change interventions of technology adoption, dynamic environmental scan, participatory stakeholder and adaptive organization as proposed by the Presidential taskforce of 2013 that will improve the performance of commercial state corporations in Kenya. The current study was undertaken based on the background given to bring knowledge in understanding and also addressing the

research gaps through empirical evidence of the influence of strategic change interventions on performance of commercial state corporations. These organizations have a great potential for improvement of profits and productivity.

1.3 Objectives of the study

1.3.1 General objective

The general objective of the study was to establish the relationship between strategic change interventions and performance of commercial state corporations in Kenya.

1.3.2 Specific objectives

The study was guided by the following specific objectives:

1. To establish the relationship between technology adoption interventions and performance of commercial state corporations in Kenya.
2. To determine the relationship between dynamic environmental scan interventions and the performance of commercial state corporations in Kenya.
3. To assess the relationship between participatory stakeholder involvement interventions and performance of commercial state corporations in Kenya.
4. To examine the relationship between adaptive organization structure interventions and performance of commercial state corporations in Kenya.
5. To determine the moderating effect of Board Composition on the relationship between Strategic change interventions and performance of commercial state corporations in Kenya

1.4 Research Hypothesis

H_{01}: There is no significant relationship between technology adoption interventions and performance of commercial state corporations in Kenya.

H_{02}: There is no significant relationship between dynamic environmental scan interventions and performance of commercial state corporations in Kenya

H_{03}: There is no significant relationship between participatory stakeholders involvement interventions and performance of commercial state corporations in Kenya.

H_{04}: There is no significant relationship between adaptive organization structure interventions and performance of commercial state corporations in Kenya.

H_{05}: There is no significant moderating effect of board composition on the relationship between strategic change interventions and performance of commercial state corporations in Kenya.

1.5 Significance of the Study

This research is of great importance due to the fact that it identified the strategic change interventions for commercial state corporations in Kenya. Commercial state corporations play a vital role in contribution towards Gross National Income. They are critical in transforming an organization to achieve competitiveness. The significance to stakeholders would be as follows:

1.5.1 State Corporations

The study would be very critical to Management of the commercial state corporations in provision of empirical research information which would lead to better change practices that are geared towards improving their performance. The study would help them to have a better understanding of the strategic change interventions that this study has statistically confirmed which affect the performance of commercial state corporations.

1.5.2 Researchers and Academicians

The study has contributed to the limited body of local literature with respect to the strategic change interventions for commercial state corporations. More specifically, the study has advocated on how among other factors, technology adoption, dynamic environmental scan, participatory stakeholders involvement and adaptive organization structure interventions influence performance of commercial state

corporations in Kenya. The study findings can also be used to explore and conduct further studies in public organizations so as to further generalize the issues contained. The findings will significantly contribute to the prevailing body of knowledge on strategy management which imminent researchers would use as reference in their future studies.

1.5.3 Policy Makers

This study would assist those in charge of policy making to re-examine existing policies on strategic change interventions and bring in new aspects that are in tandem with current trends. Such policies would bring forth an improvement of the management of commercial state corporations hence encourage economic growth in the country. The study would thus guide on best ways to develop best strategies and adopt best strategic change interventions that would help organizations remain competitive.

1.5.4 Government of Kenya

Proper strategic change interventions in the commercial state corporations will assist in improving performance hence increasing their competitive edge internationally. The findings would influence the enhancement of strategic change interventions through the scrutiny of the analysis. The analysis would enhance national government in forming a rich base of information during budget disbursements, any future collaborations and other emerging issues which could be brought forward to commercial state corporations.

1.6 Scope of the study

Strategic management is involved in various aspects of extensive knowledge. This called for specialization of a smaller area of the influence of strategic change interventions on performance of commercial state corporations in Kenya. The fifty five (55) commercial state corporations constitute two types: purely commercial and those with strategic functions according to the reclassification of corporations of October 9th, 2013 when the Presidential Task force on Corporations appointed by the

President was mandated to make conclusions on reviews that were to tackle challenges in various sectors of the economy to achieve key priorities of the Government.

The study was carried out on Commercial state corporations because of the major task of enhancing revenue to Kenya. They are charged with responsibility of economic and social roles in creating job opportunities, creation of goods and services and also building and cementing international relationships. Therefore, these corporations have the capacity to enhance productivity and even profits if managed well. The one hundred and forty four (144) respondents from the sample of forty eight (48) of the commercial state corporations selected for the study were obtained from the following three management positions: CEO's, Finance Managers and Human resource Managers. The key variables that the study limited itself to are; technology adoption, dynamic environmental scan, participatory stakeholder involvement, adaptive organizational structure and composition of Board members as the moderating variable.

1.7 Limitations of the study

In the course of the study, several limitations were experienced. One of the key constraint was information confidentiality as several respondents apparently withheld vital information crucial to the realization of the research objectives. The researcher however assured the participants that the study was solely for knowledge purpose. An introductory letter from the university to prove authenticity was presented by the researcher to the respondents that the study had no ulterior motives but was only intended for knowledge purposes. The sampled commercial state corporations was another aspect as they were spread out in several Counties thus leading to a challenge in collection of data *vis-a-vis* limited time. The researcher however, hired several research assistants to address the issue and eventually assisted to administer data collection instruments from the targeted respondents. At the data analysis stage, the relationship in the regression model of the study was presented as either strong or weak, though the causes which led to the strengths/weaknesses were not accounted

for. A causality study to account for the reasons behind the noted strength/weaknesses is hence recommended by the researcher.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Theories on strategic change interventions were reviewed in this chapter. The discussion was on the theoretical framework of strategic change interventions which include technology adoption, dynamic environment scan, participatory stakeholder involvement and adaptive organizational structure. These independent variables were linked to the dependent variable; performance of commercial state corporations through a conceptual framework. Summary of the chapter are given and research gaps identified.

2.2 Theoretical Framework

The theories and model that will be used in the study include the resource based theory, agency theory, systems theory, environment dependency theory and Kurt Lewin's change model.

2.2.1 Resource Based Theory

The resource based theory can be attributed to Selznick (1957) as noted in Olayo, *et.al*. (2018).The theory's perspective is to create a continuous competitive edge through distinct packaging of the resources of an organization. The theory also explains the internal sources which give the firm a competitive edge (Kraaijenbrink, Spender & Groen, 2010). The perspective based on resources is mostly concerned with the source or nature of strategic ability and is increasingly becoming prominent in strategy literature as an explanation to an organization's identity (Theriou & Chatzoglou, 2009). The critical aspect of how choices (which are strategic) in a firm are made is emphasized by the resource based theory. The firm's activities endeavor to maximize profits through the development and deployment of its key resources. The theory's contribution to the progress of competitive advantage theory cannot be more gainsaid.

Some of the resources are human, physical, financial, information and technological. These could either be considered as scarce, valuable or indispensable (Crook, Ketchen, Combs & Todd, 2008). Organization performance according to the competitive advantage theory improves when the different resources combine to implement the organization's objectives. According to the theory, competitive advantage is attained when a firm is able to implement strategies its competitors are incapable of imitating. Resources which give firms' a sustainable competitive advantage over their rivals should exhibit qualities of being non-substitutable, non-imitable, strategic, appropriate and scarce (Ling & Jaw, 2011).

The resource based perspective postulates that sustained competitive advantage, relies on availability of the key resources to the organization (Alas and Sun, 2007). Resources as such are only valuable if they put a firm effectively and efficiently in a position that generates market share of value to the market sector. It's prudent therefore to manage an organization's resources to attain specific capabilities that create or add value if competitive advantage is to be achieved (Sirmon, Hitt, and Ireland, 2007). For an organization to maintain a sustainable competitive advantage, the theory is a critical strategy as it enables the delivery of returns to shareholders on a long term basis (Tom, 2010). Resources as such play a critical role in the running of any organization implying their allocation should be carefully done to prevent wastage and misappropriation (Ganley, 2010)

Given that firms operate in a dynamic environment, the development capabilities that are also dynamic can synergize both internal and external resources thus making it unique in the creation of competitive advantage for a firm. The firm's internal strength are thus combined in the use of resource based theory with strategy formulation to achieve a competitive edge for the firm (Njuguna, 2009). The theory emphasizes that firms can keep ahead of their rivals through the development of unique resources which cannot be copied by the competitors. The resource based theory of a firm suggests that an institution is capable of developing capabilities that are peculiar to it which are only unique to its management and organization structure. It is imperative for a firm to be proactive and unique ahead of its competitors or else

it can easily be pushed out of business if its competitors have a head start (Njeru, Namusonge & Kihoro, 2013).

The level to which dependency and uncertainty on the environment are determined by the resource dependency theory, will depend on the extent it acts as an organization's drivers by embarking on a variety of strategies to improve an organization's performance through the control of its competitive environment. (Nickols, 2006). Dealing with uncertainties in the environment is key to any business's success hence the essence for an environmental resource dependency perspective. It's the resources available to an institution which may make it unique hence the need for wise allocation of resources.

Even if allocation of resources isn't easy, acquisition of resources required by an institution can only be attained through its good practicing. Resources such as people, capital, and technology are acquired which are critical for an organization's growth and performance. Labour is a critical resource hence the need to take good care of knowledgeable and hardworking people in an institution. Within a competitive business environment; only knowledgeable people should be assigned jobs as they would make the difference between business success and failure (Ganley, 2010).Through the theory, managers can look at major concerns such as implementation of new technological adoption and see how it can be rolled out. Dynamic scanning of the environment is crucial and the theory enables its recognition by commercial state corporations as a critical resource to be relied on to attain a competitive edge.

Through environmental scanning, organizations can avoid barriers and aim at the future to improve their performance. In this study, organizational structure, stakeholders, environment and technology constitute the resources which are utilized by commercial state corporations to achieve a competitive advantage. Board diversity which is a critical element of Board composition is also a resource as its vital in strategic decision making, due to the vast experience and knowledge they bring while executing their strategic obligation (Wagana & Nzulwa, 2016).The board's critical role in the provision of expertise is supported by K'obonyo and

Ongore (2011). Prudent utilization of available resources is another way the theory can be utilized to assist the board members (Koech *et al*., 2018).

The Resource based was adopted to reinforce the present study. Given the highly dynamic and competitive business environment, an organization requires to mix resources in the best efficient manner. The corporation will hence have a competitive edge and hence prosperity in the market. The study assumed that commercial state corporations have to mobilize their pertinent resources key among which are stakeholders, technology, adaptive organization structure in order to achieve successful strategy change interventions which in turn would improve performance of commercial state corporations.

2.2.2. Stakeholder Theory

The Stakeholder theory denotes the relationship between State Corporations and the stakeholders. According to Sasaka *et al* (2016) a State corporation strives to give a balance between the diverse interests of the various stakeholders. The theory posits that State Corporations have to be cognizant to the needs of the various stakeholders such as community and customers. Stakeholders of a corporation are identified and stratified in groups which describe and recommend methods through which the management gives consideration to the groups' various interests. The stakeholder theory explains management of firms and why values are important in State Corporations management (Bondy, Moon, & Matten, 2012). The theory strives to explain the relationship of the external environment and behavior of State Corporations within these environments.

This study adopted Friedman and Miles (2006) instrumental approach which is used to explain and describe the attributes and firm behavior, including how the board of directors considers corporate constituencies, how organizations are managed, the management approach to management, as well as the firms' nature. Empirical data is usually employed by the instrumental approach for identification that exists between the achievement of corporate goals and the management of stakeholder groups which are mostly Profitability and efficiency goals.

In his study, Kinyua, Gakure and Gekara (2016) differentiates between derivatively legitimate stakeholders (i.e. those whose status as stakeholders can impact significantly on the organization and stakeholders who are legitimately normative (i.e. those to whom a moral obligation is held by an organization). The stakeholder theory according to Miles (2012) posits the existence of other important parties to whom the state corporation and has a moral obligation to put their prior considerations and add value for them alongside the shareholders or owners as depicted in the traditional model state corporations. Communities, financiers, customers, suppliers, trade unions, employees, governmental bodies, trade associations, political groups, and competitors constitute the other parties. Commercial state Corporations should therefore give consideration to interests of the various groups listed by the stakeholder theory which either affect the state corporation's actions or are affected by it.

The relevance of the Stakeholder Theory to this study is that it gives an inkling of how an organization functions. It emphasizes that for the success of any organization, value for money for its shareholders, financiers, employees, suppliers and customers has to be created. There is hence the need to handle all stakeholders together to ensure their various interests are balanced. Stakeholder theory considers Boards as means of taking keen interests of various categories of stakeholders who interact with the organization. From the theory it can be recognized that the environment that commercial state corporations operate create impact to other organizations which in turn affects other entities as well. The crucial role of the boards and the management cannot be underestimated therefore in ascertaining appropriate interactions take place.

2.2.3 Agency Theory

Mintzberg (2003) observes that Agency theory deals with the role of agents who are charged with formulation of strategies by other stakeholders who have direct control of the firm. Gibbons (2004) refers to the agency theory as a very simple strategic management theory which deals with the principal as the person in charge and the

agent or the worker on the other side. The shareholders are the principals in this case whereas the CEO is the agent, thus explaining the chain of command in business organizations. In this management theory the agent takes decisions and acts on the principal's behalf and is expected to meet the obligations of the principal (Jean & David, 2002). The agent therefore will meet his own interests as well as those of his principal in the organization.

Koech *et al*., (2018) contends that there is need for the agent to create a balance in serving the various interests of stakeholders to enable the organization achieve its objectives. This is because the agent is in charge of all the resources of the organization and the crucial role of strategic management and formulation. The management is linked to various stakeholders including employees, suppliers, customers, trade unions and even the Government by the firm. Proper coordination should be achieved between the management and its stakeholders for the achievement of a common goal. The agent theory is explained as the central approach to managerial behaviour. Krueger (2004) noted that formulation of strategy depends on a team tactic approach which flows from the corporate to functional levels of the organization. For the process to flow all levels of management; top to bottom as well as bottom up should have their inputs.

There should be involvement of all stakeholders by the CEO when formulating strategy for the firm. He should not work alone but need to get input from all levels of management in the organization. Information should be sought in task evaluation during strategy formulation after which the strategy should be proposed to the principals through the board for adoption then the carrying out the task that is strategy implementation as per the agreement for the attainment of competitive advantage (Krueger, 2004).The agent must embrace synergy in his approach from strategy formulation to implementation in the process of involving people across the strata of the organization. Strategic management programmes need the support of management without which they are bound to fail. This calls for the agent to synthesize his own goals with those of the organization (Chesbrough, 2006).

Commercial state corporations in this case are the agents while the employees, customers, stockholders and even the Government are the Principals. There is thus an agreement made between the agent and principal in terms of service and the contract. This indicates that Commercial state corporations are expected to perform as per the agreement in the contract with the various stakeholders (principals). According to the objectives of this study, state corporations are expected to be responsible in portraying good strategic change interventions which will be geared towards better performance. The theory will be very crucial to the public as key stakeholders in provision of important information that shall impact the operations of these state corporations. The involvement will reduce conflicts and delays that are normally very costly in addition to the encouragement of good will and positive cooperation between parties involved. The agency theory stresses the important relationship that is expected to exist between the owners and the CEO's who are expected to ensure success of the organizations as agents of commercial state corporations.

Board members have a crucial role in protecting the interests of the principal through provision of an oversight role . Boards should also reduce conflicts between the agent and principal through their mediating role between the strategic change interventions and performance of commercial state corporations. Though Managers are supposed to be the agents of state corporations, they should be monitored, checks and balances be instituted so that they do not abuse power in the process of their operations.

2.2.3 Systems Theory

Littlejohn a renowned biologist in 1983 developed the System Theory. He defined it as an interrelation of entities with a group of objects to get a whole. The theory mostly concerns itself with interactions and problems of structures, interdependence instead of fixed aspects of objects. The organization is viewed as a social setting that contains people cooperating in a given framework. Within the system resources like people, finances are drawn from their environment and in exchange the products and services they offer are taken back to the environment. Managers need to consider the part played by every section of the organization instead of looking at them as

separate parts. This theory emphasizes the fact that the organization does not only exist in close connection with the environment but the larger system of the community which it serves (Abok, Gakure, Ogutu &Waititu, 2013) .Organizations are open systems which should deal with emerging issues that require workable solutions (Choge, Omwenga and Iravo, 2017).

Strategic change interventions would be very critical in state corporations in terms of steering the institutions to better performance. There is need for all stakeholders in the organizations to comprehend the process and how their own contribution can help achieve the overall organizational goals. Commercial state corporations consists of a system with various groups of individuals including line managers, members of staff, customers and even the Government. The theory considers the interactions and interrelationships among the different stakeholders involved in the organization. The Commercial state corporations system hence should react to influences of the external environment during formulation of business objectives and goals. The organization structure also needs to conform to the dynamic environment for the whole system to operate as supported by Okafor, Kaku and Ozioma (2017) in their study that emphasized the need for a suitable structure in in enhancing performance of organizations. The theory therefore assists in knowing the role of various stakeholders in the improvement of commercial state corporations performance.

In using the systems theory approach, the study recognized that there are many possible roles of governance in the strategic management of corporations. Organizations constitutes different elements that when combined make a “whole”. The major recognizable organization variables, grounded on this theory were technology adoption, dynamic environmental scan, participatory stakeholder involvement, and adaptive organization structure and board composition. The variables as perceived by the systems theory as parts which their coordination would lead to improved performance of the commercial state corporations in Kenya. The systems theory emphasizes the treatment of various parts in an organization together to create harmonious coexistence and successful outcome from the association. If this practice is upheld an issue which would have seemed as a problem initially

facing a single unit would be part of an intertwined network of similar issues. This theory therefore supports strategic change interventions.

2.2.4 The Environment Dependency Theory

The environment dependency theory postulations are grounded in the open systems theory. Open systems theory refers to the idea that the environmental forces of technology, economic, political and social to a great extent influences organizations. Therefore, the organization's survival depends upon the relationship it has with the environment. External factors are outside the physical confines of an organization and firms do not have control over them. These factors cause turbulence and uncertainty and could have a significant impact on an organization (Burnes, 2009).

The theory posits that it is crucial that the organizations should constantly scan, analyse and evaluate the environment they operate in. The underlying objective behind this purpose is to discover trends at initial stages to avoid future problems to these organizations. This suggests that as Managers in commercial state corporations develop strategic decisions, they will be subject to environmental influences and will need to continuously ensure that any decisions have to consider such influences. Businesses that are not aware of their environment in which they operate are likely to be plunged into some crisis arising from environmental complexities. Hence the managers will take decisions accordingly. Organizations that do not devise new ways to survive amidst the intensive competition or enter the expanding markets late, compute opportunity costs hence seek for different strategies to remain or survive in the competition as confirmed by Kario and Ngugi (2017) who found out that due to the competitive environment, Islamic banking had to change its strategies and introduce new products in order to remain in the market.

2.2.5 Diffusion of Innovation Theory

The theory of diffusion of innovations tries to verify permeation how technology and new ideas diffuses through the various organizational cultures. It was propagated in 1983 by Rogers. According to Rogers, as elaborated by Kang'ethe, *et al.* (2018) diffusion refers to the communication process through which an innovation is channeled to the various participants in a social system over time. Innovation refers to an object, practice or idea that a relevant unit of adoption perceives as new. Adoption of an innovation by members of an organization is usually influenced by four factors: the nature of the group it is introduced to, time, and the communication media used to convey information about the innovation, and the innovation itself.

In adopting innovation, five categories usually stand out: innovators, laggards, early adopters, early majority, and late majority. These categories can be displayed on a standard deviation-curve as follows; initially few innovators take up the innovation by 2.5%, then early adopters account for 13.5% .The group of early majority constitute 34%, the late majority account for 34% and lastly the laggards accounting for 16%,.

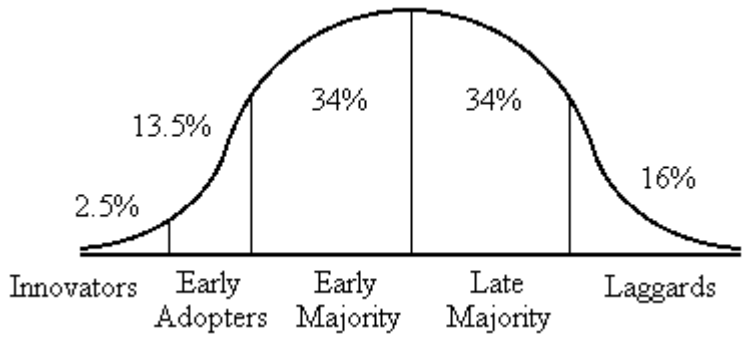


Figure 2.1: Adopter Categorization on the Basis of Innovativeness (Rogers, 2003)

Several organizational attributes can be considered in the diffusion and adoption of an innovation. These can influence the diffusion and adoption of the innovations significantly: the size of the organization, degree of formalization, the interconnectedness of the various departments as well as the degree of centralization within the organization. Diffusion of innovation theory is integral as regards to adoption of strategic change interventions in commercial state corporations as it attempts to discern how and why technology diffuses through the corporations. It will also assist in determining how strategic change intervention is introduced and diffused into these corporations' systems as well as how the top management influences through either acceleration or retardation of the process of adoption. Some of the Commercial state corporations that were the early adopters of innovation are like Kenya Airports Authority, Kenya Pipeline Corporation and Rivatex (East Africa). Sugar firms like Muhoroni and Miwani have been unable to get out of receivership for more than 20 years. They persistently failed to pay sugarcane farmers hence accumulated heavy debts. These corporations are among the late majority in innovations (RoK, 2014)

2.2.6 Kurt Lewin's Change Model

In 1947 Lewin presented the ice model of change. This model has three stages through which the change process takes; these are unfreezing, moving and refreezing. In the unfreezing stage an organization prepares in readiness for a change to take place. In this case the people are taken through preparations for creating awareness of the importance of change to enable them have the will to change. The process of moving is change implementation which entails bringing forth some selective mechanisms. In the refreezing stage organizations make the change stable and sustainable to ensure people don't relapse in doing things the way they are used to (Balogun & Hope Hailey 2008)

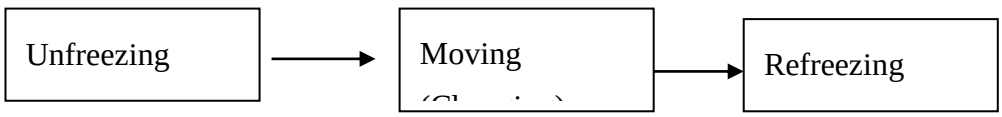


Figure 2.2: Lewin's Ice model for change (Balogun & Hope Hailey 2008)

Behaviour is viewed by Lewis a social scientist as dynamic balance where forces operate in opposite directions. Forces that are external bring change due to the fact that they push to the right direction. Some other restraining forces does not encourage change since they make employees move in opposite directions. Hence the three stage model can bring in shifts to enable the balancing of such forces and movement to right planned position. The first stage according to Blokdijk, (2008) is unfreezing the current equilibrium of the society to bring the aspect of need for change. In this stage the organization reevaluates itself through research and surveys and establishes the need to introduce change. The main challenge could be poor performance by the organization which the management can use to create a state of discomfort to employees such that they see the urgency for immediate change. In such a case the employees will be proactive in supporting the new wave for urgent change and feel uncomfortable with the status quo. People will start to believe and embrace the new direction towards change as long as they are made aware of how the change will benefit them. The organization finally has got to take the last essential stage of refreezing Unfreezing is very important in that it makes people conform to groups and removes inertia.

The first stage towards successful unfreezing involve increase of the driving forces that are geared towards directing behaviour to change from the current state. Secondly there is need to decrease the limiting forces which hinder movement from the current state of equilibrium and thirdly merging the two methods. This can be done through activities such as motivation of stakeholders involved in the change process by taking them through the preparation for change and make them appreciate the need to change, building of trust and appreciation of the need for change, active engagement in knowing challenges and group focused determination of solutions through brainstorming (Robbins & Coulter, 2003).

The second step of changing behavior is movement. According to Lewin it implies moving to a totally new level of equilibrium. There are three steps through which the movement stage can be achieved these are: pleading with employees to leave their current status quo and view the problem from a different perspective and encompass

teamwork in looking for new and valuable information to find a link with the group to the powerful leaders who are supporting the planned change (Chiuri, *et al*., 2015)

Refreezing is the third stage of Lewin's model where the organization seeks for sustainability of the organization once change has been realized and implemented. The stage is important to prevent employees from relapsing back into previous status. The stage can be realized through integration of the new values into the old traditions of the organization. Refreezing stage could also be useful to support new patterns and institutionalize them using mechanisms such as policies and procedures (Robbins & Coulter, 2003). The stage can be accompanied with celebrations to take away the pain people went through the process of change. This will assist them to have the belief that future changes will equally succeed. When organizations want to go through reforms and changes, then its employees who will make the process successful as they are the key stakeholders. Organization reforms require the employees to exercise flexibility and accept new practices brought in and be recognized as part of the change process and reforms(Pearce & Robinson, 2014).The importance of the model is it ensures maximum involvement of all stakeholders from the beginning to the end, This move will reduce resistance by the stakeholders towards change (Chiuri *et al.*2015).

This model is relevant to this study because it explains that strategic change, should be a gradual process and that in each stage of the change processes(Unfreezing, moving and refreezing), different change strategies have to be employed to ensure the success of the strategic change process for the commercial state corporations. The four independent variables are influenced by this model. Further, this theory elaborates that technology adoption, environmental scan, participatory stakeholder involvement, organizational structure, and board composition should be aligned properly to the goals of commercial state corporations.

2.2.7 Higgins 8-S Strategy Implementation Framework

There is need for frequent strategy reformulation and adjustment of elements existing strategy as the business environment becomes more dynamic and more complex. A successful strategy will be achieved when the key components of organization (the 8-S's) are aligned with the strategy that the firm intends to adopt (Nwachukwu, Hieu, Chladkova & Fadeyi, 2019). Continuous revision of their strategies by managers is underlined if organizations are to cope with changes in their environment. It is imperative for organizations to continuously rearrange the eight cross cutting factors in line with the strategy which has been reviewed. The original McKinsey's 7-S framework was reviewed by Higgins (2005) and replaced by the 8-S framework to implement strategies in organizations. Peters and Waterman had developed in 1980's the widely applied and famous 7-S strategy implementation framework. In that study of America's "best managed" organizations, seven interwoven components were identified which managers needed to concentrate on in implementation of organizations' strategies. These components comprise the structure, skills, systems, shared values, style, system and staff which are all interwoven. Higgins (2005) thus further improved the McKinsey"s 7-S model and added the 8th 'S' element (Strategic performance) which is the outcome or derivative of the 7-S's components interaction as contained in McKinsey's 7-S's original framework. Re-Sources also replaced skills as one of the background "S" as an organization cannot effectively implement a strategy without organizing extra resources such as time, information, technology and money.

A manager is able to work more efficiently and effectively with the 8-S's framework in managing the multiple tasks that are linked to strategy execution. Higgins (2005) affirms that managers who take cognizance that execution of strategy is as crucial as formulation of strategy normally assign more strategy execution and thus improves the performance of their organizations. Given the environmental changes that which takes place in organizations from time to time, managers will therefore have to re-adjust their strategies accordingly. The greatest challenge to managers hence comes in matching the 8-S's to the reviewed strategy for the successful execution of strategy and improved performance.

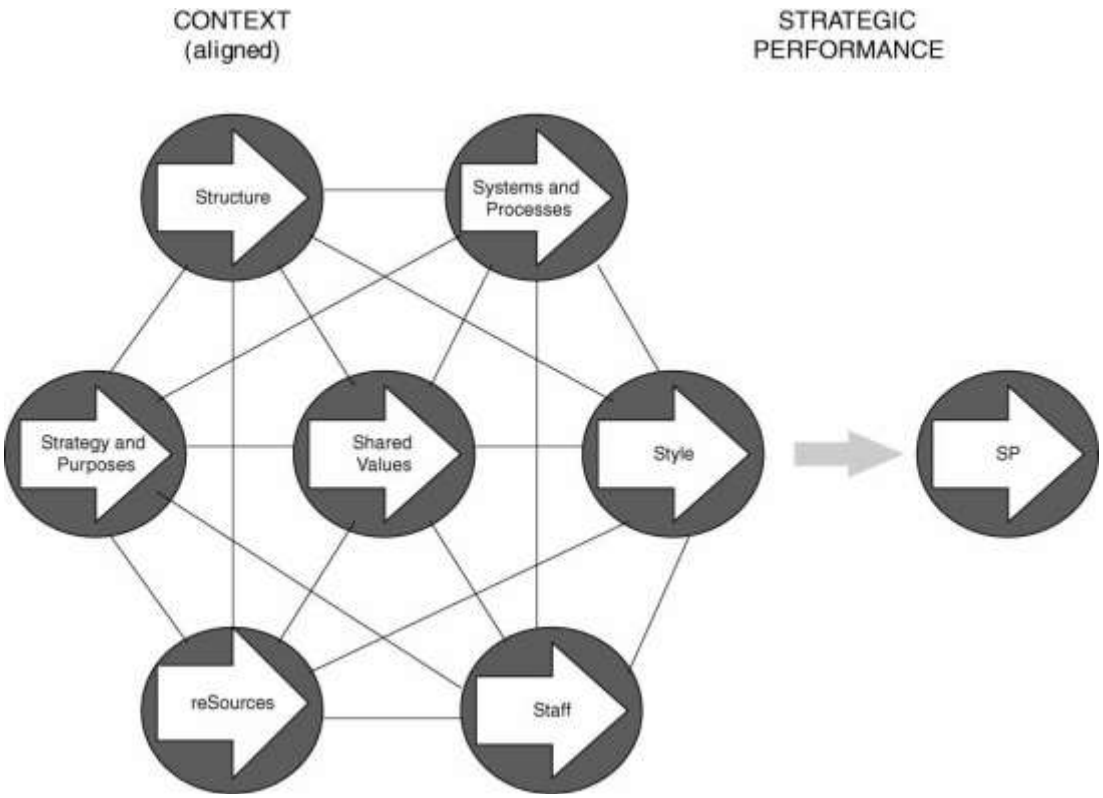


Figure 2.3: Higgin's 8-S Framework (Higgins,2005)

The 8-S model contains eight components one of which is strategy and purpose that stipulates that organizational strategy is usually formulated to achieve a given purpose. Any change in the purpose as encompassed in the organizational objectives, vision and mission appeals for revised strategies for the achievement of that purpose. The revised strategies cuts across multi-functional areas with the intention of integrating the organizational processes to enhance improved efficiency. The second component is Structure which is viewed by the model as comprising of several elements. These elements are; job grouping in a certain order which enables attainment of the objectives, the line of authority when jobs are being performed, the job itself, mechanism used by managers to coordinate so that there is effective supervision of jobs and span of control which shows the ideal number of subordinates a manager can supervise effectively.

The organization structure the third component goes a long way in determining the success of a given organization in its business strategy. Proper decisions have to be made in implementation of strategy in line with job groupings and proper identification, delegating and granting authority for performance of the jobs. Formation of several divisions and departments to execute the jobs, establishment of control mechanisms and appropriate communication to guarantee that jobs are well done and the span of control definition which will ensure that jobs are effectively supervised. One can therefore argue that an organization's structure may enable or deter making of effective decisions in allocation of resources during strategy execution (Nwachukwu *et al*, 2019)

Systems and processes are normally utilized by organizations to enhance in the achievement of objectives. The firm is as such able to conduct its normal activities and apply systems and processes (policies and procedures) in allocation of resources, planning, information and technology, management of human resources, budgeting quality control in critical sectors in an organization .Style according to the 8-S's framework refers to the leadership manifested when relating with an organization's employees or stakeholders as executed by its leaders or managers. It focuses on how colleagues and employees are treated by the managers or leaders in the process of achieving an organization's objectives. Staff are considered by the 8-S model as the required manpower which can enable an organization attain its intended strategic objective. The ideal number of employees needed such as aptitudes, skills, characteristics and background are outlined. It handles aspects such as training and development as well as employees' discipline and promotion among various issues.

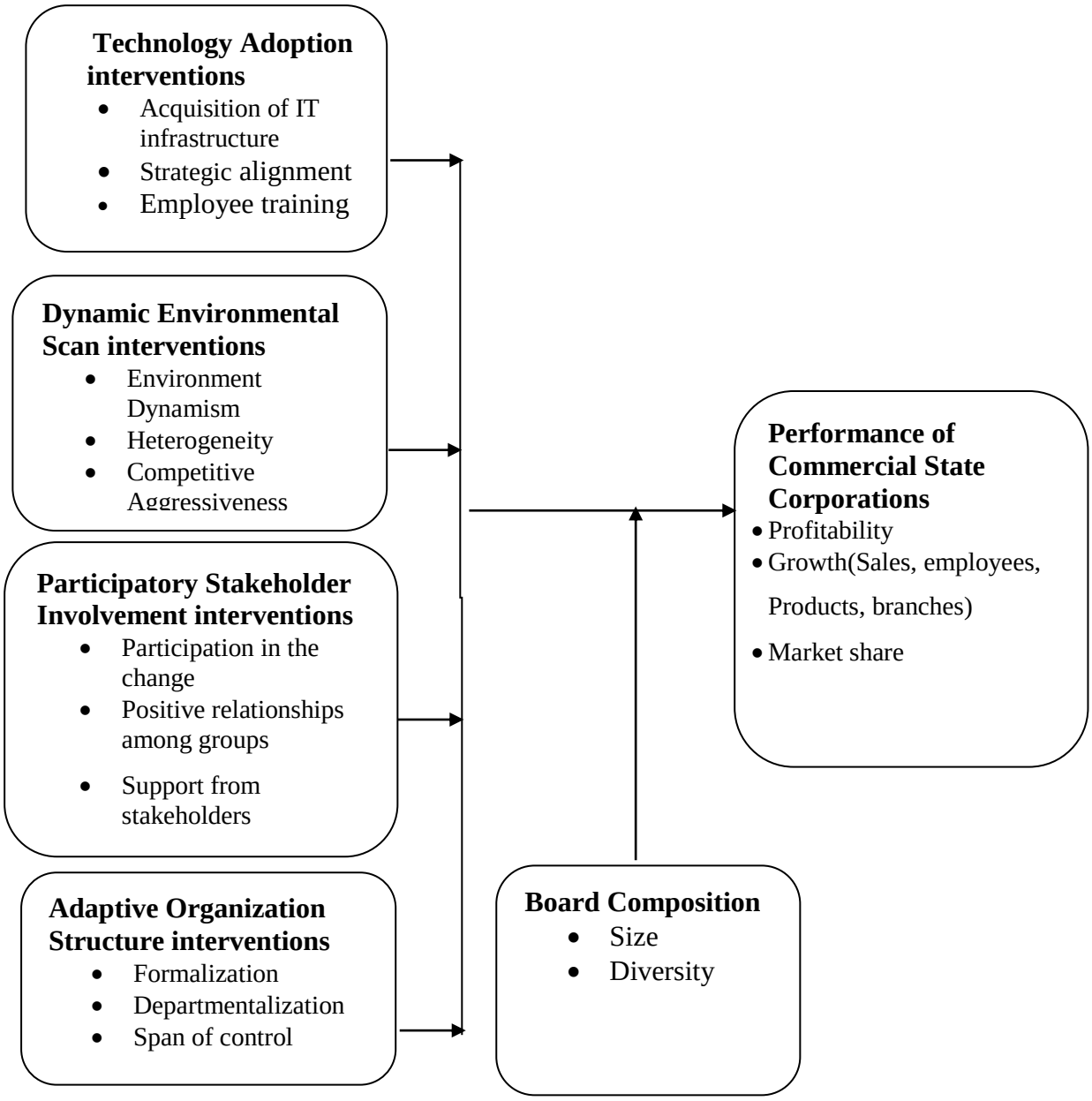
For successful implementation of an organization's strategy, adequate resources are needed. All required resources such as technology, human resources, and other materials should be availed for strategic execution process to be successful. Shared Values refer to the organizational culture that has been instituted for accomplishment of its strategic objectives and purpose. Every organization has unique values which constitute its identity and hence aids in successful strategic execution. Strategic performance which is the last component refers to the outcome obtained by an organization. The performance is best expressed in financial terms.

The model highlights out clearly that the components of strategy execution are interlinked and echoes the idea of system thinking in the process of strategy execution. The model underscores the need of organizational strategy realignment to the dynamic environment to come up with a workable strategy. The model assists managers in the detection of any emerging problem in the system in good time to and finally, the model help managers to detect problems in the system to avert any failures during strategy execution. The model is relevant to this study since it underpins all variables in this study. The framework goes to explains how the 8-S variables work together in a closely aligned relationship. The variables of this study of technology, environment, stakeholders and organization structure are explained clearly by the model .Technology is one of the resources in the model. The stakeholders are explained in the component of staff which considers employees and style which underscores the proper treatment of employees using the best leadership style. The organization structure is very key in strategy execution as it may facilitate or hinder effective decision making in term of how resources are allocated .Lastly the business environment is the main factor that calls for strategic change in the pursuit of the organization to remain competitive.

2.3 Conceptual Framework

A conceptual framework refers to a representation of variables in a study indicating their theorized interrelation (Odhiambo & Waiganjo, 2014). A clearly articulated conceptual framework has the capability and usefulness to aid a study in clarifying subsequent findings (Zikmund, Babin, Carr & Griffin, 2010)

This study's conceptual framework shows relationship between strategic change interventions and performance of commercial state corporations in Kenya. The relationship is depicted in figure 2.2. The independent variables were; technology adoption, dynamic environment scan, participatory stakeholder involvement and adaptive organization structure interventions. The moderating variable was Board composition. The dependent variable was the performance of commercial state corporations in Kenya.



Independent Variables **Moderating Variables** **Dependent Variables**

Figure 2.4: Conceptual Framework

2.4 Review of Variables

2.4.1 Technology Adoption interventions and Organizational Performance

Technology adoption is a very important ingredient for economic growth to business organizations as it enables them to be competitive and ensure their survival in the modern business world (Jabar, Soosay and Santa, 2010). Technology adoption is viewed by Woodside and Biemens (2005) as a resolution that an organization takes to utilize fully innovation in the best way possible. Organizations tends to adopt technology to initiate changes in the management of customer relationships, supply chain management and manufacturing including all essential business operations (Mwangi, Bwisa & Kihoro, 2016) as well as influencing the competitive capabilities in comparison with similar business ventures. Organizations have implemented technology to expand and enhance scope of their operations in production of goods and services. Kario and Ngugi (2017) emphasizes that organizations need to keep on reviewing technology to keep abreast with changes in the business environment.

Acquisition of Technology involves acquiring of new processes of manufacturing goods or delivering services. This includes new forms of hardware such as automation equipment and 'just in time' methods of inventory control, new products and significantly improved products resulting from advances in technology and development in the technology for processing and transmitting information. (Kario & Ngugi 2017). Strategic alignment as a sub variable of technology is the process of ensuring that the technology acquired in the organization have been implemented in compliance with business strategies. The strategy developed must be aligned to the technology acquired. Employee training involves improving the skills of employees in an organization to make them responsive to advances in the technological environment, (Kario & Ngugi, 2017).This implies an organization should train its employees to be able to operate the new technology acquired. Additionally, Nwachukwu and Chládková (2019) asserts that organizations with employees who have requisite skills and are competent are able to execute successful strategies and hence improve the performance of entities.

Despite the fact that quite a number of innovations deal with adding of new services, increasing the ones existing or enhancing service delivery, the organizations success is highly based on how the innovations are implemented to create new market opportunities also for any organization not to fail, its management should be in a state of innovations and be able to adapt to the latest conditions (Kario & Ngugi, 2017). Technology plays a big role as an agent of change to both organizations and consumers. An increasingly key role will be played by technology as connectivity and the need for decision systems intensifies in the business world. Companies in developing countries have displayed peculiar behaviour in as far as implementation and cascading of IT are concerned. This emanates from uncoordinated patterns in the adoption of IT due to eminent weaknesses of the structures and management of business organizations. This scenario has led to dearth in complementarity between IT and weak global effect on performance (Ismail & Mamat, 2012). However, one needs to exercise caution as radical adoption processes have in some instances led to disruption in organizations thus reducing their competiveness (Knights & Vudurbakis, 2005).

Youssef, Hadhri, and M'Henni (2014) in their study found out that organizations with employees who are qualified have better adoption and use of IT tools than organizations with employees who are less qualified. In essence IT adoption requires skilled labour. Their results were in tandem with earlier studies which had established the existence of close correlation between the skills and IT competency of workers (Arvanitis & Loukis, 2009). Investment in human capital has been the main determining factor for IT (Mughal & Diawara, 2011). This argument has also been supported by Dimba (2010) who found out that that there is a significant impact of training on performance of organizations. Likewise Niazi (2011) is in agreement that skills and abilities of employees are enhanced through training.

According to Darbanhosseiniamirkhiz and Wan Ismail (2012), a company registers high performance as a result of adopting technology that befits its organizational structure and employees. Organizations that are naturally reactive to acceptance of modern technology have no structured way to exercise change and will take a longer period when compared to organizations that are more flexible. It's crucial that

employees are prepared for its implementation before the commencement of the adoption to enable realization of the intended goals. Kario & Ngugi (2017) pointed out that improved productivity is achieved when employees are imparted with the appropriate skills while at the same time leads to an improvement in the working environment.

For technology adoption to be effective, employees' support is prerequisite. The effects may be disastrous if technology is implemented before seeking employees support (Darbanhosseiniamirkhiz & Wan Ismail, 2012; Barua & Islam, 2009; Kario & Ngugi, 2017). Human resource capabilities, behavior and attitude are believed to give a competitive edge and make it more distinct compared to the rivals of an organization (Cascio, 2010; Noe, Hollenbeck, Gerhart & Wright, 2008). Perceived benefits are usually accrued through the adoption and use of technology. Adoption of technology can only be implemented if the people involved are aware of the advantages of technology over existing practices and systems. Scholars (Chong & Pervan, 2007; Al-Qirim, 2008) have alluded that expected benefits category is one of the most influential predictor in the success of adoption of technology. It can be noted that literature review in emerging countries revealed the development of technology competency follows an imitation from imitating to innovation. (Bell, 2006). Though some of the researchers contend that assimilation of technology is greatly influenced by the age of the organization (Simpson & Doherty, 2004), findings by Li, Lai and Wang (2010) disclosed that relationship between the two variables was not significant. Cagna (2007) asserts that organizations consider technology as a way to create improvement in their performance. Onwuka and Eguavoen (2007) also supports that for an organization to be a key player in the world market it should have extensive use of technology. Several factors are perceived to influence the technological implementation and adoption decisions of organizations. These factors can be categorized under environmental, technological and organization in the context of an organization (Oliveira & Martins, 2011).

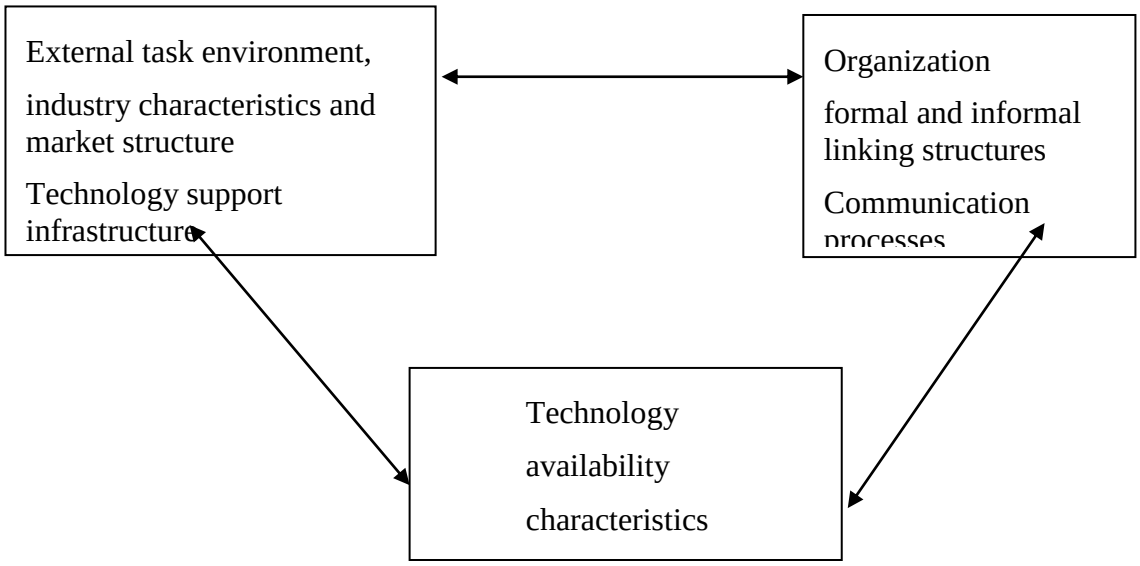


Figure 2.5: Technology, organization, and environmental framework (Oliveira & Martins, 2011)

2.4.2 Dynamic Environmental Scan interventions and Performance

The monitoring, evaluation, and distribution of information to crucial individuals within the organization from the internal and external environment, is what Kazmi, (2008) refers to as environment scan interventions. The effects caused by business environment factors on a firm's performance have undergone scrutiny in several empirical studies and theoretical contributions. Yoengtaak (2009) in their research on 'environmental factors effect on a firm's performance', identified that; 'a firm's performance is positively influenced by dynamic environment, heterogeneity and competitive aggressiveness'. Dynamic environments would most possibly provide several aspects such as varying conditions that transfer bases for competitive advantage and provoke new explorations of sources of advantage.

Environment Dynamism according to Barua *et al* (2016) refers to the apparent uncertainty in a firm's market due to constant changes. Dynamism in an industry may lead to emerging opportunities where new developments due to economic, political, social and technological changes occur which can enrich an organization's niche. Such aspects as changing conditions are provided by dynamism which supersede the basis for competitive advantage thus provoking search for sources of advantage. Consequently those organizations that emphasize strategic change

interventions look at their environments as dynamic to enhance the organizations' financial performance.

Environment heterogeneity as described by Zahra, Gedajlovic, Neubaum, and Shulman (2009) refers to the presence of numerous components served by an organization with varying needs and characteristics. This refers to the different attributes or segments of the environment which are relevant to an organization. For example, two competing firms serving the same customer groups within a similar industry may respond differently to the same environment. One may perceive it as adaptable (manageable) whereas another may perceive it as complicated and unmanageable. The perceptions may form due to the organizations' involvements with their exterior environments. **Competitive Aggressiveness** on the other hand occurs where firms even with intensified rivalry from their competitors fail to take necessary measures or on computation of the opportunity costs due to late entry into the growing markets and try to salvage the situation to remain competitive for their survival (Birkinshaw, Hood & Young, 2005). For firms to gain a niche in the market, they have to adopt an aggressive competition attitude by utilization of market strategies such as promotion of price variation among a few.

Stable environments are only known for reinforcing the current sources of competitive advantage hence provide limited opportunities (Martin & Osberg, 2007). An organization may decide to change its products by intensively advertising and creating a marketing niche when faced with unfavourable environmental conditions in the market. In case the environment continues being hostile, organizations may opt to consider new business ideas to add to the existing ones through joint ventures, mergers and product diversification and extension hence better performances (Katz & Page, 2010). In her study of change management strategies and performance of commercial banks in Kenya; Kario and Ngugi (2017) found out that due to the competitive environment, Islamic banking had to change its strategies and introduce new products in order to remain in the market.

Organizations that do not devise new ways to survive amidst the intensive competition or enter the expanding markets late, compute opportunity costs hence

seek for different strategies to remain or survive in the competition. Two organizations may be in competition in the same industry with similar customer groups but their perception of the environment may be quite different. One organization may have the perception of a very simple and manageable environment, while the other as a composite and uncontrollable environment. (Birkinshaw, Hood & Young, 2005).

Adaptation to both internal and external environmental changes should continuously be practiced by organizations given that evolution and change management of organizations are taking place. The organizations should thrive to achieve harmony within economic, political, technological and legal spheres which constitute the external environment; vis a vis internal environment comprising of structure, resources, culture, leadership style and mode of exercising power (Bermig, 2010). Organizations need to identify factors that lead to its success since if goals of achieving these factors are left out then failure of the organization is inevitable. A crucial success factor is leaving out a critical performance area for achieving consistently increased productivity. The environment where businesses operate has been changing. This calls for embracing of good practices corporate governance by State Corporations (Koech *et al.* 2018)

Organizations operate in environments that have become very complex, turbulent, and unclear and highly unpredictable (Van Tonder, 2004). In turbulent situations, it is envisaged that only those organizations that are able to respond effectively and quite rapidly will be able to survive (Burnes, 2004). Environmental changes are as a result of rising global competition, innovations in technology, restructuring of economies, changes in labour force, international regulations, shifting patterns of stakeholder and customer expectations and increased dilemma of dealing with environmental impact on organization. Organizations therefore are called forth to exercise change so that they may remain in equilibrium with the changing environment. It has been confirmed that whereas the future may unclear, organizational managers should be highly alert and responsive to the rapid changes or else their future in the society will be at stake (Harper, 2004).

Palmer and Dunford (2008) ascertained that increasingly more and more organizations including even the public realm have also found themselves in a highly turbulent environment where the introduction of successful strategic change interventions has become a necessity to remain competitive. The environment has thus become a determinant factor in running and operating of organizations but as Moran (2010) observes, what currently comprises the existing environment has no acceptable definition. A definition that is workable is one which brings in closely the variables of the environment such as political, economic and social factors which do influence organizations. These play a crucial role in strategic change interventions. Environmental scanning interventions is very significant in ensuring a balance with changes taking place in the business world. Scanning discloses those factors that involve opportunities and threats to an organization's entire objectives. Monitoring an organization is important because it enables putting in place relevant strategies to check market changes. Also scanning aids in giving appropriate inputs that are required in the formulation and subsequent implementation of potential marketing strategies (Oladele, 2006).

There are two types of environment; external and internal. External environment describes the aspects in the remote, industry and operating environments. The aspects hence form the basis of the opportunities and threats that a firm faces in its competitive environment. Pearce and Robinson (2007) as stated in Chiuri *et.al* (2015) observes that a group of external factors influences an organization's preference in terms of its direction and eventually the internal processes and organizational structure. The set of factors which constitute a complex, diverse structure that consists of a series of exogenous variables matched by the internal variables' resources (endogenous) of the organization is what is referred to as the external business environment. It includes all indirect factors that have long term and weak intensity that generate business opportunities for the organization, conversely it includes factors that threaten or forces the organization to adapt with indirect influence. Macro environment constitutes of the demographic, economic, technologic, cultural, politics, institutional and the natural geographic environments.

In the analysis of the external environment, the PESTEL framework is a useful tool. PESTEL stands for political, economic, social, technical, environmental and legal factors. Political factors represent the way and the degree to which a government influences the economy and a certain business or company. Political factors are described by specific areas including labour law, tax policy, tariffs, trade restrictions and even environmental law. Economic factors consists of areas unique to economy and are directly affected by economy or included by economy in areas such as inflation rate, interest rate, economic growth or exchange rates. Social factors mainly refer to demographic aspects which consist of factors such as population growth rate, cultural aspects, age distribution and health consciousness. All these areas can greatly influence a business or company, which makes them an extremely important part of the PESTEL analysis.

Technological factors imply mechanization, incentives, the rate of technological change and Research and Development activities. They greatly influence other issues which include efficient minimum production level, costs, quality and outsourcing decisions. Legal factors denotes all laws linked to an organization and all laws related to its operations such as consumers law, discrimination law, antitrust law, and health and safety law. Environmental factors constitutes all aspects directly connected, influenced or controlled by the surrounding environment. The PESTEL analysis involves careful regulation of all these factors to find out to what extent they influence organizations.

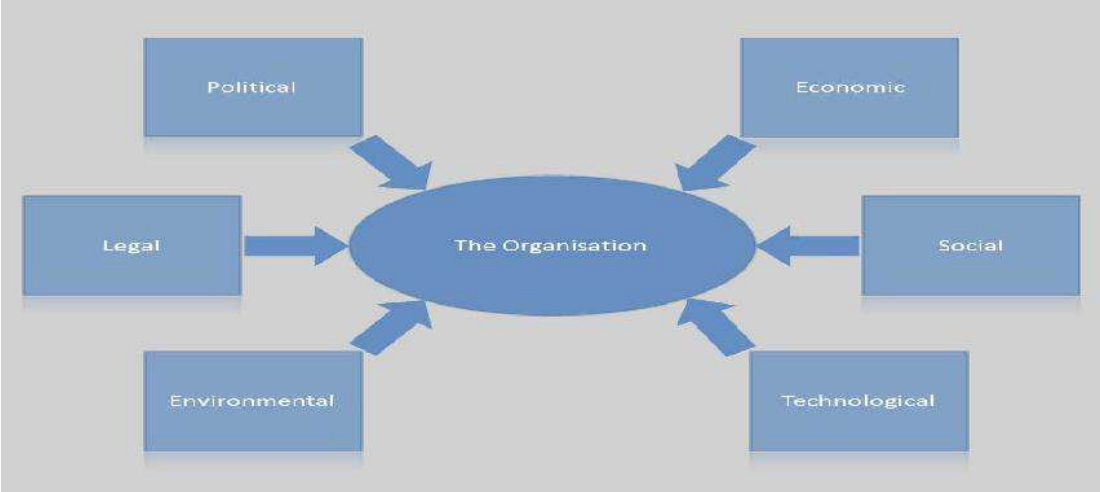


Figure 2.6: PESTEL Diagram

Internal environment comprises of all endogenous elements that are in an organization, which to a large extent are affected or are controlled by it entirely. All questions related to resources in a study on the internal environment should be able to answer and offer solutions to issues on resource management and are the prerequisite in coming up with a marketing strategy (Claudiu, Andrei, & Gabriela, 2011).Technological resources, financial resources, physical resources, information resources, human resources constitute those elements which are part of the internal environment existing within the organization. Organizational resources analysis is the frequently utilized instrument in analyzing internal environment. Figure 2.5 indicates the role held by organization resources as the initial point in coming up with any organization's marketing strategy. Another notable factor is how a competitive advantage can be developed through an organization's capabilities and resources.

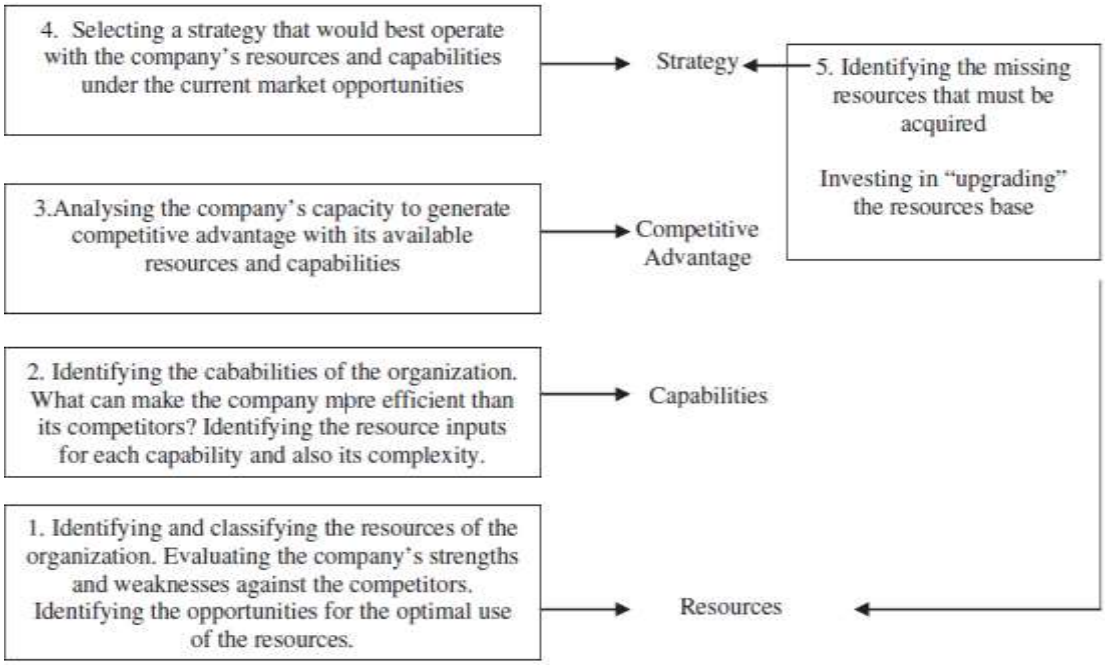


Figure 2.7: The use of the organizational resource analysis as an instrument for the internal environment analysis (Claudiu, *et al.*,2011)

2.4.3 Participatory Stakeholder Involvement interventions and Performance

Stakeholders are considered to be the entities that are most affected by an organization's various undertakings. Friedman and Miles (2006) argued that organizations should consider the interests of stakeholders because they influence the performance of firms in various ways. Mitchell and Cohen (2006) highlights that stakeholders bear some risks as a result of their direct or indirect investment in a particular organization. A firm is therefore an interrelationship of various stakeholders who influence the organization both externally and internally. Enterprises implement stakeholder management practices to enable them meet their stakeholders' expectations (Leonardi, 2011).

Participation in the change occurs when stakeholders take an active role in the process of implementation or strategy formulation. The participatory process is critical especially where stakeholders act as lead implementers (Keter, Iravo & Sakataka, 2018).Support from stakeholders occurs where stakeholders give their unequivocal backing. (Keter *et al*, 2018) reiterates that participants' explicit

involvement may be viewed by the different social partners as part of a continuous association between those affected by issues. Techniques involving stakeholders should not be looked at as public relations initiatives, winning approval, or image-building for ad hoc decisions taken. The relevant stakeholders in an organization must be involved in the strategic process throughout to invoke their acceptance for the organizational activities and policies. Relationship among Stakeholders refers to the invocation of positive relationship process among stakeholders. This is done through a deliberate effort by balancing an organization's varied interests. This enables minimization of conflicts in organizations thus prompting support for successful change initiatives that are sustainable.

There is normally interdependence between stakeholders and organizations for fulfillment of their goals (Johnson, Scholes & Whittington, 2008). Customers, local communities, members of staff, suppliers, shareholders, the media, members of the public, business partners, future and past generations, past generation, competitors, NGOs, Government and other regulators are identified as stakeholders (Friedman & Miles, 2006). Stakeholders are thus key participants in organizations and are normally very keen in the activities of the organization in relation to the previous, current and future operations (Pearce & Robinson, 2014). The environment is therefore monitored at all times by stakeholders.

There is usually so much politics due to the existence of diversified groups of stakeholders who have conflicting interests. Those involved in making decisions should be cognizant of the fact that political behavior normally is responsible for unsuccessful decisions consequently leading to poor performance. Political tactics need to be diffused if sound and successful decisions are to be made (Elbanna, 2006). Political diffusion of power could be achieved through creation of a balanced power structure where there is a distinct role to be played in decision making by all stakeholders. This means that a distinct separation for instance of the role of the board chair and the CEO needs to be made (Mori & Munisi, 2009). Enz, (2008) observes that strategies for stakeholder management for instance collaborating, educating, defending, leading and motivating of stakeholders should be developed for organizations.

Corporate governance deals with the provision of formal requirements with boundaries for development of strategy. Notwithstanding this, stakeholders' expectations should be understood in detail and also how they differ from each other and how they are likely to seek influence over the purpose and strategies of the organization (Johnson *et al.* 2008). Management must give employees a clearer direction of goals if an organization should improve its performance. Organizations should embrace participatory management practice which takes into consideration the involvement of subordinates and their superiors in information processing, decision making as well as problem solving endeavor. A sense of belonging is normally enhanced if employees feel that they are genuinely accepted by management (Elele & Fields, 2010).

According to Mokamba (2015) when stakeholders becomes proactive, they will be motivated in working towards the improvement of the organization as well as provide strong incentives to employees and management to achieve organization's state vision and mission. Gaturu, Waiganjo and Okibo (2018) in their study found out that stakeholders provide full support of various strategies when they are fully involved from the formulation stage. Employees also as part of stakeholders need to understand what the organization seek to accomplish and what role they are to play as employees in achieving the goals. Employees need to have a clear focus on outcomes and ensure they are not losing sight of their endeavours to meet their goals.

The moment employees comprehend an organization's goals, and understand what they are expected to do, they usually give their full backing. Ruch-Ross, *et al*. (2008) state that individuals who work alone are less likely to achieve much than those who synergize towards the same objective and goal. Rausch (2007) asserts that to enable appropriate participation in making decision and planning consideration of who should participate, when and how, ensures that all stakeholders are competent. Also there is need to ensure that strengths of individuals are utilized fully and that there is appropriate coordination that will encourage cooperation by all parties involved.

Key stakeholders with various organizational groups that are backing for change interventions need to be identified and proper planning on committing them should

be done. This can be achieved through force field analysis as presented in figure 2.4. The main goal of the analysis is to get forces that support and those that resist change. (Santalainen, 2006)

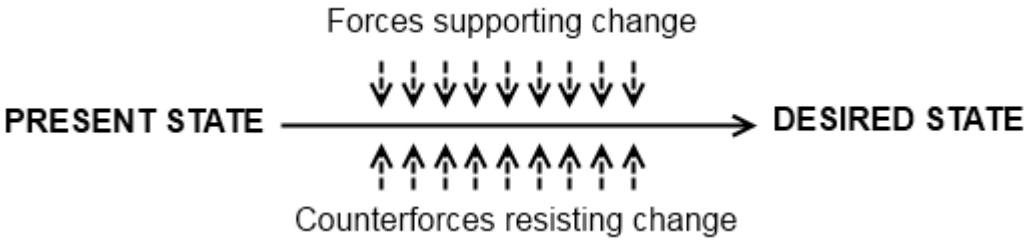


Figure 2.8: Lewin's Force Field Analysis (Santalainen, 2006).

These forces are believed to emanate from internal or external factors of the organization. It of paramount importance that key people for change are identified with their attitudes towards change so that change process can be managed with ease to enable the organization to achieve its goals. (Santalainen, 2006).

The level of satisfaction of an organization's stakeholders is crucial for its survival. Tullberg (2013), observes having a stake in a firm is suffices to be a stakeholder. He also further recommends that having a stake in an organization is tantamount to contributing an input and being part and parcel of the resultant output. Several categories of stakeholders are illustrated by Fassini (2012) as follows; "direct or indirect, legitimate/derivative, primary *vis-a-vis* secondary, strategic and environmental, generic or specific, strategic and core" and classification "based on legitimacy and urgency or even aspects of power. The classification which most commonly used however, is that of primary *vis-a-vis* secondary stakeholders.

Primary Stakeholders refers to those stakeholders who are fundamental to an organization without whose participation in the business affairs of the organization, it may end up collapsing (Benn, O'Leary & Abratt, 2016). Organizations rely tremendously on their Primary Stakeholders. Primary stakeholders are more visible because of their contractual relationships with firms such as: decisions, opportunities, choices, and the importance of their requisitions to the firms (Hult, Mena, Ferrell & Ferrell, 2011). Fassin (2012) notes the direct and contractual relationship enjoyed by

primary stakeholders with the organization. Some of the key stakeholders include customers and suppliers, investors, employees, primary shareholders. Benn, *et al* (2016) emphasize that maximization of wealth by shareholders is an obligation organizations have to their shareholders who invest in organizations with great expectation on their returns on investments compared to alternative options while minimizing risks. The maximization of returns to key shareholders by the management at other primary stakeholders' expense is no longer an option as they are now held to account as a corporate responsibility to all the primary stakeholders.

The firm's performance is dependent on the relationship between its suppliers such that any conflict with them can impact adversely on the firm's performance. Suppliers commit more to the needs of an organization when they are involved in the activities of the firm. Organizations risk losing consumer support when they ignore social interests and the community, which can adversely affect the organization. Imposition of restrictions by regulators as Benn *et al* (2016) states, can also affect marketing activities leading to extra expenses. Secondary stakeholders refers to firms, groupings, persons which can indirectly affect or be affected by the organization's actions. They are not a prerequisite for an organization's continuation as they are not engaged directly in dealings with the firm (Benn *et al*, 2016).They comprise support groups, trade associations, media, and competition. These groups can cause considerable interruption to an organization's activities in as much as it is not dependent upon them for its survival (McGrath & Whitt, 2017)

2.4.4 Adaptive Organization Structure interventions and Performance

Understanding characteristics of organizations, enables alignment of the structure with the strategies. Structures of organizations should be adjusted to match with the environment if an organization is to survive. In addition, all their decisions have an effect to the environment. Corporations for instance would adopt organic structures to enhance their performance of corporate social responsibility in environments characterized by high uncertainty but were less beneficial to corporations in a highly stable and simple environment which required mechanistic structure. Adaptive cycle was called the Structural Adaptation to Regain Fit model (SARFIT) which explained

that a firm was always initially fit, then increased in contingency variable which produced misfit and reduced performance, and then structure was changed adaptively from misfit to a new fit which restored equilibrium and facilitated performance (Little, 2006)

Organizational structure refers to the internal design of authority, communication and interactions (Tran & Tian, 2013). Structure of an organization as viewed by Goldhaber, Dennis, Richetto and Wiio (2004) considers the organization as a system of interactions and network of relationships and roles prevailing in the entire organization. Organizational structure therefore is portrayed as an essential aspect for achievement and maintenance of competitive advantage. This is attributed to the functions it performs of planning, organizing and coordination of all available resources aimed at fulfilling customer needs fully. Organization structure being involved in distribution of duties among labour units and coordinating units is very relevant to the growth of the organization. Despite the fact that different authors describe distribution of duties, centralization, process of formalizing and departmentalizing are the commonly agreed dimensions that are used (Meijaard, Brand, & Mosselman, 2005).Value of resources is gauged on amount of support they give to the strategy being pursued by the organization (Spanos & Lioukas, 2001).The argument implies that the influence on the performance by an organization structure will be indirectly through the pursued competitive strategy (Edelman, Brush, & Manolova, 2005).

Formalization refers to the existing documentation i.e. written in an organization indicating the magnitude to which formal procedures and regulations are defined by job tasks as standard operating procedures in an organization (Zakrzewska-Bielawska, 2008). In departmentalization a firm's activities are normally indicated by either levels of management or the number of departments conducting its activities (Meijjard *et al.*, 2005) in Barua, *et al.* (2016).Span of control refers to the ideal number of workers that can effectively be supervised by a manager. With larger spans, Mackenzie (1978) in Mwanje, Guyo and Muturi (2016) argues, supervision costs have a tendency to diminish, given that supervisors in the organization are only a small fraction of the members. If the span of control on the other hand is too large,

the capacity of the supervisors may be hampered by a large size of subordinates answerable to one supervisor. There is thus need to ensure there is a balance between the supervisors and the number of subordinates.

The extent to which decision making authorities are delegated through the entire organization is what is referred to as centralization (Meijaard *et al.*, 2005). This is the contrast of decentralization. Formalization denotes the extent in which organization rules, authority, procedures, communication lines and even norms are defined. Organization procedures are optimized and controlled by formalization accompanied with standardization and coordination. Departmentalization is usually determined by number of departments that are handling organizational activities or number of management levels (Meijaard *et al*. 2005). A strong structure that is hierarchical constitutes ranks where managers determine the activities of subordinates towards achieving goals of the organization. More senior officers are responsible for supervising their junior staff. The structure supports the key tasks which eventually contribute to the organizational goals being accomplished (Tran & Tian, 2013)

Conceptually, the construct of organizational structure variables against an ultimately on performance in commercial state corporations only deliver better performance if there is a willing to move away from centralized systems that involve higher levels of formality to organizational systems that facilitate higher levels of discretion(Njiru & Nyamute, 2018)Corporations adopted organic structures to enhance their performance of corporate social responsibility in environments characterized by high uncertainty but were less beneficial to corporations in a highly stable and simple environment which required mechanistic structure (Sasaka *et.al*.2018). They further stated that corporations needed to get away from the mechanistic to organic structures for them to respond to performance of corporate social responsibility because of market changes in the environment. Njiru & Nyamute (2018) highlight organizational structure as a critical antecedent to financial performance. These authors indicate that in order to be capable of adequately responding to changes in dynamic environments, organizations often decentralize decision-making authority, have minimal hierarchical levels or structural layers and adopt Free-flow communication channels. These attributes permit flexibility and rapid decision

making and thus make a positive impact on an organization's opportunity seeking financial performance.

Muriuki *et al* (2019) noted that organizations have traditionally had a hierarchical structure with numerous divisions and departments which are in charge of given tasks. Much as many organizations still use such hierarchical structures, the recent tendency is increasingly leaning to flatter surfaces where specialist teams do the work in place of specific departments. The trend of making organizations more adaptable and delegating power to employees has eliminated middle management cadres. In the study by Ndunge *et al* (2012) rigid structures were cited by respondents for not adapting to changes and they proposed review of such commercial state corporations to adapt to changes to the new era. They also proposed for a radical but flexible change implementation. This will enable employees to be decisive by making key strategic contributions to their organizations.

2.4.5 Board Composition as a Moderating Variable

Board composition describes the board size and a mix of different demographics for insiders or outsiders, males or females, foreigners or locals and the degree of affiliation directors have with organizations (Zandstra, 2002). A bigger proportion of independent directors in a board yields greater organization value. Independent board members are normally better in terms of monitoring the managers and able to make independent and better decisions than inside directors are believed to monitor the managers and make better organizational decisions than inside directors. Gaturu *et al*. (2018). It has been argued to the contrary that independent directors have inadequate information regarding the organization.

Board Size refers to the number of members that sit on the Board of a given organization**.** The recommended Boards of Directors size of state corporations is limited to a minimum of seven and maximum of nine members inclusive of a non-Executive Chairperson (RoK, 2013)**.**Board Diversity **is** another key attribute of board composition .It comprises among other aspects age, ethnicity, gender, and functional qualities such as education, knowledge, personal characteristic, profession,

membership to professional bodies, and experience (Cheng, Groysberg, Healy & Vijayaraghavan, 2017).

The capability of maximizing organization's performance for independent directors may be reduced as a result of their time commitment which is limited. In reference to the agency theory where board of directors are independent of the management where they are responsible and accountable to shareholders, they will tend to disclose all crucial information for mandatory as well as voluntary issues (Cho & Kim, 2003). It has been observed by Kamaara (2014) that the Board members are in charge of setting the vision of organizations and aligning to the mission. Koech *et al*. (2018) in their study found out that board characteristics which entails board selection, integrity and monitoring are very critical in corporate governance of state corporations in Kenya.

Board diversity is crucial in strategic change interventions, due to the fact that it tends to impart experience, requisite skills and a wide range of knowledge which are necessary in dispensation of strategic roles. Indeed, gender diversity is among the most debated diversity measures in corporate governance research. Gender diversity on a board of directors brings different perspectives, ideas, knowledge, skills and a broader view of organizational issues to a firm's strategic considerations (Ruigrok, Peck & Keller 2007; Adams & Ferreira, 2009; Wagana & Nzulwa, 2016). They further stated that gender diversity on a board of directors brings different perspectives, ideas, knowledge, skills and a broader view of organizational issues to a firm's strategic considerations.

According to Campbell and Mínguez-Vera, (2008), increased involvement of women in organization boards helps to provide a broader view of organizational issues, and therefore aids in gaining a wider comprehension of the business environment complexities which improves strategic decision making. In their sampled study of 1000 publicly listed firms, Hillman, Shropshire and Cannela (2007) found that the extent of linkage to other firms having female directors closely correlated with female presence on the respective boards. This implies that women directors provide a strong link to the industry, and so may facilitate the transfer of information, resources and linkages that are necessary in strategic decision making, such as

strategic change. Board size is defined by Haiyun, Krishnamurti and Bin (2012), as the number of board of directors present during such meetings to dispense main agendas of the day. Boards that are large in size are more suitable for organizations development in terms of investments as they are very hard for CEOs to manipulate (Waithaka, Gakure & Wanjau, 2017) On the contrary, smaller boards are seen to be more effective than larger boards. Agency problems such as director free riding tend to increase when boards become very big in size, with the boards becoming merely symbolic and hence playing an insignificant role in the process of management (Hermalin & Weisbach, 2003).

Board of directors have been very crucial in the governance of an organization by providing an important monitoring role of alignment of interests of agents and different shareholders (O'Regan, & Ghobadian, 2005). Strategic involvement of a board is a vital task for board of directors (Jensen & Zajac, 2004). The strategic tasks involve a group of activities like development of vision, mission, creation of business ideas and concepts, evaluation and regulation of strategic proposals, while managing the execution of strategies that have been approved (Zhang & Rajagopalan, 2010). Nyatichi (2016) conducted a study on the moderating influence board diversity, compensation of directors on organizational structure and financial prudence of listed firms on the Nairobi Stock Exchange. It revealed that the moderation influence of diversity of board and compensation of board members had significantly positively influenced the organizations' performance in relationship to the composition of the board.

Hsu, Wang and Hsu (2012) conducted a study on moderating influence of independent directors on the performance of a firm. The results that were obtained from a sample of 4,229 of publicly listed companies for Taiwan between the period 2006 to 2011 provided support for the mediating model. The effect of duality of the CEO on performance of the organization reduces upon adding independent directors to the model. This indicates that independent directors mediated the relationship between performance of the CEO and that of an organization. It has however been observed that participation in strategic decision making by Boards in more developed countries is more than those in less developed countries. This is due to weak legal

and justice framework (Heenetigala, 2011). Otwani, Namusonge & Makokha(2018) conducted a study on moderation effect of board composition on determinants of performance of listed companies in the Nairobi securities exchange in Kenya. The study found out that the coefficient of determination was 0.502 showing that there was a strong relationship between independent variables and financial performance hence they concluded that board composition was effective on moderating the determinants of performance of listed companies in the Nairobi securities exchange in Kenya.

2.4.6 Organizational Performance

Performance refers to an object's effectiveness in producing outcomes that result from interaction of organizational traits with the environment (Combs, Crook & Shook,2005).When considering organizational performance; performance can be taken as an indicator in the financial fortunes of organization that occurs due to changes made by the management or the implementations of those decisions by members of that organization (Carton & Hofer, 2010). Performance correlates to effectiveness and efficiency of an organization (Machuki & Aosa, 2011).

Organizational performance according to Richard. *et al*. (2009) comprises of three areas of business outcomes; financial performance which is profitability (investment returns, return on assets); product market performance (sales; growth and market share). Lastly there is shareholder return which consists of total shareholder return and economic value added. There are many Scholars in Strategic management who assert that good strategic management practices have a significant positive influence on organizational performance (Griffins, 2013; Gathenya, Bwisa & Kinyoro,2012;Linyiru, Karanja & Gichira,2015; Kihara,*et al*., 2016; Kang'ethe *et.al*.,2018; Kavulya, Muturi & Ogollah ,2018; Teece, 2014; Keter,*et al*;2018).

Contemporary strategic management research tries to come up with explanations on the sustenance of superior performance of organizations. The leading argument is that competitive advantage which is sustainable can only be realized if the value creation strategy of the firm is not being at the same time executed by existing or future rivals. Competitive advantage which is sustainable therefore can only be

realized when a firm adopts a value creation strategy that is not at the same time being implemented by any existing or future rivals and their inability to replicate the advantages of this strategy (Kario & Ngugi, 2017).

In order to gauge accurately an organization's performance, re-engineering of their measurements systems is a prerequisite to ensure that they conform to their prevailing environment and strategies. It is the circumstances of the organization being studied that determine the measures to use to represent performance. Most measures of organizational performance will however be based on profitability, financial, employee turnover, market based share (Carton & Hofer 2010), which are mostly inward looking. Many studies measure organizational performance on five perspectives as; profit; productivity; sales(growth) and market share; customer service and achievement of goals. In relation to profits many researchers use traditional accounting measures of profits.

The existence of change interventions positively impacts on organizational performance as they tend to contribute significantly on organizational competencies which in turn greatly boosts enhancement of innovativeness. According to Kakucha, *et al*. (2019), maximization of organization performance is attributed to change management practices. Due to intensive competition, volatile product, market environments and shorter product life cycles, firms continuously look for newer sources to remain ahead of competitors, the most important one being variation in management practices, which have an impact in improving and determining an organization's continuity (Andersson *et al*., 2014).

The importance of Change Management practices has dawned on most contemporary organizations. This realization is a critical step for an organization's performance (Haynes & Rees, 2006). The ideal situation is to assume that however complex or contemporary the undertakings of a firm becomes, it will always be hard to maintain its expansion without effective strategies that complement its continuity. According to Kario and Ngugi (2017) change management practices are limited by the manager's perception in terms of how to about change bearing in mind that the change process may bring results other than ones expected.

2.5 Empirical Review

The various studies carried out in strategic change interventions are discussed in this section; technology adoption, dynamic environmental, participatory stakeholder involvement and adaptive organization structure.

In a study carried out by Goga (2014), "influence on the performance of commercial state corporations in Kenya on enterprise resource planning systems", it was established that ERP system execution positively impacts on an organization's performance asserting that state corporations and organizations should lead in the embracement of technological implementation as they are essential in supporting organizational efficiency. Another study on the influence of Intrapreneurial Strategies done by Mugambi and Ngugi (2016) the latter evaluated the role of intrapreneurial strategies; support structure and product champion strategies process on the performance of an organization. The research established that there is correlation between intrapreneurship strategies (support structure and product development) and the two strategies affected commercial public organization by as much as 12.2%. The study recommended that; management should encourage innovativeness and creativity in organizations as well as encouragement of new ideas and not adhering to rigid regulations.

Kioko and Mwangangi (2017) in their study on influence of e-procurement on performance of corporations in Kenya suggested that it's imperative for all public organizations to embrace technology to improve their operations. The correlation coefficient computed for all the variables of e- procurement indicated a positive relationship between the use of technology and performance. These findings were also corroborated by Koros, Namusonge and Sakwa (2017) who studied effect of strategic management drivers on performance of airports in Kenya and found out the use of technology improves the performance of Airport operations.

In a study conducted by Miring'u and Muoria (2011) on an analysis of the effect of Corporate Governance on Commercial State Corporations' Performance in Kenya, the findings established a correlation between financial performance the size and composition of the board. The findings confirmed that a well-managed organizations

have higher performance. Ineptness, wastage, bureaucracy, mismanagement as well as apathy by staff and directors are the leading malaise that have made state corporations unable to attain their goals. This study recommended that the government should therefore ensure that SCs enforce measures it has laid down and follow them to the latter. The respective ministries should be thorough in their managerial duties through the respective committees so that guidelines are adhered to as required.

A study by Komora *et al*. (2016) revealed that succession management in state corporations in Kenya is constrained by weak human resource policy regimes/measures, insufficient top management involvement, non-alignment with business goals, dearth of talent pool development mechanisms and inept monitoring and evaluation systems. Monari, Mukulu and Kaswira (2016) established that there was a positive effect on service delivery in the state corporations through initiatives on performance management. These initiatives include among others reward programs, feedback mechanisms, performance appraisal and human resource audits.

In another study on the effect of change management on the performance of Rwanda Revenue Authority, Ndahiro, Shukla and Oduor (2015) established that a sustainable competitive edge could only be achieved through its incorporation of strategy change interventions to determine the organization's strategic requirements which was needed to execute a strategy which was competitive to attain its operational targets. They also observed that Rwanda Revenue Authority has effected change through utilization of contemporary technology, development and training of its employees, modernization of legal regimes and development of modern equipment and infrastructure. They recommended that for an organization to succeed, management should educate its stakeholders about new policies, procedures and programs. Organization must communicate a sense of urgency of change. Most people consider change uncomfortable and risky. Change execution is better achieved when it involves a good representation of the entire stakeholders within the firm.

Kario and Ngugi (2017) in their study of change management strategies and performance of commercial banks in Kenya established a positive relationship

between change management strategies and performance. She thus recommended there was need for organizations to establish processes that are compatible with the change interventions they would want to adopt and also various agents of change should work together to achieve success. A study to critically review employees' performance due to change management carried out by Njuguna and Muathe (2016) found a correlation between change management on employees' performance and the ideal environment affecting change. The outcome showed that there was need to concentrate on technology to guarantee a successful change programme. Other aspects included human relations and organizational structure but there has to be a mix between them to improve performance of the employees which in turn impacts on production quality. The findings were in tandem with a study conducted at the University of Eldoret, Kenya by Wanza and Nkuraru (2016) who analysed change management's influence on employee performance and establishing that measurement of change management done in terms of technology, leadership, and structure and organization culture affects the performance of employees significantly.

Another study done by Ismail and Mamat (2012), sought to establish the correlation between process innovation, organizational performance and information technology. The outcome noted the existence of a significant relation between information technology implementation on the innovation process and organizational performance. It has been suggested that adoption of contemporary technology that was manufactured elsewhere could facility product or process innovations by the implementing firm. Furthermore, it is also posited that innovation is countervailing performance against the effects of adopting IT. Babatunde and Adebisi (2012) in a study on Organizational Performance vis-a-vis Strategic Environmental Scanning within a Business Competitive Environment found a proportional relation between the performance of an organization and strategic environmental scanning, with a coefficient of determination (R^2) of 0.297. It indicates a change in effective performance or change in environmental scanning strategy can lead to 30% of change in an organization. Environmental forces were established by the study to impact positively on the performance of an organization. This is an indication that assessing the exterior environmental factors (threats and opportunities) through the

utilization of strategic environmental scanning, assists in taking advantage of available opportunities thus avoiding threats hence leading to an organization's profitability. Given that the findings were positive, the study recommended that organizations should periodically, strategically, and on a continuous basis engage strategic environmental scanning while simultaneously taking cognizance of environmental threats and opportunities.

These findings were similar to those of Agbim, Oriarewo and Zever (2014) who sought to establish the behaviour of entrepreneurial performance on micropreneurs due to business environmental scanning actions. The study established that interest level and the frequency of scanning are related to an entrepreneur's performance. The study recommended that even where micropreneurs get affected by resources and the capacity to conduct environmental scanning, they still require to maintain and develop keen interest in factors with the greatest uncertainty to their microenterprises within the business environment (the work environment – suppliers, customers, and competitors). This will ensure stability in the environment and in turn improve their performance and competitiveness. Njuguna, Munyoki and Kibera (2014) conducted a research in Nairobi County, Kenya on how external organizational environment influenced performance of community-based HIV and AIDS organizations. The research findings show that an organization's efficiency, effectiveness, financial viability and relevance with relevance performance indicators being most affected and influenced by its external environment. The latter was thus assessed from aspects of, capacity, dynamism, domain consensus, uncertainty and heterogeneity. Their study revealed that the planning to implementation of all activities of an organization are influenced if the external environment is properly scanned. Nevertheless, more emphasis was to be paid to the external environment. They emphasized the need for thorough scanning of the external environment by managers of community based organizations as it influenced all organization activities from program planning to implementation.

In the findings of a case study carried out by Kenyoru, Chumba, Chumba and Rotich (2015) in Uasin Gishu County–Kenya on the local Kenya Power and Lighting Company to investigate the stakeholder engagement and organizational performance,

revealed that as much as 76.2% of the changes achieved in the performance of an organization was due to stakeholder involvement in the decisions made. The study discerned that strategies that involved both employees and customer contributed immensely to organizational performance with greater organizational performance being realized with customer recognition. The study recommended that for improved performance to be achieved, there was need to integrate the two stakeholders in the decision making process.

A research study done by Murimi and Omondi (2014) at Karatina University investigated the university's performance following stakeholders' involvement in the organization's leadership. It established that stakeholder involvement positively related to the performance of the University. Stakeholders' involvement led to an increase with student interaction and changes to course structure led to transformation in the economic and business environment decreasing the probability of unemployment by undergraduate and graduate students in the labour market. The study recommended stakeholders involvement in Universities' leadership.

Meijaard *et al.* (2005) looked at the correlation between six structural dimensions, i.e. formalization, coordination, decentralization, specialization, departmentalization, and organizational performance. In their data group, standardization and formalization overlapped to a certain degree, and while specialization derived two dimensions in terms of skill and task. It was noted that regardless of their size, firms with a structure that was decentralized generally performed well, contrary to their expectation, even those with a centralized structure equally performing well. Even though the effect of an organization's structure on a firm's performance is complicated due to reliance on several aspects such as firm configuration, firm and sector size, it is recommended that encompassing them in studies gives a clearer comprehension of the factors affecting the performance of firms.

A study by Warui (2016) on human resource information systems usage determinants in the Teachers Service Commission of Kenya ascertained that the structure of an organization had a commensurate effect on its usage in its operations. In order to respond to performance, there is need to discard the corporations'

mechanistic to organic structures (Burton, Desanctis & Obel, 2006). Kihara, *et al*. (2016) in their study on the impact of strategic contingency factors on the performance of large manufacturing firms in Kenya recommended that the management of firms should put in place structural organizations strategies that lead to high performance. The firms should ensure that they have an organization structure that is specialized, high calibre of span of control, centralized structure and have departmentalization. A study by Kinyua, *et al* (2016) carried out on effects on financial performance of companies quoted on the Nairobi stock exchange (NSE) by internal control systems, established that the organization structure of companies listed in Nairobi securities is clearly defined in terms of lines of authority and responsibility and there is adequate supervision and monitoring of decentralized operations. In addition organization structure shapes the performance of these companies. The results also agree with the findings by Ndunge & Ogutu(2012). A study by Okafor, *et al* (2017) that tested empirically the influence of organizational structure on performance found out that an organization needs a suitable structure in order to succeed.

There were studies that were done to find out moderating influence of the composition of the Board on organizational performance. Otwani, *et al* (2018) in their study ;moderating effect of board composition on the determinants of financial performance of companies listed on the Nairobi securities exchange in Kenya, the moderating of board composition was found to have a significant statistical effect on financial performance of listed companies. In a study conducted by Zemzem and Ftouhi (2013), Bank Performance and Tax Planning through the moderating actions of the Board of Directors. Findings indicated that while the board size moderated the performance – tax planning relationship form, exterior directors who were independent influenced the relationship' strength. Its revelations have a relevance in the control and monitoring of the banks' tax planning activities to investors and tax administrations' direct policy. Another study carried out by Şahin , Artan and Tuysuz (2015) established how Turkey's FDI's international diversification was due to the board of directors moderating influence confirming that diversifying internationally led to an improved financial performance basing on the market

measures. On the contrary, this study indicates that the board characteristics had a moderating influence on financial performance and international diversification.

2.6 Critique of Existing Literature

The strategic change interventions concept is a critical ingredient in the achievement of both public and private entities' objectives yet there is dearth of adequate research coverage in the area. Despite there being several studies on state corporations' performance, they appear not to be highlighting how organizations' performances are influenced by strategic change interventions. Kario and Ngugi (2017) did a study on change management strategies and performance of commercial banks in Kenya. The impact on the performance of commercial state corporations due to enterprise resource planning systems in Kenya was done by Goga (2014). A study on Intrapreneurial Strategies' influence on performance was done by Mugambi and Ngugi (2016). Another study also was done by Miring'u and Muoria (2011) on analysis of how Corporate Governance in Kenya impacted on Performance of Commercial State Corporations. Other studies dealt with commercial state corporations but concentrated on other issues; Muoria and Miring'u (2011), corporate governance and Olayo *et al.* (2018) conducted a study on effect human resource management practices.

A research conducted by Ndahiro, *et al* (2015) sought to establish how the performance of Rwanda Revenue Authority was affected by change management and concluded that a sustainable competitive edge could be realized from an organization's human capital through the development of strategic change interventions to address an organization's strategic requirements needed to incorporate a strategy which is competitive and attain operational targets. They also observed that Rwanda Revenue Authority has benefited from change through utilization of modern technology, training and developing its employees, modernization of legal instruments and the development new infrastructure and equipment. There is probability of the findings not reflecting the effects of change management on the performance of similar organizations. Though strategic change interventions like modern technology was mentioned there were not related to

performance directly. The study was also conducted in Rwanda thus cannot be implied on Kenyan state corporations. Studies conducted by Njuguna and Muathe (2016) and Wanza and Nkuraru (2016) concentrated on performance of employees as a result of change management. The two studies dwelt on employees' performance as the dependent variable. In addition they were only case studies; thus their findings cannot be relevant and applicable to commercial state corporations in Kenya.

In a study carried out by Ismail and Mamat (2012), seeking to establish the relation between an organization's performance, information technology, and process innovation. The outcomes showed a significant relation on process innovation of an organization's performance through the adoption of information technology even though the study only focused one aspect of technology called information technology. Furthermore, the research was conducted in Nigeria hence lacks the replica typical of local model organizations. Babatunde and Adebisi (2012) in a study on Performance of Organizations in a Competitive Business Environment and Strategic Environmental Scanning established a proportional correlation between organizational performance and strategic environmental scanning. This was a case study of Cadbury Nigeria and Nestle Nigeria Limited companies. Other than being a study that was carried out in Nigeria its findings on the effect of Strategic Environmental Scanning can be replicated to similar organizations.

In a study done by Agbim, Oriarewo and Zever (2014) they sought to assess how the Entrepreneurial Performance of Micropreneurs impacted of Business Environmental Scanning Behaviour. The study concentrated on environmental scanning behaviour other than practices and did not focus on Micropreneurs. A local study conducted by Njuguna Munyoki and Kibera (2014) in Nairobi County, Kenya sought to establish how the external organizational environment influenced the community-based HIV and AIDS organizations' performance. However, it only concentrated on the external environment and was a case study whose outcomes could not be extrapolated to organizations like state corporations.

In a case study at the Eldoret Branch of Kenya Power and Lighting Company, Kenyoru (2015) investigated Organizational Performance versus Stakeholder

Engagement. The study dwelt on only two types of stakeholders; customer and employee. There is need to look at a wider group of stakeholders like the Government, shareholders, suppliers, members of the public and others. Meijaard *et al.* (2005) looked at the correlation of five structural dimensions namely: specialization, formalization, coordination, decentralization, performance and departmentalization of firms. The study did not delve into other factors like dynamic environmental scan, technology and stakeholders hence cannot be generalized for this study. Another study done at Teachers' Service Commission by Warui (2016) aimed at ascertaining the determinants of human resource information systems usage in the organization's operations. It considered structure as one of the determinants of human resource information systems. Other than being a case study it dealt with only structure hence its findings cannot be relevant to commercial state corporations in Kenya.

This study focused on evaluating strategic change interventions influence on performance of commercial state corporations. The findings of this study focused on the utilization of strategic change interventions by state corporations to satisfy the breadth of their stakeholders' needs. State corporations can only continuously improve their performance with the establishment of effective strategic change interventions. There is need for specific determinants that fit an individual organizational context and the establishment of systematic inquiries on what fits a specific organizational context. Kazmi (2008) sums up the business environment as being; complex, dynamic, multi-faceted with far reaching impact. In addition, he alludes that the strategic management approach that emphasizes on predictability, order and control is outdated; even though the environment itself is proving to be more unpredictable uncertain and non-linear. The environment can be summarized as characterized with ever recurring changes and herein lies the challenge for business managers.

Several authors emphasize the importance of a strategic change perspective when implementing performance management (e.g. Kasurinen, 2002; Bourne, Mills, plats & Neely, 2002; Kaplan & Norton, 2001). Other studies (Appelbaum, 2000; Schuler and Jackson, 2001; Huselid, 2005) laid emphasis on change interventions of business

organizations which made a contribution to the global economy. The central tenet in strategic management realm has been reiteration of ‘change’ (Armstrong, 2009). The configurationally theory in this area has thus emerged as the contemporary framework to analyze sources of sustainable change management in world.

2.7 Research Gaps

Several conceptual and contextual gaps were noticed from the critical review of previous literature. These gaps were noted on influence of technology adoption interventions, dynamic environmental scan, participatory stakeholder involvement interventions and adaptive organizational structure of Kenya’s commercial state corporations’ performance.

Despite there being several studies on performance of state corporations, they are yet to bring out the influence on organizational performance by strategic change interventions. This can be seen in some studies; Olayo *et al.* (2018), Kariuki, Iravo and Shale (2018), Koech *et al.* (2018), Nguru and Gichuhi (2018), Choge *et al.* (2017), Kioko and Mwangangi (2017) , Goga (2014), Mugambi and Ngugi (2016), Miring'u and Muoria (2011), Sasaka *et al.* (2016), Komora *et al.* (2016) and Barua, Gichira and Iravo (2016) . The studies concentrated on Human Resource Management practices, Supply Chain transfer, corporate governance, and work life balance, enterprise resource planning systems, Intrapreneurial, effect of strategic management practices, constraints to succession management, and effect of social entrepreneurship. Therefore there exists a gap on area covered.

A study was carried out by Ndahiro, *et al* (2015) where they sought to establish the change management effect on performance of Rwanda Revenue Authority. There exists an objective gap since this study did not address variables such as new technology adoption interventions, scanning of environment practices. In addition, there exists a contextual gap in that the study was conducted in Rwanda while this study conducted in Kenya.

A study carried out by Ismail and Mamat (2012), where they sought to establish the relationship between information technology, innovation process and organizational

performance. The study was conducted in Nigeria There exists an objective gap since this study other than not addressing other variables it also considered part of technology called information technology. Similarly there exists a contextual gap in that the study was conducted in Nigeria while this study that has been proposed will be conducted in Kenya. Babatunde and Adebisi (2012) conducted a study on strategic environment scan and performance of the organization in a competitive business environment. The study was done in Nigeria and was a case study. The study had an objective gap since it did not consider other variables of the proposed study and experienced contextual gaps since it was done in Nigeria. On the other hand, in a study conducted in Nairobi County Kenya by Njuguna, Munyoki and Kibera (2014) on the influence on the performance of community based HIV and AIDS organizations of their external (organization) environment has concentrated only on external environment and was rather a case study whose findings cannot be generalized to organizations like commercial state corporations.

In a study carried out by Kenyoru, *et al.* (2015) to investigate stakeholder engagement influence on organization performance at the Eldoret branch of Kenya Power and Lighting Company, in Uasin Gishu County in Kenya critical variables like technology adoption and dynamic environmental scan were not considered. In addition, a contextual gap exists in that the study as it focused on only one branch of a commercial state corporations moreover, its findings cannot be generalized to other commercial state corporations. Meijaard *et al.* (2005) scrutinized the relationship that existed amongst the five dimensional structures of formalization, coordination, specialization, decentralization, and departmentalization, with performance of firms. The study had an objective gap since it did not consider other variables of the proposed study. Warui (2016) conducted a study on what determines human resource information systems usage in the operations of Teachers Service Commission in Kenya. This was a case study that did not consider other variables like technology adoption and dynamic environmental scan and stakeholders. In addition, there exists a contextual gap in that the study focused on only Teachers Service Commission hence the findings may not be applicable to commercial state corporations in Kenya

2.8 Summary

The review done in this chapter was on existing literature on how Commercial state corporations performance is influenced by strategic change interventions. The outcome of this research will enable the CEOs, the Finance and HR Managers select the appropriate strategic change interventions which would improve their organizations' performance. To link a dependent variable with independent variables, a conceptual framework was developed for that purpose. The chapter also summarized the main theories that are related to the strategic change interventions and performance of commercial state corporations. It is evident from the review that technology adoption, dynamic environmental scan, participatory stakeholder involvement and adaptive organization structure affect performance. This effect can either be positive or negative. Finally an empirical review of past studies was carried out with a review and critique of previous studies both locally and globally. From the critiques, the research gap was identified.

Table 2.1: Summary of Recent Studies

Author	Title	Methodology	Findings/Recommendations
Olayo *et al*. (2018)	Effect of Perceived Human Resource Management Practices on Performance of Commercial state corporations in Kenya	The study used descriptive research design that combined quantitative and qualitative techniques	It was found that there was improved performance in the corporations with perceived human resource management practices; recruitment and selection, training, decentralized teams and employee reward. The study recommended that change management should be encouraged for improved performance.
Koech *et al.* (2018)	Determinants of Effectiveness of Corporate Governance in State Corporations in Kenya	The study adopted quantitative research design. Primary data was gathered using questionnaires.	The study established that board characteristics of board members, executive compensation of executive members, characteristics of audit committee and legal and regulatory framework, influenced corporate governance contributing (79.9%). The study recommended adoption of supportive policies to improve legal framework.
Nguru and Gichuhi	Influence of work life balance	The study used descriptive research	There was a strong positive relationship between work

(2018)	on employee commitment in corporations: a case study of National Hospital Insurance fund in Nakuru.	design .Questionnaires were used to collect data.	life balance and commitment of employees at NHIF Nakuru Branch. Growth and development opportunities was found to be the most important determinant of employee commitment.
Njuguna and Muathe (2016)	Critical review of literature on change management on employees performance	Survey research design was used for the study. Interviews and secondary sources were used to collect data.	Indications showed that there was positive and significant correlation between the independent variables of participatory leadership style, motivational commitment , communication and training and the dependent variable of change management on performance of employees
Wanza and Nkuraru (2016)	Influence of Management of change on employee performance: A case of University of Eldoret in Kenya	The study adopted a case study design. Collection of primary data was made by use of questionnaires and interview schedules	The study concluded that the employees' performance was influenced positively by structural changes, leadership, technology and organizational culture.
Sasaka *et al.* (2016)	Effect of strategic practices of management	Quantitative research design was adopted for the study.	There exists a significant and positive association between formal planning and performance of corporate

	practices on performance of corporate social responsibility of State corporations in Kenya	Questionnaires were used as the collection instrument for data.	social responsibility of corporations in Kenya
Choge *et al.(*2017)	Effect human capital adoption strategies on management of Kenyan corporations	The study used descriptive research design that combined quantitative and qualitative techniques	The study established a strong relationship between strategic management of corporations and human capital adoption strategies.
Komora *et al.* (2016)	Constraints to succession management in State Corporations in Kenya.	Research design used was census design that used semi-structured questionnaires.	Succession management in state corporations in Kenya is constrained by weak human resource policy regimes, inadequate top management involvement, on-alignment with business goals, lack of talent pool development mechanisms and weak monitoring and evaluation systems.
Mugambi and Ngugi (2016)	Influence of Intrapreneurial Strategies on the performance of State corporations in	Data for the study was obtained through survey and case study approaches.	There was a correlation between intrapreneurship strategies of support structure and product development and also it was noted that the two strategies have an influence

	Kenya.		on commercial public organizations
Barua *et al.* (2016)	Effect of social entrepreneurship factors on firm performance of enterprise based corporations in Kenya	The study adopted a survey design with mixed approaches: a systematic integration of quantitative and qualitative methods	This study therefore, concludes that organizational factors positively influence the performance of enterprise based corporations in Kenya
Monari *et al.*(2016)	Influence of performance management initiatives on service delivery in state corporations in Kenya	The study used a cross sectional descriptive survey research design. The data for the study was collected from primary sources using self-administered questionnaires	The study found that there was positive effect of performance management initiatives on service delivery among the state corporations.
Mwithi (2016)	Effect of leadership competencies on performance of State corporations in Kenya.	The study used cross sectional survey research design. This study used primary data which was largely quantitative and descriptive in nature. Primary data was collected through questionnaire	Self-awareness leadership competencies, self-management leadership , social awareness leadership and social skills leadership affects performance of state corporations in Kenya

Goga (2014)	The Influence that enterprise resource planning systems have on the organizational performance of commercial state corporations in Kenya	Descriptive research design where a census approach was used. The data was collected by use of questionnaires.	Enterprise resource planning system implementation has a positive influence on organizational performance
Nthini (2013)	Effect of strategic leadership on the performance of commercial and financial state corporations in Kenya	The study made use of descriptive survey design .The questionnaires had semi-structured questions for collection of primary data.	Performance of commercial and financial state corporations was positively influenced by strategic leadership.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter outlined procedures used for data collection and analysis of the study. Research design, the target population, sample size, sampling frame, sampling techniques, data collection procedures, methods used in data collection, data processing, pilot study, analysis and presentation were outlined here. Kothari (2008) asserts that the objective of research methodology is to come up with details of the steps to be adopted while studying a research problem by the researcher and the logic he followed.

3.2 Research Design

This refers to a guide followed to collect, analyze and interpret observations that are made; It is the blueprint for the researcher for the instruments and methods utilized to collect information and evaluate it, to address the study's research questions (Mugenda & Mugenda, 2009).Research design according to Creswell (2014), is the process of collecting and analyzing of data by combining their relationship with the research purpose. The research objectives are achieved in an economical way through acquisition of the requisite empirical evidence. The purpose of the research determines the design choice, which in turn is illustrated by the sources of data, categories of data needed, cost factors and research problems and questions (Creswell, 2014).

A cross sectional descriptive survey was adopted by this study. A research design which adopts the cross sectional survey approach is advantageous because of its cost effectiveness per respondent in comparison with other methods; given that it employs simpler methods for data collection enabling the researcher to have a bigger sample size thus increasing the accuracy of the conclusions arrived at. Data can also be collected within a shorter interval. The population at a certain point in time is viewed by the research design hence enabling drawing conclusions through collection of data

as well as testing of relationship about phenomena across a wide population (Cooper & Schindler, 2013). 'The design which was selected was appropriate for this study because it allows for the collection of data for the dependent and independent variables using questionnaires which were both structured and unstructured (Zikmund, *et al*., 2010). The design was successfully used by Nemuel, Mukulu and Waiganjo (2017), Nyingi Guyo and Waititu (2019), Rureri, Namusonge and Mwirigi (2018) Koech *et al.* (2018), Sasaka *et al*. (2016) among a few who were able to derive plausible conclusions by testing the hypothesis.

The study was also based on a positivist research philosophy which examines causes of a given relationship. Positivism is based on a theory before the research is conducted and statistically justified in conclusions which empirically test a hypothesis which are social science's core tenets (Cooper &Schindler,2013). It applied quantitative techniques and deductive reasoning. Positivism according to Babbie (2010) explains a social phenomenon through the establishment of a relationship between variables hence the application of quantitative research. The research objective of this study was to examine the relationship between selected variables and performance of commercial state corporations. It quantified the significance of the relationships between or among the variables guided by a quantitative approach.

3.3 Target Population

Target population refers to the entire set of units of inference which the survey data is normally used to make generalizations about the whole population (Kothari, 2008). This target population thus describes units in whose findings would be generalized for the survey (Mugenda & Mugenda, 2009). Kenya currently has a total of fifty five (55) commercial state corporations according to RoK (2013).

Commercial state corporations were the target population given that they play a critical role as enablers of economic and social transformations in the economy they operate. They are also key in improving delivery of public service as well as employment opportunities in varying jurisdictions. In addition they are useful conduit for international partnerships (RoK, 2013). These organizations therefore

have an inherent potential for enhancement of productivity and profits. The respondents of this study constituted human resource officers, finance managers and chief executive officers of the commercial state corporations who formed the unit of analysis. They were targeted as they are responsible for the smooth running of the corporations. This confirms the attribute of observable characteristics of the target population through which the study results are generalized (Mugenda & Mugenda, 2009).

Table 3.1 Population Size

Type of Commercial State Corporation	**Population Size**
Purely Commercial state corporations	34
Strategic Commercial state Corporations	21
Total	**55**

Source: RoK (2013)

3.4 Sample Frame

The Government ordered for the organization of State Corporations and the resultant reorganization reduced the number of State Corporations to 187 (Inventory of State Corporations, 2013). For this study the sampling frame consists of fifty (55) commercial state corporations.

3.5 Sample Size and Sampling Technique

3.5.1 Sample Size

There are a total number of 55 commercial state corporations in Kenya. This research confined to state owned entities as per the reclassification done on October 9th, 2013 period. The state corporations were reclassified to enhance service delivery in the Public Sector. The date marks the appointment of a Presidential Task force on

Corporations whose mandate was to conclude the current policy review on the sectors with a view to address sectoral challenges to achieve Government policy priorities. (RoK, 2013).

The sample size was determined using the formula given by Miller and Brewer (2003) with a confidence interval of 95 percent as given below:

$$n = \frac{N}{1 + N(\alpha)^2} \quad \text{.....Equation (3.1)}$$

Where:

N= sample size,

N= sampling frame

α = margin of error (0.05%)

The formula gave us a sample size of 48 which was arrived at as follows:

$$n = \frac{55}{1 + 55(0.05)^2} \quad \text{.....Equation (3.2)}$$

$$n = 48$$

A sample size of 48 commercial state corporations was drawn randomly using random number generator from 55 reclassified government owned entities that was traced for the study. A random number is described as a computational or physical device designed for generation of sequence of numbers/symbols that do not have any pattern (Kothari & Garg, 2014). The technique was operationalized by entering the desired quantity (55) and running it in the random number generator against a range of 1 to 55. The numbers for the study was then picked from the random number generator.

Table 3.2 Sample Size

Type of Commercial State Corporation	Population Size	Sample Size
Purely Commercial State Corporations	34	30
Strategic Commercial State Corporations	21	18
Total	55	48

Source: RoK (2013)

3.5.2 Sampling Technique

According to Sekaran and Bougie (2010), sampling is a section of data being collected or an element of a population that is selected for a study process. Bryman and Bell (2011) also refers to sampling as the selection for investigation of a section of the population. Since each unit of the population has an equal probability of inclusion, stratified random sampling was used to determine the sample so as to minimize human bias. A table of random numbers was used to select the respondents by the researcher. This method enabled each member to have an equal opportunity of being selected thus reduced the element of bias. From the population, a sample of size of forty eight (48) corporations was selected using stratified random sampling.

Respondents for this study were selected from the following three management positions namely; CEO's, Human resource and Finance managers from each of the respective commercial state corporations. This was because they are key positions for the operation of the state corporations and are responsible for the corporations' strategic change interventions.

3.6 Data Collection Instruments

3.6.1 Primary Data

Primary data for the research study was collected using questionnaires with both closed and open ended questions. Semi-structured questions used were necessary to enable the researcher to collect both quantitative and qualitative data. Objectives of

the study determined the questions to be developed. The questions designed covered the respondents' general background information relating to performance of commercial state corporations and strategic change interventions based on the conceptual framework.

Administration of questionnaires to individuals was chosen because it assists in establishing relationship with the respondents during introduction of the survey (Satrirenjit Alistair & Martin, 2012). Questionnaires are ideal as they provide for clarification if sought by respondents and can also be collected immediately after they are filled. A list of all possible alternatives accompanied the close ended questions from which the respondents selected the answer that described their situation. On the other hand, the open ended questions allowed them freedom of response.

Interviews were also conducted as a source of primary data using a Structured Interview Guide (Appendix III) which helped to achieve personal in-depth information which was appropriate in generation of more and higher quality ideas on a personal response basis. This enabled the study to probe deeper any issues that arose. Interviews give the opportunity for eliciting information and to observe both the subject and the total situation to which someone is responding to (Kothari & Gaurav, 2014).

3.7 Data Collection Procedure

The data collection process started with collection of an introduction letter from the university. Data was collected over a six weeks period. Two research assistants were recruited based on their previous data collection experience and familiarity with the study area. The researcher briefed them of what was expected of them. As part of practical training, the research assistants also participated in the pilot testing of the questionnaire. Prior to the commencement of data collection, an appointment was sought with the chief executive officers of the commercial state corporations under study, followed by administration of the questionnaires by the research assistants to the chief executive officers, finance managers and human resource managers of the selected commercial state corporations under close supervision of the researcher.

After collection of data, the questionnaire was edited to check for reliability, completeness, and consistency of data. This was followed by coding the responses in coding sheets through transcription of the data from questionnaires and assigning characters symbol. Screening and cleaning of data then followed to make sure there were no errors. Data was finally transferred for analysis through an SPSS package. Interviews were also conducted at the workplace of the respondents and detailed notes were taken during the interviews. The information obtained immediately after each interview was taken down in form of short notes.

3.8 Pilot Study

A pilot study was carried out for purposes of guiding and examining particular aspects of research to find out whether selected procedures would perform as anticipated. According to Kothari and Garg (2014). The aim of a pilot study normally tests the clarity and see if questions are understood by correspondents and that they yield results as expected. Sekaran (2008) asserts that pilot study is important in that it tests how reliable and valid the instruments of a study are. In this study, questionnaires 10% of the sample was tested to ascertain whether the data was relevant and effective. Respondents in the pilot study were drawn from five commercial state corporations, which is 10% of the sample size as per recommendations by Mugenda and Mugenda (2013) who alluded that a successful pilot study is supposed to use 10% of the actual sample size. In this study the 10% translated to 15 respondents that were used. Based on Mugenda and Mugenda (2013) recommendations, fifteen pilot questionnaires representing 10% of the sample size of 144, were given to the CEO's, Finance Managers and HR Managers of the five (5) Corporations selected for the pilot study.

3.8.1 Reliability

When data is consistent, stable and dependable it denotes that it is reliable. A researcher would always want to be certain that when he measures a variable the results are dependable and consistent (Cooper & Schindler, 2013). The most commonly used measure of reliability in research is Cronbach alpha. The measure was used in estimation of the variance proportion which was to be systematic and

consistent with the test scores. The implication is that as Cronbach alpha nears 1.0 then the internal consistent of the specific elements in the scale increases. An alpha of 0.7 was considered as a reasonable goal (Sekeran & Bougie,2010). Therefore this study identified a minimum of 0. 7 to show reliability of the constructs. This study's reliability was demonstrated since the overall Cronbach's alpha was greater than 0.7 and hence no variables had to be expunged. It is clear from the results that the reliability of the questionnaire used in this study was at an acceptable level. The results were in agreement with Olayo *et al.* (2018) where all constructs had a value of Cronbach's Alpha greater than 0.7. The reliability analysis statistics are as shown on Table 3.4

Table 3.3. Reliability Analysis of Variables

Variable	**Number of items**	**Sample size (N)**	**Reliability coefficient alpha**	**Acceptability**
Technology Adoption interventions	7	15	0.855	Acceptable
Dynamic Environmental scan interventions	6	15	0.750	Acceptable
Participatory Stakeholder Involvement interventions	5	15	0.947	Acceptable
Adaptive organization interventions	4	15	0.840	Acceptable
Board Composition	6	15	0.734	Acceptable
Organization Performance	8	15	0.938	Acceptable

Table 3.4: Overall reliability Statistics of Variables

No. of items	Reliability coefficient alpha
36	0.914

3.8.2 Validity

Mugenda and Mugenda (2013) referred to validity as having accurate and meaningful data collection tools. Validity therefore refers to the degree of similarity which subsists between the explanations of phenomena and those happening in the real world. Validity denotes the appropriate use of an instrument in measuring what it was intended to measure. The validity reflected the extent which the result of an observation is a true reflection of what happens in reality (Cooper & Schindler, 2013)

Validity of the constructs was confirmed through carrying out of a factor analysis. The tool is used to find factors between the observed variables to get an explanation for the variance observed in the large number of variables for the study through use of a smaller number of factors amongst larger number of variables (Omar, Namusonge and Sakwa, 2017) Two tests were used to assess to test how suitable the data was factor analysis. The tests were; test of sphericity by Bartlett and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy.

Test of sphericity by Bartlett and Kaiser-Mayor-Oklin Measures of sampling adequacy (KMO) have been recommended to check variable ratio for the analysis conducted. The two tests play a very big role for testing and accepting sample adequacy in research world. Kaiser-Mayor-Oklin Measures of sampling adequacy normally ranges of 0 to 1. The accepted index worldwide however is greater than 0.5. The Test of sphericity by Bartlett, relays how significant the study is. Therefore the

suitability and validity of the responses to the problem being tackled are gauged using this test. The test of sphericity by Bartlett as shown in the study by Omar *et.al.,* (2017) should not be greater than 0.05 for Factor Analysis to be ascertained to being suitable.

To ascertain whether relationship between the variables was significant or not, the study applied the KMO Measures of Sampling Adequacy and Bartlett's Test of Sphericity. Kaiser-Meyer-Olkin measures of sampling adequacy showed a value of test statistic that was above 0.5, which are acceptable indexes. Bartlett's test of sphericity showed a test statistic value for the variables to be less than 0.05 which are also acceptable indexes. The results are shown in Table 3.6.

Table 3.5: KMO and Bartlett's Test

Variable	**Kaiser-Meyer-Olkin**	**Bartlett's Test of Sphericity**	**Approx. Chi-Square**	**Df**	**Remarks**
Technology adoption	0.645	0.001	47.084	21	Acceptable
Dynamic Environmental Scan interventions	0.743	0.000	43.271	15	Acceptable
Participatory Stakeholder Involvement	0.681	0.000	64.250	10	Acceptable
Adaptive Organization Structure	0.596	0.000	52.593	10	Acceptable

interventions					
Board Composition	0.549	0.000	19.360	28	Acceptable
Organization Performance	0.731	0.000	131.798	28	Acceptable

Other diagnostic tests used to manage data were normality, autocorrelation and multicollinearity. To determine multicollinearity in this study, a test was run for all the independent variables. Multicollinearity was examined by tolerance and variance inflation factor (VIF) as depicted on Table 4.2. Regression and correlation were used to determine the relationship between independent variables against the dependent variable.

3.9 Data Analysis and Presentation

Data analysis involves examining of what had been collected during experiments or surveys then making inferences and conclusions (Kombo & Tromp, 2006). After data was collected, it had to be edited for inconsistencies, coded and controlled, entered and analyzed. Data collected from the field was then be analyzed through the usage of Statistical Packages for Social Scientists (SPSS). The first step in data analysis involved the description and summary of the data using descriptive statistics with the help of mean, frequency, percentages, and standard deviation. Microsoft excel was used to complement SPSS especially in production of diagrams and tables. In addition, the research conducted diagnostic tests. This include the normality test and the multi-collinearity tests. For the purposes of communicative efficiency to likely users, findings were presented using tables. These are important for proper presentation and comparison of the responses. All the analysis and presentations focused on reliability and accuracy as they related to the study's pre-designed objectives.

Qualitative data was gathered from interview guide that involved taking down field notes when interviewing the informants. From these field notes, keywords that kept

on recurring were identified and manual themes developed to form the basis of the codes. The categories of the codes were based on the questions of the research and these was fed into a computer to come up with pattern codes. Summaries of the data was grouped into smaller number of constructs, sets, or themes. Qualitative data was analyzed by classifying opinions into main emerging themes, categorizing and codifying the categories and assigning them numerical values. These values were processed by use of Microsoft excel to deduce descriptive statistics. Krishnaswamy, Sivakumar and Mathirajan (2006) asserts that the frequency of appearance of a particular idea is obtained as a measure of content. Presentation of data was done through frequency distribution tables and statistical tables.

3.9.1 Multiple Linear Regression

The effect of strategic change interventions on performance of commercial state corporations was examined using multiple linear regression analysis. The independent variables were technology adoption interventions, dynamic environmental scan interventions, participatory stakeholder involvement interventions and adaptive organization structure interventions. The moderating variable was Board composition while the dependent variable was performance. The multiple regression model for the study was as follows:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + + \varepsilon_{i.}$ ……Equation (3.3)

The Multiple Moderated Linear Regression Model was as follows:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_1 X_1 Z + \beta_2 X_2 Z + \beta_3 X_3 Z + \beta_4 X_4 Z + \varepsilon_{i.}$ ……Equation (3.4)

Where:

Y_i = Dependent variable (Performance)

X_1 = Technology Adoption interventions

X_2 = Dynamic Environmental Scan interventions

X_3 = Participatory Stakeholder Involvement interventions

X_4 = Adaptive Organization Structure interventions

β_i = Regression coefficient for each Independent variable i.e coefficient for X_i (i=1, 2, 3,

β_0 = Constant or intercept (value of dependent variable when all independent variables are zero)

ε = Error term

X_iZ= Product interaction term of Board members composition with the independent variables (X_1, X_2, X_3, X_4).

3.9.2 Test of Hypothesis

The t-test and F-test, were used for the testing of hypotheses of the study. The t - test was used to assess statistical significance of each independent variable. F- test was used to determine the overall significance of the model. A 5% level of significance was used to determine the tests. The robustness of the model was determined through application of p-value for the F-statistic. The conclusions for the study were arrived at from the p-value. The overall model was to be significant in cases where the null hypothesis of the beta was rejected, conversely the model was to be insignificant if null hypothesis was accepted. This is to say that if p value ≤ 0.05 then it would mean that the observed difference is significant and hence the predictors of the dependent variable are quite good and therefore the results are not based by chance. When p value ≥ 0.5 the observed difference is not significant thus the variations in the dependent variable cannot be explained by the model since it will not be significant (Kothari & Garg, 2014).

The hypothesis that Board composition moderates the relationship between strategic change interventions and performance was also tested. The significance of the effect

was evaluated for significance at a p- value of 0.05. If reported p- value was to be less than 0.05, then the moderating effect would be considered to be significant.

3.9.3 Operationalization of Study Variables

The strategic change interventions for this study included; technology adoption practice, dynamic environmental scan, participatory stakeholder involvement and adaptive organization structure. A five point Likert scale was used for each of the statements corresponding to the various parameters of the strategic change interventions. The study's research variables were operationalized as Table 3.7: -

Table 3.6. Operationalization of Study Variables

Variable	Definition	Indicator/measurement
Technology adoption interventions	Acquisition of IT infrastructure Strategic alignment Organization structure Employee training	Extent to which application of technology adoption practice influences organizational performance on a scale of 1-5
Dynamic environmental scan interventions	Dynamic environment Hostile environment Heterogeneity Competitive aggressiveness	Extent to which application of scanning environment practice influences organizational performance on a scale of 1-5
Participatory stakeholder involvement interventions	Participation in the change Positive relationships among groups	Extent to which application of stakeholder involvement practice influences organizational performance on a scale of 1-5
Adaptive	Formalization	Extent to which application

organization structure interventions	Departmentalization Span of control	of adaptive organization structure influences organizational performance on a scale of 1-5
Board Composition	Size Gender Diversity	Extent to which Board Composition influences performance on a scale of 1-5

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The chapter provided results for the study that tested the model and also the hypotheses for the research. First, it evaluated the rate of response and how reliable and valid the constructs were. Secondly, it gathered the respondents' background information. Lastly results were analyzed, hypothesis tested and then discussions, implications of findings were presented.

4.2 Response Rate

Emore (2007) noted that response rate is the extent to which the collected data takes care of every sample item; a ratio of actual respondents to anticipated number of persons who respond to the study. Good response rate guarantees that the findings represent the target population. Questionnaires were self-administered. The sample obtained consisted of 48 State corporations. Questionnaires totaling to 144 were issued out to respondents, that is, three questionnaires to each of the 48 State corporations .One hundred and twenty seven (127) questionnaires were completely filled, returned and used for analysis in this study. This meant that the active sample was 127 respondents which represents 88 percent response rate which falls within a large sample size.

Zikmund, *et al*. (2010) describes a response rate of fifty percent (50%) and above to be acceptable for analysis, sixty percent (60%) good while seventy percent (70%) and over to be very good enough. High response rate enhances validity and significance of the results. Since the overall response rate in this study was eighty eight percent (88%), it was regarded good and adequate for further analysis. Close follow up and identification of contact persons and training of research assistants before the data collection exercise, enabled a high response rate to be obtained. Results are presented in Table 4.1.

Table 4.1: Response Rate

Response Rate	Frequency	Percent
Response	127	88%
No Response	17	12%
Total	**144**	**100%**

4.3 : Multicollinearity Test

Multicollinearity test is usually done to ascertain that there is no high degree of association between variables in a study. Generally tolerance below 0.2 and Variance Inflation Factor (VIF) of 10 or higher may be a reason for concern because it shows multicollinearity between variable(Anderson, Sweeney &Williams,2012). This implies if there is any variable with VIF greater than 10, the variable should be expunged from the regression model. Multicollinearity has a tendancy to increase standard errors of coefficients. High standard errors may indicate that coefficients for the independent variables may be found insignificant. The regression models were tested to see if there was presence of multicollinearity.

Table 4.2: Multicollinearity Test

	Collinearity Statistics	
Variable	**Tolerance**	**VIF**
Technology Adoption	.836	1.197
Dynamic Environmental Scan	.857	1.166

Participatory Stakeholders	.774	1.292
Adaptive Organization Structure	.820	1.220

Dependent Variable: Performance

Table 4.2 indicates the Tolerance for the independent variables to be below 0.2. The VIF for all the variables are all below 10. The scores of these statistical tests are thus accepted. This clearly indicates absence of multicollinearity in the data sets. The independent variables were thus subjected to further statistical analysis since they showed no multicollinearity.

4.4 : Demographic results of the Study Population

Demographic characteristics of the respondents was sourced from gender, age, years of service, highest education level and corporation category.

4.4.1 Gender

As shown on table 4.3 the study found out that males formed the majority of respondents**;** 61.4 %, whereas females were 38.6%. This meant that people occupying strategic positions of CEO, Human Resource and Finance Managers were mostly men. It was therefore concluded that there is no gender balance among employees of commercial state corporations in Kenya and that the male gender heavily outnumbers the female gender among top management of the organizations. These findings are in agreement with Barua *et al.* (2016) who also established that the male gender outnumbered female gender among top management of corporations.

Table 4.3: Gender

Gender	Frequency	Percent
Male	76	61.4
Female	47	38.6

Total	**123**	**100.0**

4.4.2 Age

Age of respondents was sought. The years were in the range of 36-44 had the highest percentage of 31.5%, followed closely by 26- 35 years which had 30.7%. The age range between 45-55 years had 26% over 55 years had 7.9% while the lowest was 18-25 years which recorded only 3.9 %. The researcher targeted for the study these experienced Managers in the corporations firms who understood the current and future operations of their organizations well. Thus it indicated that the majority of the employees engaged by commercial state corporations in the top management, are aged above 36 years. Therefore vital information was provided by majority of the respondents due to their experience. The results correspond to the findings by Monari *et al.* (2016) who found out that majority of employees were above 35 years. Results are presented in Table 4.4.

Table 4.4: Age

Age	Frequency	Percentage
18-25	5	3.9
26-35	39	30.7
36-44	40	31.5
45-55	33	26.0
OVER 55	10	7.9
Total	**127**	**100.0**

4.4.3: Years of Service

Respondents were also requested to provide information on number of years they had served in these corporations as managers. The results have been provided in Table 4.4.

Table 4.5: Years of Service

The study shows in Table 4.5 that 5.5 % of the managers had worked for less than 2

Years of Service	Frequency	Percent
Less than 2 years	7	5.5
2 to 5 years	24	18.9
6 to 10 years	38	29.9
11 and more Years	58	45.7
Total	**127**	**100.0**

years, 18.9 % had a working experience between 2 to 5 years, 29.9 % had a working experience between 6 to 10 years, while 45.87 % had a working experience of more than 11 years. This implies that majority of the respondents at 45.87% had a good working experience with corporations hence were able to provide vital information for the study. This also indicated they had adequate experience to execute their tasks appropriately. The findings are in agreement with Sasaka *et al.* (2016) who established that managers had over 6 years of experience in their work.

4.4.4: Highest Education Level

Determination of highest level of education was also done. The study established holders of Master's degree at 43.7%, Bachelors at 37%, Higher National Diploma; 8.7% while Diplomas represented 10.2% .These findings reveal that the data gathered on strategic change interventions in the study was concrete since majority of the top management used had prerequisite qualifications and skills a good indicator of the high literacy levels among the Senior managers who were interviewed. Monari *et al*. (2016) in a similar study found out that 72% of the respondents had Bachelors and above qualifications.

Table 4.6: Highest Education Level

Level of Education	Frequency	Percent
Diploma Certificate	13	10.2
Higher National Diploma	11	8.7
Bachelors	47	37.0
Masters	55	43.3
PhD	1	.8
Total	**127**	**100.0**

4.4.5 Corporation Category

This question intended to capture the categories that commercial state corporations operate. The respondents were hence requested to indicate whether their corporations were in the category of purely commercial or strategic commercial. Results showed that 55.9% of the corporations were strategic commercial, while 44.1% were purely commercial. The findings indicate that responses were distributed across the two categories of commercial state corporations and hence the findings could be generalized.

Table 4.7: Corporation Category

Corporation category	Frequency	Percent
Purely Commercial	56	44.1
Strategic Commercial	71	55.9
Total	**127**	**100.0**

4.5 Descriptive Statistics of Study Variables.

4.5. 1 Qualitative Data from Questionnaires

This section provides research findings in form of tables with the number of respondents based on individual variables against each test item**.** The study aimed at examining the influence of strategic change interventions on performance of commercial state corporations in Kenya. The following variables were analyzed by the researcher in this study; technology adoption interventions, dynamic environmental scan interventions, participatory stakeholder involvement interventions, adaptive organization structure interventions and Board composition of commercial state corporations in Kenya.

4.5.1.1 Influence of Technology Adoption Interventions on Performance

The study respondents were required to indicate what change processes the management take when introducing technology to ensure it is fully adopted. It was found that 38% of the respondents agreed that commercial state corporations acquire IT infrastructure. 33% of the respondents indicated that there is employee training that takes place while 15% and 14% indicated there is organization structure improvement and strategic alignment respectively. The findings imply that commercial-state corporations have given emphasis to acquiring of IT infrastructure and training their employees on how to use the infrastructure and thus keeping

abreast with technology. These findings have been supported by Barker (2010) who asserts that training aids employees to gather competencies and skills required to perform tasks hence positively influencing performance. Kioko and Mwangangi (2017) also confirmed the positive relationship between technology and performance of corporations.

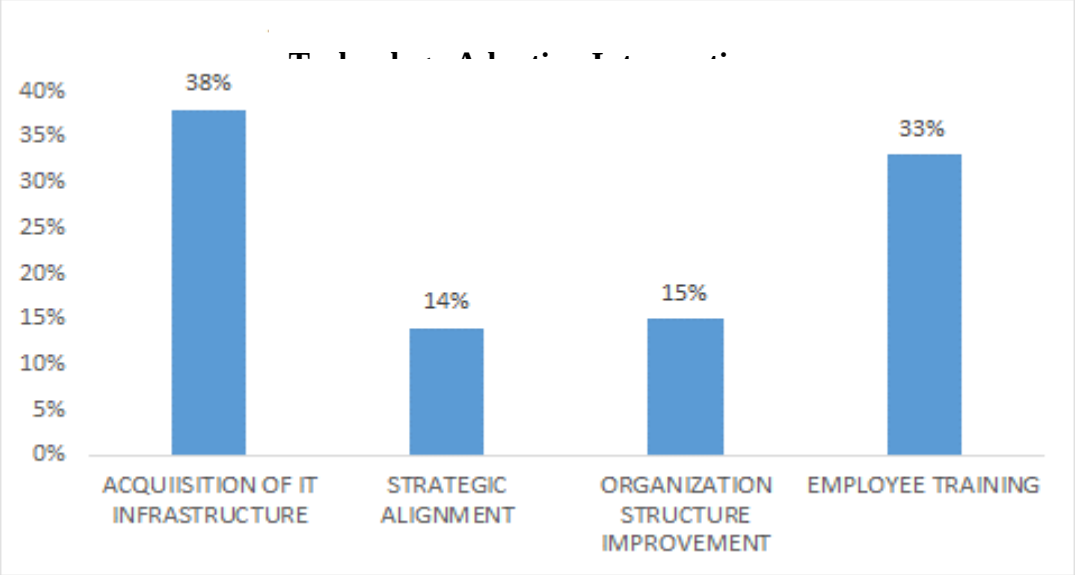


Figure 4.1: Technology Adoption Interventions

The study respondents were required to indicate the various new technology types adopted in their organization during the change processes. The study findings revealed that software was the most commonly adopted new technology at 44%. Hardware was mentioned by 26% of the respondents. Communications was at 15 %. This implies that majority of the commercial- state corporations give preference to software and hardware for their operations while acquiring few gadgets meant for communication. Olayo *et al.* (2018) emphasized acquisition of modern software in order to improve the quality of work for employees in corporations.

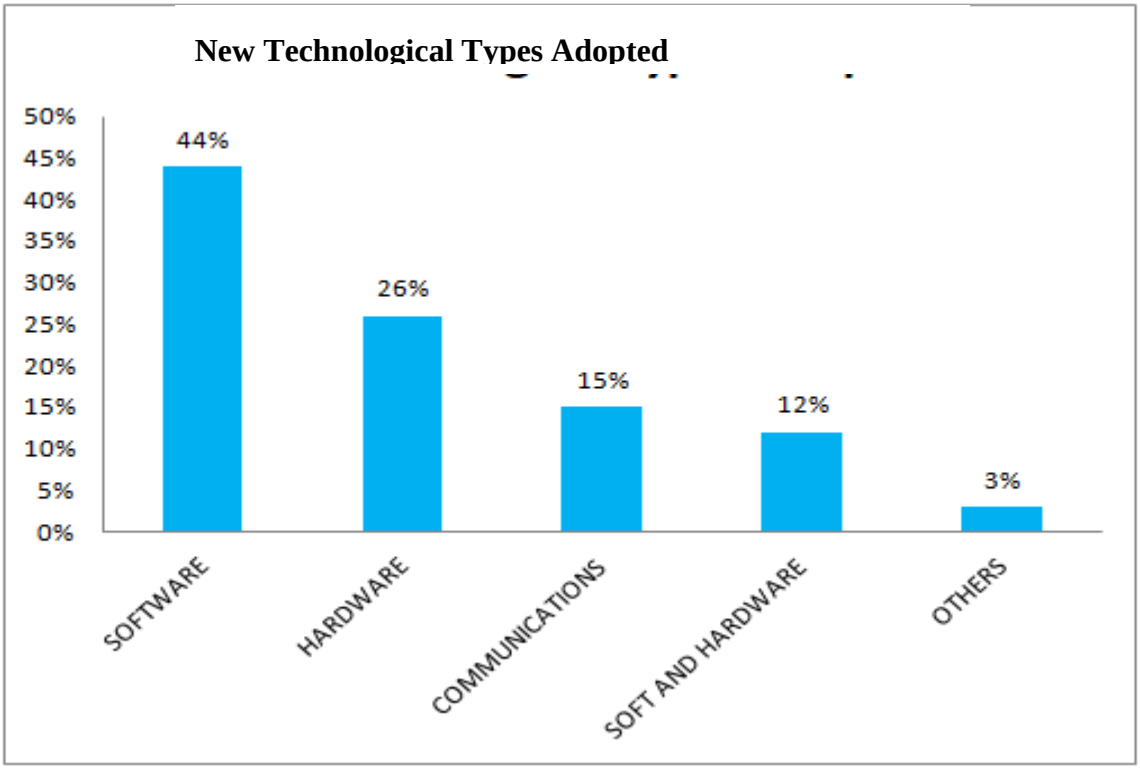


Figure 4.2: New Technology Types Adopted

Respondents were required to point out the level of innovation adoption intervention that best describes their corporation. The study findings revealed that Late Majority Adopters were the most common innovation interventions at 27.7%. Early Majority and Early Adopters were both at 22.5%.Laggards were at 15% while Innovators were mentioned by 12.5% of the respondents. These findings were supported by the study by Hashim (2007) on ICT Adoption in Small & Medium Enterprise owners in Malaysia which established that SME's owners are in the category of late majority. To the commercial state corporations, the adoption may be as a result of increasing pressure from other organizations. The late majority approach innovations join in after seeing, other organizations have initiated the processes. The findings are as shown by figure 4.3

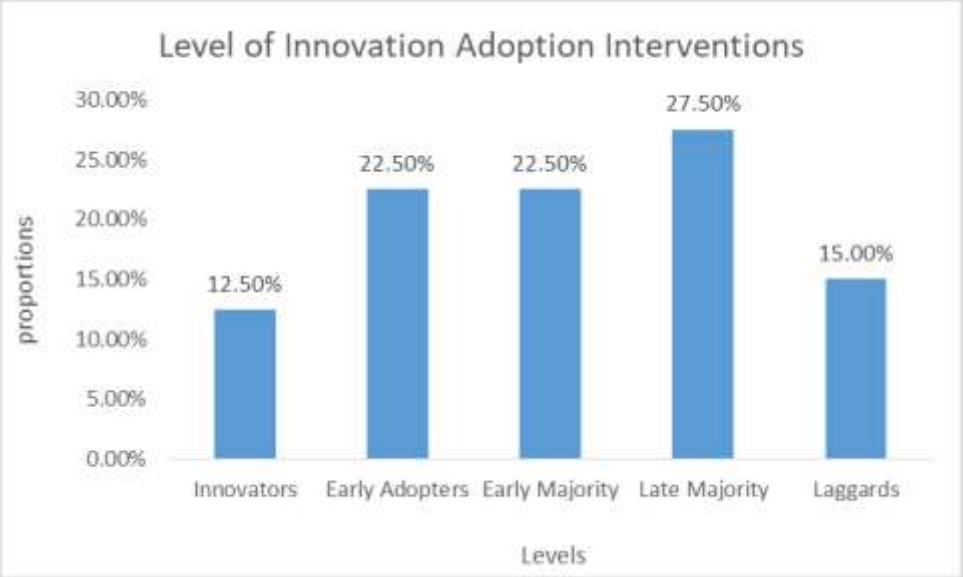


Figure 4.3: Level of Innovation Adoption Interventions

Respondents were required to point out their level of agreement with different statements regarding influence of technology adoption interventions on performance of corporations. The respondents were required to use scale 1 to 5 where 1 is those who strongly disagree, 2 is disagree, 3 is neither agree or disagree, 4 is agree and 5 is strongly agree. The aim of collecting this data was to find out whether technology adoption interventions were adequate for improvement of organization performance. Study findings are presented in Table 4.8.

Table 4.8: Influence of Technology Adoption Interventions on Performance

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Mean	Standard Deviation
There is proper alignment of technology and business strategies in the organization	1.6%	7.9%	11%	57.5%	22%	3.95	0.89
Technology has business support strategies for improvement of process management	0%	10.2%	5.5%	51.2%	33.1%	3.91	0.886
The organization structure by adopting technology systems has changed so as to enhance employee empowerment	1.6%	3.9%	20.5%	46.5%	27.6%	3.98	0.947
Change agents have been identified and trained to facilitate the change process	2.4%	15%	20.5%	36.2%	26%	4.07	0.892
The organization has well defined training and development programs	3.1%	8.7%	15.7%	47.2%	25.2%	3.94	0.885
The technology projects in the organization have	0.8%	10.2%	10.2%	48%	30.7%	3.69	1.089

been implemented in compliance							
Adequate technology infrastructure which includes networks	0.8%	7.9%	13.4%	51.2%	26.8%	3.83	1.009

The findings in Table 4.8 show that 57.5% of the respondents are in agreement that there is proper alignment of technology and business strategies in the organization. It was also found that 51.2% of the respondents agree technology has business support strategies for improvement of process management. Other respondents who accounted for 46.5% agreed that their organization structure by adopting technology systems has changed so as to enhance employee empowerment, inter-department (cross-function) integration and new business interventions and that 36.2% of the respondents also agreed that change agents have been identified and trained to facilitate the change process. A further 47.2% of respondents agreed that the organization has well defined training and development programmes while 48% agreed that technology projects in the organization were executed to match with business strategies. This implies that the corporations have given great importance to matching technology with the strategies in their organizations while also ensuring the employees are given the pre requisite training to handle the changes, This is for purposes of improving performance.

Respondents representing 51.2%, agreed that adequate infrastructural technology that includes networks, electronic data interchanges, conducting research and development to get latest technologies has been put in place. Table 4.7 shows that respondents on average agreed that technology adoption interventions influence performance with a mean ranging from 3.69 and 4.07. The findings imply that majority of the commercial state corporations have given a lot of emphasis on

technology adoption interventions and done alignment with their business processes to improve their operations. These findings concur with Ng'ang'a, Waiganjo and Njeru (2018) where the mean for influence of technology on performance was 3.76. Rugimbana and Dimba (2010) also supported the findings that that there is a significant impact of training on performance of organizations. Likewise Niazi (2011) asserts that skills and abilities of employees are enhanced through training.

4.5.1.2 Influence of Dynamic Environmental Scan Interventions on Performance

The study respondents were required to indicate which factors they regard as influencing their organizational performance in relation to scanning of environment interventions. The study findings revealed that new legislation / regulation affecting the sector was the most identified factor at 31%. New technological developments was mentioned by 28% of the respondents. National economic performance was at 20 %. This implies that the corporations were more influenced by new laws and policies being passed by the Government and new technology developments in the economy than national economic performance as per table 4.8 and figure 4.3. Very few corporations were concerned about current customer needs, inflation and cost of investment. This shows why they are very keen on aspects of technology and changes that entails it. These findings are in agreement with Ng'ang'a, *et al.* (2018) where legal environment and new legislations, influenced performance of organizations to a great extent (M=4.33).

Table 4.9: Dynamic Environmental Scan Factors

Dynamic Environmental Scan Factors	Frequency	Percentage
National Economic Performance	25	20%
New Legislation	39	31%
New Technological Developments	36	28%
Current Customer Needs	11	9%

Inflation	9	6.80%
Costs of Investments	7	5.20%
Total	**127**	**100%**

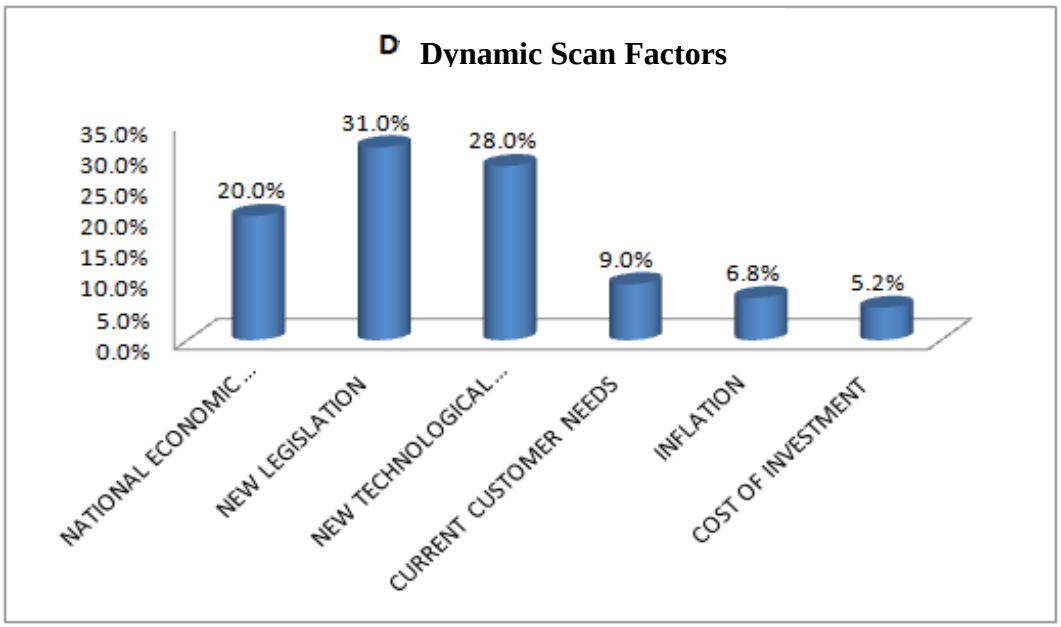


Figure 4.4: Dynamic Environmental Scan Factors

Respondents were required to point out their level of agreement with different statements regarding influence of dynamic environmental scan interventions on organizational performance. A scale of 1 -5 was used by the respondents where 1 represents strongly disagree, 2 is disagree, 3 is neither agree or disagree, 4 is agree and 5 is strongly agree. The purpose of this data was to determine whether the respondents felt that dynamic environmental scan interventions in place was sufficient to improve on the performance of the organizations. Findings were presented in Table 4.10.

Table 4.10: Influence of Dynamic Environmental Scan Interventions on Performance

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Mean	Standard Deviation
Dynamic environment affects commercial state corporations performance	0%	5.5%	7.1%	40.2%	47.2%	4.29	0.827
In the dynamic environment prices of products and changes in taxes	1.6%	2.4%	1.6%	44.1%	50.4%	4.39	0.778
Hostile environment affects commercial state corporations performance	0.8%	1.6%	15%	39.4%	43.3%	4.23	0.818
As a result of hostile environment where combination of market strategies	0.8%	3.9%	11.8%	49.6%	33.9%	4.12	.822
Heterogeneity affects commercial state corporations performance	0.8%	4.7%	10.2%	54.3%	29.9%	4.08	0.813
In the environment which is heterogeneous commercial state corporations can take	3.1%	2.4%	21.3%	44.1%	29.1%	3.94	.941
Competitive aggressiveness affects commercial state corporations performance	0.0%	2.4%	12.6%	48.8%	36.2%	4.19	0.742
The commercial state corporations takes into consideration dynamic environment	0.8%	0.8%	9.4%	52.8%	36.2%	4.12	.715
The commercial state corporations takes into consideration of heterogeneity	2.4%	1.6%	12.6%	46.5%	37%	4.14	0.87

It is clear from the results that dynamic environmental interventions positively influence performance of commercial state corporations in Kenya. This is indicated by the findings which show that 47.2% strongly agreed to the statement. Moreover 50.4% strongly agreed to the statement that in the dynamic environment prices of products and changes in taxes affects performance of commercial state corporations. 52.8% also agreed that commercial state corporations takes into consideration dynamic environment when undertaking strategic planning for enhancing performance. Further, 43.3 % strongly agreed that hostile environment affects commercial state corporations performance. Additionally, 49.6% agreed that as a result of hostile environment where combination of marketing strategies, market niche and new methods of packaging are used greatly influences performance of commercial state corporations. The findings are in agreement with Chiuri *et al.* (2015) in their study where 49.4% of the respondents agreed that they had to recast their strategies due to actions of competitors. Mbithi, Muturi and Rambo (2016) were also in agreement when their study established that to avert competition, the sugar companies had to apply strategies like product development, market development and diversification.

On heterogeneity affecting commercial state corporations performance 54.3% agreed to this statement. On whether in the environment which is heterogeneous commercial state corporations can take greater risks as a result their performance are greatly influenced. 44.1% agreed to this statement. Also a further 46.5% agreed that commercial state corporations takes into consideration of heterogeneity and competitive aggressiveness for improving performance. 48.8% agreed that competitive aggressiveness affects commercial state corporations' performance.

4.5.1.3 Influence of Participatory Stakeholders Involvement on Performance

Respondents were also requested to indicate the roles of stakeholder in change interventions. The study findings revealed that stakeholders were involved mostly at formulation of change interventions at 63%. Involvement of stakeholders at implementation was mentioned by 20% of the respondents. Involvement through giving of suggestions was at 15 %. This implies that though in as much as stakeholders are involved in formulation of strategic change interventions some respondents expressed their concerns that they were not directly involved in the implementation and giving suggestions of strategic change interventions.

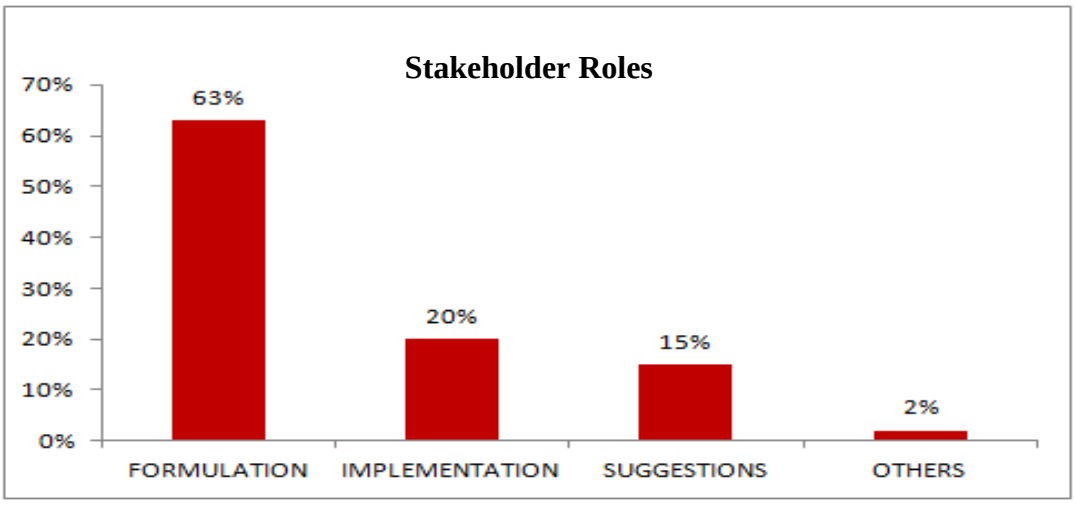


Figure 4.5: Stakeholder Roles

Respondents were required to point out their level of agreement with different statements regarding influence of participatory involvement interventions on organizational performance. A scale of 1 -5 was used by the respondents where 1 represents strongly disagree, 2 is disagree, 3 is neither agree or disagree, 4 is agree and 5 is strongly agree. The underlying reason for collection of this data was to determine whether the respondents felt that participatory stakeholder involvement interventions in place was sufficient to improve on the performance of the organizations. Findings were as tabulated in 4.11.

Table 4.11: Influence of Participatory Stakeholders Involvement on Performance

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Mean	Standard Deviation
This organization allows participation of all stakeholders to contribute to opinions	4.7%	12.6%	15.7%	45.7%	21.3%	3.66	1.093
positive relationship among stakeholders groups is encouraged in this organization	3.9%	6.3%	7.9%	53.5%	28.3%	3.96	.987
Quite often there are formal surveys of stakeholders views or opinions	0.8%	19.7%	25.2%	36.2%	18.1%	3.51	1.030
The stakeholders provide support for strategic change in the organization	2.4%	7.1%	26%	41.7%	22.8%	3.76	.965
Stakeholders involvement are responsible for the achievement of strategic changes in in the organization	2.4%	10.2%	18.9%	38.6%	29.9%	3.83	1.045

The findings in Table 4.11 show that 45.7% agreed that the organization allows participation of all stakeholders to contribute to opinions on change interventions. It was also found that 53.5% of the respondents agreed that positive relationship among stakeholders groups is encouraged in this organization.36.2% of the respondents agreed that quite often there are formal surveys of stakeholders views or opinions on change interventions. 41.7% of the respondents also agreed that stakeholders provide support for strategic change in the organization change agents have been identified and trained to facilitate the change process. 47.2% agreed that Stakeholders are responsible for the achievement of strategic changes in the organization. Therefore majority of the respondents agree with statements regarding participatory stakeholder involvement interventions. This is given by the evidence of means ranging between 3.51 and 3.96. Similarly, standard deviation is in the range of 0.965 and 1.093. This indicates that the responses showed little deviations from the mean. The results are in agreement with Walala, *et al*. (2015) who found out that 54.5% of respondents in his study agreed on conducting consultation meetings with stakeholders before initiation of change processes. These views were also supported by Koech, *et al.* (2018).

4.5.1.4 Influence of Adaptive Organization Structure on Performance

The respondents were also requested describe the structure of their organizations. The study findings revealed; formalization description was identified by 33% of the respondents. Span of control was mentioned by 30% of the respondents. Departmentalization was at 25%.

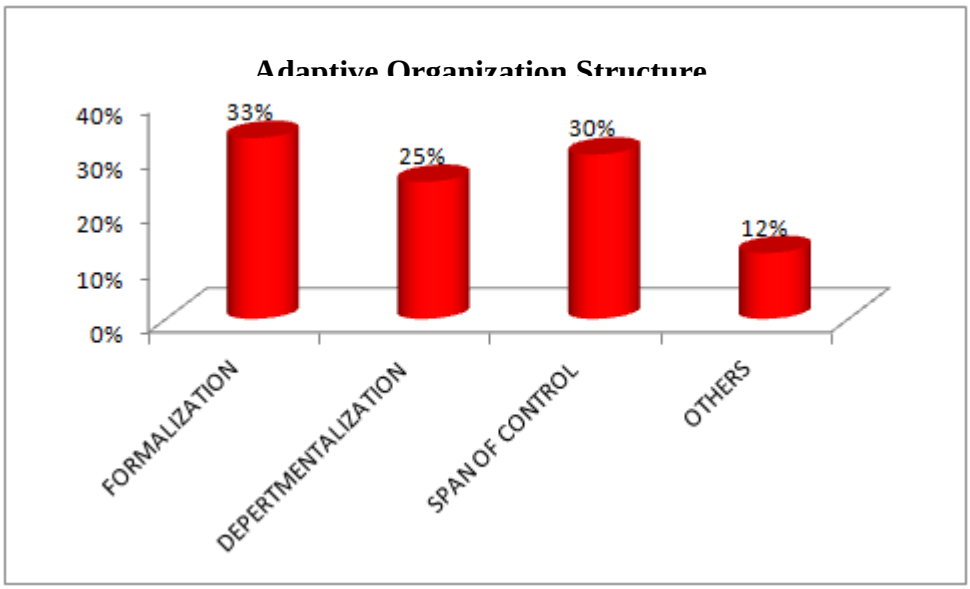


Figure 4.6: Adaptive Organization Structure

Respondents were required to point out their level of agreement with different statements regarding adaptive organization interventions on organizational performance. A scale of 1 -5 was used by the respondents where 1 represents strongly disagree, 2 is disagree, 3 is neither agree or disagree, 4 is agree and 5 is strongly agree. The underlying reason for collection of this data was to determine whether the respondents felt that adaptive organization interventions in place were sufficient to improve on the performance of the organizations. Findings are as tabulated in 4.12.

Table 4.12: Influence of Adaptive Organization Structure on Performance

	Strongly Disagree	**Disagree**	**Neither**	**Agree**	**Strongly Agree**	**Mean**	**Standard Deviation**
The organization strictly operates routinely through formalized structures and processes	0.8%	3.1%	11.8%	42.5%	41.7%	4.21	0.832
our organization has a clear	7.1%	16.5%	11%	38.6%	26.8%	3.61	1.241

internal pattern of relationships, authority and communication							
All departments should be allowed to have their own structures which are unique	3.9%	3.9%	17.3%	48%	26.8%	3.90	0.975
duties and tasks within the organization are clearly indicated and boundaries set	3.1%	7.1%	17.3%	45.7%	26.8%	3.86	0.998
In our institution each employee holding a position of authority is responsible for a few subordinates	4.7%	0.8%	20.5%	57.5%	16.5%	3.80	0.891
The organization structures responds to changes in its environment effectively	3.9%	4.7%	20.5%	53.5%	17.3%	3.76	0.932
This structure of the organization supports the tasks hence ultimately contribute to the performance	3.1%	3.9%	18.9%	48%	26%	3.9	0.941

Table 4.12 represents the findings of influence of adaptive organization structure interventions on performance of commercial- state corporations in Kenya. On whether the organization strictly operates routinely through formalized structures and processes, 42.5% agreed while 41.7% had strongly agreed. A total of 38.6 % of the respondents agreed that their organization has a clear internal pattern of relationships, authority and communication a further 26.8% strongly agreed to this statement. On whether all departments should be allowed to have their own structures which are unique, 48% of the respondents were in agreement to this

statement while 26.8 strongly agreed. 45.7% agreed that duties and tasks within the organization are clearly indicated and boundaries set. 57.5% agreed that each employee holding a position of authority in their organization is responsible for a few subordinates. Respondents at 53.5% were in agreement to the statement that the organization structures responds to environmental changes effectively. On whether the organizational structure supports the tasks hence ultimately contribute to the performance 48% of the respondents were in agreement with this statement. The results reveal that most of the respondents agreed with the adaptive organization interventions measures that were used. This is evidenced by means ranging between 3.61 and 4.21, while standard deviation being in the range of 0.832 and 1.241. There was therefore very small deviation from the means. The question on whether all departments should be allowed to have their own structures which are unique was contradicting the study by Chiuri *et al.* (2015) which showed that about 16.4% agreed that all departments should be allowed to have their own structures which were unique to themselves while majority (72.7%) did not agree with the statement. This contradiction may be because her study was on Higher Education Institutions while the current study is on commercial state corporations. The findings on the question that sought to investigate the respondents views on whether each employee holding a position of authority was responsible for a few subordinates was in agreement with Chiuri *et al.* (2015) where the majority (52.6%) agreed that in their institutions each employee holding a position of authority was responsible for a few subordinates. This was further supported by Okafor *et al*. (2017) who established that it's the duty of the organizational structure to allocate authority and responsibility. Therefore, it specifies who is in charge of each employee and hence spells out accountability.

4.5.1.5 Influence of Board Composition

The study also sought to establish the composition of the board in terms of diversity. The study findings revealed that outside directors represent 60% of the board members, non-executive directors stand at 17%, while inside and executive directors are 12% and 11% respectively.

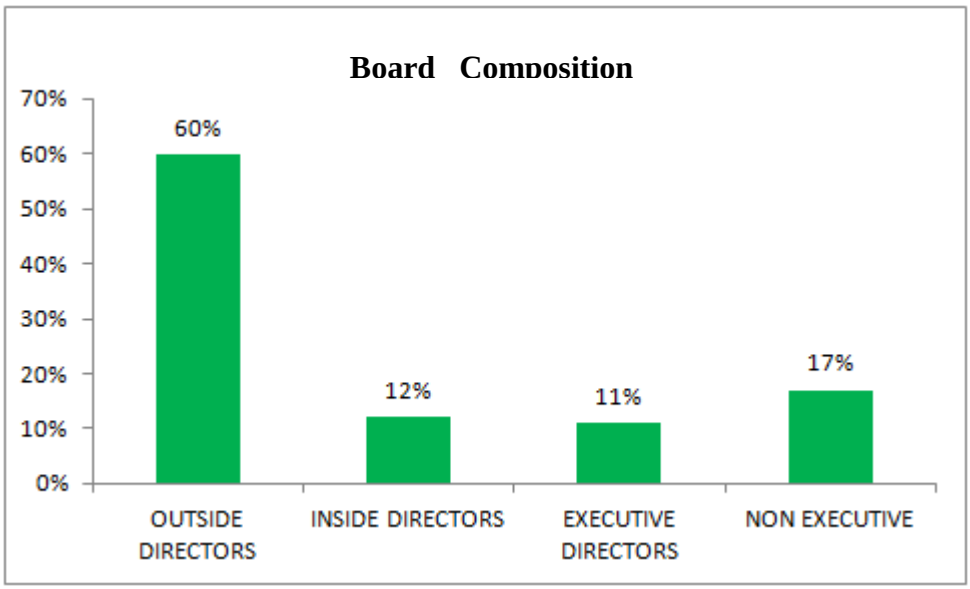


Figure 4.7: Board Composition

The study also sought to find out composition of Board in terms of gender. The majority of the respondents indicated that these board members were comprised of males at 67% while 33% were females. These findings indicate men are more favoured in Board membership than women. Gaturu *et.al*. (2018) also is in agreement with these findings when he established domination of males in Board membership in his study (males; 66.8%) females; 34.2%)

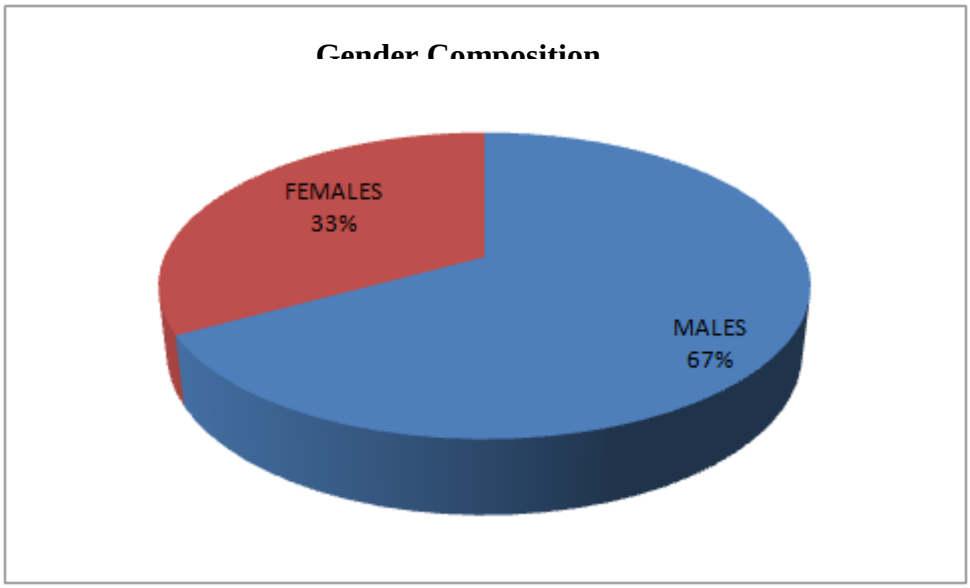


Figure 4.8: Gender Composition

The fifth objective of the study sought to establish the moderating effect of Board composition on the relationship between strategic change interventions and performance of Commercial state corporations in Kenya. The respondents were required to state the extent to which the number of board members has influence on the organization. About 40.9% and 33.1% of the respondents agreed and strongly agreed respectively to this statement. On the statement whether there is optimal mix of inside and outside directions for their organization, 32.3% expressed their agreement. About 44.3% of the respondents agreed that executive directors have influence on the organization while 32.3% agreed that non-executive directors in the board have influence in the organization. On the issue of Independent directors not having adequate information and knowledge 32.3% agreed. About 37.8 % of the respondents agreed that female representation is adequate in their boards. On whether there was adequate male representation in the board, 48 % were in agreement. Respondents representing 42.5%, agreed that the increased involvement of women on the boards has helped to improve strategic decision-making in the organization. 46.5% strongly agreed that Board diversity is critical in strategic decision making because it provides a pool of knowledge, skills, experience, and perspectives, necessary in the execution of strategic roles. These findings are presented in table 4.13. Diversification of the board for better performance has been underscored by Wagana and Nzulwa (2016) .According to Campbell and Mínguez-Vera (2008), the more the women in a board the better an organization becomes in terms of wider understanding of issues and hence quality decisions.

Table 4.13: Influence of Board Composition

	Strongly Disagree	**Disagree**	**Neither**	**Agree**	**Strongly Agree**	**Mean**	**Standard Deviation**
Number of board members has influence on the organization	3.9%	10.2%	11.8%	40.9%	33.1%	3.89	1.100

There is optimal mix of inside and outside directions for the organization	10.2%	15%	21.3%	36.2%	17.3%	3.35	1.225
Non-executive directors in the board have influence in the organization	10.2%	17.3%	11.8%	32.3%	28.3%	3.51	1.338
Executive directors have influence on the organization	3.9%	7.1%	8.7%	43.3%	37%	4.02	1.050
Independent directors don't have adequate information and knowledge about the organization	15%	17.3%	10.2%	32.3%	25.2%	3.35	1.412
Female representation is adequate in the board	7.9%	8.7%	11.8%	37.8%	33.9%	3.81	1.22
Male representation is adequate in the board	3.9%	2.4%	5.5%	40.2%	48%	4.26	0.961
The increased involvement of women on the board of the organization has helped	5.5%	4.7%	8.7%	42.5%	38.6%	4.04	1.079
Board diversity is critical in strategic decision making because it provides a pool	1.6%	1.6%	5.5%	44.9%	46.5%	4.33	0.787

The results reveal that most of the respondents agreed with the Board composition measures that were used. This is evidenced by means ranging between 3.35 and 4.33,

while standard deviation being in the range of 0.050 and 1.412. There was therefore very small deviation from the means.

4.5.1.6 Organizational Performance

Respondents were also required to indicate their organizations sales growth in percentage (%) from 2012 to 2016.

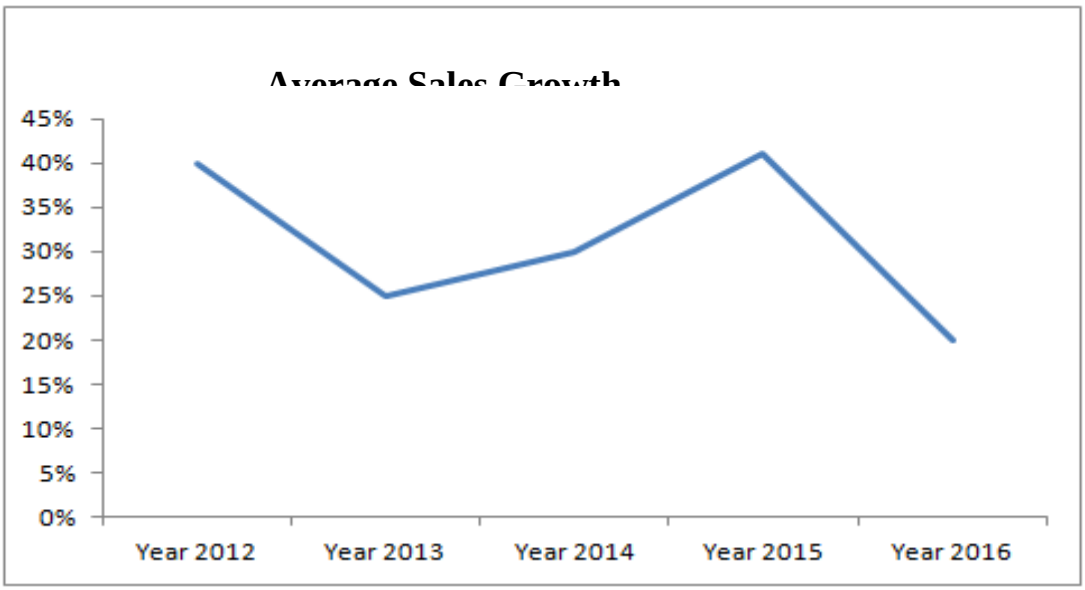


Figure 4.9: Average Sales Growth

Respondents were required to point out their level of agreement with different statements regarding organization performance. A scale of 1 -5 was used by the respondents where 1 represents strongly disagree, 2 is disagree, 3 is neither agree or disagree, 4 is agree and 5 is strongly agree. The underlying reason for collection of this data was to determine whether the respondents understood the procedures and processes that impacted on organization performance. The study findings are presented in Table 4.14.

Table 4.14: Organizational Performance

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Mean	Standard Deviation
Our firm profitability has increased over the last five years	11%	17.3%	23.6%	28.3%	19.7%	3.28	1.272
The number of employees has increased over the last five years	8.7%	26%	14.2%	28.3%	22.8%	3.31	1.312
Our firm has experienced an increase in number of branches over the last 5 years	30.7%	28.3%	15.7%	15%	10.2%	2.46	1.338
Our firm has experienced increased sales growth over the last 5 years	11%	14.2%	15%	40.9%	18.9%	3.43	1.257
Our firm has increased number of products over the last 5 years	8.7%	11.8%	18.9%	41.7%	18.9%	3.50	1.181
our firm has experienced increased market share over the last 5 years	10.2%	19.7%	20.5%	37.8%	11.8%	3.21	1.193
Our firm has experienced increased annual running expenditure over the last five years	8.7%	12.6%	16.5%	41.7%	20.5%	3.53	1.201
Over the last five years your organization has been able to	7.9%	15.7%	17.3%	37.8%	21.3%	3.49	1.214

achieve its goals in relation to organizational performance	

Table 4.14 represents the findings of indicators on performance of commercial state corporations in Kenya. On whether organization profitability has increased over the last five years, 28.3% agreed to the statement. A total of 28.3 % of the respondents agreed to the statement that the number of employees in the organization has increased over the last five years. On whether their organization has experienced an increase in number of branches over the last 5 years, 30.7% strongly disagreed to this statement while 28.3% disagreed. In regard to the organization experiencing increased sales growth over the last 5 years, about 40.9% of the respondents agreed to this statement. On whether the organization has increased a number of products over the last 5 years, 41.7% were in agreement to this statement. About 37.8% of the respondents agreed that their organization has experienced increased annual running expenditure over the last five years. A total of 37.8% agreed that over the last five years the organization has been able to achieve its goals in relation to performance.

4.5. 2 Qualitative Data from Interviews

In this section, the study sought the respondents' opinions on strategic change interventions in their organizations.

4.5.2.1 Strategic Change Interventions

Respondents were requested to state the strategic change interventions present in their organizations. The study findings were presented in table 4.15 and figure 4.10.

Table 4.15: Strategic Change Interventions

Main Themes	Frequency	Percentage
Point of Sale System	2	13.3%
ICT Infrastructure	4	26.7%
Stakeholders Involvement	2	13.3%
Training	2	13.3%
Restructuring	2	13.3%
Automation	1	6.7%
Review of Strategic Plan	2	13.3%

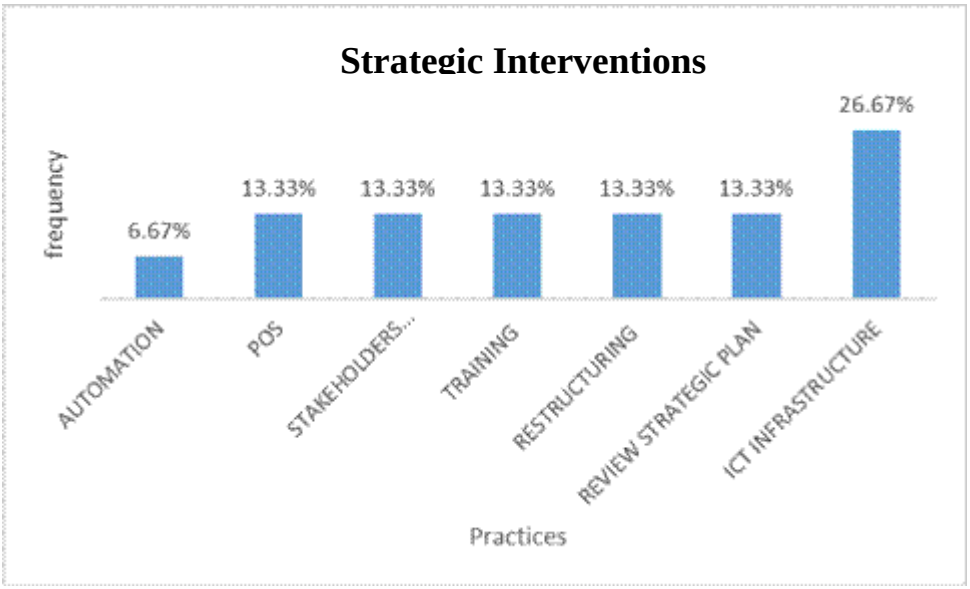


Figure 4.10: Strategic Interventions

The findings reveal that 13.3% cited point of sale system as the strategic change interventions present in their organization while ICT infrastructure was at 26.7%. Stakeholder involvement was mentioned by 13.3%. It was also found that 13.3% of the respondents cited restructuring of the organization while 6.7% mentioned automation and 13.3% was review of strategic plan. These finds were echoed by

Mwangi, *et al.* (2016) who observed that strategic changes take place in terms of technological advancements, review of strategic plans to suit the environmental dynamism.

4.5.2.2 Attribution of Performance to Strategic Change Interventions

Respondents were requested to explain what they would attribute the performance of their organization to only strategic change interventions. The results were as per table 4.16 and figure 4.11.

Table 4.16: Attribution of Performance to Strategic Change Interventions

Main Themes	Frequency	Percent
Yes	8	62%
No	5	38%
Total	13	100%

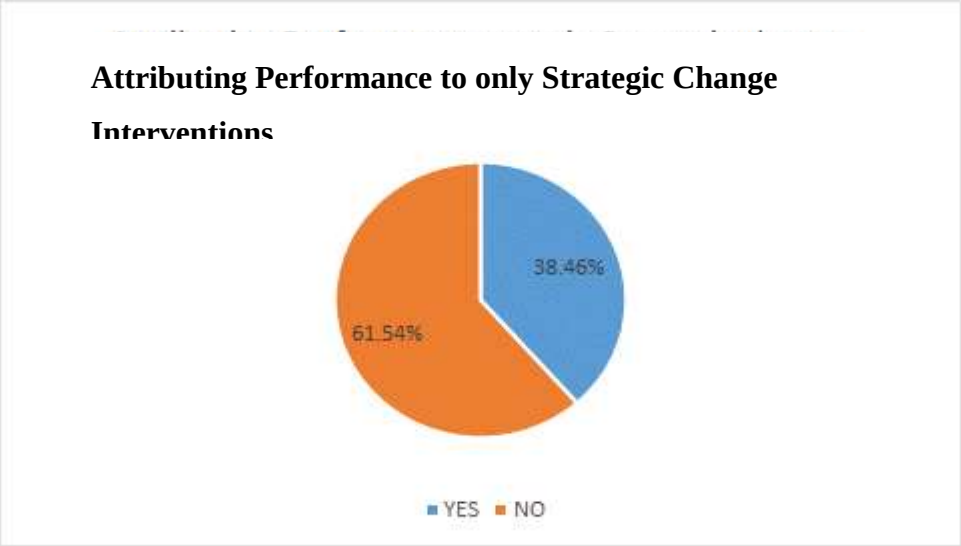


Figure 4.11: Attributing Performance to only Strategic Change Interventions

The results revealed that 62% of the respondents revealed that they would attribute performance to strategic change interventions while 38% were attributing performance to other factors other than strategic change interventions.

4.5.2.3 Environmental Scan Interventions

Respondents were to explain to what extent they were involved in environmental scan interventions. The results were as given in table 4.17 and figure 4.12.

Table 4.17: Involvement in Environmental Scanning Interventions

Main Themes	Frequency	Percentage
None	3	30%
Large	7	70%

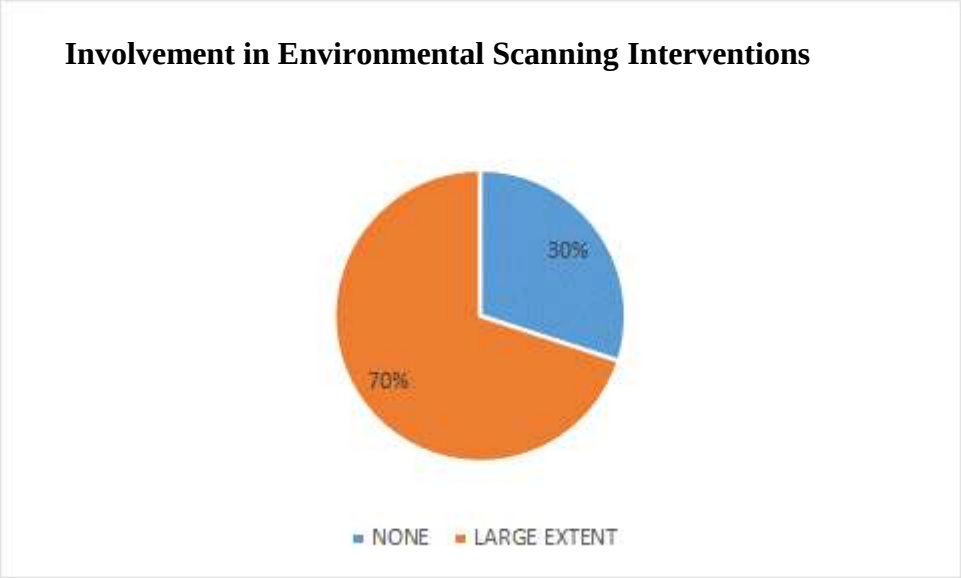


Figure 4.12: Involvement in Environmental Scanning Interventions

The respondents who were interviewed indicated that since they operate in a dynamic environment, environmental scanning interventions become key activities in their daily operations. This was supported by70% of the respondents. These findings were also echoed by Kario and Ngugi (2017) who asserts that the survival of an organization depends on the relationship it has with the environment. These findings imply that Commercial state corporations are dependent on the environment and hence need to scan the environment to detect any challenges that would impact negatively to the efforts of application of strategic change interventions.

4.5.2.4 Technology Adoption Interventions

The study also sought the respondents' opinions on the importance of Technology Adoption Interventions. . The results were as given in table 4.18 and figure 4.13.

Table 4.18: Importance of Technology Adoption Interventions

Main Themes	Frequency	Percent
Very	2	78%
Negligible	7	22%
Total	9	100%

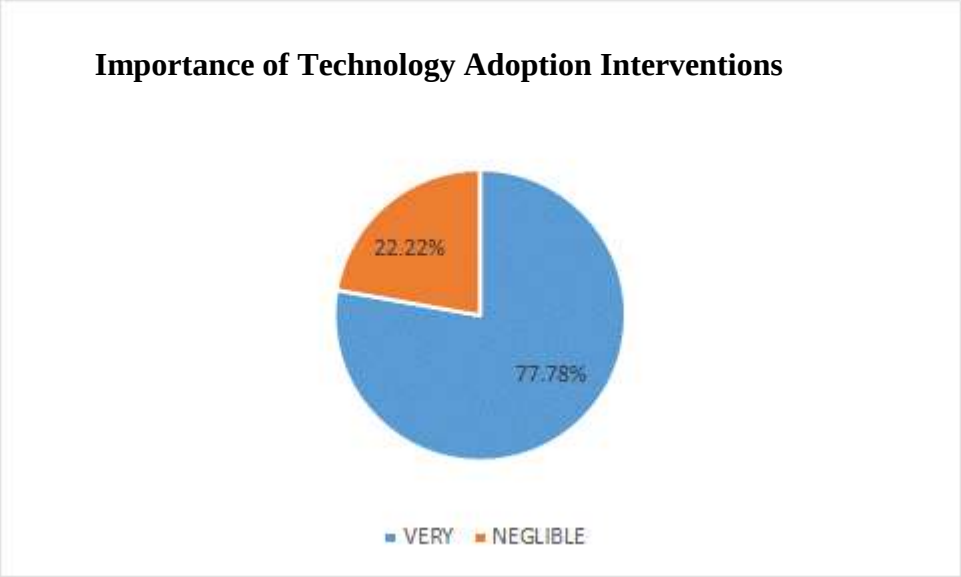


Figure 4.13: Importance of Technology Adoption Interventions

The HR managers interviewed indicated that they usually considered technology adoption to be a very crucial activity as it leads to new innovations hence improved operations and performance of the organization. This was cited by 77.78% of the respondents. They also emphasized that they organize training programmes and carry out training of their employees to cope up with the new technologies adopted. It came out clearly during the interviews that technology adoption is very important especially in the aspects of machines and new products innovation. It was also emphasized that technology plays a very critical role during strategy implementation and that it reduces the cost of doing business. Teece (2014) ascertains that training is crucial in making employees develop the appropriate skills required to perform tasks. Such a gesture makes employees be very supportive of strategies pursued by the organization. Mwangi, *et.al.* (2016) also confirmed in their study that great emphasis is required on training to ensure employees acquire adequate knowledge and skills to enable them perform duties effectively.

4.5.2.5 Organization Linkage to Competitive Edge

Respondents were to explain the extent to which their organization link its competitive edge to the strategic change interventions. . The results were as given in table 4.19 and figure 4.14.

Table 4.19: Organization Linkage to Competitive Edge

Main Themes	Frequency	Percent
Large Extent	5	56%
Somehow	4	44%
Total	9	100%

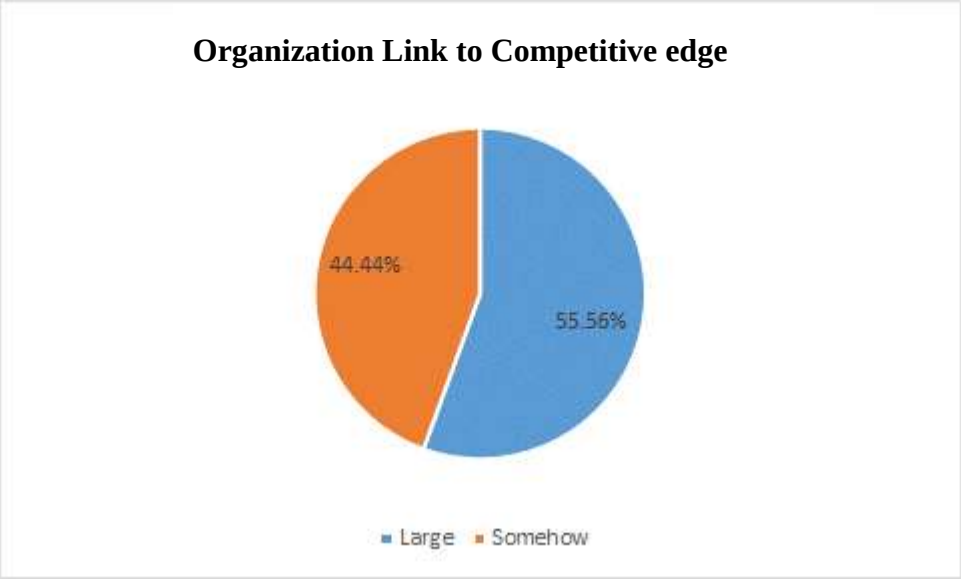


Figure 4.14: Organization Link to Competitive edge

56% of the informants interviewed agreed that they link the competitive edge of their organization to strategic change interventions while 44.44% were not sure. The findings concurred with Sage (2015) who asserts that that successful implementation of robust strategies gives an organization a competitive edge compared to its competitors.

4.5.2.6 Stakeholder Involvement Interventions

The study also sought from the respondents whether their organization was keen in involvement of all its stakeholders in its change initiatives. . The results were as shown in table 4.20 and figure 4.15.

Table 4.20: Involvement of Stakeholders

Main Themes	Frequency	Percent
Yes	9	75%
Somehow	3	25%
Total	12	100%

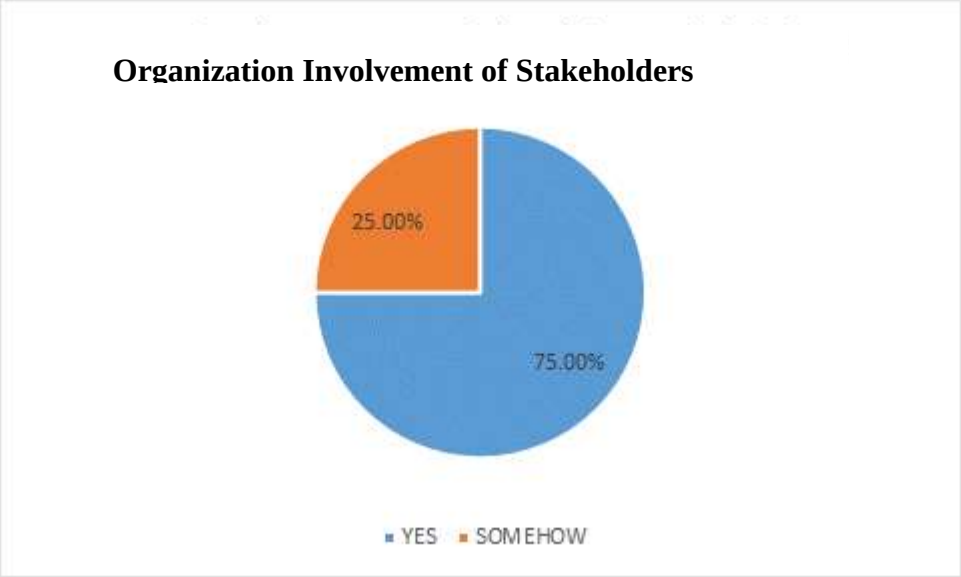


Figure 4.15: Organization Involvement of Stakeholders

The interviews revealed that majority of the organizations (75%) involve stakeholders in coming up with change initiatives while 25% are not keen in involving stakeholders. Respondents stated that the management held consultative meetings with various stakeholders on the formulation and implementation of change processes. Murimi and Omondi (2014) supports the findings by establishing a positive relationship between stakeholder involvement and performance in an organization.

4.5.2.7 Satisfaction with Organization Performance

Respondents were to explain the extent in which they are satisfied with their organization's performance in the past five years. . The results were as given in table 4.21 and figure 4.16.

Table 4.21: Satisfaction with Organization Performance

Main Themes	Frequency	Percent
Yes	6	55%
No	5	45%
Total	11	100%

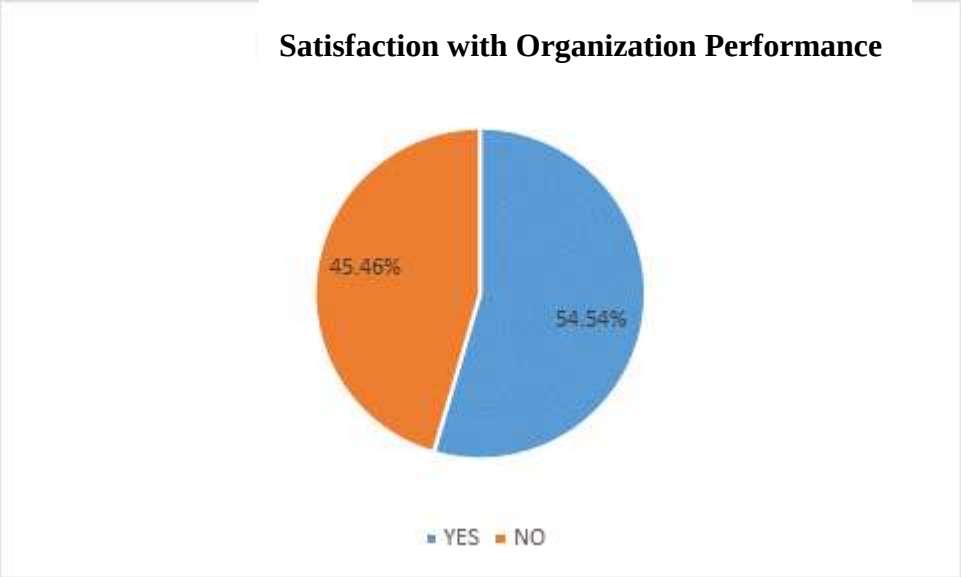


Figure 4.16: Satisfaction with Organization Performance

54.54% of the respondents in the interviews indicated that they were satisfied with the organizations performance though 45.46% expressed their dissatisfaction with the performance of their organizations.

4.5.2.8 Enhancing Performance

Respondents were to also suggest ways of enhancing performance of organizations. The responses were tabulated as in table 4.22 and figure 4.17.

Table 4.22: Ways of Enhancing Performance

Main Themes	Frequency	Percentage
Flexibility	1	3.3%
Research And Innovation	1	3.3%
Privatization	1	3.3%
Increasing Funding	2	6.7%
Reduce Political Division	2	6.7%
Commercialization	4	13.3%
Motivation	4	13.3%
Training	5	16.7%
Marketing	10	33.3%
Total	**30**	**100.0%**

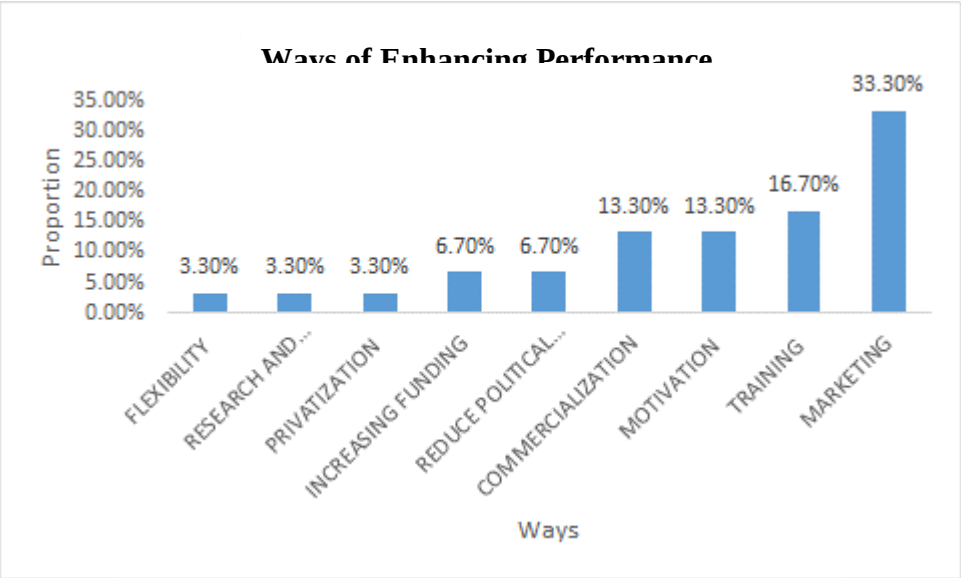


Figure 4.17: Ways of Enhancing Performance

. These informants cited flexibility in operations especially organization structure, research and innovations geared towards consumer satisfaction, privatization, increasing funding, reducing political interference (1% each). 13.3% of the

respondents said that better performance would have been realized if they were allowed to go fully commercial, 13.3% cited motivation among the staff in terms of improved working conditions and remuneration. 16.7% were of the views intensifying employee training programmes would improve performance. The majority of those interviewed (33.3%) suggested aggressive marketing of services through advertisement would boost revenue and enhance survival in the competitive market conditions. in addition to engaging in research and innovation of products.

The study findings have been supported by Maina *et al.* (2018) who established the importance of strategic management interventions; market development, product development, strategic planning and strategic alliances on competitiveness. Another study by Gaturu *et al*. (2018) also revealed that strategic management interventions are important in influencing organizational performance. This implies whenever strategic interventions are applied they bear positive results. Regarding the aspect of Human resource where respondents interviewed were emphasizing on best human resource interventions, Choge *et al.* (2017) held a similar view in their study that recommended the adoption of human capital strategies of training in Kenya's corporations for improving productivity and performance.

4.6 Quantitative Data Analysis on Study Variables

4.6.1 Technology Adoption Interventions Results

4.6.1.1 Factor Analysis Results for Technology Adoption Interventions

The first objective of this study was to investigate the influence of technology adoption interventions on the performance of commercial state corporations in Kenya. The variable technology adoption interventions were operationalized by three sub variables namely acquisition of IT infrastructure, strategic alignment, and employee training. Seven constructs of this variable were subjected to factor analysis.

4.6.1.2 Sample Adequacy Results for Technology Adoption interventions

The KMO and Bartlett's tests results for Technological adoption interventions are given in Table 4.22. KMO and Bartlett's tests measured the correlation between Technology adoption interventions variables. The KMO measure of sample adequacy results is 0.813 as shown in Table 4.23. This indicates that the data is adequate for factor analysis as it is more than 0.5. The Bartlett's Test of Sphericity has a p-value of 0.000. These findings are also supported by Koech *et al.* (2018). This shows that there is sufficient correlation among the Technology adoption interventions variables.

Table 4.23: KMO and Bartlett's Test for Technology Adoption Interventions

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.813
Bartlett's Test of Sphericity	Approx. Chi-Square	394.349
	Df	21
	Sig.	.000

4.6.1.3 Factor Analysis Results of Technology Adoption Interventions

Technology adoption interventions was assessed by three sub-variables namely acquisition of IT infrastructure, strategic alignment and employee training. Three factors were subjected to factor analysis. Two factors were identified with the biggest influence on technology adoption interventions with cumulative variance of 69.690%. Factor one, which is acquisition of IT had the highest with 53.151% while factor two which is; employee training had 16.538% of total variance. These two factors had their Eigen values greater than 1 as shown in table 4.24.

Table 4.24: Factor Analysis Results of Technology Adoption interventions

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.721	53.151	53.151	3.721	53.151	53.151
2	1.158	16.538	69.690	1.158	16.538	69.690
3	.656	9.370	79.060			
4	.535	7.644	86.703			
5	.417	5.958	92.661			
6	.301	4.306	96.967			
7	.212	3.033	100.000			

4.6.1.4 Rotated Component Matrix Results for Technology Adoption Interventions

Table 4.25 gives the rotated component matrix for determinants of Technology adoption interventions. Component 1 was acquisition of technology and Component 2 was employee training.

Table 4.25: Rotated Component Matrix for Technology Adoption Interventions

	Component	
Opinion Statement	**AT**	**ET**
Adequate technology infrastructure which includes networks	0.673	
There is proper alignment of technology and business strategies in the organization	0.861	
Technology has business support strategies for improvement of process management	0.770	

The organization structure by adopting technology systems has changed so as to enhance employee empowerment	0.797
Change agents have been identified and trained to facilitate the change process	0.843
The organization has well defined training and development programs for the employees to handle new technology	0.663

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 3 iterations.

KEY: AT=Acquisition of Technology, ET= Employee Training

4.6.1.5 Descriptive Results of Retained Technology Adoption Sub Variables

Adoption interventions was assessed by two measures namely acquisition of technology and employee training. Descriptive data is given by Table 4.25 on a scale of 1 to 5 (where 1 is Strongly Disagree and 5 Strongly Agree).

Table 4.26: Descriptive Results for Technology Adoption

Variable	Mean	Std. Deviation	Cronbach's Alpha
Acquisition of Technology	3.9449	0.78653	0.834
Employee training	3.8189	0.80207	0.726

Table 4.26 shows that respondents on average agreed that acquisition of technology affects technology adoption interventions with a mean of 3.9449. Respondents also agreed that employee training affects Technology adoption interventions with a mean of 3.8189. Cronbach's alpha was used to test the reliability of the selected variables. Acquisition of technology had a coefficient of 0.834. On the other hand Employee training had a coefficient of .726. Since the Cronbach's coefficient is more than 0.7 the data is reliable (Kothari Garg, 2014).

Table 4.27: Correlation Results for Technology Adoption

		Performance	Emp. Training	Acquisition of Technology
Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	127		

4.6.1.6 Correlation Results for Technology Adoption and Performance

One of the tools used to determine the nature of the relationship between variables and to measure the strength of relationship between variables is Correlation analysis. In this research Pearson correlation coefficient was used to establish the relationship between Technology adoption interventions and performance of commercial state corporations. Table 4.27 gives correlation matrix between the measures of technology adoption interventions and performance.

Emp_Training	Pearson Correlation	0.149	1	
	Sig. (2-tailed)	0.094		
	N	127	127	
Acqusition_of_Technology	Pearson Correlation	0.512**	0.472**	1
	Sig. (2-tailed)	0.000	0.000	
	N	127	127	127

**. Correlation is significant at the 0.01 level (2-tailed).

The results showed a strong positive relationship between acquisition of technology and performance with a correlation coefficient of 0.512 with a p value of 0.000. This implies that acquisition of technology influences performance of state corporations. These views were also supported by Ismail and Mamat (2012) who established a significant relationship between information technology acquisition and adoption on the innovation process and organizational performance. Technology adoption has been viewed also as a very important ingredient for economic growth to business organizations as it enables them to be competitive and ensure their survival in the modern business world (Jabar, Soosay and Santa, 2010).

4.6.1.7 Regression Analysis Results for Technology Adoption

4.6.1.8 Data Normality Test Results for Technology Adoption Interventions

One of the assumptions of linear regression is that the sample data must have come from a population that follows normal distribution. Several normality tests exist in the literature. However in this research the Kolmogorov Smirnov (K-S) one sample test was used. In Kolmogorov Smirnov test the null hypothesis is that the data came from a normal distribution and the alternative is that the data didn't come from a normal distribution. The rule is to reject the null hypothesis when the p value is less than 0.05 (the proposed level of significance). Table 4.28 presents the results of the K-S test.

Table 4.28 : One-Sample Kolmogorov-Smirnov Test

	Acquisition of technology	Employee training

N		127	127
Normal Parameters[a,b]	Mean	3.9449	3.8189
	Std. Deviation	0.7865	0.8021
Most Extreme Differences	Absolute	.071	.103
	Positive	.070	.091
	Negative	-.071	-.103
Kolmogorov-Smirnov Z		0.799	1.159
Asymp. Sig. (2-tailed)		0.546	0.136

a. Test distribution is Normal.

b. Calculated from data.

Since the p value is more than 0.05 for the two cases we fail to reject the null hypothesis and conclude that the two data sets are normal.

4.6.1.9 Durbin-Watson Test Results

Another assumption of linear regression is that there should be no auto correlation. One of the tests used for auto correlation is Durbin Watson test which checks for serial correlation (Omar *et al.*, 2017).

Table 4.29: Durbin-Watson (Autocorrelation) Results for Technology Adoption Interventions

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	0.523[a]	0.273	0.2.62	0.64184	1.984

a. Predictors: (Constant), Acquisition of IT infrastructure and employee training

b. Dependent Variable: Performance

Durbin Watson test takes values of between 0 to 4. A value of 2 shows that errors are not correlated. However, values from 1.75 to 2.25 are considered acceptable. Other

scholars argue that value between 1.5 and 2.5 may be considered to indicate no presence of collinearity (Omar *et al.*, 2017). Durbin-Watson value of 1.98 indicates that there is no autocorrelation.

4.6.1.10 ANOVA Results for Technology Adoption

Table 4.30 gives the analysis of variance of the study on technology adoption and performance of state corporations. The results show that at least one of the measures of technology adoption (acquisition of technology and employee training) has a significant relationship with performance (F = 23.351, p = 0.000) as indicated in Model 1.

Table 4.30: ANOVA Results for Technology Adoption

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	25.977	2	12.988	23.351	.000[b]
	Residual	68.971	124	.556		
	Total	94.948	126			
2	Regression	29.290	4	7.322	13.606	.000[c]
	Residual	65.658	122	.538		
	Total	94.948	126			

a. Dependent Variable: performance

b. Predictors: (Constant), employee training, acquisition of technology

c. Predictors: (Constant), employee training, acquisition of technology, acquisition of technology & board composition, employee training & board composition

When moderating variable (board composition) was introduced, the F value reduced (F = 13.606 with a p value of 0.000) as indicated in Model 2. However the model still showed a significant relationship between the technology adopting interventions measures and performance.

4.6.1.11 Goodness-of-fit Model Results for Technology Adoption Interventions

Table 4.30 shows that measures of technology adoption (acquisition of technology and employee training) explains 27.4% of the variation in Performance of State corporations. Other factors explain 72.6% of the changes on performance. This implies that the measures have a predictive power on the performance.

Table 4.31: Goodness-of-fit Model Results for Technology Adoption Interventions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.523[a]	0.274	0.262	0.74580
2	.555[b]	0.308	0.286	0.73361

The introduction of the moderating variable Board composition increases the coefficient of determination by 3.4% to 30.8%. This implies the moderating variable influence is not very significant.

To determine the influence of Technology Adoption Interventions measures (acquisition of technology and employee training) the following hypotheses were stated:

Hypothesis One

H_{01}: There is no statistically significant influence of Technology Adoption Interventions on the performance of commercial state corporations in Kenya.

Regression analysis was conducted to determine the probable form of the relationship between acquisition of technology, employee training and performance. The regression model was also to show whether the measures have significant influence on performance. The results are given in Table 4.32.

Table 4.32: Coefficients Results for Technology Adoption Interventions

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.341	0.381		3.524	0.001

	Acquisition of Technology	0.645	0.099	0.569	6.550	0.000
	Employee Training	-0.129	0.094	-0.120	-1.376	0.171

a. Dependent Variable: performance

Table 4.32 shows the regression coefficients results of the Technology adoption interventions measures (acquisition of technology and employee training). Acquisition of technology was found to be significant at 5% level of significance with a coefficient of 0.645 and p-value of 0.000. The resultant regression model can be summarized by equation 4.1 as

$$Y = 1.341 + 0.645X_1 \quad \text{.....Equation 4.1}$$

When the two sub variables are combined into one variable that is, they become technology adoption interventions, the resultant regression results are given by Table 4.33

Table 4.33: Coefficients for ccombined Technology Adoption Interventions

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	Std. Error	Beta		
1	(Constant)	1.414	0.411		3.439	0.001
	adopting_tech	0.491	0.107	0.380	4.599	0.000

a. Dependent Variable: performance

This implies that the null hypothesis is rejected and the alternative hypothesis is accepted since $\beta \neq 0$ and p-value<0.05. The regression model is summarized by equation 4.2

$$Y = 1.414 + 0.491X_1 \quad \text{.....Equation 4.2}$$

Where, X_1 represents technology adopting interventions.

It can be concluded that there is statistically significant relationship between technology adopting interventions and performance of commercial state corporations in Kenya.

To determine the moderation effect of Board composition on technology adoption interventions and performance of commercial state corporations, the following hypotheses were tested:

Hypothesis Five

H_{01}: There is no statistically significant moderating effect of board composition on the technology adoption interventions and performance of commercial state corporations in Kenya.

Moderated regression was done to determine if technology adoption interventions measures moderated with board composition has any significant influence on the performance of commercial state corporations in Kenya. Table 4.34 gives the results.

Table 4.34: Coefficients for Moderated Regression for Technology Adoption Interventions

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients Beta	T	Sig.
(Constant)	1.485	.382		3.889	.000
Acqusition_of_technology	.306	.116	.277	2.645	.009
Emp_training	-.369	.619	-.341	-.596	.552
Acquisition of tech_boardcomp	.011	.160	.050	.067	.947
Employee train_boardcomp	.059	.158	.279	.373	.710

Dependent Variable: performance

Results in Table 4.34 shows that the interaction variables have a p value of more than 0.05. This implies that the null hypothesis is not rejected. It can be concluded that there is no moderation effect of board composition on the relationship between technology adoption interventions measures (acquisition of technology and employee training), and performance of commercial state corporations in Kenya.

4.6.2 Dynamic Environmental Scan Interventions and Performance

The second objective of this study was to investigate the influence of dynamic environmental scan interventions on the performance of commercial state corporations in Kenya. The variable dynamic environmental scan interventions was operationalized by four sub-variables namely dynamic environment, hostile environment, heterogeneity and competitive aggressiveness. Nine constructs of this variable were subjected to factor analysis.

4.6.2.1 Sample Adequacy Results on Dynamic Environmental Scan Interventions

The KMO and Bartlett's tests results for dynamic environmental scan interventions are given in Table KMO and Bartlett's tests measured the correlation between dynamic environmental scan interventions variables. The KMO measure of sample adequacy results is 0.766 as shown in Table 4.35. This indicates that the data is adequate for factor analysis as it is more than 0.5. The Bartlett's Test of Sphericity has a p-value of 0.000 hence there is sufficient correlation among the dynamic environmental scan interventions variables (Kothari & Garg, 2014)

Table 4.35: KMO and Bartlett's Test for Dynamic Environmental Scan Interventions

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.766
Bartlett's Test of Sphericity	Approx. Chi-Square	458.820
	Df	36
	Sig.	.000

4.6.2.2 Factor Analysis Results for Dynamic Environmental Scan Interventions

Dynamic environmental scan interventions were assessed by four sub-variables namely dynamic environment, hostile environment, heterogeneity and competitive aggressiveness. Nine factors were subjected to factor analysis. Two factors were identified to be having the biggest influence on dynamic environmental scan interventions with cumulative variance of 59.497%. Factor one which was heterogeneity had the highest accounting for 44.225% while factor two which was dynamic accounted for 15.273% of total variance. These two factors had their Eigen values greater than 1. This given by table 4.36.

Table 4.36: Factor Analysis Results for Dynamic Environmental Scan Interventions

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.980	44.225	44.225	3.980	44.225	44.225
2	1.375	15.273	59.497	1.375	15.273	59.497
3	.916	10.183	69.681			
4	.713	7.917	77.597			
5	.596	6.620	84.218			
6	.525	5.835	90.052			
7	.411	4.568	94.621			
8	.330	3.666	98.286			
9	.154	1.714	100.000			

4.6.2.3 Component Matrix Results for Dynamic Environmental Scan Interventions Rotated

Table 4.37 gives the rotated component matrix for determinants of dynamic environment, hostile environment, heterogeneity and competitive aggressiveness. Component 1 was identified to be heterogeneity while Component 2 was identified to be dynamic environment.

Table 4.37: Component Matrix Results for Dynamic Environmental Scan Interventions Rotated

	Component	
Opinion Statement	**HT**	**DT**
Dynamic environment affects commercial state corporations performance		.821

In the dynamic environment prices of products and changes in taxes affects commercial state corporations		.819
Hostile environment affects commercial state corporations performance		.550
As a result of hostile environment where combination of market strategies, market niche and new methods of packing.	.567	
Heterogeneity affects commercial state corporations performance	.621	
In the environment which is heterogeneous commercial state corporations can take greater risks as a result their performance are greatly influenced	.801	
Competitive aggressiveness affects commercial state corporations performance	.774	
The commercial state corporations takes into consideration dynamic environment when undertaking strategic planning for enhancing development	.744	
The commercial state corporations takes into consideration of heterogeneity and competitive aggressiveness for improving performance	.859	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization

Rotation converged in 3 iterations.

KEY: HT=Heterogeneity, DT= Dynamic Environment

4.6.2.4 Descriptive Results of Retained Sub Variables of Dynamic Environmental Scan Interventions

Dynamic environment interventions were assessed by two measures namely heterogeneity and dynamic environment. Descriptive data is given by Table 4.38 on a scale of 1 to 5 (where 1 is Strongly Disagree and 5 is Strongly Agree).

Table 4.38: Descriptive Results of retained Sub Variables of Dynamic Environmental Scan Interventions

Variable	Mean	Std. Deviation	Cronbach's Alpha
Heterogeneity	4.1155	0.6206	0.850
Dynamic environment	4.3045	0.6101	0.722

Table 4.38 shows that respondents on average agreed that heterogeneity affect dynamic environment scan interventions with a mean of 4.1155. Respondents also agreed that dynamic environment affects dynamic environment scan interventions with a mean of 4.3045.Cronbach's alpha was used to test the reliability of the selected variables. Heterogeneity had a coefficient of 0.850. On the other hand dynamic environment had a coefficient of 0.722. Since the Cronbach's coefficient is more than 0.7 then the data is reliable.

4.6.2.4 Correlations Results for Dynamic Environmental Scan Interventions and Performance

One of the tools used to determine the nature of the relationship between variables and to measure the strength of relationship between variables is Correlation analysis. In this research Pearson correlation coefficient was used to establish the relationship between Dynamic environmental scan interventions and performance of state corporations. Table 4.39 gives correlation matrix between the measures of Dynamic environmental scan interventions and performance.

Table 4.39: Correlations Results for Dynamic Environmental Scan Interventions and Performance

		Performance	Dynamic envt	Heterogeneity
Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	127		
Dynamic_env	Pearson Correlation	0.444**	1	
	Sig. (2-tailed)	0.000		
	N	127	127	
Hetero	Pearson Correlation	0.549**	0.235**	1
	Sig. (2-tailed)	0.000	0.008	
	N	127	127	127

**. Correlation is significant at the 0.01 level (2-tailed).

Results show a strong positive relationship between heterogeneity and performance, dynamic environment and performance with a correlation coefficient of 0.549 and 0.444 respectively and p-values of 0.000. This implies that Dynamic environmental scan interventions influence performance of state corporations. Barua *et al.* (2016) had similar results for environmental factors when he computed a correlation coefficient of 0.654 with p-value of 0.000 which implied that environmental factors influence performance of corporations.

4.6.2.5 Regression Analysis Results for Dynamic Environmental Scan

4.6.2.6 Data Normality Test Results for Dynamic environmental scan interventions

One of the assumptions of linear regression is that the sample data must have come from a population that follows normal distribution. Several normality tests exist in the literature. However in this research the Kolmogorov Smirnov (K-S) one sample test was used. In Kolmogorov Smirnov test the null hypothesis is that the data came from a normal distribution and the alternative is that the data didn't come from a

normal distribution. The rule is to reject the null hypothesis when the p value is less than 0.05 (the proposed level of significance). Table 4.40 presents the results of the K-S test.

Table 4.40: One-Sample Kolmogorov-Smirnov Test for Dynamic environmental scan interventions

		Heterogenity	Dynamic_envt
N		127	127
Normal Parameters[a,b]	Mean	4.1155	4.3045
	Std. Deviation	.62060	.61006
Most Extreme Differences	Absolute	.120	.172
	Positive	.097	.127
	Negative	-.120	-.172
Kolmogorov-Smirnov Z		1.352	1.22
Asymp. Sig. (2-tailed)		.058	.102

a. Test distribution is Normal.

b. Calculated from data.

Since the p value is more than 0.05 for the two cases we fail to reject the null hypothesis and conclude that the two data sets are normal.

4.6.2.7 Durbin-Watson Test Results

Another assumption of linear regression is that there should be no auto correlation. One of the tests used for auto correlation is Durbin Watson test which checks for serial correlation (Kothari & Gaurav 2014).

Table 4.41: Durbin-Watson (Autocorrelation) Results

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	0.637[a]	0.406	0.397	0.5773	2.001

a. Predictors: (Constant), heterogeneity, Dynamic environment

b. Dependent Variable: Performance

Durbin Watson test takes values of between 0 to 4. A value of 2 shows that errors are not correlated. However, values from 1.75 to 2.25 are considered acceptable. Other scholars argue that value between 1.5 and 2.5 may be considered to indicate no presence of collinearity (Makori & Jagongo, 2013). Durbin-Watson value of 2.001 indicates that there is no autocorrelation.

4.6.2.8 ANOVA Results for Dynamic Environmental Scan Interventions and Performance

Table 4.42 gives the analysis of variance of the study on Dynamic environmental scan interventions and performance of state corporations. The results show that at least one of the measures of Dynamic environmental scan interventions (heterogeneity and dynamic environment) has a significant relationship with performance (F = 42.447, p = 0.000) as indicated in Model 1.

Table 4.42: ANOVA Results for Dynamic Environmental Scan Interventions and Performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	38.587	2	19.293	42.447	0.000[b]
	Residual	56.361	124	0.455		
	Total	94.948	126			
2	Regression	40.252	4	10.063	22.445	0.000[c]
	Residual	54.696	122	0.448		
	Total	94.948	126			

a. Dependent Variable: Performance

b. Predictors: (Constant), heterogeneity, dynamic environment

c. Predictors: (Constant), heterogeneity & board composition, dynamic environment & board composition

When moderating variable (board composition) was introduced, the F value reduced (F = 22.445 with a p value of 0.000) as indicated in Model 2. However the model still showed a significant relationship between the measures of Dynamic environmental scan interventions measures and performance.

4.6.2.9 Goodness-of-fit Model Results for Dynamic Environmental Scan Interventions

Table 4.43 shows that measures of dynamic environmental interventions (dynamic environment and heterogeneity) explains 40.6% of the variation in Performance of State corporations. Other factors explain 59.4% of the changes on performance. This implies that the measures have a predictive power on the performance.

Table 4.43: Goodness-of-fit Model Results for Dynamic Environmental Scan Interventions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.637[a]	0.406	0.397	0. 5773
2	0.651[b]	0.424	0.405	0.5695

The introduction of the moderating variable Board composition increases the coefficient of determination by 1.8% to 42.4%. This implies the moderating variable influence is not very significant.

4.6.2.10 Regression Results for Dynamic Environmental Scan Interventions and Performance

To determine the influence of Dynamic environmental scan interventions measures (heterogeneity and dynamic environment) the following hypothesis was stated:

Hypothesis two

H_{02}: There is no statistically significant influence of Dynamic environmental scan interventions on the performance of commercial state corporations in Kenya.

Regression analysis was conducted to determine the probable form of the relationship between heterogeneity, dynamic environment and performance. The regression model shows whether the measures have significant influence on performance.

The results are given in Table 4.44

Table 4.44: Coefficients of Regression Results for Dynamic Environmental Scan Interventions and Performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.678	0.463		-1.466	0.145
	Dynamic environment	0.495	0.105	0.334	4.693	0.000
	Heterogeneity	0.673	0.102	0.470	6.605	0.000

Dependent Variable: performance

Table 4.44 shows the regression coefficients results of the Dynamic environmental scan interventions measures (dynamic environment and heterogeneity). Both measures were found to be significant at 5% level of significance with coefficients of 0.495 and 0.673 respectively and p-values of 0.000. The resultant regression model is given by equation 4.3 as

$$Y = 0.495X_1 + 0.673X_2 \quad \text{.....Equation 4.3}$$

When the two sub variables are combined into one variable and form dynamic environmental scan interventions, the resultant regression results are given in Table 4.45

Table 4.45: Coefficients of combined Regression Results for Dynamic Environmental Scan Interventions and Performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.799	.450		-1.777	.078
	Dynamic environment	1.173	.128	.633	9.142	.000

a. Dependent Variable: performance

This implies that the null hypothesis is rejected and the alternative hypothesis is accepted. i.e. H_{0A} is accepted since $\beta \neq 0$ and p-value<0.05. The regression model is summarized by equation 4.4

$$Y = 1.173X_1 \quad \text{Equation 4.4}$$

Where, X_1 represents dynamic environmental scan interventions.

It can be concluded that there is a statistically significant relationship between dynamic environmental scan interventions and performance of commercial state corporations in Kenya. These results are in agreement with Yoengtaak (2009) in his research of effects of environmental factors on firm performance which identified that the performance of firms is positively influenced by dynamic environment, heterogeneity and competitive aggressiveness. Babatunde and Adebisi (2012) also supported by establishing a proportional relation between the performance of an organization and strategic environmental scanning interventions.

To determine the moderation effect of Board composition on dynamic environmental scan interventions and performance of commercial state corporations, the following hypothesis was tested:

Hypothesis Five

H_{01}: There is no statistically significant moderating effect of board composition on the dynamic environmental scan interventions and performance of commercial state corporations in Kenya.

Moderated regression was done to determine if dynamic environmental scan interventions measures moderated with board composition has any significant influence on the performance of commercial state corporations in Kenya. Table 4.46 gives the results.

Table 4.46: Coefficients of Moderated Results for Environmental Scan Interventions

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.435	0.477		-0.913	0.363
	dynamic_envt	0.116	0.515	0.078	0.225	0.822
	Hetero	0.870	0.674	0.608	1.291	0.199
	heterogeinity_boardcomp	-0.052	0.172	-0.188	-0.303	0.762
	Dynamic envt_boardcomp	0.083	0.127	0.372	0.659	0.511

a. Dependent Variable: Performance

Results in Table 4.46 shows that the interaction variables have a p value of more than 0.05. This implies that the null hypothesis is not rejected. It can be concluded that there is no moderation effect of board composition on the relationship between dynamic environmental scan interventions measures (heterogeneity and dynamic environment) and performance of commercial state corporations in Kenya.

4.6.3 Participatory Stakeholder Involvement Interventions

4.6.3.1 Participatory Stakeholders Involvement Interventions and Performance

The third objective of this study was to investigate the influence of Participatory Stakeholders Involvement Interventions on the performance of commercial state corporations in Kenya. The variable Participatory Stakeholders Involvement Interventions was operationalized by three sub-variables namely participation in the

change, positive relationships among groups and support from stake holders. Five constructs of this variable were subjected to factor analysis.

4.6.3.2 Sample Adequacy Results for Participatory Stakeholders Involvement Interventions

The KMO and Bartlett's tests results for Participatory Stakeholders Involvement Interventions are given in Table 4.47. KMO and Bartlett's tests measured the correlation between Participatory Stakeholders Involvement Interventions variables. The KMO measure of sample adequacy results is 0.755 as shown in Table 4.47. This indicates that the data is adequate for factor analysis as it is more than 0.5. The Bartlett's Test of Sphericity has a p-value of 0.000 hence there is sufficient correlation among the Participatory Stakeholders Involvement Interventions variables.

Table 4.47: KMO and Bartlett's Test for Participatory Stakeholder Involvement Interventions

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.755
Bartlett's Test of Sphericity	Approx. Chi-Square	295.278
	Df	10
	Sig.	0.000

4.6.3.3 Factor Analysis Results for Participatory Stakeholder Involvement Interventions

Participatory Stakeholders Involvement Interventions was assessed by three sub-variables namely participation in the change, positive relationships among groups and support from stake holders. Five factors were subjected to factor analysis. Two factors were identified to be having the biggest influence on Participatory stakeholder involvement interventions with cumulative variance of 81.091%. Factor one which was participation in the change had the highest influence accounting for 60.868% while factor two which was support from stakeholders accounted for

20.222% of total variance. These two factors had their Eigen values greater than 1 as indicated in table 4.48

Table 4.48: Factor Analysis Results for Participatory Stakeholder Involvement Interventions

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.043	60.868	60.868	3.043	60.868	60.868
2	1.011	20.222	81.091	1.011	20.222	81.091
3	.392	7.835	88.926			
4	.304	6.070	94.996			
5	.250	5.004	100.000			

4.6.3.4 Rotated Component Matrix Results Participatory Stakeholders Involvement Interventions

Table 4.49 gives the rotated component matrix for determinants of participation in the change, positive relationships among groups and support from stake holders. Component 1 was identified to be participation in the change while Component 2 was support from stake holders.

Table 4.49: Rotated Component Matrix Results for Participatory Stakeholder Involvement

Opinion Statement	Component	
	PIC	SFS
This organization allows participation of all stakeholders to contribute to opinions on change interventions	.917	
positive relationship among stakeholders groups is encouraged in this organization	.822	

Quite often there are formal surveys of stakeholders views or opinions on change process in this organization	.722
The stakeholders provide support for strategic change in the organization	.919
Stakeholders involvement contributes highly to the achievement of strategic change in the organization	.875

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 3 iterations.

KEY: PIC=Participation in the Change, SFC=Support from Stakeholders

4.6.3.5 Descriptive Results of Retained Sub Variables of Participatory Stakeholders Involvement

Participatory Stakeholders Involvement interventions were assessed by two measures namely participation in the change and support from stake holders. Descriptive data is given by Table 4.50 on a scale of 1 to 5 (where 1 is Strongly Disagree and 5 is Strongly Agree).

Table 4.50: Descriptive Results of Retained Sub Variables of Participatory Stakeholders Involvement

Variable	Mean	Std. Deviation	Cronbach's Alpha
Participation in the change	3.7113	0.8962	0.830
Support from stake holders	3.7953	0.9351	0.843

Table 4.50 shows that respondents on average agreed that participation in the change affect Participatory Stakeholders Involvement interventions with a mean of 3.7113. Respondents also agreed that support from stake holders affects Participatory Stakeholders Involvement interventions with a mean of 3.7953.Cronbach's alpha was used to test the reliability of the selected variables. Participation in the change had a coefficient of 0.830. On the other hand support from stake holders had a coefficient of 0.843. Since the Cronbach's coefficient is more than 0.7 the data is reliable.

4.6.3.6 Correlations Results for Participatory Stakeholders Involvement Interventions and Performance

One of the tools used to determine the nature of the relationship between variables and to measure the strength of relationship between variables is Correlation analysis. In this research Pearson correlation coefficient was used to establish the strength of the relationship between Participatory Stakeholders Involvement interventions and performance of state corporations. Table 4.51 gives correlation matrix between the measures of Participatory Stakeholders Involvement interventions and performance.

Table 4.51: Correlations Results for Participatory Stakeholders Involvement

		Participation in the change	**Performance**	**Support from stakeholders**
Participation in the change	Pearson Correlation	1	.502**	.580**
	Sig. (2-tailed)		.000	.000
	N	127	127	127
Performance	Pearson Correlation	.502**	1	.615**
	Sig. (2-tailed)	.000		.000
	N	127	127	127
Support from Stakeholders	Pearson Correlation	.580**	.515**	1
	Sig. (2-tailed)	.000	.000	
	N	127	127	127

**. Correlation is significant at the 0.01 level (2-tailed).

Results show a strong positive relationship between participation in the change and performance, support from stakeholders and performance with a correlation coefficient of 0.502 and 0.580 respectively and p-values of 0.000. This implies that

Participatory Stakeholders Involvement interventions influence performance of state corporations. A research study done by Murimi and Omondi (2014) established that stakeholder involvement positively related to the performance. This was also proved by Mokamba (2015) who alluded that when stakeholders become proactive, they will be motivated in working towards the improvement of the organization.

4.6.3.7 Regression Analysis Results for Participatory Stakeholder Interventions

4.6.3.8 Data Normality Test Results for Participatory Stakeholders Involvement Interventions

One of the assumptions of linear regression is that the sample data must have come from a population that follows normal distribution. Several normality tests exist in the literature. However in this research the Kolmogorov Smirnov (K-S) one sample test was used. In Kolmogorov Smirnov test the null hypothesis is that the data came from a normal distribution and the alternative is that the data didn't come from a normal distribution. The rule is to reject the null hypothesis when the p value is less than 0.05 (the proposed level of significance). Table 4.52 presents the results of the K-S test.

Table 4.52 :One-Sample Kolmogorov-Smirnov Test for Participatory Stakeholders Involvement

		Participation in the change	**Support from stakeholders**
N		127	127
Normal Parameters[a,b]	Mean	3.7113	3.7953
	Std. Deviation	.89616	0.93511
Most Extreme Differences	Absolute	.170	0.193
	Positive	.098	0.130
	Negative	-.170	-0.193
Kolmogorov-Smirnov Z		0.799	1.159
Asymp. Sig. (2-tailed)		0.546	0.136

a. Test distribution is Normal.

b. Calculated from data.

Since the p value is more than 0.05 for the two cases we fail to reject the null hypothesis and conclude that the two data sets are normal.

4.6.3.9 Durbin-Watson Test Results

Another assumption of linear regression is that there should be no auto correlation. One of the tests used for auto correlation is Durbin Watson test which checks for serial correlation.

Table 4.53: Durbin-Watson (Autocorrelation) Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.640[a]	0.410	0.401	0.6304	1.864

a. Predictors: (Constant), participation in the change, support from stakeholders
b. Dependent Variable: Performance

Durbin Watson test takes values of between 0 to 4. A value of 2 shows that errors are not correlated. However, values from 1.75 to 2.25 are considered acceptable. Other scholars argue that value between 1.5 and 2.5 may be considered to indicate no presence of collinearity (Makori & Jagongo, 2013). Durbin-Watson value of 1.864 indicates that there is no autocorrelation.

4.6.3.10 ANOVA Results for Participatory Stakeholders Involvement Interventions and Performance

Table 4.54 gives the analysis of variance of the study on Participatory Stakeholders Involvement interventions and performance of state corporations. The results show that at least one of the measures of Participatory Stakeholders Involvement interventions (participation in the change and support from stakeholders) has a significant relationship with performance ($F = 43.125$, $p = 0.000$) as indicated in Model 1 in table 4.54.

Table 4.54: ANOVA Results for Participatory Stakeholders Involvement Interventions and Performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	38.950	2	19.475	43.125	0.000[b]
	Residual	55.998	124	0.452		
	Total	94.948	126			
2	Regression	39.995	4	9.999	22.198	0.000[c]
	Residual	54.953	122	0.450		
	Total	94.948	126			

a. Dependent Variable: performance

b. Predictors: (Constant), support from stakeholders, participation in the change

c. Predictors: (Constant), support from stakeholder, participation in the change, participation in the change & board composition, support from stakeholders & board composition

When moderating variable (board composition) was introduced, the F value reduced (F = 22.198 with a p value of 0.000) as indicated in Model 2. However the model still showed a significant relationship between the measures of Participatory Stakeholders Involvement interventions and performance.

4.6.3.11 Goodness-of-fit Model Results for Participatory Stakeholders Involvement Interventions

Table 4.55 shows that measures of Participatory Stakeholders Involvement interventions (participation in the change and support from stakeholders) explains 41.0% of the variation in Performance of State corporations. Other factors explain 59.0% of the changes on performance. This implies that the measures have a predictive power on the performance.

Table 4.55: Goodness-of-fit Model Results for Participatory Stakeholders Involvement Interventions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.640[a]	0.410	0.401	6304
2	0.649[b]	0.421	0.402	0.6115

a. Predictors: (Constant), support from stakeholder, participation in the change

b. Predictors: (Constant), support from stakeholders, participation in the change, participation in the change & board composition, support from stakeholders & board composition

The introduction of the moderating variable Board composition increases the coefficient of determination by 1.1% to 42.1%. This implies the moderating variable influence is not very significant.

To determine the influence of Participatory Stakeholders Involvement interventions measures (participation in the change and support from stakeholders) the following hypothesis was stated:

Hypothesis Three

H_{03}: There is no statistically significant influence of Participatory Stakeholders Involvement interventions on the performance of commercial state corporations in Kenya.

Regression analysis was conducted to determine the probable form of the relationship between participation in the change, support from stakeholders and performance. The regression model also shows whether the measures have significant influence on performance.

The results are given in Table 4.56

Table 4.56: Coefficients for Participatory Involvement Interventions Sub-Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.457	0.325		1.407	0.162
	participation	0.257	0.099	0.219	2.591	0.011
	stakeholder	0.507	0.088	0.488	5.764	0.000

a. Dependent Variable: performance

Table 4.56 shows the regression coefficients results of the Participatory Stakeholders Involvement interventions measures (participation in the change and support from stakeholders). Both measures were found to be significant at 5% level of significance with coefficients of 0.257 and 0.507 and p-values of 0.011 and 0.000 respectively. The resultant regression model is given by equation 4.3 as

$$Y = 0.257X_1 + 0.507X_2 \quad \text{.....Equation 4.5}$$

When the two sub variables are combined into one variable and form Participatory Stakeholders Involvement interventions, the resultant regression results are given in Table 4.57

Table 4.57: Coefficients for Participatory Stakeholders Involvement

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.382	0.323		1.184	0.239
	participatory	0.784	0.086	0.632	9.120	0.000

a. Dependent Variable: performance

This implies that the null hypothesis is rejected since $\beta \neq 0$ and p-value<0.05. The regression model is summarized by equation 4.4

$$Y = 0.784X_1 \text{ ……Equation 4.6}$$

Where, X_1 represents Participatory Stakeholders Involvement interventions.

It can be concluded that there is statistically significant relationship between Participatory Stakeholders Involvement interventions and performance of State corporations in Kenya.

To determine the moderation effect of Board composition on participatory stakeholder involvement interventions and performance of commercial state corporations, the following hypothesis was tested:

Hypothesis Five

H_{01}: There is no statistically significant moderating effect of board composition on the Participatory Stakeholders Involvement interventions and performance of commercial state corporations in Kenya.

Moderated regression was done to Participatory Stakeholders Involvement interventions to measure if moderation with board composition has any significant influence on the performance of commercial state corporations in Kenya. Table 4.58 gives the results.

Table 4.58: Coefficients of Moderated Results for Participatory Involvement Interventions

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.457	0.325		1.407	0.162
	participation	0.257	0.099	0.219	2.591	0.011
	stakeholder	0.507	0.088	0.488	5.764	0.000
2	(Constant)	0.554	0.340		1.630	0.106
	participation	-0.513	0.629	-0.437	-.815	0.416
	stakeholder	1.132	0.612	1.089	1.850	0.067
	stakeholder_boardcomp	-0.176	0.166	-0.908	-1.056	0.293
	participation_boardcomp	0.206	0.170	0.996	1.212	0.228

a. Dependent Variable: performance

Results in Table 4.58 shows that the interaction variables have a p value of more than 0.05. This implies that the null hypothesis is not rejected. It can be concluded that there is no moderation effect of board composition on the Participatory Stakeholders Involvement interventions measures (participation in the change and support from stakeholders) and performance of commercial state corporations in Kenya.

4.6.4 Adaptive Organization Structure Interventions and Performance

The fourth objective of this study was to investigate the influence of Adaptive Organization Structure Interventions on the performance of commercial state corporations in Kenya. The variable Adaptive Organization Structure Interventions was operationalized by three sub-variables namely Formalization, Departmentalization and Span of Control. Seven constructs of this variable were subjected to factor analysis.

4.6.4.1 Sample Adequacy Results on Adaptive Organization Structure Interventions

The KMO and Bartlett's tests results for Adaptive Organization Structure Interventions are given in Table 4.59. KMO and Bartlett's tests measured the correlation between Adaptive Organization Structure Interventions variables. The KMO measure of sample adequacy results is 0.780 as shown in Table 4.58. This indicates that the data is adequate for factor analysis as it is more than 0.5. The Bartlett's Test of Sphericity has a p-value of 0.000 hence there is sufficient correlation among the Adaptive Organization Structure interventions variables.

Table 4.59: KMO and Bartlett's Test for Adaptive Organization Structure Interventions

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.780
Bartlett's Test of Sphericity	Approx. Chi-Square	415.260
	Df	21

Sig.		.000

4.6.4.2 Factor Analysis Results of Adaptive Organization Structure Interventions

Adaptive Organization Structure interventions were assessed by three sub-variables namely Formalization, Departmentalization and Span of Control. Seven factors were subjected to factor analysis. Two factors were identified to be having the biggest influence on Adaptive Organization Structure interventions with cumulative variance of 66.117%. Factor one, which was departmentalization had the highest influence accounting for 49.282% while factor two, which was formalization accounted for 16.835% of total variance. Departmentalization and formalization had their Eigen values greater than 1.This is as shown on table 4.60

Table 4.60: Factor Analysis Results of Adaptive Organization Structure Interventions

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.450	49.282	49.282	3.450	49.282	49.282
2	1.178	16.835	66.117	1.178	16.835	66.117
3	.869	12.417	78.534			
4	.733	10.473	89.007			
5	.384	5.485	94.491			
6	.247	3.532	98.023			
7	.138	1.977	100.000			

4.6.4.3 Rotated Component Matrix Results for Adaptive Organization Structure Interventions

Table 4.61 gives the rotated component matrix for determinants of Formalization, Departmentalization and Span of Control. Component 1 was identified to be Departmentalization while Component 2 was seen to be formalization.

Table 4.61: Rotated Component Matrix for Adaptive Organization Structure Interventions

Opinion Statement	Component	
	DT	FM
our organization has a clear internal pattern of relationships, authority and communication which are understandable to all employees		0.726
All departments should be allowed to have their own structures which are unique to themselves in strategy change interventions		0.762
duties and tasks within the organization are clearly indicated and boundaries set such that every employee knows what is required of him	0.813	
In our institution each employee holding a position of authority is responsible for a few subordinates	0.858	

The organization structures responds to changes in its environment effectively	0.907
This structure of the organization supports the tasks hence ultimately contribute to the performance of the commercial state corporations	0.891

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 3 iterations.

KEY: DT=Departmentalization, FM=Formalization

4.6.4.4 Descriptive Results of Retained Sub Variables for Adaptive Organization Structure Interventions

Adaptive Organization Structure interventions were assessed by two measures namely departmentalization and formalization. Descriptive data is given by Table 4.62 on a scale of 1 to 5 (where 1 is Strongly Disagree and 5 is Strongly Agree).

Table 4.62: Descriptive Results of Retained Sub Variables for Adaptive Organization Structure Interventions

Variable	Mean	Std. Deviation	Cronbach's Alpha
Departmentalization	3.8287	0.8302	0.905
Formalization	3.7559	0.8401	0.763

Table 4.61 shows that respondents on average agreed that departmentalization affect Adaptive Organization Structure interventions with a mean of 3.8287. Respondents also agreed that formalization affects Adaptive Organization Structure interventions with a mean of 3.7559. Cronbach's alpha was used to test the reliability of the selected variables. Departmentalization had a coefficient of 0.905. On the other hand formalization had a coefficient of 0.763. Since the Cronbach's coefficient is more than 0.7 the data is reliable.

4.6.4.5 Correlations Results for Adaptive Organization Structure interventions and Performance

One of the tools used to determine the nature of the relationship between variables and to measure the strength of relationship between variables is Correlation analysis.

In this research Pearson correlation coefficient was used to establish the relationship between departmentalization, formalization and performance of state corporations. Table 4.63 gives correlation matrix between the measures of Adaptive Organization Structure interventions and performance.

Table 4.63: Correlations Results for Adaptive Organization Structure Interventions and Performance

		Performance	Departmentalization	Formalization
Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	127		
Departmentalization	Pearson Correlation	0.288**	1	
	Sig. (2-tailed)	0.001		
	N	127	127	
Formalization	Pearson Correlation	0.532**	0.150	1
	Sig. (2-tailed)	0.000	0.092	
	N	127	127	127

**. Correlation is significant at the 0.01 level (2-tailed).

Results show a significant positive relationship between departmentalization and performance, formalization and performance with a correlation coefficient of 0.288 and 0.532 respectively and p-values of 0.001 and 0.000 respectively. This implies that Adaptive Organization Structure interventions influence performance of state corporations. These findings are similar to where the correlation coefficient Results from the study by Okafor *et al*. (2017) also showed positive relationship between organization structure and performance of organizations with correlation coefficient of 0.787 with p- values of 0.000.

4.6.4.6 Regression Analysis for Adaptive Organization Interventions

4.6.4.7 Data Normality Test Results for Adaptive Organization Structure Interventions

One of the assumptions of linear regression is that the sample data must have come from a population that follows normal distribution. Several normality tests exist in the literature. However in this research the Kolmogorov Smirnov (K-S) one sample test will be used. In Kolmogorov Smirnov test the null hypothesis is that the data came from a normal distribution and the alternative is that the data didn't come from a normal distribution. The rule is to reject the null hypothesis when the p value is less than 0.05 (the proposed level of significance). Table 4.64 presents the results of the K-S test.

Table 4.64: One-Sample Kolmogorov-Smirnov Test for Adaptive Organization Structure Interventions

		Departmentalization	**Formalization**
N		126	126
Normal Parameters[a,b]	Mean	3.8287	3.7559
	Std. Deviation	0.8302	0.8401
Most Extreme Differences	Absolute	0.073	0.103
	Positive	0.073	0.090
	Negative	-0.071	-0.103
Kolmogorov-Smirnov Z		0.822	1.155
Asymp. Sig. (2-tailed)		0.508	0.139

a. Test distribution is Normal.

b. Calculated from data.

Since the p value is more than 0.05 for the two cases we fail to reject the null hypothesis and conclude that the two data sets are normal.

4.6.4.8 Durbin-Watson Test Results

Another assumption of linear regression is that there should be no auto correlation. One of the tests used for auto correlation is Durbin Watson test which checks for serial correlation.

Table 4.65: Durbin-Watson (Autocorrelation) Results for Adaptive Organization Structure Interventions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.572[a]	0.327	0.316	0.6589	1.7651

a. Predictors: (Constant), Departmentalization, Formalization,

b. Dependent Variable: Performance

Durbin Watson test takes values of between 0 to 4. A value of 2 shows that errors are not correlated. However, values from 1.75 to 2.25 are considered acceptable. Durbin-Watson value of 1.7651 hence indicates that there is no autocorrelation.

4.6.4.9 ANOVA Results for Adaptive Organization Structure Interventions and Performance

Table 4.66 gives the analysis of variance of the study on Adaptive Organization Structure interventions and performance of state corporations. The results show that at least one of the measures of Adaptive Organization Structure interventions (departmentalization and formalization) has a significant relationship with performance ($F = 30.149$, $p = 0.000$) as indicated in Model 1.

Table 4.66: ANOVA Results for Adaptive Organization Structure Interventions and Performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	31.065	2	15.532	30.149	0.000[b]
	Residual	63.883	124	0.515		
	Total	94.948	126			

	Regression	35.286	4	8.821	18.039	0.000[c]
2	Residual	59.662	122	0.489		
	Total	94.948	126			

a. Dependent Variable: performance

b. . Predictors: (Constant),departmentalization, formalization

c. Predictors: (Constant), departmentalization, formalization
departmentalization & board composition, formalization & board composition

When moderating variable (board composition) was introduced, the F value reduced (F = 18.039 with a p value of 0.000) as indicated in Model 2. However the model still showed a significant relationship between the measures of Adaptive Organization Structure interventions and performance.

4.6.4.10 Goodness-of-fit Model Results for Adaptive Organization Structure Interventions

Table 4.67 shows that measures of Adaptive Organization Structure interventions (departmentalization and Formalization) explains 32.7% of the variation in Performance of State corporations. Other factors explain 67.3% of the changes on performance. This implies that the measures have a predictive power on the performance.

Table 4.67: Goodness-of-fit Model Results for Adaptive Organization Structure Interventions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	**.572[a]**	**.327**	**.316**	**.6589**
2	.610[b]	.372	.351	.6993

The introduction of the moderating variable Board composition increases the coefficient of determination by 4.5% to 37.2%. This implies the moderating variable influence is not very significant.

To determine the influence of Adaptive Organization Structure interventions measures (departmentalization and formalization) the following hypothesis were stated:

Hypothesis Four

H_{04}: There is no statistically significant influence of Adaptive Organization Structure interventions on the performance of commercial state corporations in Kenya.

Regression analysis was conducted to determine the probable form of the relationship between departmentalization, formalization and performance. The regression model will also show whether the measures have significant influence on performance. The results are given in Table 4.68

Table 4.68: Coefficients for Adaptive Organization Interventions Sub-Variables

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.281	0.408		0.689	0.492
	Departmentalization	0.223	0.078	0.213	2.863	0.005
	Formalization	0.584	0.087	0.500	6.706	0.000

a. Dependent Variable: performance

Table 4.68 shows the regression coefficients results of the Adaptive Organization Structure interventions measures (departmentalization and formalization). Both measures were found to be significant at 5% level of significance with coefficients of 0.223 and 0.584 respectively and p-values of 0.005 and 0.000 respectively. The resultant regression model is given by equation 4.3 as

$$Y = 0.223X_1 + 0.584X_2 \quad \text{.....Equation 4.7}$$

When the two sub variables are combined into one variable, Adaptive Organization Structure interventions, the resultant regression results are given by Table 4.69

Table 4.69: Coefficients for Adaptive organization Structure Interventions

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.382	0.418		0.913	0.363
	Adaptive	0.772	0.110	0.531	7.010	0.000

a. Dependent Variable: performance

This implies that the null hypothesis is rejected and the alternative hypothesis is accepted. i.e. H_{0A} is accepted since $\beta \neq 0$ and p-value<0.05. The regression model is summarized by equation 4.4

$$Y = 0.772X_1 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\text{Equation 4.8}$$

Where, X_1 – Adaptive Organization Structure interventions.

It can be concluded that there is statistically significant relationship between Adaptive Organization Structure interventions and performance of State corporations in Kenya. The findings are in tandem with Warui (2016) who carried out a study on human resource information systems usage determinants in the Teachers Service Commission of Kenya and ascertained that organizational structure had a significant effect on its usage in its operations.

To determine the moderation effect of Board composition on Adaptive Organization Structure interventions and performance of commercial state corporations, the following hypothesis was tested:

Hypothesis Five

H_{01}: There is no statistically significant moderating effect of board composition on the Adaptive Organization Structure interventions and performance of commercial state corporations in Kenya.

Moderated regression was done to Adaptive Organization Structure interventions to find if measures moderated with board composition have any significant influence on

the performance of commercial state corporations in Kenya. Table 4.70 gives the results.

Table 4.70: Coefficients of Moderated Regression Model for Adaptive Organization Structure Interventions

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.281	.408		.689	.492
	Departmentalization	.223	.078	.213	2.863	.005
	Formalization	.584	.087	.500	6.706	.000
2	(Constant)	.435	.419		1.039	.301
	Departmentalization	-.153	.411	-.147	-.372	.710
	Formalization	.630	.473	.539	1.330	.186
	Departmentalization & board composition	.094	.123	.460	.770	.443
	Formalization & board composition	-.020	.133	-.085	-.150	.881

a. Dependent Variable: performance

Results in Table 4.70 shows that the interaction variables have a p value of more than 0.05. This implies that the null hypothesis is not rejected.

It can be concluded that there is no moderation effect of board composition on the Adaptive Organization Structure interventions measures (Formalization and Departmentalization) and performance of commercial state corporations in Kenya.

4.6.5 Performance Factors

4.6.5.1 Factor Analysis for Performance factors

Factor analysis has been used to cluster variable into sub groups based on common variance (Yong & Pearce, 2013). Table 4.71 presents the factors analysis results

Table 4.71 : Total Variance Explained for Performance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.040	50.497	50.497	4.040	50.497	50.497
2	.996	12.450	62.947			
3	.865	10.815	73.763			
4	.734	9.174	82.936			
5	.610	7.620	90.557			
6	.336	4.195	94.752			
7	.259	3.237	97.989			
8	.161	2.011	100.000			

Extraction Method: Principal Component Analysis.

Factor analysis was done on performance variable. The factors were subjected to a variance tests through the principal component analysis test. Results showed that only one factor was extracted and it accounts for 50.497% of the variations. Since there was only one factor extracted, there was no rotation matrix. The sums of the Variance analysis shows that the 8 statements on performance are factored into one factor.

4.6.5.2 Descriptive Results of Performance

Descriptive results have been shown in Table 4.72 on a scale of 1 to 5; where 1 is Strongly Disagree while 5 is Strongly Agree.

Table 4.72: Descriptive Results of Performance

Variable	Mean	Std. Deviation	Cronbach's Alpha
Performance	3.2756	0.8681	0.848

Cronbach's alpha was used to test the reliability of the proposed constructs (Ali *et al*., 2016). The performance variable had a Cronbach's alpha value of 0.848 which is more than the proposed threshold of 0.7 hence the tools were reliable

4.7 Summary of Study Variables

The study sought to determine the relationship between strategic change interventions and performance of commercial state corporations in Kenya. Strategic change interventions were assessed by four independent variables (Technology adoption, Dynamic Environmental scan, participatory stakeholder involvement and adaptive organization structure interventions). The moderating variable was Board Composition. Correlation and regression analyses were used to determine the relationship and strength of the strategic change interventions on performance of commercial state corporations to draw conclusions on this study.

4.7.1 Overall Correlation Coefficient Matrix Results

Pearson correlation coefficient was used to compute the correlation between the dependent variable (Performance), the moderating variable, Board Composition and all the independent variables. The independent variables in this study were strategic change interventions (Technology adoption, Dynamic Environmental scan, participatory stakeholder involvement and adaptive organization structure interventions)

Table 4.73 shows the overall correlation matrix which gives the correlation analysis of the independent variable measures, the moderating variable and the dependent variable. The Pearson correlation coefficient was generated at 0.01 significance level (2-tailed).

Table 4.73: Overall Correlation Matrix

Variable		TA	DES	PSI	AOS	BC	OP
Technology Adoption(TA)	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	127					
Dynamic Environmental Scan(DES)	Pearson Correlation	.285**	1				
	Sig. (2-tailed)	.001					
	N	127	127				
Participatory Stakeholder Involvement (PSI)	Pearson Correlation	.326**	.246**	1			
	Sig. (2-tailed)	.000	.005				
	N	127	127	127			
Adaptive Organization Structure(A0S)	Pearson Correlation	.319**	.197**	.406**	1		
	Sig. (2-tailed)	.000	.026	.000			
	N	127	127	127	127		
Board Composition(BC)	Pearson Correlation	-.020	.183	-.182	.102	1	
	Sig. (2-tailed)	.843	.064	.066	.307		
	N	103	103	103	103	103	

Organizational Performance	Pearson Correlation	.594**	.449**	.611**	.597**	.078	1
(OP)	Sig. (2-tailed)	.000	.000	.000	.000	.432	
	N	127	127	127	127	103	127

**. Correlation is significant at the 0.01 level (2-tailed).

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

KEY: **TA** = Technology Adoption, **DES** = Dynamic Environmental Scan**,** **PIS** = Participatory Stakeholder Involvement, **AOS** = Adaptive Organization Structure, **BC**= Board Composition, **OP**=Organization Performance

There was a strong positive relationship between technology adoption interventions and performance of commercial state corporations in Kenya. P=0.000(p value<0.05).There was a moderate positive relationship between Dynamic Environmental Scan and performance, p=0.000(p value<0.05).There was a strong positive relationship between Participatory stakeholders interventions and performance of commercial state corporations in Kenya, p =0.000 (p-value<0.05).There was also a strong positive relationship between Adaptive organization structure interventions and performance of commercial state corporations in Kenya, p =0.000 (p-value<0.05).There was however no significant relationship between Board composition and Strategic change interventions(Technology adoption, Dynamic Environmental scan, Participatory stakeholder involvement and Adaptive organization structure interventions) since p value>0.05 for the four variables

4.6.1 Overall Goodness of fit Results

The results on Table 4.74 showed that measures of strategic change interventions had explanatory power on performance of commercial state corporations as it accounted for 69.3% of its variability (R Square =0.693) as indicated in Model 1, hence the model is a good fit for the data. This implies a strong positive relationship between strategic change interventions and performance of commercial state corporations in Kenya.

Table 4.74: Overall Model Summary on Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.832	.693	.680	.26920	1.852
2	.852	.726	.703	.25948	1.933

a. Predictors: (Constant), Adaptive Organization Structure, Dynamic Environmental Scan, Technology Adoption, Participatory Stakeholder Interventions

b. Predictors: (Constant), Adaptive Organization Structure - Board Composition, Dynamic Environmental Scan- Board Composition, Technology Adoption- Board Com[position, Participatory Stakeholder Interventions- Board Composition

c. Dependent Variable: Organization Performance

When the moderating variable, Board Composition was introduced as per model 2, the explanatory power of measures of strategic change interventions(Technology Adoption, Dynamic Environmental Scan, Participatory Stakeholder and Adaptive Organization Structure)did not change significantly (R Square = 0.726). Hence the variation increased from 69.3% to 72.6% which was a slight increase of only 3.3%. This implies the moderating variable influence on the relationship between strategic change interventions and performance of commercial state corporations was not very significant.

4.7.2 Overall Analysis of Variance (ANOVA) Results

Table 4.75 presents the overall analysis of variance of the study. The results reveal that there is significant relationship that exists between strategic change interventions(Technology Adoption, Dynamic Environmental Scan, Participatory Stakeholder, Adaptive Organization Structure) and Performance of commercial state

Corporations (F = 69.086, with p value of 0.000) as indicated in Model 1. When moderating variable (board composition) was introduced, the F value reduced (F = 38.889 with a p value of 0.000) as indicated in Model 2.

Table 4.75: Overall Analysis of Variance (ANOVA) Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.028	4	4.007	69.086	.000[b]
	Residual	7.102	122	0.058		
	Total	23.130	126			
2	Regression	16.801	8	2.100	38.889	.000[c]
	Residual	6.329	118	0.054		
	Total	23.130	126			

a. Dependent Variable: organization performance

b. Predictors: (Constant), adaptive organization structure, dynamic environmental scan, technology adoption, participatory stakeholder involvement

c. Predictors: (Constant), Adaptive Organization Structure - Board Composition, Dynamic Environmental Scan- Board Composition, Technology Adoption- Board Com[position, Participatory Stakeholder Interventions- Board Composition

4.7.3 Overall Regression Model for Influence of Strategic Change Interventions on Performance of Commercial State Corporations

Multiple regression analysis was performed to assess the relationship between strategic change interventions (Technology Adoption, Dynamic Environmental Scan, Participatory Stakeholder, Adaptive Organization Structure) and performance of commercial state corporations).

Table 4.76:Coefficients of Overall Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.892	.523		-1.707	0.090
	Dynamic env	0.237	0.101	0.236	2.338	0.023
	Participatory stake	0.538	0.097	0.434	5.578	0.000
	Adaptive org. structure	0.317	0.118	0.218	2.694	0.008
	Technology Adoption	0.200	0.094	0.176	2.134	0.035

a. Dependent Variable: performance

Table 4.76 shows that all the variables were statistically significant. This can be summarized using equation (4.9) as:

$Y=0.237X_1+0.538X_2 + 0.317X_3 + 0.2X_4$ ……Equation 4.9

Table 4.77: Summary of Hypotheses Test Results

Null Hypothesis	Comment
1. There is no statistically significant influence of Technology adoption interventions on the performance of state corporations in Kenya.	Rejected
2. There is no statistically significant influence of Dynamic Environment Scan interventions on performance of state corporations in Kenya.	Rejected
3. There is no statistically significant influence of participatory stakeholder involvement interventions on the performance of state corporations in Kenya.	Rejected
4. There is no statistically significant influence of Adaptive organization structure interventions on the performance of state corporations in Kenya.	Rejected
5. There is no statistically significant moderating effect of Board Composition on performance of state corporations in Kenya.	Accepted

4.8 Discussion of Findings on Relationship Between Strategic Change Interventions and Performance of Commercial State Corporations in Kenya.

The general objective of the study was to assess the effect of strategic change interventions on the performance Commercial state corporations in Kenya. Independent variables that were considered were technology adoption change interventions, Dynamic Environmental scan change interventions, participatory

stakeholder involvement change interventions and adaptive structure change interventions. Board composition was considered as a moderating variable. This section gives a full discussion of the findings and results.

4.8.1 Technology Adoption Interventions

The first objective sought to examine whether technology adoption change interventions had an influence on performance of Commercial state corporations to ascertain whether technology adoption change interventions had a significant effect or otherwise on performance a number of tests were done. Technology adoption interventions was assessed by four sub-variables namely acquisition of IT infrastructure, strategic alignment, organization structure and employee training. Seven factors were subjected to factor analysis. Two factors that is, acquisition of IT and employee training were identified with the biggest influence on technology adoption interventions with cumulative variance of 69.690%. Factor one had the highest with 53.151% while factor two had 16.538% of total variance. Acquisition of IT and employee training had Eigen values greater than 1. Respondents on average agreed that acquisition of technology affects technology adoption interventions with a mean of 3.9449. Respondents also agreed that employee training affects technology adoption interventions with a mean of 3.8189. In deed acquisition of technology was seen to be very crucial as posited by Jabar, *et al.,* 2010) who viewed acquisition of technology as a very important ingredient for economic growth to business organizations as it enables them to be competitive and ensure their survival in the modern business world.

Majority of the respondents for the research agreed that organizations required adequate infrastructural technology that includes networks, electronic data interchanges, conducting research and development to get latest technologies has been put in place. Paasivaara and Lassenius (2014) compliments the ideas by stating that a stable technological infrastructure with its support operations and systems, coupled with good management practices is quite useful in the achievement of

improved firm performance. The respondents were also in agreement that agents of change have been identified by their organizations and trained to facilitate the change processes. They also agree that their organizations have well defined training and development programmes for the employees on how to deal with new technology. These views are echoed by Youssef, Hadhri, and M'Henni (2014) who in their study found out that organizations with employees who are qualified have better adoption and use of IT tools than organizations with employees who are less qualified. In essence IT adoption requires skilled labour. The findings are in tandem with previous studies which established the existence of close correlation between IT and the skills of workers (Bresnahan, Brynjolfsson & Hitt, 2002, Arvanitis & Loukis, 2009). Human capital investment has been the main determining factor for IT (Mughal & Diawara, 2011).

Technology adoption interventions were found to have a positive significant influence on performance of commercial state corporations in Kenya with a coefficient of correlation of 0.512 and p-value of 0.000. 27.4% of the variation in Performance of commercial state corporations is attributed to technology adoption interventions. Other factors explain 72.6% of the changes on performance. This implied that the measures have a predictive power on the performance. This is in agreement with the study done by Ismail and Mamat (2012) who sought to establish the correlation between process innovation, organizational performance and technology. The outcome noted the existence of a significant relationship between technology adoption on the innovation process and organizational performance. Ng'ang'a *et al*. (2018) in their study found out that adoption of technology had great influence on performance of organizations.

The regression coefficients results of the Technology adoption interventions measures were found to be significant at 5% level of significance with a coefficient of 0.491 and p-value of 0.000. This implied that the null hypothesis is rejected and the alternative hypothesis is accepted that technology adoption interventions influence performance of commercial state corporations in Kenya. These results

clearly underscore the importance attached to technology adoption in state corporations. Most commercial state corporations have tried to acquire modern technology and also have been training its employees on how to handle and cope with the technology at hand. Chen and Tsou (2006) in their study; information technology adoption for service innovation practices and competitive advantage, established that business organizations have prioritized adoption of information technology as a strategy to gain competitive advantage over competitors. Their study also accepted the alternate hypothesis that information technology adoption has a positive and significant effect on service innovation of services, products and creating competitive advantage to organizations. Mwangi, *et al* .(2016) in their study also obtained a regression coefficient of 0.320 at 5% level of significance, putting technology to be a very important factor in improving performance of an organization. Onwuka and Eguavoen (2007) also supports that for an organization to be a key player in the world market it should have extensive use of technology.

4.8.2 Dynamic Environmental Scan Interventions

The second objective of the study was to examine the influence of dynamic environmental scan interventions on performance of commercial state corporations in Kenya. The findings on environmental scan interventions revealed that heterogeneity affect dynamic environment scan interventions with a mean of 4.1155. Respondents also agreed that dynamic environment affects dynamic environment scan interventions with a mean of 4.3045. According to Birkinshaw, Hood and Young (2005) firms which fail to take new position to respond to intensive competition, attract very high opportunity costs as they look for different strategies to enable them remain in business. The mean score for responses for this section was 4.20 which indicate the majority of the respondents agreed that the environmental factors were key drivers of firm performance. Results also show a strong positive relationship between heterogeneity and performance, dynamic environment and performance with a correlation coefficient of 0.549 and 0.444 respectively and p-values of 0.000.

These findings therefore implies that Dynamic environmental scan interventions influence performance of state corporations. The results show that measures of technology adoption explains 40.6% of the variation in performance of commercial state corporations. Other factors explain 59.4% of the changes on performance. This implies that the measures have a predictive power on the performance. This is supported through a study by Babatunde and Adebisi (2012) of organizational performance in relation to strategic environmental scanning within a business competitive environment found a proportional relation between the performance of an organization and strategic environmental scanning, with a coefficient of determination (R^2) of 0.297. It indicates that a variation in effective performance of 30% change of an organization is due to a change in environmental scanning strategy. Barua *et al.* (2016) was also in agreement with the findings when he established that both sales and profit constructs had significant positive correlations with environmental factors yield in the coefficients of 0.686 ($p < 0.001$) and 0.294 ($p < 0.001$) respectively.

Results on regression analysis were conducted to determine the probable form of the relationship between heterogeneity, dynamic environment and performance. The regression model was to show whether the measures have significant influence on performance. The regression coefficients results of the Dynamic environmental scan interventions measures (heterogeneity and dynamic environment). Both measures were found to be significant at 5% level of significance with coefficients of 0.495 and 0.673 respectively and p-values of 0.000.The combined results gave a coefficient 1.173. This implies that the null hypothesis is rejected and the alternative hypothesis is accepted that dynamic scan environmental interventions influences performance of commercial state corporations in Kenya. The results have been supported by Yoengtaak (2009) in their research of effects of environmental factors on firm performance who identified that the performance of firms is positively influenced by dynamic environment, heterogeneity and competitive aggressiveness. This is also supported by studies undertaken by Noruzi, Westover and Rahimi (2010) and Perrini and Vurro (2006) who found that dynamic environment and heterogeneity are important factors that determine the firm performance.

The findings were similar to those of Agbim, Oriarewo and Zever (2014) who sought to establish the behaviour of entrepreneurial performance on micropreneurs due to business environmental scanning actions and found a positive and significant relationship between environmental scanning actions and entrepreneurial performance. Garg, Walters and Priem (2003) in their study: CEO scanning emphasis, on dynamic environment and firm performance also confirmed a relationship between environment scanning and performance. Results of the study showed that when the CEO becomes more keen to dynamism in the external environment and internal functions, there is higher performance. Likewise a study by Lewa, Mutuku and Mutuku (2009) underscores the critical role of an organization in scanning both the external and internal environment.

4.8.3 Participatory Stakeholder Involvement Interventions

The third objective was to examine the influence of participatory stakeholder involvement interventions on performance of commercial state corporations in Kenya. The findings on participatory involvement interventions revealed two factors were identified to be having the biggest influence on participatory stakeholder involvement interventions with cumulative variance of 81.091%. Factor one had the highest influence accounting for 60.868% while factor two accounted for 20.222% of total variance. These two factors which are participation in the change and support from stakeholders respectively had their Eigen values greater than 1. Participation in the change affects participatory stakeholder involvement with a mean of 3.7113 while support from stakeholders had a mean of 3.7953. Results show a strong positive relationship between participation in the change and performance, support from stakeholders and performance with a correlation coefficient of 0.502 and 0.580 respectively and p-values of 0.000. This implies that Participatory Stakeholders Involvement interventions.

The results also show that measures of participatory stakeholder involvement interventions (participation in the change and support from stakeholders) explain

41.0% of the variation in Performance of State corporations. Other factors explain 59.0% of the changes on performance. This implies that the measures have a predictive power on the performance. This phenomenon underscores the relevance attached to stakeholders as emphasized by Johnson *et al*., (2008) who posits that organizations and stakeholders depend on each other for fulfillment of their goals. According to Mokamba (2015) when stakeholders becomes proactive, they will be motivated in working towards the improvement of the organization.

The findings were closely related to to case study carried out on Kenya Power and Lighting Company, in Uasin Gishu County–Kenya to investigate the stakeholder engagement and organizational performance by Kenyoru, (2015) who established that more than 50% of the changes achieved in the performance of an organization was due to stakeholder involvement in the decisions made. Participatory stakeholders involvement was found to be significant at 5% level of significance with coefficient of 0.784 and p-value of 0.000. This implies that the null hypothesis is rejected that participatory stakeholders involvement interventions does not influence performance of commercial state corporations in Kenya. The findings were supported by Muindi (2011) which in its correlation analysis established a perfectly positive correlation of 0.888 between the level of participation in decision-making and the level of job satisfaction.

4.8.4 Adaptive Organization Structure Interventions

The fourth objective of the study was to examine the influence of adaptive organization structure interventions on performance of commercial state corporations in Kenya. Adaptive Organization Structure interventions were assessed by three sub-variables namely Formalization, Departmentalization and Span of Control. Seven factors were subjected to factor analysis. Two factors were identified to be having the biggest influence on Adaptive Organization Structure interventions with cumulative variance of 66.117%. Factor one had the highest influence accounting for

49.282% while factor two accounted for 16.835% of total variance. These two factors had their Eigen values greater than 1.

Respondents on average agreed that departmentalization affect Adaptive Organization Structure interventions with a mean of 3.8287 while formalization affects Adaptive Organization Structure interventions with a mean of 3.7559.Results show a significant positive relationship between departmentalization and performance, formalization and performance with a correlation coefficient of 0.288 and 0.532 respectively and p-values of 0.001 and 0.000 respectively. This implies that Adaptive Organization Structure interventions influence performance of state corporations. Rauch, Frese and Utsch (2005) conducted an empirical analysis based on longitudinal data from 119 German business owners and found that factors such as organizational structures are the most important factors for predicting firm performance.

Measures of Adaptive Organization Structure interventions (departmentalization and Formalization) explains 32.7% of the variation in Performance of State corporations. Other factors explain 67.3% of the changes on performance. This implies that the measures have a predictive power on the performance. These results were supported by a study by Warui (2016) which ascertained that organizational structure had a significant effect on its usage in its operations. Kihara, Ngugi and Ogollah *(*2016) in his study on how strategic contingency factors impacted on large manufacturing firms' performance in Kenya recommended that the management of those firms should put in place structural organizations strategies that lead to high performance. The firms should ensure that they have an organization structure that is specialized, high calibre of span of control, centralized structure and have departmentalization in the company. A study by Kinyua, *et al* (2016) carried out on effects of internal control systems on financial performance of companies quoted in the stock exchange of Nairobi (NSE) established that the organization structure of companies listed in Nairobi securities is clearly defined in terms of lines of authority and responsibility

and there is adequate supervision and monitoring of decentralized operations. In addition organization structure shapes the performance of these companies.

4.8.5 Board Composition

Moderated regression was done to determine if technology adoption interventions moderated with board composition has any significant influence on the performance of commercial state corporations in Kenya. Results show that the interaction variables have a p value of more than 0.05. This implies that the null hypothesis is not rejected. Hence there was no moderation effect of board composition on the technology adoption interventions measures and performance of commercial state corporations in Kenya. Moderated regression was done to determine if dynamic environmental scan interventions measures moderated with board composition has any significant influence on the performance of commercial state corporations in Kenya. Results show that the interaction variables have a p value of more than 0.05. This implies that the null hypothesis is not rejected. It can be concluded that there is no moderation effect of board composition on the dynamic environmental scan interventions measures (heterogeneity and dynamic environment) and performance of commercial state corporations in Kenya.

Moderated regression was done to Participatory Stakeholders Involvement interventions measures moderated with board composition has any significant influence on the performance of commercial state corporations in Kenya. Results show that the interaction variables have a p value of more than 0.05. This implies that the null hypothesis is not rejected. It can be concluded that there is no moderation effect of board composition on the Participatory Stakeholders Involvement interventions measures (participation in the change and support from stakeholders) and performance of commercial state corporations in Kenya.

Moderated regression was done to find out whether Adaptive Organization Structure interventions measures moderated with board composition has any significant

influence on the performance of commercial state corporations in Kenya. Results show that the interaction variables have a p value of more than 0.05. This implies that the null hypothesis is not rejected. It can be concluded that there is no moderation effect of board composition on the Adaptive Organization Structure interventions measures (participation in the change and support from stakeholders) and performance of commercial state corporations in Kenya.

For analysis of variance of the study on strategic change interventions and performance of state corporations, it was found that When moderating variable (board composition) was introduced, the F value reduced (F=23.351F to 13.606 with a p value of 0.000) for the technology adoption interventions. For dynamic environmental interventions F value also reduced (from F= 42.447 to 22.445 with a p value of 0.000). A similar case was noted for participatory stakeholders involvement where F reduced (F=43.125 to 22.198 with a p value of 0.000). Adaptive organization structure relationship with performance when moderating variable was added had its F value reduced (F= 30.149 to 18.039 with a p value of 0.000). This clearly shows a very insignificant relationship between the moderating variable in influencing relationship between strategic change interventions and performance of commercial state corporations in Kenya. It has however been observed that participation in strategic decision making by Boards in more developed countries is more than those in less developed countries. This is due to weak legal and justice framework (Heenetigala, 2011). This proposition was further supported by Ranti (2011) that even though developing countries may have good composition of board members, executing their mandate becomes a challenge due to weak regulatory framework.

The findings are supported by Al-Matari, Fadzil and Al-Swidi. (2014) who in their study: moderation influence of board diversity on the relationship between members of Boards attributes and organization performance found insignificant relationship between the size of the board and return on assets. They attributed the reason to be domination of activities by the CEO. In their other study, they found insignificant

moderation influence of board diversity on the relationship between Audit Committee commitment and Return on Assets. The insignificant moderation influence according to the study can be associated with inappropriate sizes of the board which end up failing to perform possible because of inadequate qualifications of Board members and not able to cope with environmental changes. They also found outside directors of the board to have insignificant impact in moderating the relationship between characteristics of board of directors and the return on assets. This was attributed to inadequate knowledge of the firm by outside directors. Gaturu *et al* (2018) was of a contrary view when he posits that outside board members are normally better in terms of monitoring the managers and able to make independent and better decisions than inside directors .

In the current study, Board composition had an insignificant contribution when introduced to the independent variables where the R^2(coefficient of determination change was only 0.033. Al-Matari *et al.*(2014) also was in support of these findings when the results regarding the model reveals that there was insignificant moderation by board diversity R^2 change when the moderator was introduced increased by only 0.016. A study by Otwani, *et al*. (2018) was however of a contrary opinion as it established that Board composition had a significant positive influence on performance of listed companies in Kenya with a coefficient of determination (R^2) of 0.501. In another study by Şahin, *et al*. (2015) they established a moderate significant moderating influence between Director's characteristics and international diversification and performance of the firm. In terms of outside board members, it was found that outside board members have negative moderating significant relationship in that an increase in their numbers leads to poor financial performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains results and conclusions made from the study on influence of strategic change interventions on performance of commercial state corporations in Kenya. The observed influence of each of the independent variables namely technology adoption, dynamic environmental scan interventions, participatory stakeholder involvement interventions and adaptive organization structure and on performance (dependent variable) are reported and discussed. Finally, the applications of the overall findings on commercial state corporations in Kenya are also discussed. The following sections provided the summary, conclusions and recommendations for each of the study objectives.

5.2 Summary of the Major Findings

5.2.1 Influence of Technology Adoption Interventions on Performance

A factor analysis was carried out to get factor scores with the greatest influence on Technology adoption interventions. Two factors were identified with the biggest influence on technology; acquisition of Technology and employee training. The Pearson Correlation of Technology Adoption versus performance showed a significant and positive relationship between Acquisition of Technology and Performance of commercial state corporations in Kenya. It can therefore be affirmed of the existence of a positive linear relationship between acquisition of technology and Performance.

The descriptive findings indicated that commercial state corporations have given great importance to matching technology with the strategies in their organizations while also ensuring the employees are given the pre requisite training to handle the changes. Adequate technology infrastructure which includes networks; management

and provisioning of large-scale computing, electronic data interchange and shared databases, and research and development to identify emerging technologies had been put in place in the organizations. This was for purposes of improving performance.

The results of coefficient of determination (R square) indicated that 27.4% of the variation in the improvement of performance was explained by Technology adoption. This was an indication that commercial state corporations should embrace technology adoption for improvement of performance. The contribution of the independent variable was significant. The regression analysis also indicated that there was a significant and strong positive association between technology adoption and performance. Therefore the null hypothesis $H0_1$: Technology adoption has no significant relationship with performance of commercial state corporations in Kenya was rejected.

5.2.2 Influence of Dynamic Environmental Scan Interventions on Performance

A factor analysis was carried out to get factor scores with the greatest influence on Dynamic Environmental Scan Interventions. Two factors were identified with the biggest influence on Dynamic Environmental Scan; Environment Heterogeneity and Environment Dynamism. The Pearson Correlation of dynamic environment scan versus performance showed a significant and positive relationship between dynamic environmental scan and Performance of commercial state corporations in Kenya. It can therefore be affirmed of the existence of a positive linear relationship between dynamic environmental scan and Performance.

Descriptive statistics showed that the organizations respond accordingly to changes in preference and taste of consumers and also prices for goods and services they offer. The data showed that commercial state corporations also respond to competitive aggressiveness and are willing to take greater risks in some circumstances to maintain a competitive edge. The results of coefficient of determination (R square) indicated that 40.6% of the variation in the improvement of performance was explained by dynamic environmental scan. This was an indication that commercial state corporations should embrace dynamic environmental scan

interventions for improvement of performance. The contribution of the independent variable was significant. The regression analysis also indicated that there was a significant and strong positive relationship between dynamic environmental scan interventions and performance. Therefore the null hypothesis $H0_2$: Dynamic environmental dynamic scan interventions has no significant relationship with performance of commercial state corporations in Kenya was rejected.

5.2.3 Influence of Participatory Stakeholder Involvement Interventions on Performance

A factor analysis was carried out to get factor scores with the greatest influence on Participatory stakeholder involvement interventions. Two factors were identified with the biggest influence on participatory stakeholder involvement; participation in the change and support from stakeholders. The Pearson Correlation of participatory involvement versus performance showed a significant and positive relationship between participatory stakeholder involvement and performance of commercial state corporations in Kenya. It can therefore be affirmed of the existence of a positive linear relationship between participatory stakeholders involvement and Performance. Descriptive statistics showed that stakeholders have identified the goals of the commercial state corporations, they know what is expected of them therefore give their full support. Also, Key stakeholders with various organizational groups that are backing for change interventions have been identified and proper planning and hence have been committed.

The results of coefficient of determination (R square) indicated that 41.0% of the variation in the improvement of performance was explained by participatory stakeholder involvement stakeholders. This was an indication that commercial state corporations should embrace participatory stakeholder involvement interventions for improvement of performance. The contribution of the independent variable was significant. The regression analysis also indicated that there was a significant and strong positive relationship between participatory stakeholders involvement interventions and performance. Therefore the null hypothesis $H0_3$: Participatory

stakeholder involvement interventions has no significant relationship with performance of commercial state corporations in Kenya was rejected.

5.2.4 Influence of Adaptive Organization Structure Interventions on Performance

A factor analysis was carried out to get factor scores with the greatest influence on Adaptive Organization Structure interventions. Two factors were identified with the biggest influence on organization structure; Formalization and Departmentalization. The Pearson Correlation of organization structure versus performance showed a significant and positive relationship between organization structure and performance of commercial state corporations in Kenya. It can therefore be affirmed of the existence of a positive linear relationship between organization structure and Performance.

Descriptive statistics revealed that commercial state corporations strictly operate routinely through formalized structures and processes**.** They also have clear internal pattern of relationships, authority and communication which are understandable to all employees. All departments are allowed to have their own structures which are unique to themselves in strategy change interventions. This implies that duties and tasks within the organizations are clearly indicated and boundaries set such that every employee knows what is required of him.

The results of coefficient of determination (R square) indicated that 32.7% of the variation in the improvement of performance was explained by Adaptive organization structure. This was an indication that commercial state corporations should embrace adaptive organization structure interventions for improvement of performance. The contribution of the independent variable was significant. The regression analysis also indicated that there was a significant and strong positive relationship between adaptive organization interventions and performance. Therefore the null hypothesis H_{04}: organization structure interventions has no significant

relationship with performance of commercial state corporations in Kenya was rejected.

5.2.5 To Establish the Moderating Influence of Board Composition on the Relationship Between Strategic Change Interventions and Performance

The study found that board composition had no influence on the relationship between strategic change interventions and performance of commercial state corporations in Kenya. The predicting power of R square when board composition was introduced in the regression model to each of the variable of the study was not statistically different. Moderated regression was done to each of the independent variables (Technology adoption, dynamic environmental scan, participatory stakeholder involvement and adaptive organization structure interventions) to find if measures moderated with board composition have any significant influence on the performance of commercial state corporations in Kenya. It was found that the interaction variables had a p value of more than 0.05. This implied that board composition did not have any moderating effect on the relationship between strategic change interventions and performance of commercial state corporations in Kenya. The null hypothesis that Board composition has no moderating effect on the relationship between strategic change interventions and performance of commercial state corporations in Kenya was, therefore, accepted.

5.3 Conclusions

From the findings of the study, it can be concluded that technology adoption interventions which had acquisition of technology and employee training as sub-variables retained after factor analysis was found to have a significant relationship with performance of commercial state corporations in Kenya. Acquisition of technology, had a positive and linear relationship with performance. There was also a positive relationship between employee training and performance. This therefore underscores the importance of technology acquisition and also training the agents involved in the change interventions as is evidenced by the commercial state corporations in Kenya.

Dynamic environment scan interventions which had environmental dynamism and environmental heterogeneity as sub-variables retained after factor analysis was found

to have a significant relationship with performance of commercial state corporations in Kenya. Environmental dynamism, had a positive and linear relationship with performance. There was also a positive relationship between environmental heterogeneity and performance. The present research provides evidence that it is helpful to consider dynamic environmental scan interventions as a strategic change intervention for organizations to be able to survive in business. Based on the findings of this study, it can therefore, be concluded that commercial state corporations in Kenya should lay more emphasis on environmental dynamism and heterogeneity to create a competitive edge in their operations to improve performance.

Participatory stakeholder involvement interventions which had participation in the change and support from stakeholders as sub-variables retained after factor analysis was found to have a significant relationship with performance of commercial state corporations in Kenya. Participation in the change, had a positive and linear relationship with performance. There was also a positive relationship between support from stakeholders and performance. The current research emphasizes the importance of stakeholders involvement interventions in execution of change initiatives in commercial state corporations in Kenya. Commercial state corporations should would therefore get support from stakeholders if they involve them in their activities. The study has found out that when stakeholders provides support for strategic change in the organizations.

Adaptive organization structure interventions was found to be a key component for improvement of performance in commercial state corporations in Kenya. The coefficient of determination indicated that more than a third of the variation in the change in performance was explained by Adaptive organization structure interventions. The study also shows that adaptive organization structure interventions has a significant and positive influence on performance of commercial state corporations. They should therefore take adaptive organization interventions as one of the key drivers in their performance. Therefore adaptive organization structure interventions of formalization and departmentalization which were the sub variables that were retained after factor analysis are quite useful in organizations which are taking strategic change interventions.

The study also concludes that Board composition has no moderating effect on the relationship between strategic change interventions and performance of commercial state corporations in Kenya. Based on the findings, Board composition had no influence in the relationship between the variables of the study and performance. The results of this research indicated the lack of an interaction between board composition with either technology adoption, dynamic environmental scan, participatory involvement and organization structure interventions in Kenya's commercial state corporations is a reflection that Board composition has insignificance influence on strategic change interventions. Based on the findings of this study, it can, therefore, be concluded that commercial state corporations in Kenya are self-propelled and that irrespective of whether adequate Board composition was being fulfilled or not strategic change interventions remained significant in their relationship with performance.

5.4 Recommendations

5.4.1 Management Recommendations

The current study has found that acquisition of technology and employee training as the most important factors that determine firm performance. In this regard commercial state corporations should improve their performance by expanding the acquisition of technology and expound on employee training programmes to cater for the new technology. This will enable proper use of technology and enhance employee empowerment. The correlation results established a significant relationship between dynamic environmental interventions and performance. The study further found that dynamic environment and heterogeneity are the most important factors that determine performance. To circumvent any threats, commercial state corporations need to continuously scan the environment in order to take advantage of opportunities and be proactive to better the performance.

The study has noted that participatory stakeholders involvement interventions are crucial in achieving superior organizational performance. This was realized through support from stakeholders and allowing them a considerable participation in strategic change interventions of the organization. It is therefore recommended that

commercial state corporations should involve stakeholders to invoke their support for improvement of their performance.

The study established a significant and positive relationship between adaptive organization structure interventions and performance of commercial state corporations in Kenya. Formalization and departmentalization were found to be the most important sub variables. Since the organizations strictly operates routinely through formalized structures and processes then it's critical that clearer internal pattern of relationships, authority and communication which are understandable to all employees are established. Tasks within the organizations should be clearly indicated and boundaries set such that every employee knows what is required of him. It is also important for commercial state corporations to develop organizational structures that support strategic change to ensure overall coordination in inter departmental lin

The study established an insignificant relationship on the role of board composition as a mediating variable on the relationship between strategic change interventions and performance of commercial state corporations in Kenya. It is therefore recommended that role of Boards need to be re looked for organizations to benefit upfront. Boards in Commercial state corporations require more internal directors to enable closer monitoring of their performance and input in these organizations. Future appointments to Boards also should be scrutinized and have fair representation especially in terms of skills and diversity.

5.4.2 Contribution to New Knowledge

The study added knowledge on strategic change interventions from the context of commercial state corporations. This relationship between strategic change interventions and performance of commercial state corporations in Kenya provides a significant contribution to the strategic management literature. The knowledge achieved from the findings confirms the role of strategic change interventions in the performance of commercial state corporations. The findings have also contributed on the role of strategic change interventions namely technology adoption, dynamic environmental scan, participatory stakeholder involvement and adaptive organization structure interventions. The study established specifically the extent to which these variables influenced the performance of commercial state corporations in Kenya. Therefore, the findings have

bridged the knowledge gap on the lack of this kind of undertaking in commercial state corporations in Kenya. Another major contribution is the introduction of Board composition as a moderating variable in the relationship between strategic change interventions and firm performance and found out that Boards composition are insignificant in influencing strategic change interventions and performance. The findings of this study have bridged the knowledge gap.

5.4.1 Recommendation for Policy

The study found that strategic change interventions improves performance among commercial state corporations in Kenya. Therefore, commercial state corporations need to come up with policy guidelines that will lead to adoption of strategic change interventions in order to cope with environmental uncertainties in the business organizations. Appropriate strategies should be designed to cope with changes and thus the organizations would be ensured improvement in their performance. The Government need to relook Boards appointments in order to have individuals who will add value and devote more time in the affairs of the organizations. The Government should also consider having more inside directors than outside who will be more keen in the activities of commercial state corporations. This will definitely improve their role in these state corporations.

5.5. Areas for Further Research

The results of this study provide valuable insights on the relationship between strategic change interventions and performance of commercial state corporations in Kenya. Technology adoption components identified were acquisition of technology and employee training. Dynamic environmental scan interventions components that were found to have a significant relationship with performance were environment dynamism and Environment heterogeneity. Participation in the change and support from stakeholders were found to have a significant relationship with performance as stakeholder involvement interventions. The components of adaptive organization structure interventions that had a significant relationship with performance were formalization and departmentalization. It was established that the coefficient of determination (R square) in the overall model was 0.693. This indicates the model explain 69.3% of the variations in the dependent variable. It meant that the

remaining 30.7% was explained by other strategic change interventions other than the four variables. Other researchers can consider other variables such as review of strategic plan, organizational culture change, and service delivery changes among others. Other studies could also be undertaken by researchers extending the scope of other moderating factors such as duality role of CEO, organizational climate or a similar study to be carried out covering non- commercial state corporations in Kenya.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Date…….

To…….

Dear Sir/Madam,

RE: **COLLECTION OF RESEARCH DATA**

I 'am Juliana Asser a PhD pursuing Business Administration Strategic Management option at Jomo Kenyatta University of Agriculture and Technology. My research is on "Role of Strategic Change Interventions on Performance of Commercial State Corporations in Kenya".

The data being gathered would be relevant to my area of specialization. Subsequently you have been identified as one of the respondents. Your ideas will bring much input towards the success of the study. Please take some time to respond to the attached questionnaire.

The responses that will be given shall be treated in will not be disclosed to any other party. The findings shall be for academic purposes. Kindly go through the questionnaire and fill it within four days to enable the timely completion of the study.

Yours Sincerely

Juliana Hawario Asser

APPENDIX II: QUESTIONNAIRE

A STUDY IN PARTIAL COMPLETION OF DOCTOR OF PHILOSOPHY IN

BUSINESS ADMINISTRATION, JOMO KENYATTA UNIVERSITY

OF AGRICULTURE AND TECHNOLOGY

This questionnaire seeks to investigate the role of strategic change interventions on performance of commercial state corporations in Kenya.

NB: This information will be used strictly for academic purposes only and will be treated with utmost confidence.

Date: _____ Questionnaire No: _____

Do you wish to receive a complimentary copy of results of this study?

Yes ( ) No ( )

SECTION A: BACKGROUND INFORMATION

1. Gender

   Male ( )

   Female ( )

2. What is your age bracket?

   18 – 25 Years ( )

   26 - 35 Years ( )

   35 - 44 years ( )

   45 – 55 years ( )

   Over 55 years ( )

3. For how long have you been working with the state corporations?

Less than 2 years ( )

2 – 5 years ( )

6 – 10 years ( )

11 years and more ( )

4. What is your highest level of education?

Diploma Certificate ( )

Higher National diploma ( )

Bachelors ( )

Masters ( )

Phd ( )

5. Which category does your commercial state corporation fall under?

Purely Commercial ( )

Strategic Commercial ( )

6. What was the position of your State Corporation in the previous performance rating of

Public institutions?.....

SECTION B: TECHNOLOGY ADOPTION INTERVENTIONS

Part A

7. When technology is being introduced, what change processes does the management take to ensure it is fully adopted?

   i) Acquisition of IT infrastructure ( )

   ii) Strategic alignment ( )

   iii) Organization structure improvement ( )

   iv) Employee training ( )

8. The following are new technology types adopted during the change processes

   Software ( )

   Hardware ( )

   Communications ( )

   Others (Please specify) ----------

9. On the space provided indicate with a tick(✓) the level of innovation adoption intervention that best describes your corporation:

Level	**Description**	
Innovators	-dream realizers -drive change -aren't, t afraid to fail -explore in iterations -high tolerance for risk, uncertainty and ambiguity -adventures -change initiators -internally motivated to change -respected by early adopters doubted by the mass	
Early Adopters	-evangelists -embrace change	

	-self –efficacy -like to be first to try ,use, engage, buy -try out new ideas in careful way -inspired by new -like integrating new ideas in useful ways -influencers-like to convey ideas -respected by the majority	
Early Majority	-pragmatists -accept change(sooner than late majority) -Deliberate -adopt if practical-weigh out pros & cons, think it out -go along ,seldom lead -helps in gain mass appeal -wait until it has been successful in practice	
Late Majority	-skeptics -accept change later than early majority -adopt after proven -often adopt out of necessity, not choice -goes along with peers -like to know rules, Creatures of habit -jump in when sees, everybody is doing	
Laggards	-change averse -value tradition -not leaders -suspicious of new innovations -often wait until forces to adopt -feel threatened or very uncomfortable by uncertainty and change -not going to buy into new ideas	

Part B

Using a scale of 1 to 5 where 1 is strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree and 5 strongly agree, please indicate your agreement to the following statements in relation to new technology adoption interventions to enhance performance at your organization

	TECHNOLOGY ADOPTION INTERVENTIONS	**1**	**2**	**3**	**4**	**5**
10.	Adequate technology infrastructure which includes networks; management and provisioning of large-scale computing, electronic data interchange and shared databases, and research and development to identify emerging technologies have been put in place					
11.	There is proper alignment of technology and business strategies in the organization					
12.	The technology projects in the organization have been implemented in compliance with business strategies					
13.	Technology applications have supported business strategies to improve process management.					
14.	Our organizational structure, by adopting information technology systems and applications, has been changed to enhance employee empowerment, inter-department (cross-function) integration and new business practices					
15.	Change agents have been identified and trained to facilitate the change processes					
16.	The organization has well defined training and development programs for the employees to handle new technology					

SECTION C: DYNAMIC ENVIRONMENTAL SCAN INTERVENTIONS

Part A

Which of the following factors do you regard as influencing your organizational performance? Please rate the factors in relation to scanning of environment practices. You can give multiple answers.

i) National economic performance

ii) Cost of investment

iii) Inflation

iv) Interest rates

v) Government change

vi) New legislation / regulation affecting the sector

vii) Competitor pricing strategies

viii) Current customer needs

ix) Re-enforcement of trade action_by_competitors

x) Future changes in customer needs and trends

xi) Potential entrance of new competitors

xii) New technological developments

xiii) Others(Please specify)----------

Part B

To what level do you agree with the following statements concerning your commercial state corporation ? Please tick (√) the appropriate opinion based on a scale of 1 to 5 where 1 is strongly, disagree, 2 disagree, 3 neither agree nor disagree, 4 agree and 5 strongly agree.

	DYNAMIC ENVIRONMENTAL SCAN INTERVENTIONS	1	2	3	4	5
17.	Due to the dynamic environment where preference and taste of consumers keep on changing it affects commercial state corporation performance					
18.	In the dynamic environment prices of products and changes in taxes affects commercial state corporations					
19.	When Hostile environment prevails in form of competitive pricing performance of commercial state corporation is affected.					
20.	As a result of hostile environment where combination of marketing strategies, market niche and new methods of packaging are used greatly influences performance of commercial state corporation					
21.	Due to heterogeneity where there is competitive aggressiveness and investing in new ventures greatly influences commercial state corporation's performance					
22.	In the environment which is heterogeneous commercial state corporations can take greater risks as a result their performance are greatly influenced.					
23.	Competitive aggressiveness (new demand on existing products, sales and marketing, increase of market share, financial resources for sales promotion and improving market share) affects commercial state corporation performance					
24.	The commercial state corporation takes into consideration dynamic and hostile environment when undertaking strategic planning for enhancing performance					

25.	The commercial state corporation takes into consideration of heterogeneity and competitive aggressiveness for improving performance					

SECTION D: PARTICIPATORY STAKEHOLDER INVOLVEMENT INTERVENTIONS

Part A.

26. When involving stakeholder in change interventions, what are their roles?

(i). Formulation [ ]

(ii). Implementation [ ]

(iii). Suggestions [ ]

Part B

Using a scale of 1 to 5 where 1 is strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree and 5 strongly agree, please indicate your agreement to the following statements in relation to stakeholder involvement interventions to enhance performance at your organization

	PARTICIPATORY STAKEHOLDER INVOLVEMENT INTERVENTIONS	**1**	**2**	**3**	**4**	**5**
27.	This organization allows participation of all stakeholders to contribute to opinions on change interventions					
28.	Positive relationship among the various stakeholders groups is encouraged in this organization					
29.	Quite often there are formal surveys of stakeholders views or opinions on change process in this					

	organization					
30.	The Stakeholders provides support for strategic change in the organization					
31.	Stakeholder involvement contributes highly to the achievement of strategic change in the organization					

SECTION E: ADAPTIVE ORGANIZATION STRUCTURE INTERVENTIONS

Part A

32. Which of the following describes the organization structure of your organization? Please tick the ones applicable

i) Formalization where the organization strictly operates routinely through formalized structures and processes. ( )

ii) Departmentalization- All departments are allowed to have their own structures which are unique to themselves in strategy change interventions. ( )

iii) Span of control -Each employee holding a position of authority is responsible for a few subordinates only which makes feedback of ideas effective and hence facilitates application of strategic change interventions. ( )

iv) Other (Please specify)…….

Part B

Using a scale of 1 to 5 where 1 is strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree and 5 strongly agree, please indicate your agreement to the

following statements in relation to adaptive organization structure and influence on performance of your organization

	ADAPTIVE ORGANIZATION STRUCTURE INTERVENTIONS	**1**	**2**	**3**	**4**	**5**
33.	The organization strictly operates routinely through formalized structures and processes					
34.	Our organization has clear internal pattern of relationships, authority and communication which are understandable to all employees					
35.	All departments should be allowed to have their own structures which are unique to themselves in strategy change interventions					
36.	Duties and tasks within the organization are clearly indicated and boundaries set such that every employee knows what is required of him.					
37.	In our institution, each employee holding a position of authority is responsible for a few subordinates only which makes feedback of ideas effective and hence facilitates application of strategic change interventions.					
38.	The organization structure responds to changes in its environment effectively					
39.	This structure of the organization supports the tasks hence ultimately contribute to the performance of the Commercial state corporation.					

SECTION E: BOARD COMPOSITION

Part A

40. What is the composition of the board in terms of,

i) Diversity (Give numbers**)**

Outside Directors ……

Inside Directors ……

Executive Directors ……

Non -Executive Directors……

ii) Gender

Males ……

Females……

Part B

Using a scale of 1 to 5 where 1 is strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree and 5 strongly agree, please indicate your agreement to the following statements in relation to aspects of board composition and influence of relationship between strategic change interventions and performance of your organization

	BOARD COMPOSITION	**1**	**2**	**3**	**4**	**5**
41.	Number of board members has influence on the organization					
42.	There is optimal mix of inside and outside					

	directions for the organization					
43.	Non-executive directors in the board have influence in the organization					
44.	Executive directors have influence on the organization					
45.	Independent directors don't have adequate information and knowledge about the organization					
46.	Female representation is adequate in the Board					
47.	Male representation is adequate in the Board					
48.	The increased involvement of women on the board of the organization has helped to improve strategic decision-making in the organization.					
49.	Board diversity is critical in strategic decision making, because it provides a pool of knowledge, skills, experience, perspectives, necessary in the execution of strategic roles					

Section F: ORGANIZATIONAL PERFORMANCE

Part A

50. What was your organizations sales growth in percentage (%) in the following years?

Year	**Sales growth (%)**
2012	

2013	
2014	
2015	
2016	

Part B

Using a scale of 1 to 5 where 1 is strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree and 5 strongly agree, please indicate your agreement to the following statements in relation to stakeholder involvement interventions to enhance performance at your organization.

	ORGANIZATIONAL PERFORMANCE	**1**	**2**	**3**	**4**	**5**
51.	Our firm profitability has increased from the years; 2012, 2013, 2014 2015 and 2016					
52.	The number of employees has increased from the years; 2012, 2013, 2014 2015 and 2016					
53.	Our firm has experienced an increase in number of branches from the years; 2012, 2013, 2014 2015 and 2016					
54.	Our firm has experience increased sales growth from the years; 2012, 2013, 2014 2015 and 2016					
55.	Our firm has experienced increased number of products from the years; 2012, 2013, 2014 2015 and 2016					
56.	Our firm has experienced increased market share from the years; 2012, 2013, 2014 2015 and 2016					

57.	Our firm has experienced increased annual running expenditure from the years; 2012, 2013, 2014 2015 and 2016					
58.	From the years; 2012, 2013, 2014 2015 and 2016 our organization has been able to achieve its goals in relation to organizational performance					

THANK YOU FOR YOUR COOPERATION

Appendix III: Interview Guide

1. Which strategic change interventions are present in your organization?
2. Would you attribute performance of your organization to only strategic change interventions?
3. To what extent are you involved in environmental scanning interventions?
4. How important is technology adoption interventions to your organization?
5. To what extent does your organization link its competitive edge to the strategic change interventions present in the organization?
6. Is your organization keen in involvement of all its stakeholders in its change initiatives?
7. Overall, to what extent are you satisfied with your organization's performance in the past five years?
8. Suggest ways of enhancing the performance of your organization.

Appendix IV: List Of Commercial State Corporations In Kenya

PURELY COMMERCIAL

1. Agro-Chemical and Food Company
2. Kenya Meat Commission
3. Muhoroni Sugar Company
4. Nyayo Tea Zones Development Corporation
5. South Nyanza Sugar Company Ltd
6. Chemilil Sugar Company
7. Nzoia Sugar Company Ltd
8. Simlaw Seeds Kenya
9. Simlaw Seeds Tanzania
10. Simlaw Seeds Uganda
11. Kenya National Trading Corporation
12. Kenya Safari Lodges and Hotels Ltd
13. Golf Hotel Kakamega
14. Kabarnet Hotel Limited
15. Mt Elgon Lodge
16. Sunset Hotel Kisumu
17. Jomo Kenyatta Foundation
18. Jomo Kenyatta University Enterprises Ltd
19. Kenya Literature Bureau
20. Rivatex (East Africa) Ltd
21. School Equipment Production Unit
22. University of Nairobi Enterprises Ltd
23. University of Nairobi Press
24. Development Bank of Kenya Ltd
25. Kenya Wine Agencies Ltd(KWAL)
26. New Kenya Cooperative Creameries
27. Yatta Vineyard Ltd
28. National Housing Corporation
29. Research Development Unit Company Ltd
30. KWA Holdings
31. Consolidated Bank of Kenya

STRATEGIC COMMERCIAL

1. Kenya Animal Genetics Resource Centre
2. Kenya Seed Company
3. Kenya Veterinary Vaccine Production Institute
4. National Cereals & Produce Board
5. Kenyatta International Convention Centre
6. Geothermal Development Company
7. Kenya Electricity Generating Company
8. Kenya Electricity Transmission Company
9. Kenya Pipeline Company
10. Kenya Power And Lighting Company
11. National Oil Corporation of Kenya
12. National Water Conservation And Pipeline Corporation
13. Numerical Machining Complex
14. Kenya Broadcasting Corporation
15. Postal Corporation of Kenya
16. Kenya Development Bank
17. Agro Seed Company
18. Kenya Post Office Savings Bank
19. Kenya Airports Authority
20. Kenya Ports Authority
21. Kenya Railways Corporation

32. Kenya National Assurance Co. (2001) Ltd
33. Kenya Reinsurance Corporation Ltd
34. Kenya National Shipping Line

Source: GoK (Presidential Taskforce Report, 2013)

Appendix V: List of Commercial State Corporations That Participated in the Study

PURELY COMMERCIAL

1. Agro-Chemical and Food Company
2. Muhoroni Sugar Company
3. Nyayo Tea Zones Development Corporation
4. South Nyanza Sugar Company Ltd
5. Chemilil Sugar Company
6. Nzoia Sugar Company Ltd
7. Simlaw Seeds Kenya
8. Kenya Safari Lodges and Hotels Ltd
9. Golf Hotel Kakamega
10. Kabarnet Hotel Limited
11. Jomo Kenyatta Foundation
12. Jomo Kenyatta University Enterprises Ltd
13. Kenya Literature Bureau
14. Rivatex (East Africa) Ltd
15. School Equipment Production Unit
16. University of Nairobi Enterprises Ltd
17. University of Nairobi Press
18. New Kenya Cooperative Creameries
19. National Housing Corporation
20. Consolidated Bank of Kenya

STRATEGIC COMMERCIAL

1. Kenya Animal Genetics Resource Centre
2. Kenya Seed Company
3. Kenya Veterinary Vaccine Production Institute
4. National Cereals & Produce Board
5. Kenyatta International Convention Centre
6. Kenya Electricity Generating Company
7. Simlaw seeds Kenya
8. Kenya Pipeline Company
9. Kenya Power And Lighting Company
10. Agro Seed Company
11. National Oil Corporation of Kenya
12. National Water Conservation And Pipeline Corporation
13. Numerical Machining Complex
14. Kenya Broadcasting Corporation
15. Postal Corporation of Kenya
16. Kenya Post Office Savings Bank
17. Kenya Airports Authority

21. Kenya National Assurance Co. (2001) Ltd
22. Kenya National Shipping Line
18. Kenya Ports Authority
19. Kenya Railways Corporation

Appendix VI: Measurement of Variables

Variable Name	Indicator	Measure	Scale	Instrument
Technology Adoption interventions	• Acquisition of IT • Strategic alignment • Employee Training	Likert/ Ordinal	5 Point Likert Scale	Questionnaires
Dynamic Environmental Scan interventions	• Dynamic Environment • Heterogeneity • Competitive Aggressiveness	Likert/ Ordinal	5 Point Likert Scale	Questionnaires
Participatory Stakeholders Involvement interventions	• Participation in the change • Positive relationships among groups • Support from stakeholders	Likert/ Ordinal	5 Point Likert Scale	Questionnaires
Adaptive Organization Structure interventions	• Formalization • Departmentalization • Span of control	Likert/ Ordinal	5 Point Likert Scale	Questionnaires
Board Composition	• Size • Diversity	Likert/ Ordinal	5 Point Likert Scale	Questionnaires
Performance	• Profitability • Growth(Sales,products,branches) • Market share	Likert/ Ordinal	5 Point Likert Scale	Questionnaires

Appendix Vii: Level of Innovation Adoption Interventions

Innovators	**Early Adopters**	**Early Majority**	**Late Majority**	**Laggards**
Visionaries and Enthusiasts		**Mainstream Adopters**		**Resisters**
-Dream realizers -Drive change -aren't, t afraid to fail -explore in iterations -High tolerance for risk, uncertainty and ambiguity -adventures -change initiators -internally motivated to change -Respected by Early Adopters doubted by the mass **Organizations indicated in the category of Innovators:** 1)Kenya Seed Company 2)Kenya Airports Authority 3)Kenya Ports Authority 4)Kenya Pipeline Company 5)Rivatex (East Africa) Ltd	-Evangelists -Embrace change -self –efficacy -like to be first to try ,use, engage, buy -Try out new ideas in careful way -inspired by new -like integrating new ideas in useful ways -influencers-like to convey ideas -respected by the majority **Organizations indicated in the category of Early Adopters:** 1)New Kenya Cooperative Creameries 2University of Nairobi Enterprises Ltd 3) University of Nairobi Press 4)Simlaw seeds Kenya 5)Kenya Electricity Generating Company	-pragmatists -accept change(sooner than Lm) -Deliberate -adopt if practical-weigh out pros & cons, think it out -go along ,seldom lead -helps in gain mass appeal -wait until it has been successful in practice. **Organizations indicated in the category of Early Majority:** 1)Agro-Chemical and Food Company 2)Kenya Safari Lodges and Hotels Ltd 3)Golf Hotel Kakamega 4)Kabarnet Hotel Limited 5)National Water Conservation And Pipeline Corporation 6)Jomo Kenyatta Foundation 7)Kenya Literature Bureau	-skeptics -accept change (Later than EM) -adopt after proven -often adopt out of necessity, not choice -goes along with peers -like to know rules, Creatures of habit -jump in when sees, everybody is doing it. **Organizations indicated the category of Late Majority:** 1)Muhoroni Sugar Company 2)South Nyanza Sugar Company Ltd 3)Chemilil Sugar Company 4)Nzoia Sugar	-change averse -value tradition -not leaders -suspicious of new innovations -often wait until forces to adopt -feel threatened or very uncomfortable by uncertainty and change -not going to buy into new ideas. **Organizations in the category of laggards:** 1)Postal Corporation of Kenya 2)School Equipment Production Unit 3)National Cereals & Produce Board 4)Kenya National Assurance Co.

	6)Kenya Power And Lighting Company 7)National Housing Corporation 8)Kenyatta International Convention Centre 9)Kenya Broadcasting Corporation	National Oil Corporation of Kenya 8)Kenya Animal Genetics Resource Centre 9)Jomo Kenyatta University Enterprises Ltd	Company Ltd 5)Kenya Post Office Savings Bank 6)Kenya Literature Bureau 7)Consolidated Bank of Kenya 8)Kenya National Shipping Line 9)Kenya Veterinary Vaccine Production Institute 11)Numerical Machining Complex 12)Kenya Railways Corporation	(2001) Ltd 5)Agro Seed Company 6)Nyayo Tea Zones Development Corporation

Appendix Viii: Letter of Approval from Nacosti

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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NAIROBI-KENYA

Ref No **NACOSTI/P/17/70812/19704** Date: **14th November, 2017**

Juliana Hawario Asser
Jomo Kenyatta University of
Agriculture and Technology
P.O. Box 62000-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Influence of strategic change practices on performance of commercial based state parastatals in Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **selected Counties** for the period ending **14th November, 2018.**

You are advised to report to **the County Commissioners and the County Directors of Education, selected Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioners
Selected Counties.

The County Directors of Education
Selected Counties.