INFLUENCE OF STRATEGIC HUMAN RESOURCE MANAGEMENT PRACTICES ON PERFORMANCE OF STATE-OWNED CORPORATIONS IN THE MINISTRY OF INDUSTRY, TRADE AND COOPERATIVES IN KENYA

BY

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A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF BUSINESS AND ECONOMICS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN HUMAN RESOURCE DEVELOPMENT

MOI UNIVERSITY

2021

DECLARATION

Declaration by the Candidate

This research project is my original work and has not been presented in any University for

the award of Certificate, Diploma or Degree.

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DEDICATION

This research project is dedicated to my wife, children and family members for their patience, prayers, and moral support during my study period.

ACKNOWLEDGEMENTS

I would like to acknowledge the following persons whose contributions facilitated the completion of this project. First, I thank the Almighty God for the gift of life and for giving me the skills, knowledge and energy to be able to complete this research project.

Secondly, special thanks go to my supervisors Prof. Richard Musebe and Dr. Jemimah Ombongi both of Moi University for providing unlimited, invaluable and active guidance throughout the study. Their immense command and knowledge of the subject matter enabled me to shape this research project to the product that it is now. Further I will not forget the support from the non-teaching staff at Moi University during the preparation of this research project for defense.

Thirdly, I would like to appreciate my good friends who supported me with courage and morale, I will be very unfair if I do not mention my Msc. in HRD colleagues for their moral support during the draft of this research project.

ABSTRACT

The performance of some government corporations has been wanting. For instance, East African Portland Cement Company posted Ksh.3.4 billion loss in 2019. It was also reported Wilson Airport had potholes in some of the runways signifying poor performance by the Kenya Airports Authority. A study by Transparency International indicated there is a high level of service inconsistencies such as delayed service delivery and inability to innovate services among most of the state corporations. Further previous studies revealed public organizations and more specifically State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya are experiencing deteriorating performance characterized by inefficiencies and ineffectiveness in service delivery. This formed the basis to conduct the study about the influence of strategic human resource management practices on performance of state-owned corporations in the ministry of industry, trade and cooperatives in Kenya. The specific objectives of the study were to establish the effect of strategic human resource planning, strategic staffing and retention, strategic training and development on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya and to determine the moderating effect of technology on the relationship between strategic human resource management and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. The study was anchored on empowerment theory, Herzberg's two factor theory and Human capital theory. Positivist research philosophy and cross-sectional research design were adopted for this study. A structured questionnaire was used to collect data from a sample of 185 respondents who were selected from a target population of 344 employees from 13 State owned Corporations in the Ministry of Industry, Trade and Cooperatives by employing stratified sampling. The unit of analysis were State-owned Corporations while unit of observation were middle level managers and lower-level employees of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. Quantitative data was analyzed using descriptive statistics, correlation and regression methods which were effected using the Statistical Package for Social Sciences version 24. Mean scores, standard deviation, minimum, maximum, kurtosis and skewness were used for descriptive analysis of the study variables by their indicators. Inferential analysis was based on fitting ordinary least squares regression models which formed the basis of hypotheses testing used to draw conclusions on the study objectives. The inferential analysis results revealed that the performance of State-owned Corporations is significantly influenced by Strategic Human Resource $(\beta = 0.376, t - \text{statistic} = 5.603, p - \text{value} = 0.000)$, by Strategic Staffing and Retention $(\beta = 0.464, t - \text{statistic} = 7.918, p - \text{value} = 0.000)$ and by Strategic training and development $(\beta = 0.205, t - \text{statistic} = 2.712, p - \text{value} = 0.008)$. The study also found that technology has a significant moderating effect on the relationship between the Strategic Human Resource Management (SHRM) Practices and Performance of State-owned Corporations (R-square change = 0.090, F−change = 16.535, P-value = 0.000). The study therefore concluded that SHRM Practices influences performance of the state-owned Corporations and that technology significantly moderates the relationship between SHRM Practices and Performance. The study recommends the findings to be applied in State-owned Corporations during policy formulation and decision making.

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OPERATIONAL DEFINITION OF TERMS

Strategic Human Resource Planning: Is a process that determines the current and future human resource needs for an organization to achieve its long term and short-term goals (Chebet 2015; Ondieki, Kwamboka & Mbura, 2017). It involves aspects of developing recruitment, succession, retirement policies for organizational sustainability.

Organization Performance: It involves the ability of the organization to achieve its objectives using limited resource available (Thiriku & Were, 2016; Lusch & Laczniak, 2009; Abdullah, 2014). The selected metrics of organizational performance in this study involves efficiency, effectiveness, employee satisfaction, customer satisfaction and corporate image.

Strategic Staffing and Retention: Is a process of deploying employees based on their qualification and experience and seeking to retain them through fair compensation, working conditions and career growth (Magutu et al. 2010).

Strategic Human Resource Management practices: Refers to organizational level activities/policies/initiatives that determine the competitiveness of a firm in the long-term period such as HR planning, staffing and retention, training and development (Mutua, Karanja & Namusonge, 2012; Maina, 2011).

Strategic Training and Development: Is a systematic acquisition of skills, knowledge, concepts or attitudes that result in improved performance of workers in an organization (Chebet, 2015). The selected indicators in this study involve needs assessment, career development and talent management.

ABBREVIATIONS AND ACRONYMS

ANOVA	-	Analysis of Variance
CUE	-	Commission for University Education
GoK	-	Government of Kenya
HRD	-	Human Resource Development
HRM	-	Human Resource Management
HRP	-	Human Resource Planning
KBV	-	Knowledge Based View
KIPPRA	-	Kenya Institute of Public Policy Research and Analysis
NACOSTI	-	National Commission for Science Technology and Innovation
R & D	-	Research and Development
R.B.V	-	Resource Based View
SHRM	-	Strategic Human Resource Management
SPSS	-	Statistical Package for Social Studies
SRC	-	Salaries and Remuneration Commission
T & D	-	Training and Development
UNESCO	-	United Nations Educational, Scientific and Cultural Organization

CHAPTER ONE

INTRODUCTION

1.1 Overview

The chapter covers background of the study, statement of the problem, purpose of the study, research objectives, research hypotheses, significance of the study, scope and the limitations of the study.

1.2 Background of the Study

Organizations operating in the 21st century are gradually shifting from traditional approaches of Human Resource Management (HRM) to Strategic Human Resource Management (SHRM) approaches (Lamba & Choudhary, 2013). With the changing business environment, competition, influence of technology, employee diversity, change of consumer demands and costs of operation, organizations in developed and developing countries have to adopt strategic human resource management in order to be competitive (Thite & Russell, 2010). The development of SHRM concept since 1980s has resulted to transformation in many organizations internationally and locally (Abdus, 2011). The concept of SHRM is widely recognized around the world and particularly in developed countries such as Australia, United States, Japan and China.

Organizations that fail to develop human resource strategies are likely to perform poorly and vice versa. Hassan (2014) in Pakistan observed that for organizations to achieve their objective more efficiently and effectively, strategic human resource management policies should be developed. For organizations to achieve their long term and short-term goals in the changing business environment, shaping employee behaviors through human resource policies or strategies is key. Extensive studies conducted in Kenya by Kiiru (2013); Kilika et al. (2016); Gitonga, Kilika and Obere

(2016); Thiriku and Were (2016) indicate that strategic human resource management can result to a number of benefits to modern organizations that range from: the ability of the organization to achieve its goals with minimal resistance, employee support of business strategies, it enhances organizational competitiveness, it promotes creativity and innovation among workers, it promotes top management support of plans formulated and enhances cooperation among workers and departmental synergies.

Some of the previous studies such as Mbugua (2015), Ngatia (2011), Nyaema and Wambua (2019), Hee, and Jing (2018), Ligare, (2010) noted that strategic human resource planning, strategic staffing and retention and strategic training and development are fundamental components of strategic human resource management practices. For any organization to be competitive, issues of human resource planning, talent development, job design, knowledge management, learning and development, employee staffing and retention and training and development should be addressed (Mulwa, 2018; (Masaiti & Naluyele, 2011).

Strategic human resource planning predicts the future human resource needs of the organization after analyzing the organization's current human resources, the external labour market and the future human resource environment that the organization will be operating in (Muraga, 2015). Strategic human resource planning should link human resource management to the overall strategic plan of an organization (Chakraborty & Biswas, 2019).

Strategic staffing and retention include deploying employees based on their qualifications and experience and seeking to retain them through fair compensation, working conditions and career growth (Magutu et al. 2010). Managing for employee retention involves strategic actions to keep employees motivated and focused so they

elect to remain employed and fully productive for the benefit of the organization and this positively increases performance (Pamela, Umoh & Worlu, 2017). The retained employees are experienced and require less time to complete a task and this translates to efficiency thus substantial performance.

Strategic training and development include intensifying the acquisition of skills and understanding among the employees to improve their performance Strategic training and development facilitate the updating of skills and lead to increase commitment, wellbeing, and a sense of belonging, thus directly strengthening the organization's competitiveness (Kuria 2011). The primary function of training is to improve the employees' skills for current and future duties and responsibilities (Mainya, 2016). Training has a distinct role in the achievement of an organizational goal by incorporating the interests of the organization and the workforce (Maina, 2016).

Further, Hafiza (2015) reports that technology enhances organizational efficiency and effectiveness. Organizations that adopt information and communication technology improve the efficiency and effectiveness of services offered to customers, improve business processes, as well as to enhance managerial decision making and workgroup collaboration (Gilaninia et al, 2011). Moturi (2010) established that continuous improvement was one of the strategic practices that enhanced the performance of government ministries. Further, Mueni (2014) noted that integration of technology in the system and employee training were key determinants of continuous improvement. Therefore, technology was used as moderating variable in the study. The rationale for using technology as the moderating/ control variable was because the digital environment is not static and keeps on propelling each day.

1.2.1 Strategic Human Resources Management Practices

Strategic Human Resource Management concept has continued to evolve as scholars seek a common consensus on its operationalization in the organizational context (Masaiti & Naluyele, 2011). Despite a common consensus on the universality of SHRM, a number of scholars have tried it from different perspectives. Wright, Kroll and Lado (2010) define a strategy as the direction and scope of an enterprise in the long-term period. Samson et al. (2016) assert that SHRM practices, are those decisions and actions which concern the management of employees at all levels in the business, and which are related to the implementation of strategies directed towards sustaining competitive advantage.

Kilika et al. (2016) assert that SHRM as policies that are developed and implemented by employees of the organization. It is an approach that emphasizes on equipping employees with necessary skills and knowledge to enable them adjust to internal and external challenges. Lanyon and Abdalla (2008) argue that SHRM is the process of linking the human resource function with the strategic objectives of the organization in order to improve performance.

Armstrong (2010) regards SHRM to be a process that facilitates the development of a human capital in the organizational. He further argues that, human resource strategies have remained the integral part of any competitive business enterprise. On the other hand, SHRM is regarded as set of managerial decisions and actions that provide the long-run performance of an organization (Austin, 2006). It was found that strategic human resource planning, strategic staffing and retention and strategic training and development are fundamental components of strategic human resource management practices (Nyaema & Wambua, 2019; Mbugua, 2015; Hee, & Jing, 2018).

1.2.2 Organization Performance

The concept of organizational performance has continued to receive a number of interpretations from different scholars. For instance, Shikha and Karishma (2012) regard organization performance to be employee satisfaction, customer satisfaction, minimal employee absenteeism and high level of employee commitment. On the other hand, Ghazala and Habib (2012) define organization performance as the extent to which a firm can achieve its objectives using limited resources. Thiriku and Were (2016) also suggest that organization performance can be measured using a number of indicators that include; profits, volume of sales and employee satisfaction.

Lusch and Laczniak (2009) assert that performance of an organization can be measured in terms of system creativity and innovation, customer satisfaction and efficiency and effectiveness of internal business processes. Organizational performance is thought to be a function of strategic human resource management in competitive organizations (Ligare, 2010). Even though human resource management practice is thought to influence organizational performance, strategic human resource management is also thought to be one of the practices that enhances organizational performance in a more efficient and effective way (Lanyon & Abdalla, 2008).

Measurement of organizational performance is viewed to be a complex issue that is attributed to financial and non-financial metrics. Financial metrics may include profits, costs, investments, volume of sales while non-financial metrics may include employee satisfaction, customer satisfaction, repeat purchase and corporate image. Further, Mutia (2011) ascertains that organization performance can be measured using indicators such as effectiveness, efficiency, change implementation, product development, expansion and financial viability (Mutia, 2011).

Similarly, Kasmi (2011); Katua, Mukulu and Gachunga (2014) acknowledge that organizational performance can be measured using the firm's ability to gain the support of its priority stakeholders as well as meet their needs in the past, present and future, that is, the extent to which a firm adapts to changing conditions and its environment. Additionally, it is the firm's ability to innovate and create new and more effective situations as a result of insight and new knowledge. On the other hand, Hassan (2014) contend that organizational performance can be viewed as the ability of a firm to generate enough cash to run its programs in the short term and long-term period (Afiza et al. 2015).

1.2.3 State Corporations in Kenya

State corporations are entities that are treated by national laws and regulations to be under the guidance of the government but separate and autonomous from the government. All State Corporations are regulated and controlled by the by the Act of parliament (Cap 446) Section 11 and 12. They receive some revenue from charging customers for its services; these organizations are often partially or majorly funded by the government. State corporations are financially semi-autonomous bodies created by enabling laws called edicts or government flats in the absence of edicts. State corporations are created in some cases because their business cannot be efficiently carried out by governments and are also unsuitable or unattractive to private sector (GoK, 2018).

Currently, there are 13 State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. These corporations includes Anti-Counterfeiting Agency, East African Portland Cement, Export Processing Zone Authority, Kenya Accreditation Authority, Kenya Bureau of Standards, Kenya Industrial Estates, Kenya Industrial Property Institute, Kenya Industrial Research and Development Institute, Kenya

Investment Authority, Kenya Wines Agencies, Micro and Small Enterprises Authority, New Kenya Co-operative Creameries, Numerical Machine Complex and Sacco Societies Authority. Despite the effort of these State Corporation to provide services to Kenyan citizens, Kenya National Bureau of Statistics (2015) reveals that to a larger extent, majority (63%) of the population in Kenya are dissatisfied with services provided by State entities. Inconsistencies in service delivery are largely attributed to nepotism, favoritism, financial mismanagement, rigidity to reforms and lack or trainings among workers.

1.3 Statement of the Problem

The performance of some government corporations has been wanting. For instance, East African Portland Cement Company posted Ksh.3.4 billion loss in 2019 (Waichahi, & Machoka, 2019). It was reported Wilson Airport had potholes in some of the runways signifying poor performance by the Kenya Airports Authority (Chege, 2020). Besides, Kenya Airways' pre-tax losses deepened to KSh 13 billion in 2019 despite increasing passenger levels and revenues (Chacha, 2019). Uchumi supermarket was given a bailout of Ksh 700 million in 2017 by the government but it continued to lose due to poor implementation of strategies (Oyugi, 2017). A study by Transparency International (2017) indicated there is a high level of service inconsistencies such as delayed service delivery and inability to innovate services among most of the state corporations. Further, a survey by the Salaries and Remuneration Commission (2016) revealed the majority (96%) of public organizations in Kenya are experiencing a deteriorating performance in terms of service inconsistencies.

Despite the fact SHRM practices are attributed to improved organizational performance, little has been done by previous studies to address the issues of SHRM on the performance of State corporations in Kenya. For instance, Ali et al. (2016)

revealed there exists a positive relationship between human resource strategies and the performance of oil and gas companies in Iraq. Besides, Masaiti and Naluyele (2011) established there exists a positive relationship between strategic human resource management and employee retention and motivation in the ministry of education in Zambia. However, these studies did not focus on state-owned corporations. Locally, Kilika et al. (2016) examined the mediating role of university-industry collaboration on the relationship between human resource development infrastructure and performance of universities in Kenya. Similarly, Ligare (2010) studied strategic human resource management practices by the state corporations in Kenya. Further, a study by Maina (2011) was confined to secondary schools in Kenya and a study by Mbondo (2011) was limited to Kenya Police Staff SACCO Ltd.

Therefore, the previous studies cannot give the inferences concerning the relationship between strategic human resource management practices and the performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. The previous studies conducted were confined to different geographical and cultural backgrounds. Moreover, each study adopted different research methodologies which resulted in inconsistencies in research findings due to the sample size used, sampling design and data analysis method. Besides, none of the reviewed studies looked at the influence of strategic human resource planning, strategic staffing and retention, strategic training and development on performance with a moderating variable of technology. Therefore, a knowledge gap exists in the reviewed literature and this formed the rationale for conducting the study.

1.4 Objectives of the Study

1.4.1 General Objective

The general objective of the study was to assess the influence of strategic human resource management practices and technology on the performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

1.4.2 Specific Objectives

The specific research objectives that guided this study are:

(i)   To establish the effect of strategic human resource planning on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

(ii)   To determine the effect of strategic staffing and retention on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

(iii)   To assess the effect of strategic training and development on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

(iv)

    a) To determine the moderating effect of technology on the relationship between strategic human resource planning on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

    b) To determine the moderating effect of technology on the relationship between strategic staffing and retention on on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

c) To determine the moderating effect of technology on the relationship between strategic training and development on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

1.5 Research Hypotheses

The research hypotheses that guided this study are:

(i) **H_{01}:** There was no relationship between strategic human resource planning and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

(ii) **H_{02}:** There was no relationship between strategic staffing and retention and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

(iii) **H_{03}:** There was no relationship between strategic training and development and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

(iv) **H_{04a}:** There was no significant moderating effect of technology on the relationship between strategic human resource planning on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

H_{04b}: There was no significant moderating effect of technology on the relationship between strategic staffing and retention on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

H_{04c}: There was no significant moderating effect of technology on the relationship between strategic training and development on performance of

State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

1.6 Significance and Justification of the Study

This study may add new insights to the growing body of knowledge on strategic human resource management in developing countries by offering a perspective of the practice of strategic human resource management employed in the management of State corporations in Kenya. The information may help management of State corporations improve the working conditions and review policies of engaging workers to enhance performance. Further, policy makers such as the, Public Service Commission, Salaries and Remuneration Commission and Trade unions may use the information to formulate policies that would contribute to improved performance of State corporations in Kenya. The information may help scholars, academicians and researchers to enhance their literature and propose new models of solving the problem that was under investigation. Additionally, the study may provide new insights to researchers thus providing new research gaps to be investigated.

Further, this study considered this topic to be appropriate as it sought to address the strategic human resource management practices that would improve performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya and a similar study would be replicated in other ministries to confirm consistence of research findings. Further, theories adopted in this study were considered to be appropriate since they facilitated deductive arguments and formed the foundation of the research instruments. Further, cross-sectional research design that was adopted provided an opportunity of the researcher to analyze and present data quantitatively. Further, it facilitated testing of research hypotheses based on the principles of cause

and effect. Moreover, regression analysis method adopted by the study facilitated the establishment of the relationship between variables in a statistical manner.

1.7 Scope of the Study

The study was limited to State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. The study sought to investigate the influence of strategic human resource management practices and technology on performance. State-owned Corporations were considered appropriate area of study based on the fact they are fundamental institutions that are considered to live up to the expectations of the majority to drive government initiatives towards attainment of Vision 2030 goals. Based on their fundamental role on social-economic developments in the country, this area was considered to be of significant effect to economic stability.

The independent variables of the study were: strategic human resource planning, strategic staffing and retention and strategic training and development while the dependent variable was performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. Further, the study tested the moderating effect of technology on the relationship between strategic human resource management practices and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

1.8 Limitations of the Study

The respondents approached were reluctant in giving information due to fear that the information sought would be used to intimidate them or print a negative image about them or the corporation. Some respondents turned down the request to fill questionnaires. The research overcame the limitation by presenting an introduction letter from the selected State corporations and assured respondents that the information

given was to be treated with utmost faith and confidentially and was to be used purely for academic purposes. Another issue was the fact that this research was conducted in the State corporations only without involving private institutions this may not allow generalization of the findings.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter presents the theoretical review section which discusses theories that informs the study. Further, empirical review section describes studies conducted internationally and locally while summary of knowledge gaps are presented in table highlighting research gaps to be addressed by the current study and conceptual framework is illustrated showing the interrelationship between variables of the study.

2.2 Concepts of Performance

The organizational performance comprises the actual output or results of an organization as measured against its intended outputs (Hassan, 2016). AlSagheer and Ahli, (2016) indicated that sales volume, profitability, expansion and diversification, are notable indicators of performance. On the other side, Ghazala and Habib (2012) define organizational performance as the extent to which a firm can achieve its objectives using limited resources. Thiriku and Were (2016) suggest that organizational performance can be measured using several indicators such as profits, the volume of sales and employee satisfaction. Lusch and Laczniak (2009) assert that the performance of an organization can also be measured in terms of system creativity and innovation, customer satisfaction and efficiency and effectiveness of internal business processes.

The operational performance of an organization is a function of people, processes and technology (Thatia, 2019). Proficiency of the individual is a vital aspect that decides operational effectiveness in terms of providing quality products and services within a short time. HRM practices such as recruitment, training, compensation and

performance management enhance the competence of employees for higher performance (Nyaema & Wambua, 2019). Organizational performance has mostly been conceptualized based on financial measures; however, some scholars have urged for a wider performance construct that incorporates aspects of non-financial measures such as, effectiveness, efficiency, quality, and company image (Waiganjo, Mukulu & Kahiri, 2012).

Thus, the performance of the organization should be measured not only in terms of market share, return on investment and financial profitability, but should encompass other parameters. According to Maina (2016) and Hee and Jing (2018) categorized organization performance indicators in terms of; effectiveness, the ability of an organization to provide the best service or product within the most effective structure; efficiency, the degree to which an organization moves towards the attainment of its mission and realization of its goals.

2.2.1 Contingency model

The contingency model was created by Fred Fiedler in 1964. The model asserts that there exist no universal or unique human resource management practices and or policies, but rather they are contingent on an organization's context, business strategy and culture (Fiedler, 1978). Proponents of this school of thought assert that human resource practices are more effective when properly integrated with a given environmental and/or organizational situation. The model emphasizes the best fit, which requires that human resource practices are suitable for an organization's situation, such as the culture, internal and external environments, and operational procedures (Fiedler, 1964). The model reports that organizational performance is dependent on organizational structure, organizational strategy and the organizational environment (Ulrich & Brockbank, 2005).

There should be continuous identifying of capabilities and talents which are vital in driving an organization's competitive advantage (Mitchell, Biglan, Oncken & Fiedler, 1970). The HRM practices are central in promoting employee performance, if not many organizations may overlook or fail to acknowledge the link between SHRM and employee performance. According to this approach, the manager's task is to identify which technique will in a particular situation under particular circumstances and at a particular time, best contribute to the attainment of management goals. The practical conclusion is that a proper balance between organization and employee interests is required and can be achieved through the pursuit of the best fit (Mintzberg & Zsolt, 2012).

Linking the model to the state-owned corporations in the ministry of industry, trade and cooperatives in Kenya, the researcher noted the state corporations under the ministry had different styles of managing their employees, they had different structures, facilities and they were located in different environments or locations. This meant that the corporations in this ministry operated contingent on their structures, leadership style, physical facilities, resources and cultures that was why we had best-performing corporations within the ministry and also worst (nonperforming). Marchington & Grugulis, 2006).

Strategic human resource planning, strategic staffing and retention, strategic training and development of the employees within the corporations had to be in line with the ministry/corporations' way of doing things, that is organizational structure, organizational strategy and the organizational environment. The views of this model are also applicable in designing the organizational structure, in deciding the degree of centralization and decentralization, in planning information, decision systems, in motivational and leadership approaches, in establishing communication and control

systems, in resolving conflicts and managing change in employee development and training programmes. The presentation of the model is illustrated in Figure 2.1
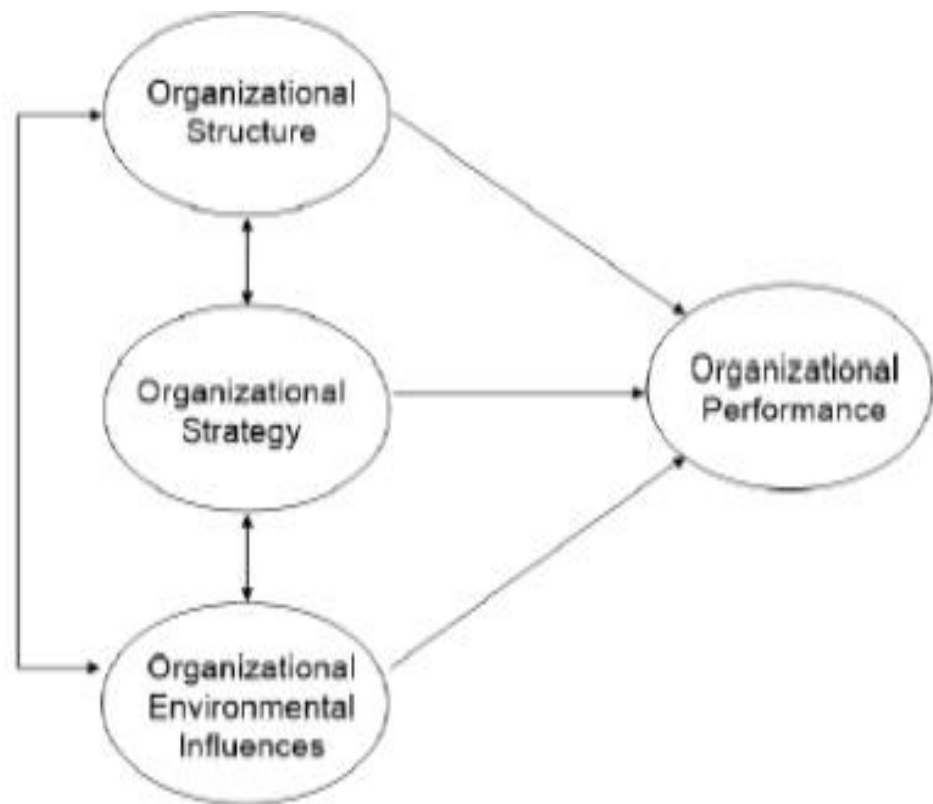
Figure 2.1: Contingency model

2.3 Concept of Strategic Human Resource Management Practices

Strategic human resource management practices are those practices which are specifically developed, implemented and executed based on a deliberate linkage to an organization's strategy (Ngui, 2015). The term strategic human resource management implies that employees are strategic resources of an organization that is human capital that must be managed and leveraged in executing organizational strategy. According to Oluoch (2013), strategic human resource management practices are flexible and able to react swiftly to the changing global business environment and promote behaviours in employees that are designed to enhance their performance.

Thatia (2019) revealed that strategic human resource management practices when operationalized could be tightly aligned to traditional human resource management practices such as recruitment and selection, training and development, employee relations and rewards to a company's strategy. It is the institutionalization of policies and procedures that facilitated proficient strategy execution (Namusonge, Kabare & Kagwiria, 2014). This is where teams are used to leverage cross-functional knowledge and competencies, developing learning organizations that facilitate the constant adoption, utilization, ownership, and internal fit, and executing change management approaches that contribute to building and maintaining strategy supportive of corporate cultures.

It was found that strategic human resource planning, strategic staffing and retention and strategic training and development are fundamental components of strategic human resource management practices (Nyaema & Wambua, 2019; Mbugua, 2015; Hee, & Jing, 2018). Strategic human resource planning predicts the future human resource needs of the organization after analyzing the organization's current human resources, the external labour market and the future human resource environment that the organization will be operating in (Muraga, 2015). Strategic staffing and retention include deploying employees based on their qualifications and experience and seeking to retain them through fair compensation, working conditions and career growth (Magutu et al. 2010).

Strategic training and development include intensifying the acquisition of skills and understanding among the employees to improve their performance (Mulwa, (2018). Strategic training and development facilitate the updating of skills and lead to increase commitment, wellbeing, and a sense of belonging, thus directly strengthening the organization's competitiveness (Kuria 2011). Training has a distinct role in the

achievement of an organizational goal by incorporating the interests of the organization and the workforce (Maina, 2016). The primary function of training is to improve the employees' skills for current and future duties and responsibilities (Mainya, 2016)

2.3.1 Matching Model

The model was developed by Dale Mortensen and Peter Diamond in 1982. The model shows the strategic human resource management practices are dependent on diverse factors such as economic forces, political forces, or even cultural forces (Boxall, 1996; Budhwar & Khatri, 2001; Bambir, Drozdová & Horvat, 1999). The mission and strategy of the organization determine the magnitude of the human resource management.

The organizational structure which consists of the system that outlines how certain activities are directed to achieve the goals of an organization determines the human resource management practices. The model notes there is a human cycle of human resource management practices which consist of selection, matching available human resources to jobs, appraisal and rewards (Bakk, Giagkoulas & Bongenaar, 2018). Human resources have to be obtained cheaply, used sparingly and developed and exploited as fully as possible to maximize the performance (Katou & Budhwar, 2012).

The model further asserts the organizational effectiveness depends on a tight fit between HRM strategy and organization strategy. The essential idea of this model is that HR practices should be matched to the firm's desired competitive position. This is seen to make the organization more effective. The matching model is credited for being simple and offering a basis for integrating human resources practices to enhance efficiency. The model however has been criticized because it limits the role of HR

organizational function and under-emphasizes the importance of societal and other external factors (Daud, 2006). The presentation of the model is presented in Figure 2.2
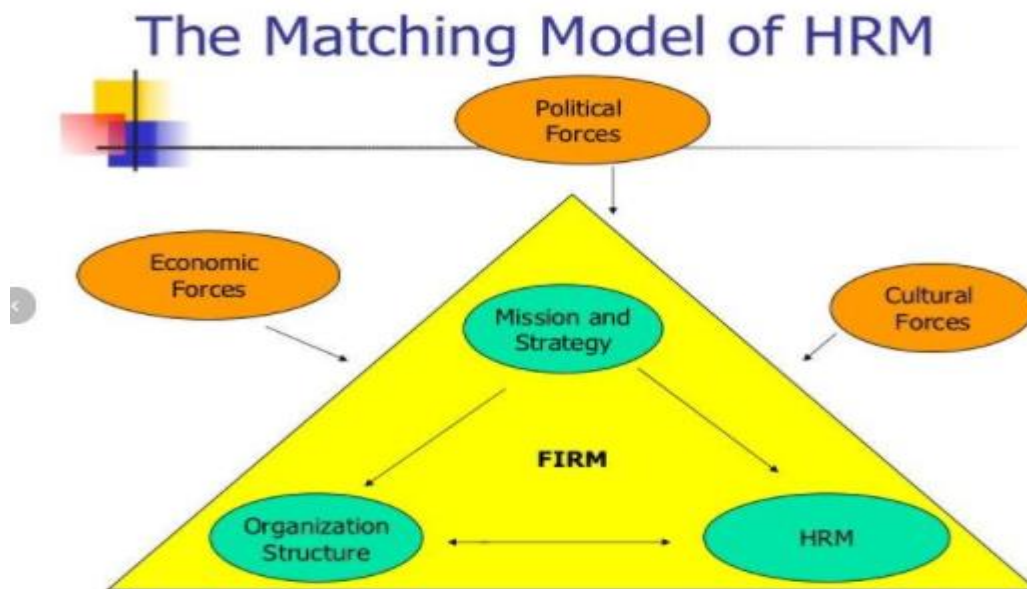
Figure 2.2: Matching Model

2.4 Theoretical Literature

This study was anchored on empowerment theory and supported by other two theories which include Herzberg's two factor theory and human capital theory.

2.4.1 Empowerment Theory

The theory was pioneered by Zimmerman (1992). The theory advocates that empowerment is seen as a process where individuals learn to see a closer correspondence between their goals and a sense of how to achieve them, and a relationship between their efforts and life outcome (Viljoen, 2004). Thiriku and Were (2016) suggest that the theory of structural empowerment includes a discussion of organizational behaviour and empowerment. According to this theory, empowerment

is promoted in work environments that provide employees with access to information, planning, support, and the opportunity to learn and develop.

Kavoo and Kiruri (2013) point out that psychological empowerment includes feelings of competence, autonomy, job meaningfulness, and an ability to impact the organization. Employees who are empowered are more committed to the organization, more accountable for their work, and better able to fulfil job demands in an effective manner (Chebet, 2015). When principles related to these concepts are incorporated into individual and team behaviours, the workforce is empowered to achieve the outcomes of the organization. Chinowsky and Byrd (2001) opine that empowerment of employees has been identified as a valuable attribute, one that is essential to the effective functioning of an organization. Empowerment has also been shown to be essential to the goals and outcomes of shared governance models (Fred, 2005).

Empowerment is evidenced by organizational members who are inspired and motivated to make meaningful contributions and who have the confidence that their contributions were recognized and valued (Stone, 2006). Spanos and Lioukas (2011) opine that empowerment is thought to occur when an organization sincerely engages people and progressively responds to this engagement with mutual interest and intention to promote growth. Empowerment develops over time as employees gain greater control over their lives and increasingly take part in decisions which affect them. This theory was applicable in this study on the premise that State corporations are likely to enhance their performance by embracing strategic human resource planning by ensuring that recruitment is based on identified staffing needs, ensure succession plans are in place and operational, and deployment of staff based on the skills they possess among others.

Therefore, the theory informed the variable of strategic human resource planning in the study.

2.4.2 Herzberg's Two Factor Theory

The theory was founded by Herzberg in 1969. Motivation-Hygiene Theory argues that employees are likely to work effectively if motivated by intrinsic and extrinsic factors. Hygiene factors are regarded to be those job factors which must be existent at the workplace for employee to be motivated to work (Kasmi, 2011). Non-existence of these factors in an organization can lead to dissatisfaction even though they do not guarantee positive satisfaction. Hygiene factors when adequate in an organization can make employee to be motivated to perform and vice versa. Hygiene factors are also called dissatisfiers or maintenance factors as they intervene to minimize levels of employee dissatisfaction (Heggested & Mingo, 2011). The hygiene factors that can make employees perform may include reasonable pay and wages, flexibility of administration policies, fringe benefits attached to employee positions, conducive working environment, good interpersonal relations among workers and job security (Greenidge, Alleyne, Parris & Grant, 2012).

Aguenza and Som (2012) argue that hygiene factors only cannot be considered to be the only motivators but also other factors termed as satisfiers can enhance employee motivation to perform such as recognizing the effort of hard working employees by top level managers, employee capacity to have a sense of achievement from the job, ability of the employee to develop his or her career in the system through promotions, ability to perform delegated duties effectively and meaningfulness of the work. Employees in an organization are likely to behave positively towards organizational goals if they find their jobs to be interesting or exciting and vice versa (Bal et al., 2012)

Despite extensive application of Motivation-Hygiene Theory in human resource management literature by Farman, Kashif., Syed, Muhammad and Muhammad,(2013); Greenidge, Alleyne, Parris and Grant (2012) and Kimani (2010), it is observed that the theory has some limitations which make operationalization and contextualization of its constructs to be uncertain. Theory assumes the correlation between satisfaction and productivity (Ligare, 2010). Further, it is observed that satisfaction is multidimensional facet which is influenced and determined by multiple aspects thus complex to be measured from context to context.

Additionally, it is observed that despite adequacy of satisfiers in an organization, to some extent, organizations may fail to accomplish their goals in the long term period (Ghansah, 2011). The level of excitement and satisfaction among workers is not correlated to productivity and vice versa. However, this theory is applicable in this study based on the premise that State corporations are likely to perform effectively if they practice strategic staffing and retention by availing both intrinsic and extrinsic motivators to the staff. These includes timely pay, promotion opportunities, staff development and training opportunities, staff recognition, friendly staff policies, provision of working tools and a good work environment among others.

2.4.3 Human Capital Theory

The theory was propounded by Becker's (1993); in his classical book "Human Capital" who argues that there are different kinds of capitals that include schooling, a computer training course and expenditures on medical care. Becker noted that the most valuable capital is the investment in employees (Abdullah, 2014). Abdus (2011) argue that the central tenets of the theory emphasis on human capital in organizations reflects the view that market value depends less on tangible resources, but rather on intangible ones, particularly human resources.

Afzal et al. (2016) posit that recruiting and retaining the best employees, however, is only part of the equation. The organization also has to leverage the skills and capabilities of its employees by encouraging individual and organizational learning and creating a supportive environment where knowledge can be created, shared and applied. The theory distinguishes firm-specific human capitals from general-purpose human capital (Markos & Sridevi, 2010). Examples of firm-specific human capital include expertise obtained through education and training in management information systems, accounting procedures, or other expertise specific to a particular firm (Anderson, 2007). The general-purpose human capital is knowledge gained through education and training in areas of value to a variety of firms such as generic skills in human resource development (Bal, Bozkurt & Ertemsir, 2012).

Mutahi and Busienei (2015) suggests that with the beginning of the new millennium it has become more and more apparent that education and human capital constitute a key element of modern economies. Human capital is 'generally understood to consist of the individual's capabilities, knowledge, skills and experience of the company's employees and managers, as they are relevant to the task at hand, as well as the capacity to add to this reservoir of knowledge, skills, and experience through individual learning (Chebet, 2015). There is a large and growing body of evidence that demonstrates a positive linkage between the development of human capital and organizational performance (Dauda et al, 2010).

Ghansah (2011) posits that human capital arises out of any activity able to raise individual worker productivity. In practice full-time education is, too readily, taken as the principal example. For workers, investment in human capital involves both direct costs, and costs in foregone earnings (Nazir & Zaman, 2012). Workers making the

investment decisions compare the attractiveness of alternative future income and consumption streams, some of which offer enhanced future income, in exchange for higher present training costs and deferred consumption. Returns on societal investment in human capital may in principle be calculated in an analogous way (Ghazala & Habib, 2012).

Gopal (2012) suggests that human capital in a real sense is an 'invisible asset'. The importance of the human capital pool (the collection of employee capabilities), and how it is managed through HR processes, becomes apparent, then, to the strategic aims of the organization. If the types and levels of skills are not equally distributed, such that some firms can acquire the talent they need and others cannot, then (ceteris paribus) that form of human capital can be a source of sustained competitive advantage. This emphasis on human capital also chimes with the emphasis in strategy research on 'core competencies,' where economic rents are attributed to 'people-embodied skills (Habbash, 2010).

The theory was applicable in this study on the premise that state corporations in the ministry of industry trade and cooperatives Kenya will ensure strategic training and development and strategic staffing and retention programs are carried out so as to boost their performance. This will be achieved by investing in employees by sponsoring workers for further studies, promoting talent management, promoting a culture of knowledge sharing and ensuring that all training and development programs are based on identified performance gaps. Thus, the theory notably informed the variable of strategic training and development in the study.

2.5 Empirical Literature

2.5.1 Strategic Human Resource Planning and Organization Performance

Afsal et al. (2013) suggest that strategic human resource planning is one of the HR competitive practices that enhance organizational productivity. Organizations should always seek to identify people with the right mix of knowledge and skills to perform. Organizations that do not have clear HR plans are likely to fail. Further, it is observed that their research work was limited to human resource planning in telecommunication sector in Pakistan and found out that there exist a significant effect between human resource planning and organizational performance. Moreover, the study sought to examine determinants of HRP such as selection, training and incentives on organizational performance.

In contrast, this study will seek to establish the effect of strategic human resource management practices on the performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives. The independent variables of the study will be strategic human resource planning, strategic staffing and retention and strategic training and development while the dependent variable will be performance. The study it will look at the real issues which are attributed to deteriorating performance among State-owned Corporations in the Ministry of Industry, Trade and Cooperatives which includes inability of employees to develop their careers, non-existence of policies that promote staff development, poor remuneration policies, poor working conditions (Magutu et al. 2010).

Chebet (2015) also established that effective HR planning was the only way organizations are using to meet customer demands in the changing business environment. Organizations should engage HR professionals to conduct employee

needs assessment. However, the study focused on examining the influence of compensation, leadership, training, working conditions on performance of the employees at the County government of Bungoma. The target population comprised of 5,900 employees of Bungoma County government.

The study adopted a descriptive survey research design and a sample size of 375 was chosen using stratified random sampling whereby the strata was represented by the levels of management which were top, middle and lower management levels. Data was analysed using descriptive statistics that failed to establish the statistical effect between variables of the study. In contrast, this study will focus on State-owned Corporations in the Ministry of Industry, Trade and Cooperatives to examine the relationship between strategic human resource management practices on performance.

Dauda et al. (2010) assert that human resource planning seems to be in practice by those firms and/or enterprises which consider their employees the most essential part of the organization. Organizations usually become unable to meet the desired objectives just due to the fact that at times of stiff competition, the moral of their employees is not as that good as it is of their counterparts.

The reason is quite clear to everyone that the employees of that firm are not having that level of potential or motivation which becomes due while operating at that level in the industry. However, those organizations outperform in the market which does well with the employees in terms of boosting their satisfaction level at work through different ways, motivating them enough to take courage and making them put forth the level best effort to meet the targets (Ondieki, Kwamboka & Mbura, 2017).

Spanos and Lioukas (2011) revealed that organizations tend to consistently work on capacity building of their workforce in acute manner and similarly manage the talent of their number of employees in different ways like doing succession planning for best individuals so that they may discharge their responsibility for key positions in future course of time. Therefore, organizations work on numerous ingredients of human resources planning; one of which is that organizations use to streamline the flow of communication across the whole organization which in turn not only boosts the satisfaction of the employees but also adds up significantly to the overall performance of the organization. However, it is noted that the study was confined to strategic human resource management practice and corporate performance of Small Business Enterprises in Lagos Metropoli but failed to focus on issues in State-owned Corporations in Kenya.

Hassan et al. (2013) argue that strategic role of human resource planning not only assists the organization in short span of time but also in many times to come. Thus it is being seen that those organizations which consider human resource planning as the significant and essential part of their human resource management, this could turn out to be very helpful in terms of dealing with its human capital which could possibly make the organization to standout of the competition prevailing in the market.

Despite the positive correlation between strategic human resource management and performance of organization, it is observed that the study was limited to training and development impact among Oil and Gas Sector of Pakistan but failed to examine the integrated approach of SHRM variables of this study on performance of State corporations in Kenya.

2.5.2 Strategic Employee Staffing and Retention and Organization Performance

Namusonge, Kabare and Kagwiria (2014) revealed that strategic employee staffing and is thought to be a function of organizational productivity where organizations seek to manage employee talents in the long term period. The study argues that employee retention is a challenge to all organizations in the context of globalization irrespective of the country. Moreover, the concern about the scarcity of talent is almost universal. However, it is observed that the study was limited to the effect of talent retention on organization performance in companies listed in Nairobi securities exchange in Kenya but failed to address issues in State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

Odunga (2011) contend that organizations around the world are competing for the same pool of talents. However, organizations are finding it hard to attract and retain competent workers. Issues of compensation, working conditions and opportunity for career growth are top priorities of aggressive workers. Nevertheless, it was noted that the study was confined to construction companies in Kenya. Ibullah et al. (2016) argue that most companies will react to employee turnover if it is found that its effect is felt companywide.

By offering employees benefit such as reasonable flexibility with work and family balance, performance reviews and performance based salary upgrade along with traditional benefits such as paid holidays and sick days companies are better able to manage their employee retention rates. However, it is noted that their study was limited to retention and organizational performance and competitiveness of firms in the banking sector in positioning in Nigeria.

Mutua, Karanja and Namusonge (2012) posit that when a business loses employees, it loses skills, experience and corporate memory. The magnitude and nature of these losses is a critical management issue, affecting productivity, profitability, and product and service quality. For employees, high turnover can negatively affect employment relationships, morale and workplace safety. The cost of replacing workers can be high, the problems associated with finding and training new employees can be considerable, and the specific workplace-acquired skills and knowledge people walk away with can take years to replace. However, it is noted that the study was confined to the role of human management practices on performance of financial cooperatives based in Nairobi County, Kenya but failed to address SHRM practices on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

Mbondo (2011) postulate that employee retention is most critical issue facing employers in the brewery industry as a result of the shortage of skilled labor, economic growth and employee turnover. Companies that are inflexible, or whose organizational culture is characterized by domination and autocracy are likely to have dissatisfied employees no matter how good the incentives to stay may be.

Nevertheless, the literature strongly supports the notion that people stay with their employers if the culture of commitment is strong. Beyond this, however, it is also clear that people are more likely to stay if the perceived workplace culture is good. Nevertheless, it is observed that the study was restricted to strategic human resource management practices at the Kenya Police Staff SACCO Ltd and studied variables of this study in isolation.

Maina (2011) suggests that while compensation, personal and professional development opportunities, and other incentives are important in attracting people and

keeping them happy, their decision to stay with the company depends vitally on how well they fit in to the company's way of doing business, how it treats employees, what it expects of them, and how people relate to one another in the workplace. However, it is noted that the study was limited to strategic human resource management practices applied in performance of the top five secondary schools Kajiado North District of Kajiado County, Kenya but failed to examine the integrated approach of the variables of this study on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

2.5.3 Strategic Employee Training and Development and Organization Performance

Ligare (2010) established that there is a relationship between strategic employee training and development and performance among organizations. Strategic employee training entails a combination of essential abilities that involve the development of a knowledge base, expertise level and mindset that is increasingly necessary for success in the modern workplace.

Employability skills are typically considered essential qualifications for many job positions and hence have become necessary for an individual's employment success at just about any level within a business environment. However, it was established that the study was limited to strategic human resource management practices by the state corporations in Kenya but failed to focus on State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

Kilika et al. (2012) contend that the ability of employees to share information and learn new skills that will facilitate effective implementation of strategy. Well trained employees are likely to have a wide understanding of the business environment and

adjust quickly to changes with minimal resistance to change. Training promotes motivation among workers thus giving them the drive to accomplish their duties. However, it is pointed out that their study was limited to understanding the design of human resource development infrastructures for knowledge intensive organizations such as universities in Kenya.

Katua, Mukulu and Gachunga (2014) argue that achievement in the workplace deals with the pride and sense of accomplishment employees feel about their jobs and employers. Managers who notice a decline in achievement must take proactive steps to implement strategies to increase motivation and employee morale. Training is one of non-financial rewards that drive and empower workers to work towards organizational strategic intent. Human resource management is primarily concerned with the management of people within organizations, focusing on policies and on systems.

The study revealed that the responsibilities of a human resource manager can fall into three roles which include; staffing, employee compensation and benefits and designing work. However, their studies were limited to the effect of employee resourcing strategies on the performance of commercial banks in Kenya but failed to address the combined SHRM variables of this study on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

Kavoo and Kiruri (2013) on the other hand noted that the purpose of human resource management is to maximize the productivity of an organization by optimizing the effectiveness of its employees. In addition, it entails, conducting job analyses, planning personnel needs, recruiting the right people for the job, orienting and training, managing wages and salaries, providing benefits and incentives, evaluating performance, resolving disputes, and communicating with all employees at all levels. However, it is

revealed that the study was confined to the effect of placement practices on employee performance in small service firms in the information technology sector in Kenya but studied variables of this study in isolation.

Kiiru (2013) assert that employees should have skills to enable them solve problems, being flexible with project changes and taking feedback from other workers. Employees often work together on projects, so some employees must take on the leadership role to ensure deadlines are met, problems are addressed and all ideas are being considered. Employers often seek employees who have natural leadership skills. In addition, these employees must also have creativity skills so they can find and use solutions for potential problems on tasks, projects or assignments. However, it is pointed out that the study was limited to State parastatals in Kenya and studied the variables of this study in isolation such as training and compensation.

Hafiza (2015) pointed out that talent management can be the best way to create a long term competitive advantage. A sustainable competitive advantage stems from the valuable company specific resources that cannot be imitated or substituted by competitors. Human capital, rational capital and structural capital can all be sources of long term competitive advantage but the most significant evidence favors human capital. Nevertheless, it is observed that the study was limited to the impact of training and development on organization performance with mediating role of intention to quit as human resource quality cost.

Gopal (2012) revealed that skills development as an organizational development intervention with the purpose of strategically focusing the individual towards future organizational demands. Furthermore, developing talent is an important managerial function, since the continuous improvement of all organizational systems and products

is dependent on it. However, the study was confined to talent management and performance of firms in India but failed to address issues in State corporations in Kenya. Regarding the factors necessitating skills development, the balance should be created between developing individual talent and adding value to the organization (Gitonga, Kilika & Obere, 2016).

Ali and Nur (2016) contend that measuring of talent is based on confidence, skills expression, virtue expression, physical wellness, mental wellness, relationship wellness, spiritual wellness and personal leverage. High performance organisations are characterised as living their vision, implementing strategic and business plans, writing and evaluating scorecards, setting benchmarks and enforce ranking. A culture of achievement stems from strong values and beliefs. A culture of achievement supports tools of motivation and measurement of individual, group and organisational performance. However, it is revealed that their study was confined to the role of recruitment and selection practices in the organizational performance of Iraqi oil and gas sector but failed to examine SHRM practices on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

Thiriku and Were (2016) assert that organizations cannot compete if employees talents are not developed through clear policies of career development. They argue that organizations should adopt scientific approaches of determining the present and future demand of products and accurately determine the number of workers who can handle the demand. However, their study was to examine the effects of talent management strategies and employee retention among the private firms in Kenya with a case of Data Centre Ltd. In contrast, this study will seek to investigate the effect of strategic human

resource management practices and technology on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

Further it is noted that the study was confined only to one variable; talent management which was treated as an antecedent of this study and discussed under training and development variable. The research design used in the study was descriptive research design. The target population for this study comprised of 76 employees of Data Centre Limited (DCL). Further, this study will adopt cross-sectional research design approach to investigate the effect of strategic human resource management practices and technology on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives. The target population of this study will consist of 344 respondents of 13 State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. Stratified sampling technique will be used to select the representative sample size of the population.

2.5.4 Technology and Organization Performance

Hafiza (2015) suggests that technology can be regarded as systems and process that enhance organizational efficiency and effectiveness. Organizations should focus on automating their systems so as to minimize costs and maximize profits. Further, Gilaninia et al. (2011) observed that information communication technology has become an integral part of modern society and business driver, such that information and communication leads to knowledgeable society.

Further studies in Taiwan postulate that organizations adopt information and communication technology to improve the efficiency and effectiveness of services offered to customers, improve business processes, as well as to enhance managerial decision making and workgroup collaboration. This helps strengthen their competitive

positions in rapidly changing or emerging economies. However, it was noted that the study was confined to a different country that was Taiwan and it focused on different variables such as training, organization development and analyzed data using factor analysis.

Moturi (2010) established that continuous improvement was one of the strategic practices that enhanced performance of government ministries. The IT quality function should focus on broad, cross-functional quality issues that are high priority and critical in nature to resolve. From an IT perspective, the scope should include such areas as application development, networking, databases, data centres and end-user support (help desk). From a business perspective, the function's responsibilities should include virtually the entire organization because most business areas will likely have some sort of IT infrastructure or application. Nevertheless, the study was restricted to strategic practices on the performance of Government ministries in Kenya.

Further, Mueni (2014) concurs that integration of technology in the system and employee training was key determinants of continuous improvement. The study concluded that employee resistance to accept new technology was a challenge to quality of education in Kenya. Nevertheless, it was noted that the study was limited to performance of higher institutions. Kwamboka (2016) observed that modern competitive organizations were likely to perform and achieve their long term goals if appropriate technology is adopted in the system. Firms in the 21st century would only survive in the turbulent business environment by automating their systems and processes. Further, the study noted that employee training on ICT skills was a mandatory competitive practice of dynamic firms.

Mulinge (2014) established that technology integration in the system has resulted in increased profits of firms in developing and developed countries. Efficiency of the system is enhanced through adoption of modern technologies. The study concluded that technology has promoted e-commerce practices to modern firms thus enhanced customer service delivery. Further, it was noted that companies have cut down costs through automated systems that requires employees with information on communication technology skills. Employees with computer skills are more likely to be productive compared to computer illiterate workers in the competitive job market.

Table 2.1: Summary of Research Gaps

Author	Focus of the Study	Methodology and Findings	Knowledge Gaps	Focus of the Current Study
Ondieki , Nyang'au & Mbura(2017).	Influence of strategic management practices on productivity of state corporations in Kenya: A case of Kenya Civil Aviation Authority.	Adopted descriptive research design and a case study to select 155 employees of Kenya Civil Aviation Authority The study established that there exists a significant effect between SHRM on productivity of State Corporations.	Independent variables of the study were organizational policies, organizational strategies and leadership style. A case study of Kenya Civil Aviation Authority.	Independent variables of the Study were human resource planning, staffing and retention and training and development. The study focused 13 State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.
Ali et al. (2016)	The Role of Recruitment and Selection Practices in the Organizational Performance of Iraqi Oil and Gas Sector	Descriptive and convenient sampling technique was used to select 113 employees of oil and gas companies in Iraq It was established that there was a correlations between recruitment, selections and performance	Variables of the study were selection, training and incentives Phenomenological paradigm was adopted and exploratory research design Data was analyzed descriptively	The study sought to examine the effect of human resource planning, staffing and retention and training and development and performance of 13 State-owned Corporations in the Ministry of Industry, Trade and Cooperatives. Cross-sectional research design to discover new knowledge and test hypotheses based on the laws of cause and effect. Multiple regression was adopted to test the statistical effect between variables
Kilika, K' Obonyo, Ogutu, & Munyoki (2016)	The Mediating Role of University Industry Collaboration on the Relationship between Human Resource Development Infrastructure and Performance of Universities in Kenya	Single case design and random sampling technique was used to select 76 employees of Data Centre Limited.	The study examine the mediating role of university industry collaboration on the relationship between human resource development infrastructure and performance of universities in Kenya.	The study tested the direct relationship between strategic human resource planning, staffing and retention and training and development and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

		It was established that human resource develop influence performance Data was analyzed descriptively.	A single case design.	Data was analyzed using multiple regression method.
Mutahi & Busienei (2015).	Effect of human resource management practices on performance of public universities in Kenya	Descriptive research design was adopted. A census approach was used The study revealed that there exist a difference between HRM and performance of public universities in Kenya.	The dependent variables of the study were resourcing practices, reward management, training and development The study was took a census approach	The study sought to investigate the relationship between SHRM practices on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives. The study adopted stratified sampling technique to select 13 State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.
Farman et al. (2013)	Effect of Human Resource Planning on Performance of the Telecom Sector in Pakistan	Purposive sampling was used to select 160 employees of telecommunication companies in Pakistan Data was collected using interview guides and questions. Factor analysis method was used to analyze data. The study established that there exist a significant relationship between HRP and Performance	Independent variables were training, selection and incentives. Interview guides were used to collect data Factor analysis method was adopted	Stratified Sampling was used to select respondents Questionnaires were be used to collect data
Kiiru (2013)	Strategic human resource management practices and performance of parastatals in Kenya	Adopted positivist research design Used both descriptive and exploratory research design To select respondents from 185 parastatals in Kenya	The study focused on SHRM practices among State Parastatals in Kenya The study tested the moderating effect of between SHRM and performance of State parastatals Exploratory research was used	The study tested the moderating effect of technology on the relationship between strategic human resource planning, staffing and retention and training and development and performance State-owned Corporations in the Ministry of Industry, Trade and Cooperatives. Cross-sectional research design was adopted

		Established that compensation, training, recruitment and performance management influenced organization performance.	Respondents were employee of parastatals in Kenya	
Maina (2011)	Strategic human resource management practices applied in performance of the top five secondary schools North District of Kajiado County, Kenya	Longitudinal research design was adopted Quota random sampling technique was used to select 111 teachers of secondary schools Revealed that employee training and motivation was directly correlated to organization performance	The variables of the study were human resource policies, talent development and compensation. Non-probability sampling technique was used. Respondents were teachers of day and boarding secondary schools	The study was confined to 13 State-owned Corporations in the Ministry of Industry, Trade and Cooperatives. Stratified sampling technique was used.
Kimani (2010).	Relationship between Strategic Human Resource Management Practices and Firm Performance of the Multinational Manufacturing Companies in Kenya: the Mediating role of Technology	Descriptive design was adopted and purposive sampling technique were used to select 36 manufacturing firms in Kenya. Data was analyzed using multiple regression analysis. The study established there exist a significant relationship between SHRM and firm performance.	The study tested the mediating effect of technology on the relationship between SHRM and performance of manufacturing firms in Kenya. Metrics of measuring performance of manufacturing firms were costs, profits, innovation and customer satisfaction	The study adopted cross-sectional research design and focus State-owned Corporations Metrics of measuring performance were efficiency, effectiveness, employee satisfaction, customer satisfaction and corporate image.

Source: Literature Review (2019)

2.6 Conceptual Framework

The conceptual framework illustrates the relationship between independent and dependent variables diagrammatically. Figure 2.1 presents the conceptual framework

Independent variables

```
┌─────────────────────────────┐
│ Strategic Human Resource    │
│ Practices                   │
│ ┌───────────────────────┐   │
│ │ Strategic Human       │   │
│ │ Resource Planning     │   │
│ │ • Recruitment Policies│   │
│ │ • Succession and      │   │
│ │   retirement plan     │   │
│ │ • Reward management   │   │
│ │   policies            │   │
│ └───────────────────────┘   │
│ ┌───────────────────────┐   │
│ │ Strategic Staffing    │   │
│ │ and Retention         │   │
│ │ • Employee            │   │
│ │   compensation        │   │
│ │ • Employee mentorship │   │
│ │ • Performance         │   │
│ │   appraisal           │   │
│ └───────────────────────┘   │
│ ┌───────────────────────┐   │
│ │ Strategic Training    │   │
│ │ and Development       │   │
│ │ • Needs assessment    │   │
│ │ • Career development  │   │
│ │ • Talent management   │   │
│ └───────────────────────┘   │
└─────────────────────────────┘
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Dependent Variable

```
┌─────────────────────────────┐
│   Organizational            │
│   Performance               │
│   • Efficiency              │
│   • Effectiveness           │
│   • Employee satisfaction   │
│   • Customer satisfaction   │
│   • Corporate image         │
└─────────────────────────────┘
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┌─────────────────────────────┐
│ Technology                  │
│ • Human Resource            │
│   Management                │
│   Information Systems       │
└─────────────────────────────┘
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Moderating Variable/control variable

Figure 2.1: Conceptual Framework

Source: (Namusonge, Kabare & Kagwiria, 2014; Ibullah et al., 2016; Hafiza, 2015; Moturi, 2010; Mueni, 2014; Mutua, Karanja & Namusonge, 2012; Afsal et al., 2013; Chebet, 2015; Ondieki, Kwamboka & Mbura, 2017; Hassan et al., 2013).

Figure 2.1 depicts the interrelationship effect between strategic human resource planning, strategic staffing and retention and strategic training and development on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives. Figure 2.1 illustrates that strategic human resource planning antecedents such as recruitment policies, succession and retirement plan and reward management policies influenced performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives. Performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives was measured in form of efficiency, effectiveness, employee satisfaction, customer satisfaction and corporate image.

Strategic staffing and retention antecedents such as employee compensation, employee mentorship and performance appraisal influenced performance and finally strategic training and development antecedents such as needs assessment, career development and talent management were found to influence performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

Further, it was revealed that technology in the system characterized by HRM information systems also influenced performance directly or indirectly if effectively managed. Finally, the model illustrates that dependent variable which was performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya was measured using metrics such as efficiency, effectiveness, employee satisfaction, customer satisfaction and corporate image.

The findings of the study revealed that there exists a positive significant relationship between strategic human resource planning, strategic staffing and retention and strategic training and development on the performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter describes the proposed research design, the target population, sample size and sampling procedure, data collection, collection procedure, validity and reliability, data analysis, diagnostic tests and ethical considerations.

3.2 Research Design

Research design is the plan or framework that is utilized to create answers to examiners' issues. Basically, there are five types of research designs; experimental, cross-sectional, longitudinal, case study and comparative designs (Patten & Newhart, 2017; Rahi, 2017). In this study, a cross-sectional design was employed. This research design involved the collection of data from numerous state corporations at the same time. The cross-sectional research design was appropriate because it explored and described the relationship between variables in their natural setting without manipulation.

Crowther and Lancaster (2012) acknowledge that cross-sectional research design is considered appropriate when the intent is gaining a broader understanding of the context of the research and processes being enacted. The design assisted the researcher in summarizing the data, for example, proportions of central tendency. The design is suitable when the researcher wants to get a better understanding of an issue and to come up with new ideas on what should be done to improve the current situation (Goodwin & Leech, 2006). The design can explain the occurrence of specific phenomena, notably for a problem that has not been studied more clearly. Therefore, the cross-sectional research design was the most suitable for the study to be used since the hypotheses were tested.

3.3 Target Population

Target population refers to the universe from which the sample is selected (Fisher, 2010)). On the other hand, Collis and Hussey (2014) argue that a population is a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. The target population of this study consisted of 344 respondents out of which 86 were middle-level managers while 258 were lower-level employees from 13 State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya as shown in appendix (3). The rationale of conducting the study in the state corporations is because there has been the aspect of underperformance. For instance, East African Portland Cement Company posted Ksh.3.4 billion loss in 2019 (Waichahi, & Machoka, 2019). It was reported Wilson Airport had potholes in some of the runways signifying poor performance by the Kenya Airports Authority (Chege, 2020). Besides, Kenya Airways' pre-tax losses deepened to KSh 13 billion in 2019 despite increasing passenger levels and revenues (Chacha, S2019). Uchumi supermarket was given a bailout of Ksh 700 million in 2017 by the government but it continued to lose due to poor implementation of strategies (Oyugi, 2017). The unit of analysis was State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya while unit of observation were middle level managers and lower-level employees of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

3.4 Sampling Technique and Sample Size

According to Fisher (2010), sample size refers to the number of items to be selected from the universe to constitute a sample. The size of sample should neither be excessively large, nor too small. It should be optimum. An optimum sample is one which fulfills the requirements of efficiency, representativeness, reliability and

flexibility. According to Fisher (2010), the aim of the research should be to recruit clearly identified individuals who could best address the purpose and goals of the research. Individuals who are invited to participate in a research must be able and willing to provide the desired information and must be representative of the population of interest.

Respondents of the study were categorized into two groups or stratum that included middle level managers and lower-level employees. This group is considered to have adequate information with regard to strategic human resource management practices and technology on performance of their respective corporations. Out of the total population of 344 respondents targeted from the 13 State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya, a sample of 185 respondents was drawn using random sampling technique. It was convenient for the researcher to do sampling because the study was technical and involved the collection of data from sensitive government offices. The source of the list of respondents to participate in the study was generated from existing human resource records of the 13 corporations. A random sample was drawn from the sampling frame.

According to Fisher (2010), a sample frame is regarded as the source material from which the representative sample of the population is drawn. Stratified sampling technique was adopted to divide the total population into strata and simple random sampling technique was used to select respondents from each strata. All respondents were given equal chances of being selected. The samples were drawn from each stratum displaying homogenous characteristics.

Based on the fact that the target population of the study was finite, the study adopted the formula proposed by Israel (2009) given by the form $n = N/1+N$ $(e)^2$, to calculate

the ideal sample size, where; n denotes the sample size, N denotes the total population and e denotes the error term (0.05). Therefore, using N=344 in the formula, the calculated sample size (n) was 185 respondents. The 185 managers were the proportionate sample size selected from each stratum as shown in Table 3.1. The researcher picked an equal number of employees from the category of the middle and lower-level management from each corporation.

Table 3. 1: Summary of Sample Size

Corporation/Stratum	Total Number of Middle and Lower-Level Management Employees Selected	Sampled Size
Anti-Counterfeiting Agency	23	12
East African Portland Cement	19	10
Export Processing Zone Authority	21	11
Kenya Accreditation Authority	18	10
Kenya Bureau of Standards	26	14
Kenya Industrial Estates	33	18
Kenya Industrial Property Institute	36	19
Kenya Industrial Research and Development Institute	41	22
Kenya Investment Authority	24	13
Kenya Wines Agencies	41	22
Micro and Small Enterprises Authority	22	12
New Kenya Co-operative Creameries	19	10
Numerical Machine Complex and Sacco Societies Authority	21	11
Total	**344**	**185**

Source: (Ministry of Industry, Trade and Cooperatives, 2019)

3.5 Data Collection and Procedure

The study relied on primary data which was collected through structured questionnaires with closed-ended questions. Questionnaires were the main instruments of data collection based on the fact that they provide an opportunity to collect data systematically and analyze it for strategic decision making. Fisher (2010) avers that questionnaires are appropriate because they provide opportunities of anonymity which encourages frankness from the respondents especially in sensitive issues like governance and or management.

Moreover, Guest (2012) concurs that questionnaires are preferred because they will ensure a high response rate as they are distributed to respondents to complete and collected by research assistants. They also offer the possibility of anonymity because subjects' names are not required on the completed questionnaires and they have less opportunity for bias as they are presented in a consistent manner.

The items of the questionnaire were measured using a likert scale type where 5 denotes strongly agree, 4 denotes Agree, 3 denotes Neutral, 2 denotes disagree and 1 denotes strongly disagree. The questionnaires were distributed through drop and pick later method using trained research assistants. Follow-ups were made to ensure that questionnaires were collected on time. This ensured that the information gathered was valid, reliable and suitable for this study.

3.6 Pilot Testing

A pilot study is a research project that is conducted on a limited scale to allow the researcher to get a clearer picture before a full-fledged study is carried out (Fisher, 2010). A pilot study was conducted to address any deficiencies in the research instruments. Guest (2010) argues that, the accuracy of data to be collected is largely

dependent on the data collection instruments in terms of validity and reliability which could only be established through a pilot test. The rule of the thumb suggests that 5% to 10% of the target sample should constitute the pilot test (Cooper & Schilder, 2014). Therefore, the study used 10% of the sample size for piloting and thus, 19 (10% of 185) managers from middle and lower-level employees were used. Notably, the study picked 9 middle-level managers and 10 lower-level employees from State-owned Corporations in the ministry of energy

3.6.1 Validity Testing

Validity shows if the questionnaires genuinely measure what it is expected to measure or how honest is the research outcomes (Golafshani, 2003). Validity entails the appropriateness, meaningfulness and usefulness of inferences a researcher makes based on the data collected (Mertler & Vannatta, 2010). To ensure content and face validity, the questionnaire was subjected to a thorough examination by the supervisors in charge of the project development and the experts in the state corporations. The supervisors and the experts evaluated the statements in the questionnaire for relevance. Based on their evaluation, the instruments were adjusted appropriately before subjecting it to the final data collection exercise. The review comments from the supervisors and experts were used to ensure that content validity is enhanced. Therefore, the content and construct validity were obtained by the help of the supervisors and the experts in the state corporations who counterchecked the research instruments to ensure the content inside is sufficient and justifiable for the study.

3.6.2 Reliability Testing

Novikov and Novikov (2013) define reliability involves a measure of the degree to which a research instrument yields consistent research or data after repeated trials. The researcher used Cronbach's alpha coefficient to test the reliability of the questionnaire.

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. To ensure reliability, the researcher calculated the Cronbach alpha co-efficient using the results of the piloted questionnaires (19 respondents). Taber (2018) suggests that Cronbach's alpha values of items included in the study should not be lower than 0.8. According to Golafshani (2003), Cronbach alpha should not be lower than 0.7. The closer Cronbach's alpha coefficient is to 1, the higher the internal consistency and reliability. Therefore, in this study, a Cronbach alpha of 0.7 and above was considered acceptable.

3.7 Data Analysis and Presentation

Data analysis involves inspecting, cleansing, transforming, and modeling data to get useful information for decision-making (Patten & Newhart, 2017). Once the data was collected, the questionnaires were edited for accuracy, consistency and completeness. The responses were coded into numerical form to facilitate statistical analysis. Further, quantitative data was analyzed using Statistical Package for Social Sciences (SPSS version 24) based on the items of the questionnaires. Both descriptive and inferential statistics was conducted. The descriptive statistics included mean, standard deviation, minimum, maximum, kurtosis and skewness while inferential statistics included the correlation analysis and regression analysis. Multiple regression model was adopted to determine the statistical relationship between variables. Regression method was conducted at 95% confidence level and 5% significance level while the results were presented in form of tables and figures. The multiple regression model is presented below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

where;

Y represents Performance

β_1 to β_3 represents regression coefficients

$\mathbf{X_1}$ denotes strategic human resource planning,

$\mathbf{X_2}$ denotes strategic staffing and retention and

$\mathbf{X_3}$ denotes strategic training and development

$\mathbf{\varepsilon}$ is the error term that represents other factors not included in the model.

Further, the model to test the moderating effect of technology on the relationship between strategic human resource management practices on the performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya was examined. Moderating variable affects the strength and direction of the relationship between predictors and an outcome thus increasing, reducing, or affecting the influence of the predictor variable. Moderation depicts the interaction between variables; thus, the test involves the determination of the statistical significance of the interaction term (Whisman & McClellard, 2005). The steps for testing the moderation effect is presented below from step 1 to 3

Step 1: $Y = \beta_0 + \beta_1 X + \varepsilon$

Where Y is the performance

X is the composite of strategic human resource planning, strategic staffing and retention, strategic training and development

Step 2: $Y = \beta_0 + \beta_1 X + \beta_2 Z + \varepsilon$

Where Y is the performance

X_1 is the composite of strategic human resource planning, strategic staffing and retention, strategic training and development

Z is the moderating variable/control variable which in technology

The model in step 3 was used to estimate and give the direction and effect of the moderator on the independent variable and the total effect (of the moderator) on the dependent variable by interacting the moderating variable and the predictor variable.

Step 3: $Y = \beta_0 + \beta_1 X + \beta_2 Z + \beta_3 X*Z + \varepsilon$

The moderation effect of technology was determined by examining the coefficient of determination (R-squared) before and after the interaction. The change in R-squared illustrate technology moderate the relationship between strategic human resource management practices (strategic human resource planning, strategic staffing and retention, strategic training and development) and performance of state-owned corporations in the ministry of industry, trade and cooperatives in Kenya.

3.8 Diagnostic Tests

Before conducting multiple regression analysis, diagnostic tests such as normality, linearity, homogeneity of variance and multicollinearity were conducted to test conformity of data with statistical assumptions.

Normality was tested using Shapiro-Wilk test to confirm distribution of data. Data was assumed to be normally distributed if the p-values or significance values of the dependent variables were less than 0.05 and vice versa (Crowther & Lancaster, 2012). Linearity test was done using Pearson's moment correlation coefficient. It was the assumption of the study that linearity between variables of the study was available if the p-value were less than 0.05 the critical value and vice versa. Co-movement of variables in the same direction indicated correlation of the study variables (Guest, 2012).

To test homogeneity of variance of the model residuals, a graphical model residuals plot was used. Linear regression models are fitted based on the assumption of homoscedasticity which is an assumption that the model residuals have equal (constant) variances as recommended by Guest (2012). To establish whether multicollinearity posed a problem, regression analysis was conducted. If the Variance Inflation Factors (VIFs) of the variables of the study were less than 10 and Tolerance greater than 0.1 respectively, then it was concluded that that there exist multicollinearity and vice versa (Collis & Hussey, 2014).

If all the variables of the study fall within the range of VIF as suggested, then it implies that there will be no multicollinearity suggesting that all independent variables will be maintained for further analysis as recommended by Crowther and Lancaster (2012). Further, homoscedasticity was tested using Breusch-Pagan test to determine of homogeneity of variances. It was the assumption that all variances displayed equal variations across the range of predictor variables as recommended by Guest (2012).

3.9 Analytical Interpretation of Data

Table 3.2 presents the analytical interpretation of data

Table 3.2: Analytical Interpretation of Data

Objective	Hypothesis	Analytical Model	Analysis Techniques	Interpretation
To establish the effect of strategic human resource planning on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.	$H0_1$: There was no relationship between strategic human resource planning and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.	Y= f(Strategic Human Resource Planning) $Y= \beta o+\beta_1 X_1 +\varepsilon$, Y= Performance of State-owned Corporations $\beta o+\beta_1$ = coefficients X_1= Strategic Human Resource Planning	Simple Regression	R value (Ranges +1 to -1 If R = +1there exists a strong positive relationship If R =-1 there exists a strong negative relationship
To determine the effect of strategic staffing and retention on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.	$H0_2$: There was no relationship between strategic staffing and retention and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.	Y= f(Strategic Staffing and Retention) $Y= \beta o+\beta_2 X_2 +\varepsilon$, Y= Performance of State-owned Corporations $\beta o+\beta_2$ = coefficients X_2= Strategic Retention and Staffing	Simple Regression	R value (Ranges +1 to -1 If R = +1there exists a strong positive relationship If R =-1 there exists a strong negative relationship
To assess the effect of strategic training and development on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.	$H0_3$: There was no relationship between strategic training and development and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.	Y= f(Strategic Training and Development) $Y= \beta o+\beta_3 X_3 +\varepsilon$, Y= Performance of State-owned Corporations $\beta o+\beta_3$ = coefficients X_3= Strategic Training and Development	Simple Regression	R value (Ranges +1 to -1 If R = +1there exists a strong positive relationship If R =-1 there exists a strong negative relationship
To determine the moderating effect of technology on the relationship between strategic human resource management practices on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.	H04: There was no significant moderating effect of technology on the relationship between strategic human resource management practices on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.	$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$ $$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 Z + \beta_5 Z*X_1 + \beta_6 Z*X_2 + \beta_7 Z*X_3 + \varepsilon$$ Y= Performance of State-owned Corporations B_0 to β_7 = coefficients $Z*X_3$ = (Interaction term) Z = **Moderating Variable (Technology)**	Stepwise Regression Analysis	If change in R^2 after addition of interaction term (moderator) is significant (R_2 change, change, β, t are significant. P< 0.05) the technology moderate the relationship

3.10 Ethical Consideration

Before data collection, the researcher sought permission from the management of the State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya, Moi University, and National Commission for Science, Technology and Innovation (NACOSTI). Informed consent was sought from respondents before data collection. Further, all information given by the respondents was treated with high confidentiality. The information was collected from respondents without discrimination.

Data collected was analyzed objectively without biasness. Information obtained from published materials was appreciated by quoting the references. Formal language was used during data collection to avoid biasness during and after data analysis. The objective of the study was clearly spelt out to the respondents before data collection for the purpose of transparency.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Overview

This chapter presents findings of the study according to the research objectives. The objectives of the study were to establish the effect of strategic human resource planning, strategic staffing and retention, strategic training and development and the moderating effect of technology on the performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. Quantitative data was analysed descriptively using statistics such as mean scores, percentages, frequencies and standard deviation. Further, inferential statistics such as multiple regression was conducted to determine the statistical effect of predictor variables on the dependent variable.

4.2 Response Rates

After questionnaire administration to 185 respondents Table 4. 1, indicates that 143 questionnaires were returned duly filled and returned by middle level managers and lower-level employees. 22 questionnaires were unreturned and 20 of them were incomplete. This contributed to 77% response rate. This response rate was considered appropriate as it conforms to Guest (2012) who asserts that any response rate above 50% is adequate for analysis and reporting. The high response rate was as a result of timely follow-ups and clarity of the research objectives to respondents of the study.

Table 4.1: Response Rates

Questionnaire Response	Frequency	Percentage
Total Number of Questionnaires Administered	143	79
Number of Questionnaires Not Returned	22	10
Incomplete Questionnaires Returned	20	11
Total	**185**	**100**

Source: Research Data (2019)

4.3 Validity and reliability of the questionnaire

Validity and reliability of the data collection instrument were carried out from the pilot study data collected. Pilot study data was collected from 10% of 185 targeted sample in the State Corporations in the ministry of Energy.

4.3.1 Validity of the data collection instrument

Validity in this study was approached by assessing construct validity. Construct validity was assessed by assessing convergent and discriminant validity. Convergent validity assesses to confirm that items in the questionnaires that belong to the same construct and are supposed to be related are actually related while discriminant validity confirms that items belonging to different constructs that are not supposed to be related are actually not related. Confirmatory factor analysis (CFA) was used in this approach to extract the factor loadings that were then used to assess convergent and discriminant validity.

Factor analysis is a dimension reduction technique for reducing a large dimension of variables into fewer constructs. CFA in particular is factor analysis carried out based on a hypothesized conceptual model such as in this study. The scree plot in figure 4.1 from the factor analysis shows the possible number of constructs that the indicator

variables in the study questionnaire factors (constructs) and the first few constructs explain most of the variance in the items.
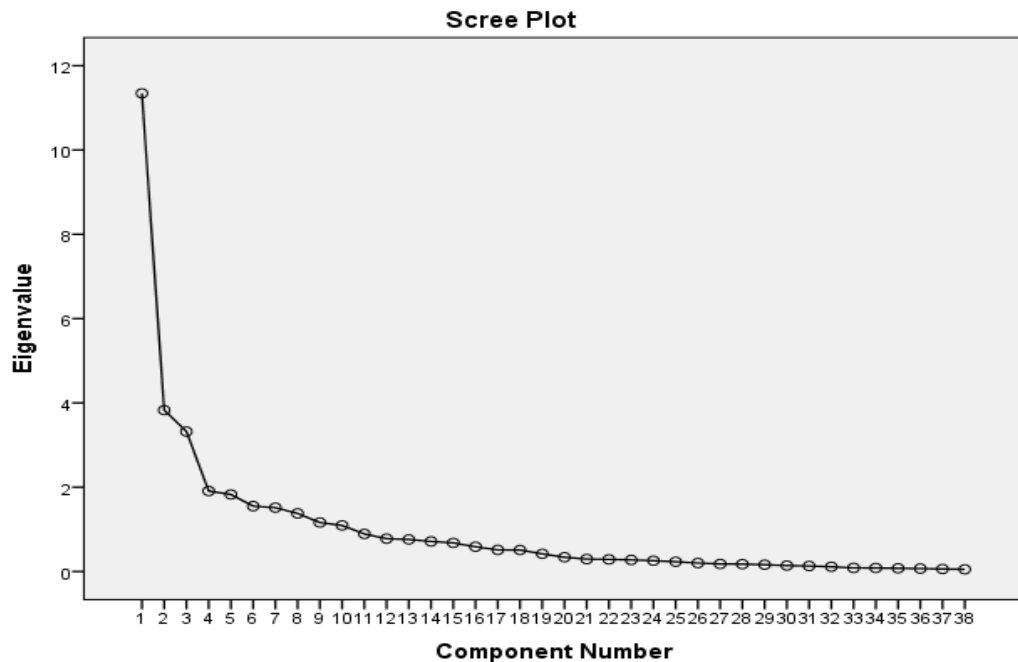
Figure 4. 1: Factor analysis Scree plot

KMO and Bartlett's tests of factor analysis are shown in Table 4. 2. The KMO shows varies from 0 to 1 where a higher KMO value is preferred to imply that the sum of partial correlations are not very large relative to the sum of correlations and thus factor analysis yields reliable distinct factors. According to Fidell (2001) a KMO value of 0.5 is suitable implying that the KMO value of 0.820 is adequate. The Bartlett's statistic on the other hand tests to confirm that there are at least some correlations between the items. Factor analysis is based on the variance covariance matric of the variables and requires some correlations. The Bartlett's test therefore confirms this with significance by testing the null hypothesis that the correlation matrix is an identity matrix. The p-value of the Bartlett's Chi-square statistic is 0.000 implying that the correlation matrix is not an Identity matrix therefore there are some relationships between the items allowing possibility of reliable factor extraction.

Table 4.2: KMO and Bartlett's Test

Test		Statistic
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.820
Bartlett's Test of Sphericity	Approx. Chi-Square	4255.220
	df	703
	Sig.	.000

From factor analysis, factor loadings were extracted for the items for each latent variable (Unobserved constructs of the study). The factor loading matrix is shown in appendix 6 showing that all the study variables retained all the indicator items as none of the indicators had loadings less than 0.4. The lowest factor loading for an indicator across all the constructs in this study was 0.519 and the highest was 0.872.

The confirmatory factor analysis results were used to assess convergent and discriminant validity of the study instruments. Convergent validity was assessed by determining the average variance extracted (AVE) for each construct while discriminant validity by determining the squared multiple correlations between the constructs as shown in Table 4. 3. Convergent validity is attributed to an AVE above 0.5 and discriminant validity by AVEs being larger than the squared multiple correlations (Fornell-Larcker, 1981). All the AVEs of the constructs are above 0.5 and greater than squared multiple correlations implying that the instrument meets both convergent and discriminant validity and thus meets construct validity.

Table 4.3: Construct validity

	AVE	Squared multiple correlations
X1 -Strategic Human Resource Planning	0.744	0.419
X2 - Strategic Staffing and Retention	0.686	0.398
X3 - Strategic training and development	0.743	0.458
Z - Technology	0.734	0.121
Y - Performance of Corporations	0.714	0.458

Source: Pilot study data (2019)

4.3.2 Reliability of the data collection instrument

Cronbach's alpha was used to determine the internal of the instrument. As shown in Table 4. 4, Cronbach's alpha coefficients for all the study constructs were above 0.7 and were therefore considered to be adequate confirming the reliability of the instrument as recommended by Mertler and Vannatta (2010).

Table 4. 4: Reliability Coefficients

Variables	No. of Items	Cronbach Alpha	Comments
X1 -Strategic Human Resource Planning	7	0.866	Reliable
X2 - Strategic Staffing and Retention	9	0.859	Reliable
X3 - Strategic training and development	7	0.864	Reliable
Z - Technology	7	0.856	Reliable
Y - Performance of Corporations	8	0.864	Reliable

Source: Pilot study data (2019)

4.4 Demographic Characteristics

Demographic information of the respondents under study was assessed to get a better understanding of the respondents and the organisations being studied. This was aimed at helping give a general view of capability of the studied respondents to give adequate reliable unbiased information.

4.4.1 Gender of Respondent

The study sought to determine the gender of respondents who participated in the study and the summary of the findings is presented in Table 4.5

Table 4.5: Gender of Respondent

Gender	Level of management	Percentage
Male	Middle level managers	74
	Lower-level employees	71
Female	Middle level managers	18
	Lower-level employees	22

Source: Research Data (2019)

The results from Table 4.5 indicated the majority middle level managers were male which constituted of 81% while female was 19%. On the side of the lower-level employees, 76% were males while 24% were females. The results indicated that majority of the employees in the thirteen State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya were males as compared to their female counterparts. These findings imply that most of the respondents of this study were departmental workers who were willing to provide the intended information as opposed to assistant managers and section heads.

4.4.2 Age of Respondents

The respondents were requested to indicate their age and pertinent results are presented in Table 4.6.

Table 4. 6: Age of Respondents

Years	Frequency	Percentage
Below 25 years	05	03%
26-35 years	23	16%
36-45 years	73	51%
Above 46 years	42	29%
Total	**143**	**100**

Source: Research Data (2019)

As shown in Table 4.6, majority (51%) of the respondents were aged between above 36-45, 29% of them were aged above 46 years, 16% of them were aged between 26-35 years and 03% of them were aged below 25 years. The results imply that majority of the respondents of the thirteen State-owned owned corporations in the Ministry of Industry, Trade and Cooperatives in Kenya who had attained the age of 46 years and above had high chances of joining management positions such as managers and assistant managers while others aged between 26-45 worked as departmental employees or officers in various positions.   These findings imply that most the respondents had adequate experience and knowledge about the problem under investigation based on the fact that they had workers for quiet sometime in their respective corporations.

4.4.3 Level of Education

The study sought to determine the level of education of respondents who participated in the study and the results are presented in Table 4.7

Table 4.7: Level of Education

Level of Education	Frequency	Percentage
First degree holders	161	87%
Postgraduate degree holders	24	13%
Total	**185**	**100%**

Source: Research Data (2019)

The results presented in Table 4.7 showed that majority (87%) of the respondents were first degree holders while 13% of them were postgraduate degree holders. The findings imply most of the workers in State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya were first degree holders and a few were postgraduate degree holders. These findings indicate that most of the workers of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya did not have postgraduate qualifications based on the fact that working schedules were not flexible to give employees and opportunity to advance their studies.

4.4.4 Duration of Work

Respondents were asked to indicate the period they had worked in their respective organizations and pertinent resulted are illustrated in Table 4.8

Table 4. 8: Duration of Work

Level	Frequency	Percentage
6 Years and below	32	22%
7-11 Years	30	21%
12 Years and above	81	56%
Total	**143**	**100**

Source: Research Data (2019)

As illustrated in Table 4.8, majority (56%) of the respondents had worked for a period of more than 12 years, 22% of them had worked for a period 6 years and below and 21 % of them had worked for a period of between 7-11 years. These findings implies that majority of the respondents of this study had worked for longer period of time and had adequate experience about strategic human resource management practices adopted by their entities. These findings imply that respondents included in this study had adequate experience and information in relation to strategic human resource management practices and performance of corporations.

4.5 Descriptive Statistics for Study Variables

4.5.1 Strategic Human Resource Planning

Table 4.9 illustrates the pertinent results provided by respondents after being requested to indicate the extent to which they agreed strategic human resource planning influenced performance of State-owned Corporations in the ministry of industry.

Table 4.9: Strategic Human Resource Planning

Statements	Mean	S.D	Min	Max	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
My corporation has the capacity to forecast future number of workers to accomplish particular tasks	3.741	1.232	1	5	-0.800	0.203	-0.29	0.403
My corporation has clear policies that demonstrates how employees are engaged and rewarded after retirement	3.706	1.238	1	5	-0.423	0.203	-0.202	0.403
My corporation has a clear policy that stipulates how employees in each cadre are rewarded	3.49	1.299	1	5	-0.680	0.203	-0.636	0.403
My corporation recruits employees on a competitive criteria	3.532	1.342	1	5	-0.436	0.203	-0.76	0.403
My corporation recruits employees with diverse knowledge and experience	3.727	1.176	1	5	-0.376	0.203	-0.033	0.403
My corporation has a clear policy of employee succession	3.525	1.326	1	5	-0.451	0.203	-0.698	0.403
My corporation conducts needs assessment before recruiting workers	3.587	1.318	1	5	-0.291	0.203	-0.512	0.403
Average Mean Score	**3.615**	**1.276**			**-0.494**	**0.203**	**-0.447**	**0.403**

Source: Research Data (2019)

As depicted in Table 4.9, the study revealed that the mean score for 6 out of the 7 statements was more than the 3.5 which mean that majority (70%) and above agreed with the statement while the rest either disagreed or were neutral. It was indicated that strategic human resource planning practices such as ability to forecast for future employee influence performance with a mean of 3.741, implementation of policies of compensation after employee retirement with a mean of 3.706, policies that endorse how workers are rewarded with a mean of 3.49, recruitment of employees with diverse skills with a mean of 3.532, clarity of employee succession policies with a mean of 3.727, recruitment of employees on a competitive criteria with a mean of 3.525 and conducting of needs assessment with a mean of 3.587.

This finding implies that despite the fact that strategic human resource planning influenced performance, to some extent some practices such as competitive recruitment and periodical employee needs assessment were not embraced effectively. It was pointed out that some State corporations were understaffed while others overstaffed. Further, it was noted that to some extent some State corporation were required to recruit employees competitively due to public service policies that advocated for a general degree for entry in to public entities.

The measures of kurtosis and skewness are used to determine if indicators met normality assumptions (Kline, 2005). If the skewness is less than -1 or greater than 1, the distribution is highly skewed, if skewness is between -1 and -0.5 or between 0.5 and 1, the distribution is moderately skewed if skewness is between -0.5 and 0.5, the distribution is approximately symmetric. The average statistics for skewness for strategic human resource planning was -0.494. Since the values were between -0.5 and 0.5, we thus conclude that the distribution is approximately symmetric.

The values of skewness statistics were negative, indicating that the data was skewed to the left and both the mean and the median were less than the mode of the data set. A kurtosis test was also run to test the normality of the distribution. The values of kurtosis statistics ranged from -0.29 to -0.76 with an average been -0.447. According to Celikoglu and Tirnakli (2018), the values for kurtosis between -2 and +2 are considered acceptable and thus the distribution of response values was normal for all the items.

This finding corresponds with that of Ogolla (2007), Ibullah et al. (2016), Shikha and Karishma (2012), Thiriku and Were (2016) who ascertained that strategic human resource planning did not only influence organizational increased productivity in terms of the quantity of goods produced but also facilitated the ability of the organization to identify the necessary skills and knowledge required by workers to perform effectively in a changing business environment.

4.5.2 Strategic Staffing and Retention

Table 4.10 depicts results that were provided by respondents after being asked to indicate the extent to which they agreed strategic staffing and retention influenced performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

Table 4.10: Strategic Staffing and Retention

Statements	Mean	SD	Min	Max	Skewness Statistic	Skewness Std. Error	Kurtosis Statistic	Kurtosis Std. Error
My corporation engages workers on permanent basis	3.594	1.257	1	5	-0.4745	0.203	-0.459	0.403
My corporation provides conducive working environment for all workers	3.937	1.115	1	5	-0.681	0.203	0.533	0.403
My corporation management incorporates views of employees when making key decision making	3.636	1.184	1	5	-0.3809	0.203	-0.194	0.403
My corporation promotes workers based on their performance	3.476	1.378	1	5	-0.1546	0.203	-0.919	0.403
My corporation has a mentorship program that aims to improve skills of workers	3.636	1.242	1	5	-0.353	0.203	-0.374	0.403
Employees of my corporation are always motivated to perform their duties with passion	3.65	1.291	1	5	-0.257	0.203	-0.285	0.403
My corporation has adequate number of staff to perform various tasks	3.566	1.287	1	5	-0.572	0.203	-0.61	0.403
My corporation allocates responsibilities to employees based on their specialization skills	3.762	1.311	1	5	-0.482	0.203	-0.375	0.403
My corporation competitively reward employees based on their qualification and experience	3.755	1.194	1	5	-0.599	0.203	0.015	0.403
Average Mean Score	**3.668**				**-0.439**		**-0.296**	

Source: Research Data (2019)

As shown in Table 4.10, the study found out that the mean score for 8 of the 9 statements was more than 3.5 which meant that a few respondents agreed with the statement while the rest either disagreed or were neutral. The study indicated that engagement of workers on a permanent basis influenced performance with a mean of 3.594, promotions based on performance with a mean of 3.937, conduciveness of the working environment with a mean of 3.636, employee mentorship with a mean of 3.476, employee motivation and adequacy of staff to perform various duties with a mean of 3.65, reward of employees based on qualifications and experience with a mean of 3.566 and allocation of responsibilities based on areas of specialization with a mean of 3.762.

The findings implies even though staffing and retention was viewed to be a practice that influence performance of State corporations, to a larger extent it was revealed that State corporations in the Ministry of Industry, Trade and Cooperatives in Kenya did not provide conducive working environment to worker, involve workers in decision making, motivate workers, increase number of staff, assign duties based on individuals skills and specialization and did not reward workers based on qualifications and experience.

Besides, the Kurtosis test was also run to test the normality of the distribution. The statistics values of kurtosis ranged from -0.194 to 0.533 with the average been -0.296. The values for kurtosis between -2 and +2 are considered acceptable to prove normal univariate distribution (George & Mallery, 2010). This means that the distribution of response values was normal. According to Ho and Yu (2015) If skewness is positive, the data are positively skewed or skewed right, meaning that the right tail of the distribution is longer than the left. If skewness is negative, the data are negatively skewed or skewed left, meaning that the left tail is longer. Notably, the average skewness statistics for strategic staffing and retention was -0.439. Since the value was between -0.5 and 0.5, we thus conclude that the

distribution is approximately symmetric. Consequently, the values of skewness statistics were negative, implying that the left tail was longer.

These findings concur with that of Kasmi (2011), Kiiru (2013), Kwamboka (2016) Ligare (2010) and Manguru (2011) who elucidated that employee motivation spirit was influenced in any competitive organization through rewarding employees based on their knowledge, experience and skills. The studies pointed out that even though matching knowledge and duties allocated to employees was perceived to be a practice of private entities, to a larger extent it was attributed to organizational performance if effectively embraced. Further, it was noted that improving working environment and recognizing workers' effort were directly correlated to organizational performance. It emerged that despite the specialization of individual's workers, most of the employees were assigned general duties which did not stimulate creativity and innovation or adoption of new changes.

4.5.3 Strategic Training and Development

Respondents were requested to indicate the extent to which they agreed strategic training and development influenced performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya and the results were presented as shown in Table 4.11.

Table 4.11: Strategic Training and Development

Statements	Mean	SD	Min	max	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
My corporation conducts training needs assessment to determine the kind of trainings each employee needs to perform effectively	3.539	1.32	1	5	**-0.68**	0.203	-0.641	0.403
My corporation has a mechanism of measuring the impact of employee training	3.699	1.239	1	5	**-0.26**	0.203	-0.41	0.403
My corporation trains workers with a long-term view of customer satisfaction	3.762	1.169	1	5	**-0.421**	0.203	0.103	0.403
My corporation provides timely feedback after performance appraisals	3.72	1.153	1	5	**-0.231**	0.203	0.055	0.403
My corporation conducts career counselling to employees	3.559	1.309	1	5	**-0.367**	0.203	-0.607	0.403
Top management of the corporation encourages lower level workers to advance their studies	3.594	1.206	1	5	**-0.538**	0.203	-0.256	0.403
My corporation sponsors internal employees to further their studies	3.727	1.257	1	5	**-0.215**	0.203	-0.203	0.403
Average Mean Score	3.657				**-0.387**		-0.280	

Source: Research Data (2019)

As shown in Table 4.11, the study found out that the mean score for all the 7 statements was more than 3.5 which meant that most of the respondents agreed with the statement while some either disagreed or were neutral. The results indicated that training and needs assessment influenced performance with a mean of 3.539, mechanisms of measuring impact of employee training with a mean of 3.699, training workers on customer care with a mean of 3.762, timely feedback of evaluations with a mean of 3.72, career counselling of workers with a mean of 3.559, encouragement of workers to advance their studies with a mean of 3.594 and employee sponsorship for further studies with a mean of 3.727. These findings imply that despite the fact that strategic training and development influenced performance, to a larger extent most of the State corporations did not sponsor workers for further studies, did not provide timely feedback after performance appraisal, and did not train workers with long term view of customer satisfaction.

The average statistics of skewness for strategic training and development was -0.387. Since the values were between -0.5 and 0.5, we thus conclude that the distribution is approximately symmetric. The values of skewness statistics were negative implying that both the mean and the median were less than the mode of the data set. A kurtosis test was also run to test the normality of the distribution. The values of kurtosis ranged from -0.203 to 0.103 with the average been -0.280. The values for kurtosis between -2 and +2 are considered acceptable and thus the distribution of response values was normal for all the items regarding strategic training and development.

These findings are in line with that of Wangai (2014), Yamamoto (2011), Thiriku and Were (2016) who acknowledge that there exists a relationship between training and development and organizational performance. The studies point out that even though

development of employee skills requires financial resources, public organizations always find it difficult to train employees due to high cost of training.

4.5.4 Technology

Table 4.12 indicates findings obtained by introducing technology as the moderating variable on the relationship between strategic human resource management practices and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

Table 4.12: Technology

Statements	Mean	S.D	Min	Max	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
My corporation has a automated payroll system	3.734	1.186	1	5	-0.855	0.203	-0.010	0.403
My corporation has a database of all employees	3.825	1.14	1	5	-0.98	0.203	0.328	0.403
My corporation makes payment to suppliers through financial management systems	3.706	1.255	1	5	-0.792	0.203	-0.312	0.403
My corporation has an active website	3.818	1.265	1	5	-0.921	0.203	-0.183	0.403
Employee of my corporation are IT literate	3.566	1.356	1	5	-0.718	0.203	-0.697	0.403
My corporation has HR systems such as biometric	3.678	1.237	1	5	-0.61	0.203	-0.667	0.403
My corporation advertises jobs through websites	3.692	1.333	1	5	-0.918	0.203	-0.336	0.403
Average Mean Score	**3.717**				**-0.828**		**-0.268**	

Source: Research Data (2019)

As illustrated in Table 4.12, the study found out that the mean score for all of the 7 statements was more than 3.5 which meant that a few of the respondents agreed with the statement while the rest either disagreed or were neutral. The findings imply that despite that fact that technology was viewed to influence performance of State Corporations, to a larger extent it was noted that most of the State Corporations did not embrace technological initiatives such as biometric technology to track employee attendance. Furthermore, organizations do not have active websites and advertising jobs on the website was rarely done. In addition, payment of suppliers through systems and periodical activation of websites were activities embraced on a small extent or not at all.

Besides, the Kurtosis test was also run to test the normality of the distribution. The values of kurtosis ranged from -0.010 to 0.328 with the average statistics been -0.26814. The values for kurtosis between -2 and +2 are considered acceptable and thus, the distribution of response values was normal for all the items. The values of skewness statistics were negative, indicating that the data was skewed to the left and both the mean and the median were less than the mode of the data set.

These finding corresponds with that of Spanos and Lioukas (2011), Shikha and Karishma (2012) and Odunga (2011) who noted that technological initiatives such as website development use of emails, teleconferencing and use of biometric technologies was not only a challenge of public entities but also private entities. Success of any technology introduced to any public entity was purely dependent on top leadership and willingness of employees to apply the technology in serving customers.

4.5.5 Performance of State corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

Respondents were requested to indicate their level of agreement with parameters that were used by their entities to measure performance and results were presented as shown in Table 4.13

Table 4.13: Measurement of Performance

Statements	Mean	S.D	Min	Max	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
Effective staff retention and development enhances customer satisfaction	3.664	1.3	1	5	-0.68	0.203	-0.646	0.403
Training and development enhances organizational efficiency	3.664	1.267	1	5	-0.298	0.203	-0.363	0.403
Training and development enhances change implementation	3.825	1.269	1	5	-0.445	0.203	-0.169	0.403
Training and development contributes to minimal complaints	3.678	1.298	1	5	-0.131	0.203	-0.350	0.403
Succession plans enhances corporate image	3.797	1.231	1	5	-0.484	0.203	0.109	0.403
Recruitment plans adopted by my corporation enhances efficiency	3.532	1.342	1	5	-0.3725	0.203	-0.588	0.403
Succession plans reflects effectiveness of service delivery	3.629	1.208	1	5	0.4537	0.203	-0.396	0.403
Retirement plans promotes employee morale to perform	3.587	1.375	1	5	-0.786	0.203	-0.582	0.403
Average Mean Score	**3.672**	**1.3**			**-0.343**		**-0.373**	

Source: Research Data (2019)

As shown in Table 4.13, the results indicate that the mean scores for the 9 statements were more than 3.5 which meant that most of the respondents agreed with the statements. This finding implies that to a larger extent strategic human resources management practises adopted by State-owned Corporations in the Ministry of Industry, Trade and Cooperatives had an influence on performance in terms of customer satisfaction, organizational efficiency, change implementation, minimal complaints recorded, improved image and improved employee morale.

The average statistics for skewness for performance was -0.343. Since the values were between -0.5 and 0.5, we thus conclude that the distribution is approximately symmetric. The values of skewness statistics were negative, indicating that the data was skewed to the left and both the mean and the median were less than the mode of the data set. A kurtosis test was also run to test the normality of the distribution. The values of kurtosis statistics ranged from -0.169 to 0.109 with an average been -0.373. The values for kurtosis between -2 and +2 are considered acceptable and thus, the distribution of response values was normal for all the items. These findings are in line with that of Ngatia (2011), Namusonge et al. (2014) and Mutia (2011) who noted that any competitive organization can measure its performance using return on investment, customer satisfaction, organizational learning, and innovation and employee morale.

4.6 Statistical modelling

The study constructs (latent variables) yielded from dimension reduction of the indicators of each of the hypothesised study variables were sued in statistical modelling (inferential analysis). The analysis in this section was aimed at assessing the relationships between the study variables, testing study hypotheses and drawing conclusions on the study

objectives. The techniques used included statistical modelling where correlation analysis was carried out and regression models fitted.

The regression models were fitted based on ordinary least squares which are bound by linear regression assumptions of normality, homoscedasticity, non-autocorrelation of model residuals, and linearity and non-multicollinearity of the independent variables. These assumptions were therefore tested on the models fitted.

4.6.1 Normality Test

Linear regression models are fitted on the assumption that the model residuals follow and normal distribution. A normal distribution is attributed to non-skewed (skewness of 0) and meso-kurtic (Kurtosis of 3) distribution. The model residuals were therefore assessed and as attributed to a normal distribution; the histogram of the model residuals in figure 4.2 shows a bell shaped featuring a possible normal distribution.
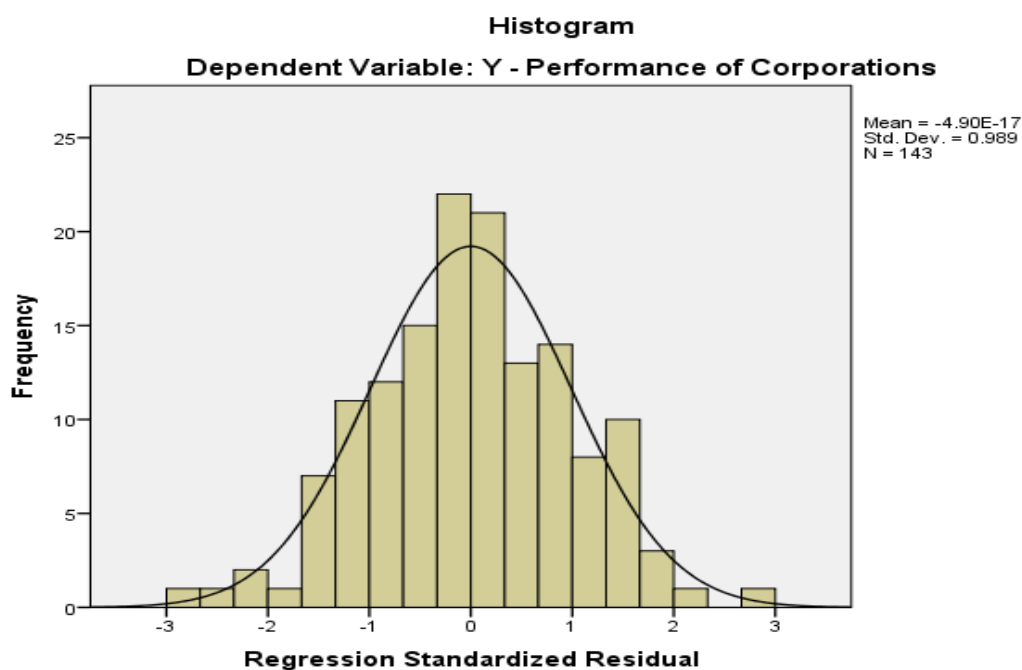
Figure 4.2: Normality histogram

Source: Research Data (2019)

To confirm the normality of the model residuals with statistical significance, the Shapiro-Wilk test was carried out. According to Guest (2010), a variable is normally distributed if the Shapiro-Wilk statistic p-value is greater than 5%. As shown in table 4. 5, he p-value of the Shapiro-Wilk statistic of the model residuals was found to be 0.951 which is greater than 0.05 implying that the model residuals follow an normal distribution thus the normality assumption was met.

Table 4.14: Normality Test

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.036	143	.200*	.996	143	.951

Source: Research Data (2019)

4.6.2 Linearity Test

Correlation analysis and linear regression models are also fitted on the assumption that the independent variables each have a linear relationship with the dependent variable. Simple scatter plots that are non-statistical tests of the linearity assumptions were used as shown in appendix 5 between the dependent variable performance and each of the independent variables.

They all show lines of best fits of linear nature between the variables and performance. An Analysis of variance (ANOVA) test for linearity was carried out to confirm linearity of assumption as shown in Table 4. 6. Linearity is attributed to a p-value of the F-statistic for the nonlinear component of the ANOVA being less than 0.05 (Garson, 2012).

Table 4.15: ANOVA Linearity Test

Predictors	Sum of Squares	Sum of Squares	Sum of Squares	df	Mean Square	F	Sig.
X1	Between Groups	(Combined)	138.406	128	1.081	4.212	0.002
		Linearity	69.905	1	69.905	272.003	0.000
		Deviation from Linearity	**68.501**	**127**	**0.539**	**2.099**	**0.058**
	Within Groups		3.594	14	0.257		
	Total		142	142			
X2	Between Groups	(Combined)	140.505	135	1.041	4.874	0.016
		Linearity	56.515	1	56.515	264.689	0.000
		Deviation from Linearity	**83.990**	**134**	**0.627**	**2.936**	**0.066**
	Within Groups		1.495	7	0.214		
	Total		142	142			
X3	Between Groups	(Combined)	138.162	121	1.142	6.248	0.000
		Linearity	98.729	1	98.729	539.500	0.000
		Deviation from Linearity	**39.433**	**120**	**0.329**	**1.796**	**0.061**
	Within Groups		3.838	21	0.183		
	Total		142	142			

Source: Research Data (2019)

Table 4.15, reveals that there exists no significant non-linear relationship between performance and strategic human resource planning (F=2.099, p=0.058>0.05), staffing and retention (F=2.936, p=0.066>0.05), and training and development (F=1.796, p=0.061>0.05), at 5% level of significance. The findings therefore reveal only linear

significant relationships between the dependent variable and each of the independent variables.

4.6.3 Homogeneity of variance Test

Another linear model assumption on the model residuals is that of homogeneity of variance (homoscedasticity). Linear models are fitted on the assumption that the residuals exhibit homoscedasticity. Homogeneity is attributed to a scatter plot of the model residuals against the predicted values that does not portray any linear patterns of decreasing or increase functions as shown in the figure from the model residuals generated in this study. Figure 4.3 shows scatter plots portraying random distribution of the residuals about zero as is also assumed that the mean of the model residuals should be zero.
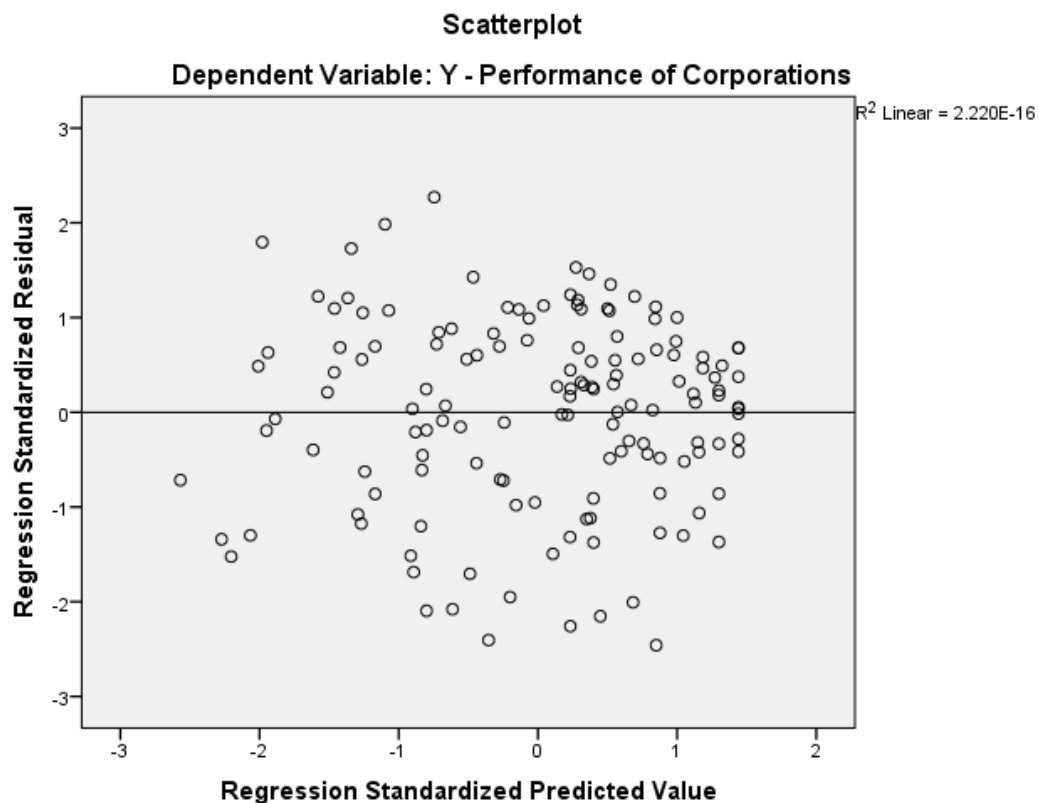
Figure 4. 3: Standardized residuals plot

Source: Research Data (2019)

4.6.4 Multicollinearity Test

Table 4. 7 indicates results of multicollinearity test. Linear regression models are fitted based on the assumption that the independent variables do note exhibit multicollinearity thus each of the predictors is independent and cannot be expressed as a linear function of the other independent variable. Variance inflation factors and the tolerances for each independent variable were generated as multicollinearity diagnostics.

Table 4. 5: Multicollinearity Test

Independent variable	Tolerance	VIF
Strategic Human Resource Planning	0.554	1.805
Strategic Staffing and Retention	0.724	1.381
Strategic Training and Development	0.434	2.304
Mean VIF		1.830

Source: Research Data (2019)

Table 4.16 indicates that all the study exogenous variables were independent of the other predictors as assumed in linear models. Multicollinearity is attributed to VIFs greater than 5 and tolerances less than 0.2 Collis and Hussey (2014). All the VIFs for the independent variables of the study were less than 5 implying non-multicollinearity amongst the predictors as assumed in linear models.

4.6.5 Autocorrelation test

Another linear model assumption tested was that of non-autocorrelation (independence) of the model residuals. The Durbin-Watson (d) test was used to check for existence of autocorrelation of the residuals. As shown in, the calculated D-W statistic of 2.048 is larger than the upper tabulated value (1.774) for a model with 3 regressors and a sample size of 150. This is an indication that the residuals are not serially related thus the non-

autocorrelation assumption is met. The from Durbin-Watson tables for the tabulated upper and lower limits was based on the Durbin Watson tables at 5% level of significance as shown in appendix 6.

Table 4. 17: Autocorrelation test

Model Durbin-Watson	Lower limit	Upper limit
2.048	1.693	1.774

Source: Research Data (2019)

4.6.6 Correlation Analysis

Pearson's product correlation analysis was used to assess the relationship between the predictor variables (strategic human resource planning, strategic staffing and retention strategic training and development) on the dependent variable (performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya as shown in Table 4.18.

Table 4.18: Correlations Analysis

		X1 - Strategic Human Resource Planning	X2 - Strategic Staffing and Retention	X3 - Strategic training and development	Z - Technology	Y - Performance of Corporations
X1	Pearson Corr	1.000				
	Sig. (2-tailed)					
X2	Pearson Corr	.175*	1.000			
	Sig. (2-tailed)	0.037				
X3	Pearson Corr	.647**	.491**	1.000		
	Sig. (2-tailed)	0.000	0.000			
Z	Pearson Corr	.271**	.184*	.291**	1.000	
	Sig. (2-tailed)	0.001	0.027	0.000		
Y	Pearson Corr	.590**	.631**	.677**	.348**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	

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

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

Source: Research Data (2019)

As shown in Table 4.18, the results indicate that there is positive significant relationship between (Strategic Human Resource Planning, Strategic Staffing and Retention, Strategic Training and Development) on the dependent variable (Performance of Corporations). Performance of the state corporations was found to have a significant relationship with Strategic human resource planning (r = .590, p=0.000<0.05), Strategic training and development (r = .631, p = 0.000<0.05), Strategic training and development (r = .677, p =0.000<0.05) at the 0.05 level in a two tailed test.

Similarly, the relationship between technology and performance of State corporations in the Ministry of Industry, Trade and Cooperatives in Kenya was moderate and statistically significant (r=0.348, p-value=0.000<0.05). These results imply that there exists a strong positive relationship between consolidated strategic human resource management predictor variables and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya

This study was based on the premise that there is a relationship between strategic human resource management practices and performance of State-owned entities but this relationship was moderated by technology. To establish the statistical significance of the respective hypotheses, simple and multiple linear regressions analysis were conducted at 95% confidence level.

4.6.7 Regression Analyses and Hypotheses Testing of Hypotheses 1

H_{01}: There was no relationship between strategic human resource planning and performance of State corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

Table 4.19: Regression Results of Strategic Human Resource planning and Performance of State-owned Corporations

(a) Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.590a	0.348	0.343	0.810

(b) ANOVA (The Overall Significance)						
Model		Sum of Squares	df	Mean Square	F	Sig.(p-value)
1	Regression	49.398	1	49.398	75.215	.000b
	Residual	92.602	141	0.657		
	Total	142.000	142			

(c) The Model coefficients						
		Unstandardized Coefficients		Standardized Coefficients		Sig.(p-value)
Model		B	Std. Error	Beta	t	
1	(Constant)	0.000	0.068		0.000	1.000
	Strategic Human Resource Planning	0.590	0.068	0.590	8.673	0.000

Predictor: (Constant), Strategic Human Resource Planning

Dependent Variable: Performance of State Corporations

Source: Research Data (2019)

The results in Table 4. 19 indicate that strategic human resource planning had a statistically significant influence on Performance State Corporations. The results show that Strategic Human Resource Planning explained 34.8 % of variation in Performance of State Corporations (R^2=.348). The remaining 65.2% of the variance in Performance of State Corporations is explained by other factors not included in this linear model. The standardized regression coefficient (β) value of the computed scores of strategic human resource planning was .590 with a t-statistic of 8.673 and a p-value of 0.000. Since the p-value of the t-statistic was found to be less than 0.05, the null hypothesis was rejected and a conclusion drawn that strategic human resource planning has a significant relationship with performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. The coefficient indicates that increasing strategic human resource planning by a unit increases the performance of the state corporations by 0.590 units as indicated by the equation below generated from the model.

$$Y = 0.00 + 0.590X + \varepsilon$$

These findings are consistent with that of Ogolla (2007), Ibullah et al. (2016), Shikha and Karishma (2012) who found out that strategic human resource planning was directly correlated with organizational performance. The null hypothesis was rejected at 95% confidence level and the study concluded that strategic human resource planning had a statistical significant effect on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

4.6.8 Regression Analyses and Hypotheses Testing of Hypotheses 2

H02: There was no relationship between strategic staffing and retention and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

Table 4.20: Regression Results of Strategic Staffing and Retention and Performance of State-owned Corporations.

(a) Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.631a	0.398	0.394	0.779

(b) ANOVA (The Overall Significance)					
Model	Sum of Squares	df	Mean Square	F	Sig.(p-value)
1 Regression	56.515	1	56.515	93.218	.000b
Residual	85.485	141	0.606		
Total	142.000	142			

(c) The Model coefficients					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.(p-value)
1 (Constant)	0.000	0.065		0.000	1.000
Strategic Staffing and Retention	0.631	0.065	0.631	9.655	0.000

Predictor: (Constant), Strategic Staffing and Retention

Dependent Variable: Performance of State Corporations

Source: Research Data (2019)

The results in Table 4.20 depicts that the relationship between Strategic Staffing and Retention and Performance of State Corporations is statistically significant. According to the results, Strategic Staffing and Retention explained 39.8 % of variation in performance of the state corporations (R^2=.398). The standardized regression coefficient (β) value of the computed score of strategic staffing and retention was .631 with a t-test of 9.655 and significance level of p-value=. 000. Since the p-value of the t-statistic was found to be less than 0.05, the null hypothesis was rejected and a conclusion drawn that Strategic Staffing

and Retention has a significant relationship with performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. The coefficient indicates that increasing Strategic Staffing and Retention by a unit increases the performance of the state corporations by 0.631 units as indicated by the equation below generated from the model.

$$Y = 0.00 + 0.631X + \varepsilon$$

The results indicate a linear dependence of Performance of State Corporations on strategic staffing and retention previous studies by Kasmi (2011), Kiiru (2013) and Kwamboka (2016) concur that strategic staffing and retention is a function of organizational performance from context to context. The null hypothesis was rejected at 95% confidence level and the study concluded that strategic staffing and retention had a statistical significant effect on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

4.6.9 Regression Analyses and Hypotheses Testing of Hypotheses 3

H_{03}: There was no relationship between strategic training and development and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

Table 4.21: Regression Results of Strategic Training and Development and Performance of State-owned Corporations.

(a) Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.677a	0.458	0.454	0.739

(b) ANOVA (The Overall Significance)						
Model		Sum of Squares	df	Mean Square	F	Sig.(p-value)
1	Regression	64.994	1	64.994	119.005	.000b
	Residual	77.006	141	0.546		
	Total	142.000	142			

(c) The Model coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.(p-value)
1	(Constant)	0.000	0.062		0.000	1.000
	Strategic Training and Development	0.677	0.062	0.677	10.909	0.000

Predictor: (Constant), Strategic Training and Development

Dependent Variable: Performance of State Corporations

Source: Research Data (2019)

The findings in Table 4.21 indicate that the relationship between strategic training and development and performance of State-owned Corporations is statistically significant. Strategic Training and Development was found to explain 45.8% of variation in performance of state corporations (R^2=.458). The standardized regression coefficient (β) value of the computed scores of strategic staffing and retention was .677 with a t-statistic of 10.909 and a p-value of .000. Since the p-value of the t-statistic was found to be less than 0.05, the null hypothesis was rejected and a conclusion drawn that Strategic Training and Development has a significant relationship with performance of State-owned

Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. The coefficient indicates that increasing Strategic Training and Development by a unit increases the performance of the state corporations by 0.677 units as indicated by the equation below generated from the model.

$$Y = 0.00 + 0.677X + \varepsilon$$

The findings contradict that of Yamamoto (2011), Thiriku and Were (2016) who revealed that there exists a difference between training and development form one organization to another. The null hypothesis was rejected at 95% confidence level and the study concluded that strategic training and development had a statistical significant effect on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

4.6.10 Combined effect model of strategic human resource management practices on Performance of State-owned Corporations

A multiple regression model was fitted to assess the joint effect of strategic human resource management practices on Performance of State-owned Corporations. This involved including all the independent variables in one regression model. The results are shown in Table 4.22.

Table 4.22: Regression Results of the joint effect of strategic human resource management practices on Performance of State-owned Corporations

(a) Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.808a	0.654	0.646	0.595

(b) ANOVA (The Overall Significance)						
Model		Sum of Squares	df	Mean Square	F	Sig.(p-value)
1	Regression	92.817	3	30.939	87.440	.000b
	Residual	49.183	139	0.354		
	Total	142.000	142			

(c) The Model coefficients						
		Unstandardized Coefficients		Standardized Coefficients		Sig.(p-value)
Model		B	Std. Error	Beta	t	
1	(Constant)	0.000	0.050		0.000	1.000
	Strategic Human Resource Planning	0.376	0.067	0.376	5.603	0.000
	Strategic Staffing and Retention	0.464	0.059	0.464	7.918	0.000
	Strategic Training and Development	0.205	0.076	0.205	2.712	0.008

Predictor: (Constant), Strategic Human Resource Planning, Strategic Staffing and Retention, Strategic Training and Development

Dependent Variable: Performance of State Corporations

Source: Research Data (2019)

The results in Table 4.22 indicate that strategic human resource management practices statistically significant influence Performance of State Corporations. The practices combined effect explained 65.4 % of the variance in performance of state corporations. (R^2=.654). Other non-strategic human resource management factors not included in this study explain the remaining factor 34.6% of the variance in performance of state corporations. Since the p-values of the t-statistics of all the 3 predictors (strategic human resource management practices) were found to be less than 0.05 strategic human resource

management practices significantly influence the performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. The equation generated from the estimated model is shown model.

$$Y = 0.00 + 0.376X_1 + +0.464X_2 + 0.205X_1 + \varepsilon$$

4.6.11 Testing of Hypotheses 4

H$_{04}$: There was no significant moderating effect of technology on the relationship between strategic human resource management practices on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

This objective was assessed by carrying out a moderated multiple regression model as shown in Table 4. 6. The moderated multiple regression was carried out in 3 stages where stage one is a multiple regression model with all the 3 independent variables (human resource management practices). In stage 2 the moderating variable (technology) was added to the model and in stage three the interaction terms between the moderating variable were included in the model and the change in the model explanatory power assessed. The interaction terms between the moderator and the independent variables were calculated as cross products between the variables and the moderator. A moderating effect was assessed and attributed to significant change in the R-square (explanatory power on addition of the interaction terms and also significant coefficient estimates of the interaction terms.

Table 4:23: Regression Results of the Moderating effect of Technology on the Relationship between Strategic Human Resource Management (SHRM) Practices and Performance of State-owned Corporations.

Model Summary[d]									
		R Square	**Adjusted R Square**	**Std. Error of the Estimate**	**Change Statistics**				
Model	**R**				**R Square Change**	**F Change**	**df1**	**df2**	**Sig. F Change**
1	.808a	0.654	0.646	0.595	0.654	87.440	3	139	0.000
2	.815b	0.665	0.655	0.587	0.011	4.638	1	138	0.033
3	.869c	0.755	0.742	0.508	0.090	16.535	3	135	0.000

The Overall Significance						
Model		**Sum of Squares**	**df**	**Mean Square**	**F-value**	**Sig.(p-value)**
1	Regression	92.817	3	30.939	87.440	.000b
	Residual	49.183	139	0.354		
	Total	142.000	142			
2	Regression	94.416	4	23.604	68.456	.000c
	Residual	47.584	138	0.345		
	Total	142.000	142			
3	Regression	107.202	7	15.315	59.414	.000d
	Residual	34.798	135	0.258		
	Total	142.000	142			

(c) Model coefficients						
		Unstandardized Coefficients		**Standardized Coefficients**		
Model		**B**	**Std. Error**	**Beta**	**t**	**Sig.**
1	(Constant)	0.000	0.050		0.000	1.000
	X1 -Strategic Human Resource Planning	0.376	0.067	0.376	5.603	0.000
	X2 - Strategic Staffing and Retention	0.464	0.059	0.464	7.918	0.000
	X3 - Strategic training and development	0.205	0.076	0.205	2.712	0.008
2	(Constant)	0.000	0.049		0.000	1.000
	X1 -Strategic Human Resource Planning	0.357	0.067	0.357	5.355	0.000
	X2 - Strategic Staffing and Retention	0.455	0.058	0.455	7.832	0.000
	X3 - Strategic training and development	0.189	0.075	0.189	2.521	0.013
	Z - Technology	0.315	0.146	0.112	2.154	0.033
3	(Constant)	-0.144	0.047		-3.052	0.003
	X1 -Strategic Human Resource Planning	0.422	0.059	0.422	7.115	0.000
	X2 - Strategic Staffing and Retention	0.433	0.051	0.433	8.530	0.000

X3 - Strategic training and development	0.237	0.066	0.237	3.599	0.000
Z – Technology	0.051	0.132	0.018	0.388	0.699
X1 interaction Z	0.518	0.163	0.165	3.187	0.002
X2 interaction Z	0.566	0.167	0.173	3.384	0.001
X3 interaction Z	0.564	0.196	0.152	2.870	0.005

a Predictors: (Constant), X3 - Strategic training and development, X2 - Strategic Staffing and Retention, X1 -Strategic Human Resource Planning

b Predictors: (Constant), X3 - Strategic training and development, X2 - Strategic Staffing and Retention, X1 -Strategic Human Resource Planning, Z - Technology

c Predictors: (Constant), X3 - Strategic training and development, X2 - Strategic Staffing and Retention, X1 -Strategic Human Resource Planning, Z - Technology, X2Z, X1Z, X3Z

d Dependent Variable: Y - Performance of Corporations

Source: Research Data (2019)

The results in Table 4.23 show that SHRM Practices and Technology explained 75.5% of the variation in Performance of State Corporations(R^2=.755). As shown in model 3, there was a change in R-square from .665 to .755 (R^2change=0.090) when the interaction terms between SHRM Practices and Technology was added. The change was statistically significant at α=0.05 (F-change =8.162, p-value=.000). In this regard, the results indicate a that technology significantly moderate the relationship between, performance and SHRM Practices jointly. On assessing the interaction terms between technology and each independent variable, technology was found to significantly moderate the relationship between each dimension of SHRM practices and performance. Each interaction term was found to have significant estimates with p-values less than 0.05.

Table 4.24: Summary of Hypotheses Testing

	Hypotheses	Results	Decision	Conclusion
H_{01}	Strategic Human Resource Planning	β=0. 590 $P < 0.05$	Reject null hypothesis and adopt alternative hypothesis	Strategic human resource planning has s a positive statistical significant effect on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.
H_{02}	Strategic Staffing and Retention	β=0. 631 $P < 0.05$	Reject null hypothesis and adopt alternative hypothesis	Strategic staffing and retention has a positive statistical significant effect On performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.
H_{03}	Training and Development	β=0.667 $P < 0.05$	Reject null hypothesis and adopt alternative hypothesis	Strategic training and development has a positive statistical significant effect on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.
H_{04a}	Technology	β=0.51 $P < 0.05$	Reject null hypothesis and adopt alternative hypothesis	Technology has a statistically significant effect on the relationship between Strategic Human Resource Planning and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.
H_{04b}	Technology	β=0.566 $P < 0.05$	Reject null hypothesis and adopt alternative hypothesis	Technology has a statistically significant effect on the relationship between Strategic Staffing and Retention and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.
H_{04c}	Technology	β=0.564 $P < 0.05$	Reject null hypothesis and adopt alternative hypothesis	Technology has a statistically significant effect on the relationship between Training and Development and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya.

Source: Research Data (2019)

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter provides the summary of the research findings based on the research objectives. The research objectives were to determine the effect of strategic human resource planning, strategic staffing and retention and strategic training and development and the moderating effect of technology on performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. Further, conclusions and recommendations were provided and finally recommendations for further studies.

5.2 Summary of Findings

The study revealed that there exists a positive significant relationship between strategic human resource planning and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. However, it was noted that to some extent State-owned Corporations were not embracing competitive recruitment criteria and do not conduct needs assessment before recruiting workers. This has led to problems such as inadequate number of staff with sufficient knowledge and skills to perform particular technical tasks, inability to anticipate number of workers to replace retiring, dying and resigning employees.

The study found out that there exists a positive significant relationship between strategic staffing and retention and performance of State corporations. However, it emerged that to some extent issues of staffing and retention were of great concern. Inability to involve workers in decision making, poor working conditions, unclear duties, inability to nature talents and motivate workers, using trainings and recognition were among the factors that contributed to deteriorating performance of State-owned Corporations in the Ministry of

Industry, Trade and Cooperatives in terms of employee turnover, low morale and lack of creativity and innovation among workers.

The study established that there exists a positive significant relationship between strategic training and development and performance of State Corporation in the Ministry of Industry, Trade and Cooperatives. Although, it was observed majority of the workers of State-owned Corporations did not have relevant skills and knowledge to execute their duties and responsibilities more effectively. Inability to conduct employee needs assessment, allocate training budgets, failure to provide feedback after performance appraisal, were among the factors that hampered performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives.

It was established by the study that there exists a positive significant effect of technology on the relationship between strategic human resource management practices and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya. However, it was noted that most of the State-owned Corporations were experiencing a number of challenges when new technology was introduced. Inability to use biometric technology, inability to upgrade systems of service delivery such as websites were among the factors that were attributed to deteriorating performance of State-owned Corporations.

5.3 Conclusions

The study concludes that despite the fact that there was a positive significant relationship between strategic human resource planning and performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya, there exists challenges of understaffing, inadequate skills among workers to perform technical tasks and inappropriate human resource plans.

The study established that State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya are experiencing staffing and retention challenges such as inability to involve staff in decision making, failure to reward employees based on their qualifications, and failure to allocate responsibilities based on specialized skills.

It emerged that despite the fact that there was a relationship between training and development and performance of State Corporations, a number of challenges such as conducting employee needs assessment, lack of timely feedback and failure to sponsor employees for further studies were experienced. The study noted that technology had a positive significant moderating effect on the relationship between strategic human resource management practices and performance of State corporations though challenges such as inability to use biometric, and failure to upgrade websites to improve customer service delivery were experienced.

In conclusion, the findings of the study agree with previous empirical works Ligare, (2010) and Ngatia (2011) that for any organization to be competitive, issues of human resource planning, employees staffing and retention and training and development should be addressed. Mulinge (2014) established that technology integration into the system results in increased profits of firms in developing and developed countries

5.4 Recommendations

5.4.1 Contributions to the Management

The state corporations need to develop and operationalize human resource plans to ensure the right number of staff with the right skills are available to discharge the functions of the organization at any given time hence enhancing performance. The corporations need also to ensure succession plans are developed to facilitate replacement of employees exiting the organizations through retirement, death or resignation among others to

facilitate continuity of operations. The study recommends the state corporations need to provide staff with a conducive work environment which should include among others provision of working tools, a clean work environment, and ensuring wellness of staff.

The corporations should also develop a policy of staff involvement/participation when making decisions that affect them and while developing policies. Thirdly they need to have operational policy on promotion and reward whereby staff should be promoted/rewarded based on performance, qualifications and experience. Employees also need to be deployed to perform duties and responsibilities that match their skills this will enhance performance since they will be motivated discharge their assignments. Besides all employees irrespective of the level in the organization must be issued with a job description on reporting on first appointment, this will set clearly what is expected of the employee.

The study recommends the development of the training programs that will assess and determine the skill gaps for each employee and thereafter develop an annual training and development plan based on the identified performance skill gaps. The corporations need to be conducting annual training and development impact surveys to ascertain the return on investment and influence on organizational performance. Thirdly, organizations should support employees by sponsoring them to pursue both long term and short-term courses that aim to build their technical capacity for enhanced performance.

The policy on performance appraisal should ensure that the exercise is so interactive between the appraiser and the appraisee' and its feedback must be provided on time for corrective action purposes. The organizations are also recommended to develop policies that will encourage staff to pursue self-development courses by refunding a percentage of

the amount spent on tuition and examination. This will motivate staff to acquire skills that will enhance organizational performance.

The study recommends the organizations to automate their systems including, Payroll management, payment of suppliers, recruitment, leave management, performance appraisal, fleet management, attendance schedule/biometrics and staff skills inventory database for purposes of achieving efficiency and effectiveness. They should always update their websites with all the information that is relevant to the public and other key stakeholders.

5.4.2 Contributions to Further Studies

Since the study was limited to four consolidated variables which include: strategic human resource planning, strategic staffing and retention strategic training and development including technology which was a moderating variable, the study suggests that other researchers should seek to investigate other variables in isolation or in a consolidated form and their influence on performance in other State entities in Kenya.

Since this study focused mainly in the public sector it is also recommended that other researches may conduct a similar study in the private sector to for purposes of comparing the findings. Other studies should seek to test the moderating and intervening variables such as management policies and employee commitment on the relationship between strategic human resource management practices and organizational performance. Other researchers should seek to replicate a similar study in other countries. Furthermore, researchers should go ahead and conduct comparative studies among countries in East Africa such Uganda, Tanzania and Rwanda to compare the findings in terms of performance of State-owned Corporations.

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APPENDICES

Appendix 1: Introductory Letter

C/O

MOI UNIVERSITY

TO WHOM IT MAY CONCERN

Dear Respondent,

REF: MASTER OF SCIENCE IN HUMAN RESOURCE DEVELOPMENT PROPOSAL

I am a student pursuing a Master of Science in Human resource development degree. As a requirement of the program, am required to carry out a research study on: **" Influence Strategic Human Resource Management Practices and Technology on Performance of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives in Kenya"**

I hope that this study will result to findings that would lead to beneficial recommendations on the improved services to State corporation customers. In addition, this information will help policy makers and practitioners to develop strategies that will result to enhanced employee satisfaction thus improved service delivery. Information given will be treated with utmost good faith and confidentiality.

Yours Faithfully

Sign_____

David Etyang Idewa

Appendix 2: Questionnaire for Employees of State-owned Corporations in Kenya

SECTION A: BACKGROUND INFORMATION

Please tick [√] the appropriate box as provided.

1) **Gender of the Respondent**

   Male [ ]   Female   [ ]

2) **Age   of the Respondent**

   Below 25   years   (   )   26 to 35 years   (   )

   36 to 45 years   (   )   46 years and above   (   )

   What is your Highest Level of Education?

   Postgraduate   [ ]   Bachelors Degree   [ ]

3) **Indicate your period of service in your organization?**

   Below 6years   [ ] 7 to 11 years [ ]   12 years and above   [ ]

SECTION B: STRATEGIC HUMAN RESOURCE MANAGEMENT PRACTICES

PART A: STRATEGIC HUMAN RESOURCE PLANNING AND ORGANIZATIONAL PERFORMANCE

4) Indicate your level of agreement with the following statements concerning the effect of strategic human resource planning and performance of your corporation (5=strongly agree, 4= Agree, 3= Neutral 2 =disagree, 1=strongly disagree)

Statement	1	2	3	4	5
My corporation recruits employees on a competitive criteria					
My corporation recruits employees with diverse knowledge and experience					
My corporation has a clear policy of employee succession					
My corporation conducts needs assessment before recruiting workers					
My corporation has the capacity to forecast future number of workers to accomplish particular tasks					
My corporation has clear policies that demonstrates how employees are engaged and rewarded after retirement					
My corporation has a clear policy that stipulates how employees in each cadre are rewarded					

PART B: STRATEGIC STAFFING AND RETENTION AND ORGANIZATIONAL PERFORMANCE

5) Indicate your level of agreement with the following statements concerning the effect of strategic staffing and retention and performance of your corporation (5=strongly agree, 4= Agree, 3= Neutral 2 =disagree, 1=strongly disagree)

Statement	1	2	3	4	5
My corporation has adequate number of staff to perform various tasks					
My corporation allocates responsibilities to employees based on their specialization skills					
My corporation competitively reward employees based on their qualification and experience					
My corporation engages workers on permanent basis					
My corporation provides conducive working environment for all workers					
corporation management incorporates views of employees when making key decision making					
My corporation promotes workers based on their performance					
My corporation has a mentorship program that aims to improve skills of workers					
Employees of my corporation are always motivated to perform their duties with passion					

SECTION C: STRATEGIC EMPLOYEE TRAINING AND DEVELOPMENT AND ORGANIZATIONAL PERFORMANCE

6) Indicate your level of agreement with the following statements concerning the effect of strategic training and development on performance of your corporation (5=strongly agree, 4= Agree, 3= Neutral 2 =disagree, 1=strongly disagree)

Statement	1	2	3	4	5
Top management of the corporation encourages lower level workers to advance their studies					
My corporation sponsors internal employees to further their studies					
My corporation conducts training needs assessment to determine the kind of trainings each employee needs to perform effectively					
My corporation has a mechanism of measuring the impact of employee training					
My corporation trains workers with a long term view of customer satisfaction					
My corporation provides timely feedback after performance appraisals					
My corporation conducts career counselling to employees					

SECTION D: TECHNOLOGY AND ORGANIZATIONAL PERFORMANCE

7) Indicate your level of agreement with the following statements concerning the effect of technology on performance of your corporation (5=strongly agree, 4= Agree, 3= Neutral 2 =disagree, 1=strongly disagree)

Statement	1	2	3	4	5
My corporation has an active website					
Employee of my corporation are IT literate					
My corporation has HR systems such as biometric					
My corporation advertises jobs through websites					
My corporation has a automated payroll system					
My corporation has a database of all employees					
My corporation makes payment to suppliers through financial management systems					

SECTION D: ORGANIZATIONAL PERFORMANCE

8) Indicate your level of agreement with the following statements concerning the parameters of performance of your corporation (5=strongly agree, 4= Agree, 3= Neutral 2 =disagree, 1=strongly disagree)

Statement	1	2	3	4	5
Effective staff retention and development enhances customer satisfaction					
Training and development enhances organizational efficiency					
Training and development enhances change implementation					
Training and development contributes to minimal complaints					
Succession plans enhances corporate image					
Recruitment plans adopted by my corporation enhances efficiency					
Succession plans reflects effectiveness of service delivery					
Retirement plans promotes employee morale to perform					

Thank you for your Cooperation

Appendix 3: Factor loadings matrix

	Indicator/ Item	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5
BA1	My corporation recruits employees on a competitive criteria	0.803				
BA2	My corporation recruits employees with diverse knowledge and experience	0.749				
BA3	My corporation has a clear policy of employee succession	0.864				
BA4	My corporation conducts needs assessment before recruiting workers	0.813				
BA5	My corporation has the capacity to forecast future number of workers to accomplish particular tasks	0.651				
BA6	My corporation has clear policies that demonstrates how employees are engaged and rewarded after retirement	0.721				
BA7	My corporation has a clear policy that stipulates how employees in each cadre are rewarded	0.608				
BB1	My corporation has adequate number of staff to perform various tasks		0.748			
BB2	My corporation allocates responsibilities to employees based on their specialization skills		0.8			
BB3	My corporation competitively reward employees based on their qualification and experience		0.86			
BB4	My corporation engages workers on permanent basis		0.848			
BB5	My corporation provides conducive working environment for all workers		0.585			
BB6	corporation management incorporates views of employees when making key decision making		0.669			
BB7	My corporation promotes workers based on their performance		0.546			
BB8	My corporation has a mentorship program that aims to improve skills of workers		0.599			
BB9	Employees of my corporation are always motivated to perform their duties with passion		0.519			
C1	Top management of the corporation encourages lower level workers to advance their studies			0.835		

|			
C2	My corporation sponsors internal employees to further their studies	0.752	
C3	My corporation conducts training needs assessment to determine the kind of trainings each employee needs to perform effectively	0.872	
C4	My corporation has a mechanism of measuring the impact of employee training	0.803	
C5	My corporation trains workers with a long term view of customer satisfaction	0.647	
C6	My corporation provides timely feedback after performance appraisals	0.7	
C7	My corporation conducts career counselling to employees	0.589	
D1	Top management of the corporation encourages lower level workers to advance their studies	0.812	
D2	My corporation sponsors internal employees to further their studies	0.735	
D3	My corporation conducts training needs assessment to determine the kind of trainings each employee needs to perform effectively	0.85	
D4	My corporation has a mechanism of measuring the impact of employee training	0.8	
D5	My corporation trains workers with a long term view of customer satisfaction	0.651	
D6	My corporation provides timely feedback after performance appraisals	0.711	
D7	My corporation conducts career counselling to employees	0.581	
E1	Recruitment plans adopted by my corporation enhances efficiency		0.785
E2	Succession plans reflects effectiveness of service delivery		0.814
E3	Retirement plans promotes employee morale to perform		0.835
E4	Effective staff retention and development enhances customer satisfaction		0.858
E5	Training and development enhances organizational efficiency		0.64
E6	Training and development enhances change implementation		0.653
E7	Training and development contributes to minimal complaints		0.521
E8	Succession plans enhances corporate image		0.607

Appendix 4: Scatter plots for linearity assumption checks

R² Linear = 0.398

0.000+0.631*x
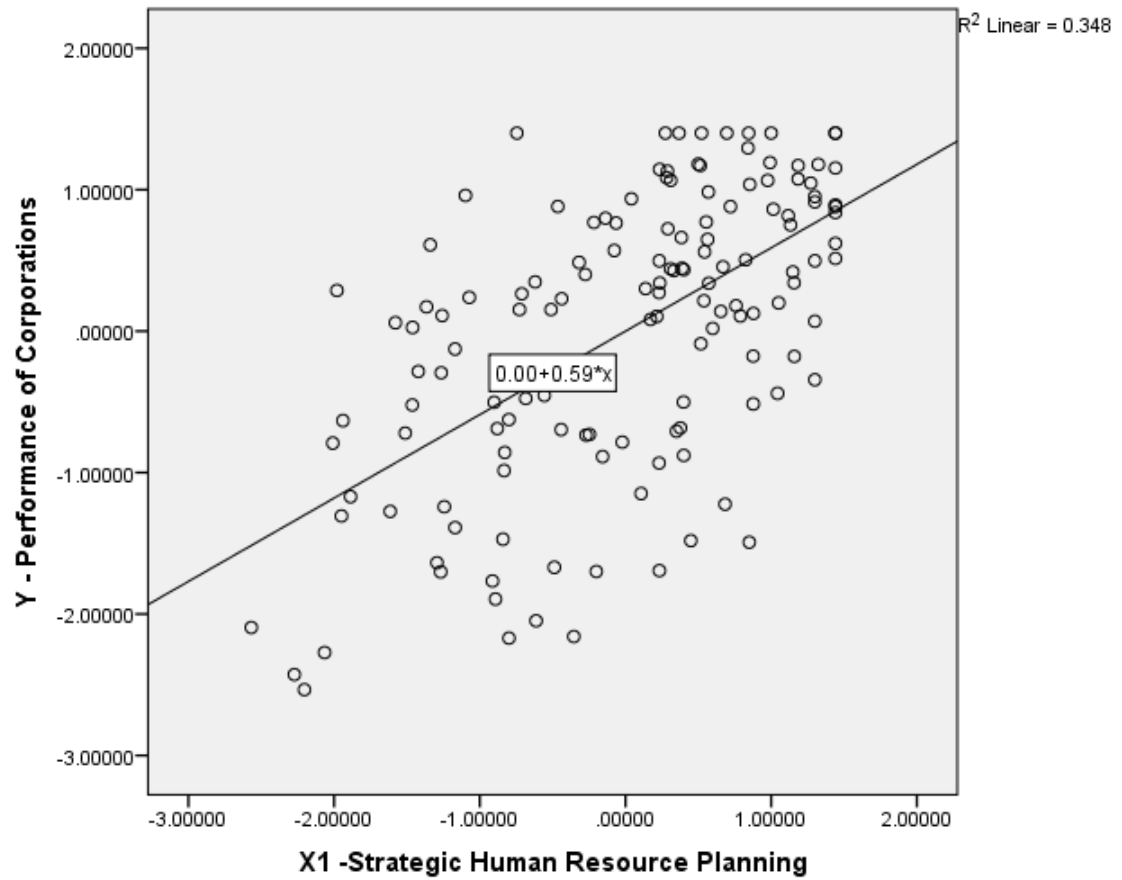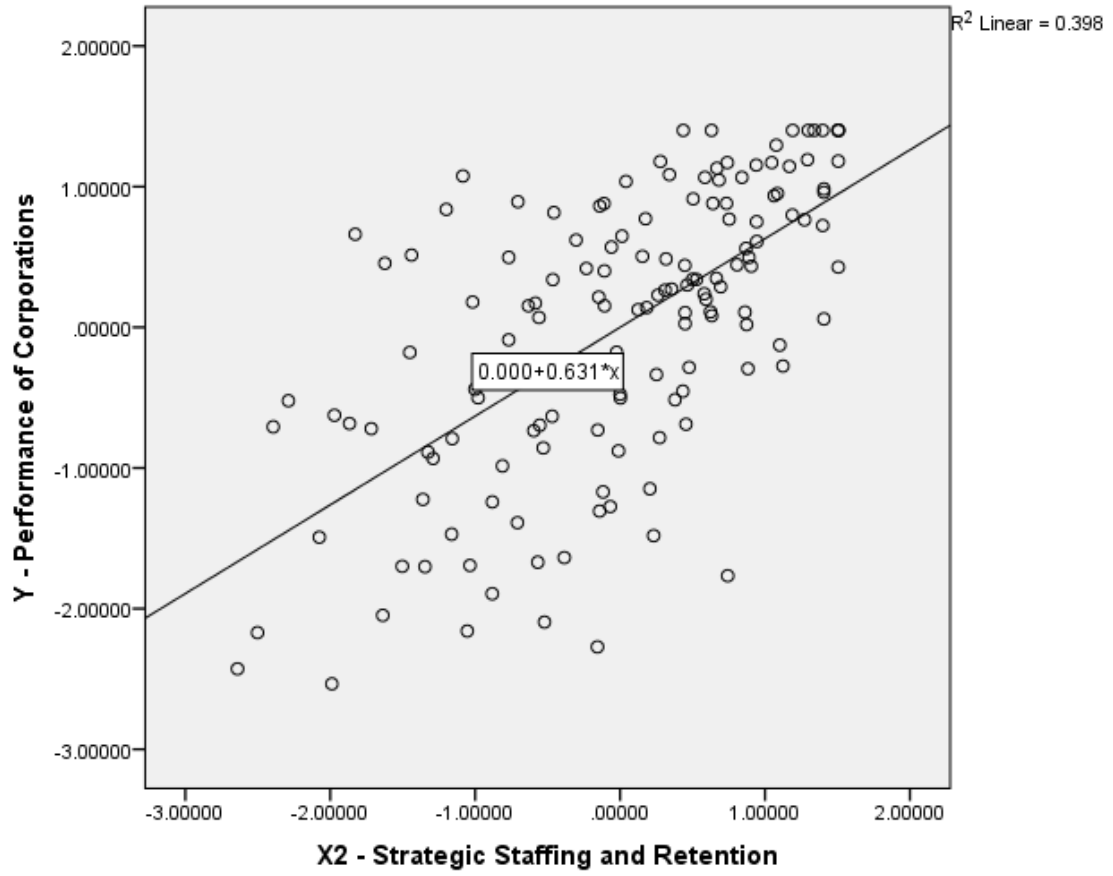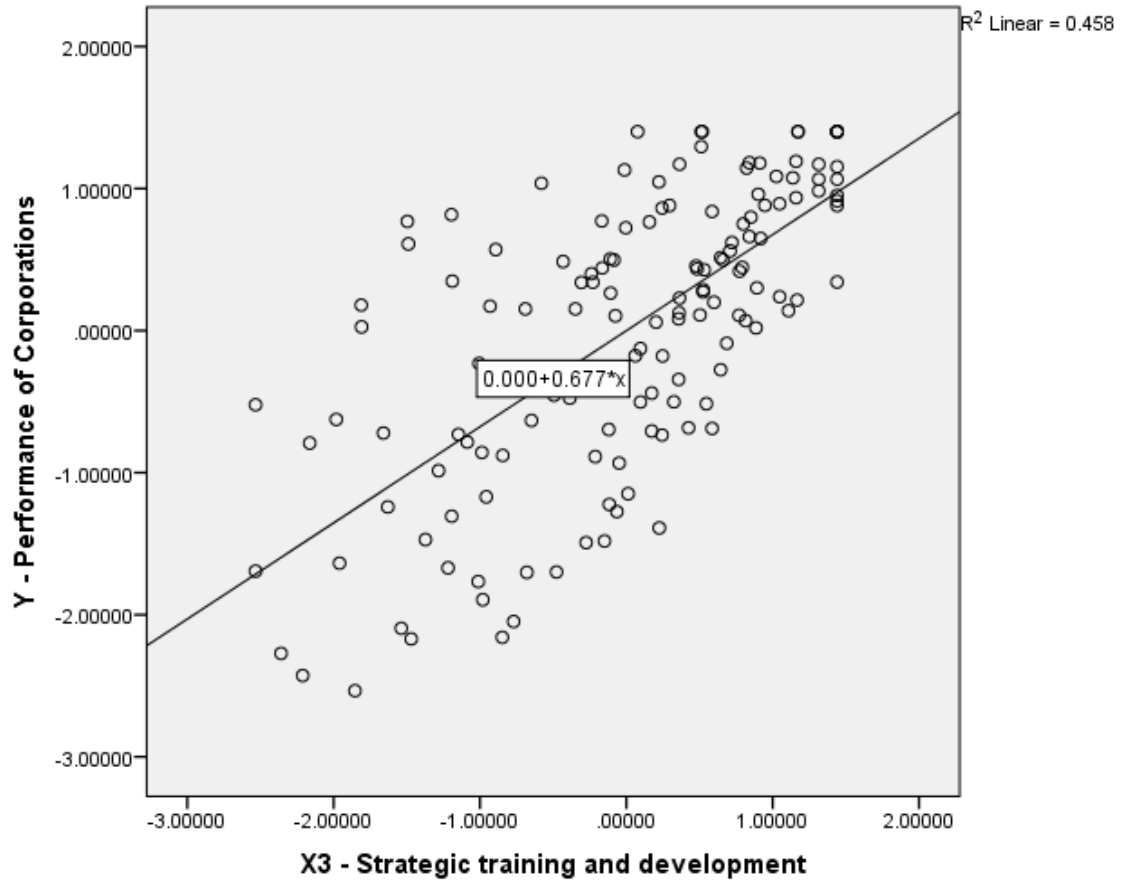
Appendix 5: Durbin Watson tables

Durbin-Watson "d" statistic: Significance points of dL and dU at 0.05 level of significance

k'=number of explanatory variables excluding the constant term

obs.	k'=1		k'=2		k'=3		k'=4		k'=5		k'=6		k'=7	
N	dL	du	dL	du	dL	du	dL	du	dL	du	dL	du	dL	du
6	0.610	1.400	-	-	-	-	-	-	-	-	-	-	-	-
7	0.700	1.356	0.467	1.896	-	-	-	-	-	-	-	-	-	-
8	0.763	1.332	0.559	1.777	0.368	2.287	-	-	-	-	-	-	-	-
9	0.724	1.320	0.629	1.699	0.455	2.128	0.296	2.588	-	-	-	-	-	-
10	0.879	1.320	0.697	1.641	0.525	2.016	0.376	1.414	0.243	2.822	-	-	-	-
11	0.927	1.324	0.658	1.604	0.595	1.928	0.444	2.283	0.316	2.645	0.203	3.005	-	-
12	0.971	1.331	0.812	1.579	0.658	1.864	0.512	2.177	0.379	2.506	0.268	2.832	0.171	3.149
13	1.010	1.340	0.861	1.562	0.715	1.816	0.574	1.094	0.445	2.390	0.328	1.692	0.230	2.985
14	1.045	1.350	0.905	1.551	0.767	1.779	0.632	2.030	0.505	2.296	0.389	1.572	0.286	1.848
15	1.077	1.361	0.946	1.543	0.814	1.750	0.685	1.977	0.562	2.220	0.447	2.472	0.343	2.727
16	1.106	1.371	0.982	1.539	0.857	1.728	0.734	1.935	0.615	2.157	0.502	2.388	0.396	2.624
17	1.133	1.381	1.015	1.536	0.897	1.710	0.779	1.900	0.664	2.104	0.554	2.318	0.451	2.537
18	1.158	1.391	1.046	1.535	0.933	1.696	0.820	1.872	0.710	2.060	0.603	2.257	0.502	2.461
19	1.180	1.401	1.074	1.536	0.967	1.685	0.859	1.848	0.752	2.023	0.649	2.206	0.549	2.396
20	1.201	1.411	1.100	1.537	0.998	1.676	0.894	1.828	0.792	1.991	0.692	2.162	0.595	2.339
21	1.221	1.420	1.125	1.538	1.026	1.669	0.927	1.812	0.829	1.964	0.732	2.124	0.637	2.290
22	1.239	1.429	1.147	1.541	1.053	1.664	0.958	1.797	0.863	1.940	0.769	2.090	0.677	2.246
23	1.257	1.437	1.168	1.543	1.078	1.660	0.986	1.785	0.895	1.920	0.804	2.061	0.715	2.208
24	1.273	1.446	1.188	1.546	1.101	1.656	1.013	1.775	0.925	1.902	0.837	2.035	0.751	2.174
25	1.288	1.454	1.206	1.550	1.123	1.654	1.038	1.767	0.953	1.886	0.868	2.012	0.784	2.144
26	1.302	1.461	1.224	1.553	1.143	1.652	1.062	1.759	0.979	1.873	0.897	1.992	0.816	2.117
27	1.316	1.469	1.240	1.556	1.162	1.651	1.084	1.753	1.004	1.861	0.925	1.974	0.845	2.093
28	1.328	1.476	1.255	1.560	1.181	1.650	1.104	1.747	1.028	1.850	0.951	1.958	0.874	2.071
29	1.341	1.483	1.270	1.563	1.198	1.650	1.124	1.743	1.050	1.841	0.975	1.944	0.900	2.052
30	1.352	1.489	1.284	1.567	1.214	1.650	1.143	1.739	1.071	1.833	0.998	1.931	0.926	2.034
31	1.363	1.496	1.297	1.570	1.229	1.650	1.160	1.735	1.090	1.825	1.020	1.920	0.950	2.018
32	1.373	1.502	1.309	1.574	1.244	1.650	1.177	1.732	1.109	1.819	1.041	1.909	0.972	2.004
33	1.383	1.508	1.321	1.577	1.258	1.651	1.193	1.730	1.127	1.813	1.061	1.900	0.994	1.991
34	1.993	1.514	1.333	1.580	1.271	1.652	1.208	1.728	1.144	1.808	1.080	1.891	1.015	1.979
35	1.402	1.519	1.343	1.584	1.283	1.653	1.222	1.726	1.160	1.803	1.097	1.884	1.034	1.967
36	1.411	1.525	1.354	1.587	1.295	1.654	1.236	1.724	1.175	1.799	1.114	1.877	1.053	1.957
37	1.419	1.530	1.364	1.590	1.307	1.655	1.249	1.723	1.190	1.795	1.131	1.870	1.071	1.948
38	1.427	1.535	1.373	1.594	1.318	1.656	1.261	1.722	1.204	1.792	1.146	1.864	1.088	1.939
39	1.435	1.540	1.382	1.597	1.328	1.658	1.273	1.722	1.218	1.789	1.161	1.859	1.104	1.932
40	1.442	1.544	1.391	1.600	1.338	1.659	1.285	1.721	1.230	1.786	1.175	1.854	1.120	1.924
45	1.475	1.566	1.430	1.615	1.383	1.666	1.336	1.720	1.287	1.776	1.238	1.835	1.189	1.895
50	1.503	1.585	1.462	1.628	1.421	1.674	1.378	1.721	1.335	1.771	1.291	1.822	1.246	1.875
55	1.528	1.601	1.490	1.641	1.452	1.681	1.414	1.724	1.374	1.768	1.334	1.814	1.294	1.861

60	1.549	1.616	1.514	1.652	1.480	1.689	1.444	1.727	1.408	1.767	1.372	1.808	1.335	1.850
65	1.567	1.629	1.536	1.662	1.503	1.696	1.471	1.731	1.438	1.767	1.404	1.806	1.370	1.843
70	1.583	1.641	1.554	1.672	1.525	1.703	1.494	1.735	1.464	1.768	1.433	1.802	1.401	1.837
75	1.598	1.652	1.571	1.680	1.543	1.709	1.515	1.739	1.487	1.770	1.458	1.801	1.428	1.834
80	1.611	1.662	1.586	1.688	1.560	1.715	1.534	1.743	1.507	1.772	1.480	1.801	1.453	1.831
85	1.624	1.671	1.600	1.696	1.575	1.721	1.550	1.747	1.525	1.774	1.500	1.801	1.474	1.829
90	1.635	1.679	1.612	1.703	1.589	1.726	1.566	1.751	1.542	1.776	1.518	1.801	1.494	1.827
95	1.645	1.687	1.623	1.709	1.602	1.732	1.579	1.755	1.557	1.778	1.536	1.802	1.512	1.827
100	1.654	1.694	1.634	1.715	1.613	1.736	1.592	1.758	1.571	1.780	1.550	1.803	1.528	1.826
150	1.720	1.746	1.706	1.760	1.693	1.774	1.679	1.788	1.665	1.802	1.651	1.817	1.637	1.832
200	1.758	1.778	1.748	1.789	1.738	1.799	1.728	1.810	1.718	1.820	1.707	1.831	1.697	1.841

Appendix 6: List of State-owned Corporations in the Ministry of Industry, Trade and Cooperatives

1. Anti-Counterfeiting Agency
2. East African Portland Cement
3. Export Processing Zone Authority
4. Kenya Accreditation Authority
5. Kenya Bureau of Standards
6. Kenya Industrial Estates
7. Kenya Industrial Property Institute
8. Kenya Industrial Research and Development Institute
9. Kenya Investment Authority
10. Kenya Wines Agencies
11. Micro and Small Enterprises Authority
12. New Kenya Co-operative Creameries
13. Numerical Machine Complex and Sacco Societies Authority

Appendix 7: National Commission for Science, Technology and Innovation Letter

NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349,3310571,2219420
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref No. **NACOSTI/P/18/53163/25818**

Date: **9th October, 2018**

David Etyang Idewa
Moi University
P.O Box 3900-30100
ELDORET

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Influence of strategic human resource management practices and technology on performance of state owned corporations in the Ministry of Industry, Trade and Cooperatives in Kenya"* I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **9th October, 2019.**

You are advised to report to **the Principal Secretary, Ministry of Industry, Trade and Cooperatives, the County Commissioner and the County Director of Education, Nairobi County** 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.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The Principal Secretary
Ministry of Industry, Trade and Cooperatives.

The County Commissioner
Nairobi County

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

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REPUBLIC OF KENYA

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National Commission for Science, Technology and Innovation

RESEARCH LICENSE

Serial No.A 21023

CONDITIONS: see back page

THIS IS TO CERTIFY THAT:
MR. DAVID ETYANG IDEWA
of MOI UNIVERSITY, 78029-507
NAIROBI, has been permitted to conduct
research in *Nairobi County*

on the topic: *INFLUENCE OF STRATEGIC HUMAN RESOURCE MANAGEMENT PRACTICES AND TECHNOLOGY ON PERFORMANCE OF STATE OWNED CORPORATIONS IN THE MINISTRY OF INDUSTRY, TRADE AND COOPERATIVES IN KENYA*

for the period ending:
9th October, 2019

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Applicant's Signature

Permit No : NACOSTI/P/18/53163/25818
Date Of Issue : 9th October, 2018
Fee Recieved : Ksh 1000

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Director General
National Commission for Science, Technology & Innovation