

**Role of Corporate Culture on the Performance of Commercial State
Corporations in Kenya**

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of Philosophy in Human Resource Management in the Jomo
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DECLARATION

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

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DEDICATION

My mother Hellena Sigara

My father Lucas Mose

My son Ogato

My beloved wife Mbula

For their love and encouragement

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LIST OF ABBREVIATIONS/ACRONYMS

ANOVA	Analysis of Variance
BSC	Balanced Scorecard
CC	Corporate culture
DOCS	Denison Organizational Culture Survey
POE	Private Owned Enterprise
ROA	Return on Asset
ROE	Return on Equity
ROI	Return on Investment
ROS	Return on sale
SC	State Corporation
SPSS	Statistical Package for Social Sciences
SVS	Social Value Survey

OPERATIONAL DEFINITION OF TERMS

- Adaptability:** A system of norms and beliefs that can support the capacity of an organization to receive, interpret and translate signals from its environment into internal behavioural changes that increase its chances for survival, growth, and development (Denison, 1990).
- Agreement :** A vivid line followed by employees throughout the organisation in order to link individual work into the whole; consonance of opinion and achievement of the planned results in accordance with the defined organisation goals (Denison, 1990).
- Capability development:** Initiating and endorsing skills assessment and capability development plans for individual employees; ensuring that these are aligned with information, resources and support to achieve their plan (Denison, 1990).
- CEO values:** Desirable, trans-situational goals that vary in importance as guiding principles in CEO's lives. For example CEOs who lead innovative organizations and value self-direction tend to experience outcomes such as high sales growth (Schwartz, 2007).
- Consistency:** Shared system of beliefs, values, and symbols, widely understood by an organization's members, which has a positive impact on their ability to reach consensus and carry out coordinated actions (Denison, 1990).
- Coordination:** Collaboration that exists among departments to achieve unity of effort as per the demand of the environment (Muhammad, 2008)

Core values: Deeper sense of what is important; durable disposition of an organisation (Muhammad, 2008).

Corporate/Organizational Culture: The assumptions, beliefs, values and behavioural expectations shared within organizations that help in shaping employee behavior (Schein, 2011).

Dramatis-personae: participants or players in a particular event (Nworgu, 1991).

Empowerment: Providing opportunities for an employee to practice new methods use good practices and participate in decision making (Denison, 1990).

Involvement: A sense of responsibility of an employee towards his work (Denison, 1990).

Mission: It expresses how the organisation will look into the future; it focuses activities by entire element channels to achieve organizational goals (Denison, 1990).

Moderating variable: A variable that influences or moderates the relation between two other variables and thus produces an interaction effect.

Organisation: a consciously coordinated social entity with relatively identifiable boundary functioning on a relatively continuous basis to achieve a common goal or set of goals.

Organizational Performance: ability of a state corporation to deliver on agreed and shared economic growth targets.

State corporations: Statutorily authorized corporate entities which earn their revenue from the sale of goods and services and in which the government holds a majority of shares.

Team orientation: Creating a group of people working together to accomplish a goal. It means cohesiveness, coordination and cooperation among the rank and file of employees (Denison, 1990).

Vision: Shared values that organizations come to follow (Muhammad, 2008).

ABSTRACT

The concept of corporate culture has received increasing attention in recent years both from academics and practitioners. In the process of international economic integration, corporate culture is the sharp weapon for enterprises to obtain the competitive advantage and managerial effectiveness. On the other hand, the performance of State Corporations in Kenya is one of key areas that need urgent address. Most of them face stiff challenges, some of which have their background from government interference, lack of right personnel, conflicting interests between organizational objectives and individual needs and lack of proper statutes of total quality management. Performance of State Corporations in Kenya has been unsatisfactory. There has been concerted efforts and clear communication from the government that Commercial State Corporations need to do more to improve performance. Despite several efforts by the government to restructure the State Corporations to enhance performance, the corporations have over the years performed dismally. The purpose of this study was to assess the role of corporate culture on organisational performance of State Corporations in Kenya. Specifically the study set to assess the role of involvement culture in the performance of commercial state corporations, establish the role of consistency culture in the performance of commercial state corporations, find out whether adaptability culture plays a role in performance of commercial state corporations, identify how mission culture affects performance of commercial state corporations, and investigate the moderating effect of CEO values on the relationship between corporate culture and performance of commercial state corporations. The measures for this study were corporate culture and organizational performance. The study is basically a replication of the Denison's Model of Culture but it also integrates other models. This was a descriptive census study where the population was drawn from all the 34 purely commercial state corporations in Kenya. Respondents were selected from various departments including finance, human resources, marketing operations and corporate affairs (public relations). Data was collected from 70 respondents giving a response rate of 68%. Structured questionnaires and performance reports were used in eliciting data. The research adopted Denison's questionnaire as one of the data collection instrument complimented by other secondary sources. After the pilot testing and all necessary modifications, the questionnaires were subjected to reliability and validity tests and then administered directly to the respondents. Descriptive analysis, factor analysis, Pearson correlation, analysis of variance (ANOVA) and regression were carried out to analyse data using SPSS. The results show that the role of corporate culture appears significant in performance of commercial state corporations. The results also indicate that corporate culture could improve performance of state corporations. Implications of the findings for Kenyan commercial state corporations and limitation are also discussed in this study. The study contributes to the body of knowledge in that organizations will gain practical insights into the determinants of corporate culture thereby enriching their knowledge how to increase work engagement and future researchers may concentrate on the development of a common tool of measurement for corporate culture in public sector as well as in private sector.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Organisations in many industries, such as service, energy, banking, electronics and agriculture have faced increasingly complex and changing environments brought about by deregulation, technological revolution, foreign competition and unpredictable markets. This has not spared state corporations (Liu, Kiley & Ballard, 2009). Besides, the fierce competition of the market economy and globalization trends are forcing businesses to constantly explore new things and boost creativity and adaptability to changes in order to survive and develop (Nguyen, 2015). This requires businesses to build and maintain culture-specific routines to promote the capacity and promote the contribution of everyone to achieve the overall objectives of the organization - which is Corporate Culture (CC). Development of a particular culture for the organisation is key to the success of these organisations (Philip & McKeown, 2004). This consists of fostering attitudes of flexibility, dynamism and responsiveness; seeking structures and cultures that are positive and organic; and developing the human resource to its maximum capacity (Pettinger, 2000).

This study on corporate culture has been an important theme in management and business research for the past few decades due to its potential to affect a range of organizationally and individually desired outcomes such as commitment, loyalty, turnover intent, and satisfaction (Chow et al., 2001). There is also a consensus that corporate culture is a management philosophy and a way of managing organizations to improve their overall effectiveness and performance (Kotter & Heskett, 1992). In today's business environment, corporate culture is used as a powerful tool to quantify the way a business functions (Gray et al., 2003). Research has confirmed that corporate culture is able to influence the thoughts, feelings, interactions, and organizational performance (Yusof & Ali, 2000; Saeed & Hassan, 2000). Generally, lack of attention to organizational culture, individual beliefs and values lead to absolute failure of

organization and achievement of goals, create many operational problems and waste a lot of energy to solve problems (Salarzahi, 2014).

The performance of commercial State Corporations (SCs) is one of the key areas that need urgent research on the viable ways to revamp and re-engineer them. Their future lies in dilemma, owing to the fact that most of them face stiff challenges, some of which have their background from government interference, lack of right personnel, conflicting interests between organizational objectives and individual needs, lack of proper statutes of total quality management among other related managerial needs and challenges (Gunter *et al.*, 2010). In most countries SCs are under pressure to deliver better public services and quality goods. An improvement in public sector performance and service delivery in any country requires a clear understanding of the human resources characteristics, corporate culture as well as the current working of the public sector systems.

SCs provide crucial services to industry and the public. When things go well, they can provide a solid base for economic and social development, contribute significantly to state budgets, and be an important tool to achieve government policies. When things go wrong, they can become a crushing financial and political burden. The public interest in the performance of SCs is thus often acute.

From the state's perspective, maximizing SCs performance is a goal of overriding importance. One of the most important factors driving SCs performance is the corporate culture. Studies on State corporations' performance show that a strong corporate culture translates into better results, while weak corporate culture is often at the root of many of the performance problems typically associated with state ownership (Boon, 2006). Corporate culture can be viewed as the unique pattern of shared values, attitudes, rituals, beliefs, norms, expectations, socialization, and assumptions of employees in the organization (Armstrong, 2009; Chatman & Caldwell, 1991; Furnham & Gunter, 1993; Schein, 1992). Corporate culture is often equated with the personality of the organization, depicting employee behaviour even when they are not instructed on what

to do (Hellriegel et al., 2004). Research evidence (Deal & Kennedy, 1982; Denison, 1990; Kotter & Heskett, 1992; Peters & Waterman, 1982; Rowe et al., 1992; Wasti, 2003) suggests that corporate culture exerts a considerable influence on organizational behaviour, especially in the areas of efficiency, effectiveness, and commitment. This means that by developing an appropriate corporate culture, organizations can achieve success.

Schein (2011) has defined corporate culture as a set of shared values, beliefs and norms that influence the way employees think, feel and behave in the workplace. Many definitions of corporate culture give primacy to the cognitive components such as assumptions, beliefs, and values (Denison, 1990; Handy, 1993; Mclean and Marshal, 1993). There are two perspectives in understanding corporate culture; the symbolic interactionist perspective (Blumer, 1969; Coolgy, 1922; Mead, 1934) and the social – anthropological perspective (Kluckhohn, 1951). The symbolic interactionist perspective view the exchange of symbols as the basis for the shared meaning for a group of social actors. Recognizing and using these symbols entails developing a ‘self’ defined in terms of culturally specified symbols. Stemming from this perspective myths (Eliade, 1959), archetypes (Mitroft, 1984), and stories and ideologies (Starbuck, 1982) are often useful in explaining objectively organizational features as they embody and articulate the identity of organizational members. The social anthropological perspective view culture as socially constructed. The two perspectives have taken a contingency approach (Lawrence & Lorch, 1967) that argue that different environmental conditions give rise to and are consistent with different patterns of behaviour and cultures within organizations.

1.1.1 Corporate Culture and Performance

Performance is a broader indicator that can include quality, consistency and productivity, among others. On the other hand performance measures can include results, behaviours (criterion based) and relative (normative) measures (Richard, 2002). The effectiveness of an organization is influenced by corporate culture, which affects the

way managerial functions of planning, organizing, staffing, leading, and controlling are carried out (Ikyanyon & Gundu, 2009). In particular, the performance benefits of a strong corporate culture are thought to derive from three consequences of having widely shared and strongly held norms and values: enhanced coordination and control within the firm, improved goal alignment between the firm and its members, and increased employee motivation.

Corporate culture is thus pervasive and powerful as it either encourages or hampers change in the organization. For employees, corporate culture is either the glue that binds employees to the organization or the wind that blows them away. Corporate culture is important in enhancing organizations' key capabilities and how they function (Chen, 2004; O'Reilly, 1989; Silverthorne, 2004). Culture is also essential in determining how well an employee fits into the organizational context. Deal and Kennedy (1982) argue that a strong corporate culture enables employees understand the goals of the organization, and as they work towards organizational goals, their productivity increases.

1.1.2 CEO Values

CEOs are individuals who hold personal values. These values shape their leadership style and decision making processes (Lockmer, 2014). A CEO's values set the stage for the culture of the organization, which in turn influences its growth, efficiency, and member behavior. Through the strategic decisions they make, CEOs impress their values upon the culture of the organization (Knoppen & Saris, 2009)

Each type of culture is associated with a different set of CEO personal values. Because CEOs are primarily accountable for the success or failure of an organization, they are responsible for making sure the organization's culture is able to keep up with the changes to the organization's environment. The way CEOs are able to modify an organization's culture is likely to echo pieces of their own personal value systems. One of the sets of personal values that correspond most closely with the different types of

corporate culture is self-direction – making one’s own choices, expressing free thought, and having independence. Another one is benevolence – having concern for others, attending to their needs, and establishing supportive relationships (Schwartz, 2007).

The value types stimulation and self-direction are combined into the higher-order domain ‘openness to change’. It follows then that the values correspond to the cultural types in such a way that, for instance, CEOs who value self-direction tend to lead highly innovative organizations.

An organization’s culture (influenced by the CEO’s values) contributes to different performance outcomes. The particular outcomes experienced depend on the values a CEO impresses upon its organization’s culture. CEOs valuing self-direction, who lead innovative organizations, tend to experience outcomes such as high sales growth. This study focused on the relationships between a set of CEO values, corporate culture, and likely performance outcomes.

The extent to which CEOs values moderate influence of corporate culture on firm performance is fundamental to scholarly understanding of how organizations work; yet, this linkage is poorly understood. Previous empirical efforts to examine the link between CEOs and firm performance suffer from methodological problems that systematically understate the relative impact of CEOs on firm performance.

1.1.3 Commercial State Corporations in Kenya

From 1963 when Kenya achieved political independence up to 1979 when a comprehensive review of the State Corporations sub-sector was carried out, the Government’s participation in commercial activities grew rapidly and broadly resulting in state dominance in various forms (including monopolies) in many commercial activities (Mwaura, 2007). The establishment of the parastatals was driven by a national desire to accelerate economic and social development; redress regional economic imbalances; increase Kenyan Citizen’s participation in the economy; promote indigenous entrepreneurship; and promote foreign investments (through joint ventures).

This was expressed in the Sessional Paper No. 10 of 1965 on African Socialism and its application to planning in Kenya which specified strategies that were to be applied to achieve Africanization without hurting the economy and within the country's declared aims. The paper outlined the principles, which guided nationalization under which a few private sector operations were brought under government control. It pointed out that once in government hands the nationalized operations had to operate efficiently, cover costs and earn profits at least equivalent to taxes paid when operating efficiently.

A comprehensive review of the public enterprises performance was carried out in 1979 (the Report on the Review of Statutory Boards) and 1982 (the Report of the Working Party on Government Expenditures). The Report on Review of Statutory Boards pointed out that the growth in the parastatal sector had not been accompanied by development of efficient systems to ensure that the sector plays its role in an efficient manner; there was clear evidence of prolonged inefficiency, financial mismanagement, waste and malpractices in many parastatals; government investments had largely been at the initiative of private promoters with government being brought in either as an indispensable partner or to undertake rescue measures; many of the parastatals had moved away from their primary functions, especially the regulatory boards most of which had translated their regulatory role into executive one, resulting in waste and confusion; and there was danger of over-politicizing production and distribution through establishment of too many parastatals.

The Report on the Working Party on Government Expenditures concluded that productivity of the state corporations was quite low while at the same time they continued to absorb an excessive portion of the budget, becoming a principal cause of long-term fiscal problem. The report observed that State corporations' operations had become inefficient and unprofitable, partly due to multiplicity of objectives.

Following the two reviews a number of measures were put in place. One of the measures was the enactment of the State Corporations Act. Although this was a major attempt to streamline the management of the state corporations, the performance of most of the

corporations continued to deteriorate (Mwaura, 2007). One reason is the continued reliance on limited public sector financing which was not adequate to meet all the sector's needs. They continued to be financed from loans borrowed by the government and on-lent or channelled to them as government equity; loans borrowed by the enterprises on government guarantees which in most cases ended up being repaid by the Treasury when the corporations defaulted; funds provided directly by the Treasury as grants or equity; or through internally generated funds. The internally generated funds were, however, inadequate due to huge debt burdens, tariffs that were below cost recovery levels, over employment (which caused most of the revenue to be used in payment of salaries), non-viable ventures which siphoned away resources from the enterprises, corruption and mismanagement in general. This is captured in various government reports indicating some of the poorest performers like Kenya Broadcasting Corporation (KBC), Kenya Railways Corporation, Numerical Machining Complex (NMC) and Kenya Meat Commission (KMC).

1.2 Statement of the Problem

Despite several efforts by the government to restructure the State Corporations to enhance performance, the corporations have over the years performed dismally due to a number of challenges notably bad governance, political interference and lack of corporate culture (Mwaura, 2007). The Presidential Task Force on Parastatal Reforms (PTPR) of 2013 identified eleven commercial state corporations that made losses in the Financial year 2011/12 compared to twelve in 2010/11 and sixteen in 2009/10 (PTPR, 2013). This represents 21%, 23% and 31% respectively of all commercial oriented state corporations. Although empirical studies have been carried out globally on corporate culture and performance of organizations, there has been little evidence relating the effect of corporate culture to organizational performance (McKinon *et al.*, 2003). This shows that the importance of corporate culture, as a factor in defining performance, has received considerably little attention (Tepeci & Bartlett, 2002).

Denison and Mishra (1995) found that organizations with higher levels of involvement, consistency, adaptability and mission sense were more effective in achieving their goals. This study investigated involvement, consistency, adaptability and mission as sub-constructs under corporate culture given that no study has linked them to performance of organisations in Kenya. This holds especially true for parastatals (which form the largest sector in the economy) in Kenya. It is surprising because human resource involvement is considered an inherent and integral characteristic of the state corporations (Bavik, 2014). The distinct characteristics of the SCs make corporate culture an important area of concern for this sector, particularly as corporate culture has the potential to affect employees' behaviours to a noticeable degree. It plays an important role in internal control, employees' behaviours, and the prevention of undesirable behaviours (Hosseini, 2004).

In a study of Hong Kong and Australian managers, Lok and Crawford (2004) found a positive effect of corporate culture on employee performance. In another study Zain *et al.* (2009) examined the effect of four dimensions of corporate culture namely teamwork, communication, reward and recognition, and training and development on organizational performance and found that all the four dimensions of corporate culture were important determinants of organizational performance. While Mahmudah (2012) report a significant relationship between corporate culture and organizational performance, research by Lahiry (1994) showed only a weak association between corporate culture and organizational performance.

Locally, there is scarce literature on the role of corporate culture in performance of SCs. Several studies have been conducted on performance of SCs in Kenya, such as one in which Shitakwa (2008) undertook a study of the relationship between performance contracting and performance of state owned corporations. Muriithi (2008) also did a research on corporate governance and the financial performance of state corporations. Wario's (2012) study was on the role of HRM in operationalization of tacit knowledge in Kenyan state corporations. Ong'onge's (2012) study was on the effect of autonomy on financial performance of commercial state corporations in Kenya. Mwaura (2007)

focused on the failure of corporate governance in state owned enterprises in Kenya while Chumo's (2013) study was on effects of Chief Executive Officers' turnover and succession on the performance of state corporations in Kenya. Kibui (2014) conducted a study on role of talent management on employees of state corporations in Kenya. Empirical review among all these studies conducted shows no one has addressed role of corporate culture on performance of commercial state corporations in Kenya. Therefore there is need to address corporate culture and its role in performance of commercial state corporations in Kenya as the knowledge gap necessitating this research study.

The purpose of the study was to examine this relationship with particular reference to four corporate culture dimensions, namely involvement, consistency, adaptability and mission, in State Corporations in Kenya. CEO's values was adopted as the moderating variable because previous studies examining top leaders' personal values found that values can function as a cognitive hierarchy (Behr, 1998; Ravlin & Meglino, 1987) and the hierarchy of values has been used to explain the differences in organizational outcomes (Meglino & Ravlin, 1998). It is important to analyze performance and conditions of parastatals under different aspects and changing environment and to use modern research methods in order to contribute to recommendations and improvement of performance of SCs. The research conducted by Denison is the most extensive quantitative study on organizational culture and organizational performance. Denison's organizational culture model in comparison with other models has such benefits as: it is based on group behavior rather than personality assessment, it measures to the lowest levels of the organizations, it applies at all levels of an organization. Although a significant amount of research has been conducted on the Denison Organizational Culture Survey elsewhere, there have been no studies of this nature in Kenya. This study, thus, seeks to answer the question: what is the role of corporate culture in the performance of State Corporation in Kenya?

1.3 Objectives of the Study

This study was guided by a general objective and five specific objectives.

1.3.1 General Objective

The general objective of this study was to assess the role of corporate culture in organisational performance of State Corporations in Kenya.

1.3.2 Specific Objectives

In line with the general objective, the specific objectives were as follows:

1. To assess the role of involvement culture in the performance of commercial state corporations.
2. To establish the role of consistency culture in the performance of commercial state corporations.
3. To find out whether adaptability culture plays a role in performance of commercial state corporations.
4. To identify how mission culture affects performance of commercial state corporations
5. To investigate the moderating effect of CEO values on the relationship between corporate culture and performance of commercial state corporations.

1.4 Research Hypotheses

In order to achieve the objectives of the study, the following hypotheses were formulated and tested in the course of the study.

H₀₁: Involvement culture has no influence on performance of State Corporations.

H₀₂: Consistency culture has no influence on performance of State Corporations.

H₀₃: Adaptability culture has no influence on performance of State Corporations.

H₀₄: Mission culture has no influence on performance of State Corporations.

H₀₅: CEO values have no moderating effect on the relationship between corporate culture and performance of state corporations.

1.5 Significance of the Study

As evidence shows, corporate culture is a sophisticated issue. It has important role in facilitating progression and organization revolution. When organizations do not have sufficient knowledge about their organizational culture and its dimensions and indices, they face abundant problems like organizational conflict, lack of organizational coherence and performance reduction. Therefore, recognition of role of culture by managers is vital because they can use its strength and apply it to the prevailing situations in the organization and predict the necessary measures and stratagems (Salarzahi, 2014). Studying the organizational culture acts as a means of data collection and managers are able to use the said means to compare the groups or working parts first and, second, to prioritize the issues and third, to identify the perceptions and expectations of the personnel through which they can improve the gap between existing and desirable condition. In order to promote the existing organizational culture, first, the prevailing culture must be studied and identified through which improvable parts of culture are identified and suitable grounds are established for the organizational culture accordingly. Now, assuming that one of the most important inefficient elements of the organizational performance and employee performance may be the corporate culture, studying the relationship between the said two elements are of great importance (Ghorbani, Asadi, Sharifi et al, 2009; in Najafi *et al.*, 2015).

It is assumed that corporate culture influences employees' sense of engagement, identification and belonging to the organization. Lok and Crawford (2004) observed that such sentiments might reasonably be expected to affect performance. Due to the dearth of research on organizational performance in Kenya and the lack of adequate research attention given to the effect of corporate culture on organizational performance of state

corporations as evidenced in previous research, there exists a huge research gap that this study intended to fill. There is much that remains to be done to address the evident gap between the impact of cultural issues and the approaches adopted by managers in many public sector organisations. The reason why this study opted on Denison's model is that it is the one that identifies the characteristics of corporate operation the most squarely compared to other culture models. It measures corporate culture along dimensions such as involvement, consistency, adaptability and mission whose strategic emphases can be mentioned as a characteristic that gets considered during assessment of its role in performance of State corporations. The model's measures do not have the features of identification of national culture (as in Hofstede's model); they rather aim at exploring the direct organizational relations.

The study focused on how organizations can effectively manage organizational culture as an integral part of both corporate strategies and organizational change measures to enhance performance. This study contributes to the awareness and understanding of culture management in public sector organizations. The challenge is to translate this understanding into practical measures in state corporations to further bolster modernization and deliver the 'performance culture where indicators inform policy choices, budgetary allocations and the day to day management of operations' (Cowen, 2008). Specifically, the study is of benefit as described in the following statements.

1.5.1 Researchers and scholars

The study advances knowledge on the importance of organizational culture as a performance driver in the State Corporations and provides a further proof of the culture - performance links using a set of measures of the latter which are partly financially-based and partly non-financially-based. This has caused new knowledge to be contributed to the body of knowledge, which is grounded in specific theories and made a unique contribution to the scholarship within the domain of corporate culture and performance. The findings of the research have made a contribution to theory by further validating the work by Denison (1990) and others; the link between organisational culture and

performance has been demonstrated. It has also identified particular cultural factors in organizations that appear to be significantly responsible for achieving successful outcomes and revealed opportunities for further research into the organizational culture of State Corporations.

1.5.2 Policy Makers and other Stakeholders

The findings of the study enables managers, employees, policy makers, economic players and other stakeholders to realize the importance of corporate culture as a driver for high productivity and performance of organizations. The study can be used by other institutions and sectors like county governments, education, health, financial institutions, and industrial sector as reference and literature review on the importance of a strong and positive corporate culture. In order to develop strategic plans, it is crucial to understand corporate culture constructs. Lack of collaborative cultural inquiry and re-designs are a cause of failures in organizations.

1.5.3 Management of State Corporations

Specifically, the management of the state corporations stands to benefit from the findings and recommendations of the study as they strive to achieve their respective visions of being the ‘leading providers of...’ The study is significant for a rapidly developing country such as Kenya as there is great need to understand how corporate culture influences employee commitment towards performance of an organization. This could lead to improvements in workplaces to help employees become more empowered and committed to their jobs.

1.5.4 Existing Literature

The purpose of this study was to find out what is not yet programmed into the existing body of knowledge of corporate culture and performance. Theoretically, it is imperative to enhance our understanding of how corporate culture affects organizational performance in a non-western country. Results from this study have made a contribution

to the existing literature. It has increased understanding of dynamics of performance of state corporations in general and thus helped to disentangle the ‘black-box problem’ between corporate culture and organizational outcomes in SCs, in particular.

1.5.5 Human Resource Practitioners

Finally, the study is of immense help to HR managers in terms of formulating HR policies and in practice especially in decision making in areas of recruitment, selection, promotion, training, motivation, and instituting change in their organizations thus contributing to higher employee engagement and hence better organizational performance.

1.6 Scope of the Study

This study assessed the role of corporate culture in performance of commercial state corporations in Kenya. It engaged top level management including HODs by use of questionnaires. The study was restricted to 34 State Corporations in Kenya (as shown in Appendix C) undertaking commercial activities. The study focused on these corporations because they are an important component of the country’s economy in terms of financial and non-financial indicators. These corporations are geographically spread within the country and were accessible to the study within the period set for conducting the research. The study examined one dependent variable (organizational performance), a moderating variable (CEO values) and four independent variables (involvement culture, consistency culture, adaptability culture and mission culture).

1.7 Limitations of the Study

Limitations are those conditions which are beyond the control of a researcher that place restriction on the conclusion of the study and their application to the situations (Best & Kahn, 1993; in: Munene, Namusonge & Iravo, 2013). The first problem confronted in the study was access to information. It is normally difficult to access data in government. They consider it a sensitive issue in releasing information to outsiders.

Some of the crucial documentary records of the state corporations were very difficult to access due to bureaucratic bottlenecks in the parastatals. In a few instances the study relied on secondary data available in websites or documented in other similar recent studies. The authenticity of the information collected can only be assured to that extent.

There were some methodological challenges that hampered the systematic analysis of how values combine to moderate the other variables. The most common measure of Schwartz's (1992) values has been the 57-item Schwartz Value Survey (SVS), which is reasonably difficult to answer as respondents are asked to read the first set of 30 value items and choose the one value item that is most important and rate its importance, then choose the value item most opposed to their values and rate it as -1, or if there is no such value item, to rate the least important value item as 0 or 1. Then, they are asked to rate the remaining value items in the first set and to repeat the process for a second set of 27 value items. This process takes approximately 12 minutes of survey time (Lindeman & Verkasalo 2005). It also produces an ordinal, ipsatised scores, which limit the type of analyses researchers should use (Lee et al., 2010). The CEO values were therefore measured using two sub-variables (self direction and stimulation) each with three indicators.

Response style was a major problem in this study because of a reliance on self-report rating scales (Campbell, 1996). Both social desirability and acquiesce biases have been found to be significant issues in values research. In addition, most people tend to rate most values as being important in their life, leading to highly skewed responses and so-called "end-piling" (Hood 2003; Lee et al., 2010). This skewing tendency leads to high inter correlations between all of the basic values and value-expressive attitudes and behaviours, especially when the values and behaviours are measured on similar scales. This necessitated some adjustment, which in the case of the SVS led to mean centering as the recommended practice. However, this process may remove true differences from the data (Van Hemert, Van de Vijver, Poortinga & Georgas, 2002).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is to gain insight into organizational performance, corporate culture, the typologies that are used to classify corporate culture and the linkage between corporate culture and performance in public sector institutions. One particular typology, from Denison (1992), was used in this study and was therefore focused on in detail in this chapter. More specifically, the theoretical perspectives pertaining to the typologies of organizational culture, organizational culture functions and determinants, as well as the role of organizational culture on organizational performance are discussed.

2.2 Theoretical Review

Various theories and models can be employed in order to understand the theoretical underpinning of culture-performance associations. The current study has used institutional theory, contingency theory, resource based view, organizational culture theory and social exchange theory, all of which are relevant to the study.

2.2.1 The Institutional Theory

The origin of culture as an independent variable affecting an employee's attitudes and behaviour can be traced back more than 50 years ago to the notion of institutionalization (Hammonds, 2000). Institutionalization operates to produce common understanding among members about what is appropriate and fundamentally meaningful behaviour. Organizations as institutions tend to have acceptable modes of behaviour that are largely self-evident (Amah, 2012). Culture is an important force determining managerial attitudes and practices, and does influence the practice of management. Cultural differences may often affect management expectations and styles. Coping with other cultures and trying to understand why and how culture influences behaviour is one of the

most crucial issues facing management. The impact of culture in organizations is becoming increasingly important. Effect can be positive, as evidenced in the cases of Wal-Mart, UPS, and South-West Airlines. Employees of South West airlines for example, actually accept lower wages than their industry counterparts in order to be part of the 'fun' working environment created by South West's people Department Motto: Hire for Attitude, Train for Skills. Cultures of obscurity and distrust, however, can have a negative effect on organization performance such as recently observed at Enron and WorldCom (Amah, 2012).

In order to achieve their goals, organizations are driven by their own kind of culture known as 'corporate culture', which has significant influence on member's attitudes and behaviours. Bateman and Snell (1999) observed that a company's culture provides a framework that organizes and directs people's behaviour on the job. Corporate culture impact individual behaviour on what it takes to be in good standing and directs the appropriate behaviour for each circumstance. Culture is an essential quality of excellent organizations (Peters & Waterman, 1982; Amah, 2012). Culture is viewed as the organization's DNA (Deoxyribonucleic Acid) – invisible to the naked eye yet powerful template that shapes what happens in the workplace (Davenport, 1998).

The Institutional Theory is relevant to this study from the perspective of state corporations as public agencies and statutory bodies in Kenya. Mohdi Saudi (2014) states that members in organizations are to act rationally because the corporate culture only acts as a tool to enhance the productivity of the organisation. Thus, the management in the organisation must make rational choices in focusing on the explicit goals. However, the Institutional Theory has shaped the organizational structure of an organisation through internal and external constituents (Brignall & Modell, 2000). Hence, the legitimacy and long term survival have been secured through the adoption of the rationalized institutional myths (Meyer & Rowan, 1991).

Powell and DiMaggio (1991) in their research stated that the institutional theory focused on the way in which societal bodies accorded social legitimacy to the organisation and

thus, contributed to the achievement of organizational survival and success. Hence, the idea that organizations are highly embedded with the institutional environment suggests that organizational practices especially in public agencies and statutory bodies are often a direct reflection or response to rules and structures built into their larger pictures (Powell & DiMaggio, 1991). Thus, in the case of SCs, this situation applies and therefore, is pertinent to this study.

The isomorphic forces from the external environment might influence the adoption of the corporate culture processes. Deephouse (1996) saw isomorphism as the replication of a focal organisation to other organizations in its environment. Some empirical evidences have found that organizations might be pressured to imitate other organizations under conditions of environmental uncertainty (Carruthers, 1995; Galaskiewicz & Wasserman, 1989). They might also claim that their actions to adopt procedures, processes, systems or structures have been justified.

However, the concept of institutionalization has been neglected by the SCs because they have considered it normal to resemble other organizations as long as the mission and goals have been achieved (Mohd Saudi, 2014). Powell and DiMaggio (1991) proposed that isomorphism be classified into two categories namely competitive and institutional. Competitive isomorphism emphasizes on efficiency and the forces of competition could stimulate the firm to perform the most efficient way of doing the task. On the other hand, institutional isomorphism does not concern efficiency. The practices could be adopted by the organisation because of the pressure received from the stakeholders or competitors from the same industry. Powell and DiMaggio (1991) have also proposed that cultural expectations in the community could influence the coercive isomorphism and also result in pressures exposed to the organisation, internally and externally.

Mimetic isomorphism is the second form of isomorphism in which an organisation resembles another organisation because of its uncertainty, poor knowledge of technologies or research and development as well as unclear sets of goals. Thus, organizations imitate similar organizations and mimic their practices due to uncertainty

situations. Organisations would feel comfortable when following what other organizations have been doing well. Hence, organizational fads and fashions have seemed likely to spread through mimetic isomorphism (Powell & DiMaggio, 1991; Granlund & Lukka, 1998).

Normative isomorphism is the third form of institutional isomorphism that could occur from the influence of professions on the organisation. The training and knowledge gained from specialized classes attended by employees could influence the way the activities are performed in the organisation. In 1991, the Powell and DiMaggio research found that professionalism was vital in determining how employees undertake their activities especially in transformation processes that occurred in organizations.

2.2.2 The Contingency Theory

The contingency theory states that an organization is shaped by its environment. This is premised on the assumption that each organization faces a unique set of internal and external constraints (Moorthy et al, 2012; & Aketch, 2015). Since the mid 1960s contingency theory has dominated the study of organizational performance, and the key concept in the contingency proposition is fit (Drazin & Van de Ven, 1995), or a good fit between the environment encountered by the organization and the internal structure of the organization (Fyfe et al, 1997). Furthermore, contingency theory is defined by the open systems perspective. SCs operate in open systems which emphasizes the interactions of an organization with its environment to satisfy the ultimate objectives of their survival. They are not closed off from their operating environment, but rather open to and dependent on resources and information from the outside.

Donaldson (2006) emphasizes that the contingency theory of organizations is rated as a success because a large body of research has produced evidence of validity of several major relationships between contingency and internal integration. In essence, the ability of SCs to use the available resources in a manner that takes into account contingencies within their operating environment, under CEO values that recognises that no one

situation fits all, will enable them attain increased performance and rate of survival. Therefore, the conceptual modeling for this study is partly based on contingency theory and the relationships between three constructs: corporate culture, CEO values, and performance.

2.2.3 Resource-Based View of the Firm

The resource based view of the firm (RBV) focuses inwardly on the firm's resources and capabilities to explain firm profitability and value (Barney, 1986a, 1991). According to the RBV, competitive advantage is provided by distinctive, valuable firm-level resources that competitors are unable to reproduce (Barney, 1986a, 1991; Prahalad & Hamel, 1990). The RBV model is based on the argument that across all firms those with greater competitive capability, a rare, valuable, imperfectly imitable and non-substitutable set of resources, will prove more successful in the emerging economy. According to Wernerfelt (1984), a firm's resources are those tangible and intangible assets tied semi permanently to the firm. These include all firm-specific assets, capabilities, organizational processes, firm attributes, information and knowledge that allow the firm to develop strategies benefiting its efficiency and effectiveness (Barney, 1991). The importance of a given resource can only be assessed in comparison to those held by competitors, since only a competitively unique and superior competence can be a source of economic value (Collis, 1991). Resources have features that lead to a sustainable competitive advantage, or produce equilibrium returns in excess of the cost of capital (Barney, 1986a, 1991; Peteraf, 1993).

Barney (1986a) notes that rent producing resources must be valuable, rare, imperfectly imitable, and not perfectly substitutable. The literature is replete with examples of such firm resources. Examples given in the literature include trade contacts, machinery, efficient procedures, capital, corporate culture, firm's reputation among suppliers, and interpersonal relations among managers in a firm (Barney, 1986b, 1991; Wernerfelt, 1984). Organizational culture could be one of the sources of competitive advantage if it generates the attributes by combining elements of tacit knowledge, social

interconnections, and specificity (Barney 1986; Wilderom et al. 2000; Zheng et al., 2010). Internal integration comes from firm-specific bundles of cultural traits that are difficult if not impossible to imitate. Internal integration is beneficial to an organization because it can capitalize on common visions and shared values among employees and units as well as strong identification with the organization.

Resource based view has, however, been faulted for not sufficiently explaining reasons for competitive advantage during rapid and unpredictable changes (Aketch, 2015). Further, it is criticized for not providing linkages with market dynamics and processes involved in transforming resource advantage into competitive advantage since its focus is on the internal integration (Menon & Mohanty, 2008). We can thus conclude that CSC in Kenya need to develop corporate cultures and adopt CEO values that are not only strong but also unique and not easily imitated by the competitors with the ability to enable them adapt to changes in environmental conditions (Ogbonna & Harris, 2000).

2.2.4 Organizational Culture Theory

This theory is based on the work of Clifford Geertz, Michael Pacanowsky, and Nick O'Donnell-Trujillo. The basic idea of the theory is that organizational cultures vary, organizational members create the culture, symbols enact the culture, and organizational culture persists over time as existing members inculcate new members with the cultural norms. Here, culture has a different meaning from that usually used with nations, peoples, ethnic or racial groups. The theory claims to study organizations through a 'cultural lens' since organizations are complex enough to warrant it. It asserts that culture is a way of living in an organization that include emotional and psychological atmosphere; morale, attitudes and levels of productivity. It maintains that culture arises from the collected webs of relationships among individuals within an organization; people spin webs, and thus the culture evolves.

The theory is based on some assumptions: organizational members create and maintain a shared sense of organizational reality, resulting in a better understanding of the values of

the organization; the use and interpretation of symbols are critical to an organization's culture; cultures vary across organizations, and the interpretation of actions within these cultures are diverse. The theory focuses on organizational culture because change and complexity are integral to any organization's life cycle. Such change can result in confusion, anxiety, frustration and excitement. Equally, organizational culture includes the emotional and psychological atmosphere. In brief, an organization's culture is composed of shared symbols. Symbols have unique meanings. Examples of an organization's culture include: organizational stories, rituals, rites of passages.

Ethnographic techniques are used in this theory to uncover the fundamental actions the members take, called performances. Organization members act out communicative performances to create a unique organizational culture. The performances include: ritual performance, passion performances, social performances, political performances and encultural performances. Among the types of cultural performances include: ritual performances like personal (checking e-mails) task (doing one's actual job), social (after work, Fridays), organizational (meetings, company picnics); passion performances like organizational memory via stories, parables, morals, and other teachings; social performances like civility and politeness, norms of employee conduct, customer relations, and water cooler chats; political performances like establishing and exerting power, barking, intimidation rituals; enculturation performances like informal teaching and observational learning, mentoring, orientation and interviews.

Critical Strengths of the Theory

In terms of applicability or heuristics the theory is applied far and wide. Equally, organizations are so complex that trying to reduce them to a set of variables is seen by some as hopeless. Thus, a cultural studies approach is suitable to understand organisation performance. In terms of utility the theory applies to nearly every employee in an organization. Since it is based on real-world observation, the theory is useful and practical.

Criticisms of the Cultural Approach

In terms of logical consistency the theory relies too heavily on shared meaning among organizational members (Eisenberg & Goodall, 2004). The theory does not provide prediction. In terms of scope its expansive boundaries allow for vastness and potential vagueness.

2.2.5 Public Choice Theory

Public choice theories suggest that public managers, bureaucrats and politicians will use their control of SCs to further their own interests rather than the state firm's efficiency (Shirley, 1998). The theory, which applies economic market theories to the provision of public services, has become a primary influence on government operations. Its features consist of a mistrust of governmental power and a preoccupation with designing systems to fragment power in order to prevent the abuse of authority (Huff, 2007). The necessary design is one that prevents the tendency for government to grow and repress the liberty of individuals. Public choice theorists always suspect government as potentially destructive of individual liberty or as inherently incompetent and wasteful. With this philosophical orientation, public choice is concerned with maximizing the economic efficiency of government owned enterprises.

The basic behavioural postulate of public choice is that man is an egoistic, rational utility maximiser (Mueller, 2003). Public choice theorists assert that decisions are based on 'rational self interest' where policies may be adopted that are privately beneficial to public officials and special interests, but which could in time, ultimately reduce society's overall welfare. From the standpoint of public choice, this concept of the individual in economic theory applies to politician, public servant and citizen alike. Public choice theory attempts to explain how government bureaucracy grows to levels of ineffectiveness and advocates for restructuring to refashion its operations along market lines (Kettl, 2000).

Public choice theorists argue for a restructured government to address three interrelated problems: its size and structure, the processes of implementing policy decisions or the 'rules' of the bureaucracy, and its lack of competition, all seen as necessary to achieve efficiency (Huff, 2007). Public choice theory argues that the economies of scale thought to be associated with large public organizations are seldom realized due to the heavily labour-intensive nature of public agencies; that natural coordination occurs among public service agencies, rendering formalized systems and structures unnecessary; and that large scale public entities do not perform as well as small-scale, autonomous government units. Solutions offered to overcome these problems include the decentralization and fragmentation of hierarchical government agencies, flattened organization structures, introducing internal and external competition and decentralized decision-making. The restructuring of government advocated by public choice theory in response to these basic problems, parallels the reinvention movement where public purposes are thought to be best achieved more effectively and efficiently by relaxing bureaucratic rules, decentralizing authority, introducing a measure of internal competition and addressing the needs of different publics versus offering uniform services (Osborne & Gaebler, 1992).

2.3 Conceptual Framework

A conceptual framework is a graphical or diagrammatic representation of relationship between variables in a study (Borg, Gall & Gall, 2005 in Ngugi, 2012). The variables for this study are corporate culture, CEO values, and organizational performance. The proposed relationship among variables is presented in Figure 2.1. In this framework corporate culture is the independent variable and is represented by four constructs that form Denison's culture dimensions; organizational performance is the dependent variable while CEO values are a moderating variable.

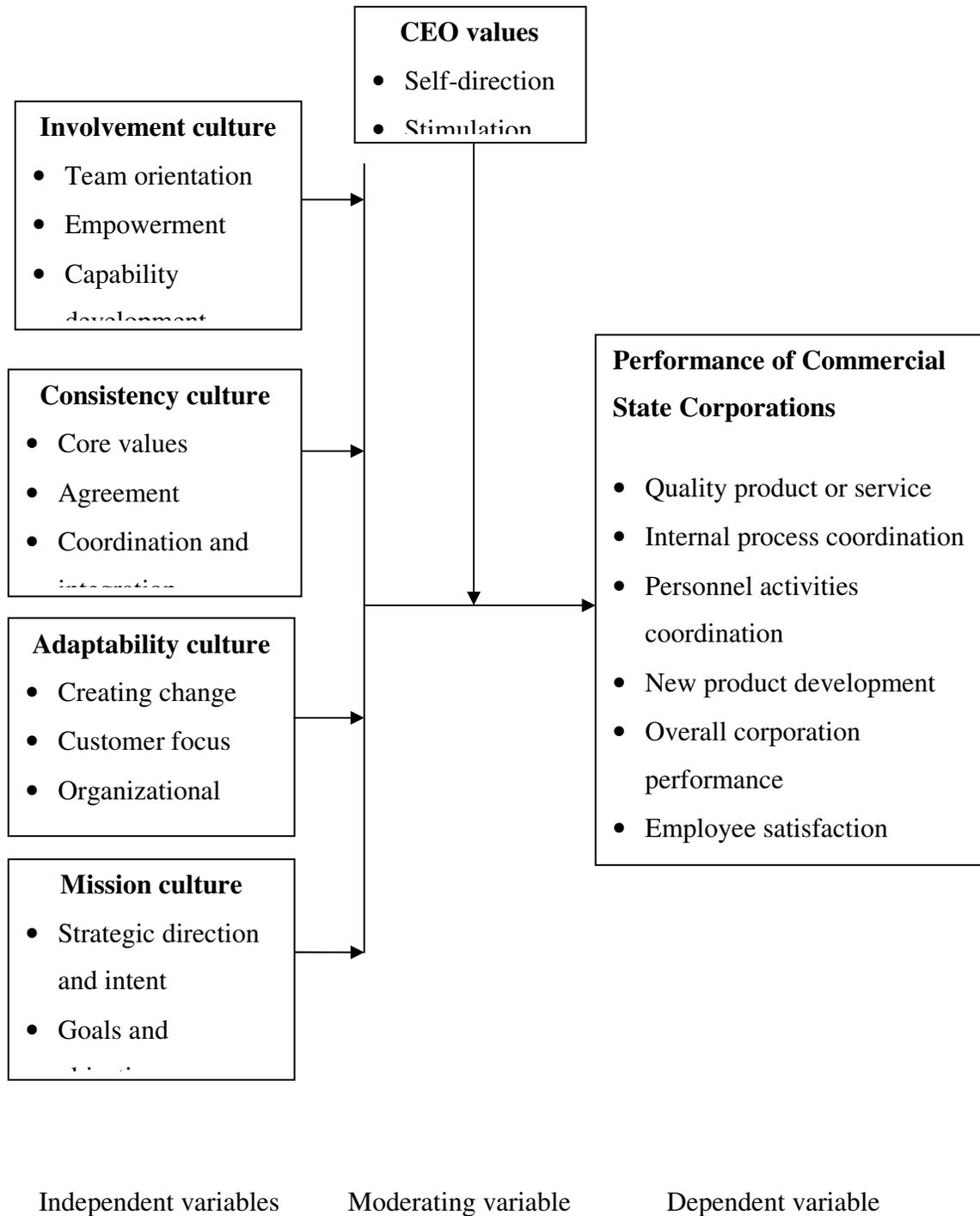


Figure 2.1: Conceptual Framework

2.3.1 Involvement Culture

Effective organizations empower employees, they count on teamwork, and they develop human skills at all organizational levels. Top managers, the executives and the employees are actively involved in the work they perform and they feel they are part of the organisation. The members of the organisation can influence, to a certain extent, the decisions that have an impact on their work and they feel that the tasks performed lead to the fulfillment of the set objectives. It specifically features empowerment where employees have authority, initiative and ability to manage their own work; orientation towards teamwork where the organisation counts on the team's efforts; and skills development meaning that the organisation invests in the employees' skills development (Pirayeh, Mahdavi, & Nematpour, 2011).

2.3.2 Consistency Culture

This defines values and elements that form the basis of a strong organizational culture. Organisations tend to be effective because they have strong cultures and they are coherent, well-coordinated and integrated. The employees' behaviour is based on a well-defined set of values and the leaders have the skills necessary to reach an agreement even when there are very different views. Consistency creates a strong culture that is based on beliefs, values, symbols that are understood and supported by the staff. Consistency is a powerful source of stability and internal integration resulting from a mind-set common to all members of the organisation and from a high degree of compliance.

Distinctive features of consistency include: core values which refers to the existence of a common set of values; agreement which means both general consensus and the ability to reconcile differences that occur; and coordination and integration meaning that although different, the members of the organisation work together to achieve organizational objectives. The first two traits (involvement and consistency) address the internal dynamics of the organisation, but do not address the interaction of the organisation with

the external environment. The following two traits, adaptability and mission, focus on the relationship between the organisation and the external environment (Kokina & Ostrovska, 2013).

2.3.3 Adaptability Culture

This trait transforms the requirements of the external business environment into action. Ironically, organizations that are well integrated are often the most difficult to change. Adaptable organizations are those that take risks, learn from their own mistakes and have the ability and experience necessary to create change. They are based on a continuous change of the system leading to improved group skills in order to provide value to customers (Muhammad, 2008). Adaptability has an impact on organisational effectiveness in three ways: creating change viewed in terms of the ability to perceive and meet the requirements of the external environment through change; customer focus where the organisation understands and responds to the customer's needs, anticipating their future needs (this feature reflects the degree to which the organisation is concerned with customer satisfaction); and organizational learning through which the organisation receives, decodes and interprets the signals from the external environment, turning them into opportunities to encourage innovation, information collection and skills development.

2.3.4 Mission Culture

Mission defines a significant long-term direction for the organisation. Successful organizations have a well-defined purpose and a direction defining the organizational and strategic objectives which express the company's vision for the future. The mission reflects a clear, concrete direction both for the company and for its members. This dimension is characterized by three features: strategic direction showing that there is a clear strategy in the organisation that gives meaning and direction to the employees; aims and objectives showing that the management sets ambitious, but realistic goals that are understood and measurable; and vision meaning that there is a long-term vision that

creates excitement and motivation among employees and which is not affected by short-term objectives (Pirayeh, Mahdavi, & Nematpour, 2011).

2.3.5 Organisational Performance of Commercial State Corporations

The operational indicators in this study include such measures as new product introduction, product quality, personnel activities coordination, internal process coordination, sales/revenue growth, profitability/ROA, personnel absenteeism, productivity, employee satisfaction, labour turnover and overall corporation performance. These operational measures reflect the competitive position of the firm in its industry space and might lead to financial performance. Hence, using a multiple indicator approach to operationalize firm's performance would be superior to using only a single indicator.

2.3.6 CEO Values

Rokeach (1973) defined value as an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. The self-direction and stimulation values of organizational top leaders are the criteria shaping organizational culture as one of the elements and its emerging effects can be diminished or empowered via the values mentioned (Akta, et al., 2011).

2.4 Empirical Review of Literature

2.4.1 Organizational Performance

One of the important questions in business has been why some organizations succeed while others fail. Organizational performance is the most important issue for every organization be it profit or non-profit one. It is very important for managers to know which factors influence an organization's performance in order for them to take appropriate steps to initiate them. However, defining, conceptualizing, and measuring

performance have not been an easy task. Researchers among themselves have different opinions and definitions of performance, which remains to be a contentious issue among organizational researchers (Barney, 1997). The central issue concerns with the appropriateness of various approaches to the conceptualization and measurement of organizational performance (Venkatraman & Ramanujam, 1986).

Performance continues to be a contentious issue among organizational researchers (Barney, 1997). According to Javier (2002) performance is equivalent to the famous 3Es (economy, efficiency, and effectiveness) of a certain program or activity. However, according to Daft (2000) organizational performance is the organization's ability to attain its goals by using resources in an efficient and effective manner. Ricardo (2001) defined organizational performance as the ability of the organization to achieve its goals and objectives. Organizational performance has suffered from not only a definition problem, but also from a conceptual problem. Hefferman and Flood (2000) states that as a concept in modern management, organizational performance suffer from problems of conceptual clarity in a number of areas. The first is the area of definition while the second is that of measurement. The term performance is sometimes confused with productivity. According to Ricardo (2001), there is a difference between performance and productivity. Productivity is a ratio depicting the volume of work completed in a given amount of time. Performance is a broader indicator that could include productivity as well as quality, consistency and other factors. In result oriented evaluation, productivity measures are typically considered. Ricardo argued that performance measures could include result-oriented behaviour (criterion-based) and relative (normative) measures, education and training, concepts and instruments, including management development and leadership training, which are the necessary building skills and attitudes of performance management. Hence, from the above literature review, the term 'performance' should be broad-based which include effectiveness, efficiency, economy, quality, consistency behaviour and normative measures (Ricardo, 2001).

The next issue is about factors that determine organizational performance. According to Hansen and Wernerfelt (1989), there are two major streams of research on the determinants of organizational performance. One is based on economic tradition, emphasizing the importance of external market factors in determining organizational performance. The other line of research is built on the behavioural and sociological paradigm and focus on organizational factors and their 'fit' with the environment as the major determinant of success. The economic model of organizational performance provides a range of major determinants of organizational profit which include: characteristics of the industry in which the organization compete, the organization's position relative to its competitors, and the quality of the firm's resources. Organizational model of firm performance focus on organizational factors such as human resource policies, organizational culture, and organizational climate and leadership styles. A study by Chien (2004) found that there were five major factors determining organizational performance, namely: leadership styles and environment, organizational culture, job design, model of motive, and Human resource policies. Organizational culture is used in this study.

Previous research has used many variables to measure organizational performance. These variables include profitability, gross profit, return on asset (ROA), return on investment (ROI), return on equity (ROE), return on sale (ROS), revenue growth, market share, stock price, sales growth, export growth, liquidity and operational efficiency (Snow & Hrebiniak, 1983; Segev, 1987; Smith, Guthrie & Chen, 1989; Parnell & Wright, 1993; Thomas & Ramaswamy, 1996; Gimenez, 2000). Although the importance of organizational performance is widely recognized, there has been considerable debate about both issues of terminology and conceptual bases for performance measurement (Ford & Schellenberg, 1982). No single measure of performance may fully explicate all aspects of the term (Snow & Hrebiniak, 1980). There is also notable inconsistent measurement of organizational performance- although most researchers (Kotter & Heskett, 1992; Marcoulides & Heck, 1993; Denison & Mishra, 1995; Peter & Crawford, 2004; Lee, 2005) measured organizational performance

by using quantitative data like return on investments, return on sales, among others. The definition of performance has included both efficiency-related measures, which relate to the input/output relationship, and effectiveness related measures, which deal with issues like business growth and employee satisfaction.

Performance has also been conceptualized using financial and nonfinancial measures from both objective and perceptual sources. Objective measures include secondary source financial measures such as return on assets, return on investment, and profit growth. These measures are nonbiased and are particularly useful for single-industry studies because of the uniformity in measurement across all organizations in the sample (Venkatraman & Ramunujam, 1986). Financial measures enable researchers to construct trend analyses and benchmarking analyses (Drew, 1997). Perceptual sources include employee evaluations of organizational effectiveness or financial health and their overall level of satisfaction. These subjective assessments of performance frequently have been used in organizational theory to evaluate organizational effectiveness and overall employee satisfaction. Given the increasing pressure of organizations to satisfy multiple stakeholder groups, there is a need for more complex measures of organizational effectiveness in which overly simplistic single variable models are inadequate expressions of the real world, multi-goal existence of organizations (Kirchhoff, 1977).

Most practitioners seem to use the term performance to describe a range of measurements including input efficiency, output efficiency and in some cases transactional efficiency (Stannack, 1996). According to Doyle (1994), there is no single measure or best measure of organizational performance. Organizations adopt different objectives and measurements for organizational performance. Hamel and Prahalad (1989) and Doyle (1994), however, argue that profitability is the most common measurement used for organizational performance in business organizations. This view is supported by Nash (1993) who stress that profitability is the best indicator to identify whether an organization meet its objectives or not.

Other researchers such as Galbraith and Schendel (1983) support the use of return on assets (ROA), return on equity (ROE) and profit margin as the most common measures of performance. Return on Assets (ROA) is derived by dividing net income of the fiscal year with total assets. Return on Equity (ROE) means the amount of net income returned as a percentage of shareholders equity. It measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. Ricardo (2001) emphasize that successful organizations are those with the highest return on equity and those who have established performance management system "aligning" every aspect of the organization from top management to the factory floor. On the other hand, Nicholas (1998) argues that many organizations do not give a balanced picture of organizational performance. There is an over-emphasis on financial criteria, with pre-occupation with past performance. Performance measures are usually not linked to strategies and goals of the overall organization and they are inward looking and do not capture aspects of performance necessary to gain and retain customers or build long term competitive advantage.

Zou and Stan (1998) propose seven categories of financial, non-financial, and composite scales to measure performance based on a review of the empirical literature between 1987 and 1997. The financial measures are sales measures, profit measures and growth measures, whereas the non-financial measures are perceived success, satisfaction and goal achievement. Financial measures are more objective compared to the non-financial measures which are more subjective.

Composite scales refer to measures that are based on overall scores of a variety of performance measures. According to Griffin (2003), organizational performance is described as the extent to which the organization is able to meet the needs of its stakeholders and its own needs for survival. Hence, performance should not be wholly equated with certain profit margin, high market share, or having the best products, although they may be the result from fully achieving the description of performance. To Griffin, organizational performance is influenced by multitude factors that are combined in unique ways to both enhance and detract performance. This argument by Griffin is

well supported by Venkatraman and Ramanujam (1986) who postulated that there are two major issues associated with the operationalization of organizational performance. First, what constitutes the construct? That is, how does one define the performance of the organization? Second, what are the data sources that should be used in the measurement of this construct? Should archival (or secondary) measures be used or can respondent (or primary) data be as reliable? Venkatraman and Ramanujan (1986) consider three aspects of performance including: financial performance, business performance, and organizational effectiveness (the latter has been subsequently known as organizational performance). They suggested that researchers in addition to using financial indicators should also use operational indicators when measuring organizational performance.

Conversely, researchers have argued that no one measure is inherently superior to another and the definition that a researcher adopts should be based on the disciplinary framework adopted for the study (Cameron & Whetten, 1983). According to Hofer (1983), different fields of study will and should use different measures of organizational performance because of the differences in their research questions. Conceptualization of business performance in management research usually revolves around the use of finance-based measures such as sales growth, profitability, and earnings per share. In addition, market-based measures such as variants of stock market returns have been used in previous studies. However, none of these measures is without flaws (Barney, 1997).

The second major issue associated with operationalising business performance is the source of data used to develop the construct. Data on the performance of a firm can be obtained either from published sources (secondary data) or directly from the firm (primary data). While financial data from secondary sources may be more accessible in the case of the large, publicly held company, such information is extremely difficult to obtain in the case of the small firms. Hence, the general consensus among researchers is that secondary sources of performance data represent the ideal source since measures developed using secondary data are less likely to be influenced by the personal biases of the respondent. In a similar vein, Chandler and Hanks (1993) assert that assessing

performance relative to competitors is a relevant concept when gauging firms' performance. Firms are more likely to be aware of the activities of their competitors (Porter, 1980) and when these measures are anchored to objectively defined performance criteria; their validity is enhanced (Chandler & Hanks, 1993). Liao and Rice (2010) measured organizational performance by two variables: sales growth and expected sales growth.

Many researchers have used managers' subjective perceptions to measure beneficial outcomes for firms. Others have preferred objective data, such as return on assets. Scholars have widely established that there is a high correlation and concurrent validity between objective and subjective data on performance, which implies that both are valid when calculating a firm's performance (Dess & Robinson, 1984; Venkatraman & Ramanujan, 1986).

As seen in the literature on organizational performance, performance is all about achieving the objectives that organizations/firms set for themselves. The objectives of an organization / firm could be financial, that is to say, profit-making or non-financial such as spreading awareness among a certain community. Organizational performance could be categorized under two categories: financial and non-financial.

The profitability of an organization is an important financial indicator to reflect the efficiency of the organization and the owners/managers ability to increase sales while keeping the variable costs down (Davis et al., 2000). Profit margin, return on assets, return on equity, return on investment, and return on sales are considered to be the common measures of financial profitability (Robinson, 1982; Galbraith & Schendel, 1983). Sales growth is measured based on the average annual sales growth rate for, say, three consecutive years (Hashim, 2000). On the other hand, profitability is analyzed by financial ratios like return on sales (ROS), return on investment (ROI) and return on asset (ROA)-incurred during, say, the last three years. The respective consecutive years' financial ratios (ROS, ROI and ROA) are averaged out and incorporated into a Business Performance Composite Index (BPCI).). The BPCI is a common index used by

researchers to measure profitability since it provides the complete measurement of firm's profitability (combination of ROS, ROA and ROI). Hence, the use of BPCI could be the best measurement of profitability. Furthermore, the inclusion of the financial ratios as components of BPCI provides a comprehensive and fair view of the firm's financial performance as compared to using only one measurement alone such as ROS or ROA or ROI. ROS is derived by dividing net income of the fiscal year with total sales. ROA is derived by dividing net income of the fiscal year with debt and equity. ROA is derived by dividing net income of the fiscal year with total assets. Previous studies by Lee (1987) and Hashim, Wafa and Sulaiman (2004) have also used BPCI as measurement of profitability. BPCI is derived from the mean values of ROS, ROI, and ROA and is formulated as:

$$\text{BPCI} = \frac{\text{ROS} + \text{ROI} + \text{ROA}}{3} \dots\dots\dots \text{Equation 1} \quad 3$$

Besides financial indicators as an evaluation of firm's performance in any industry, other industry-specific measures of effectiveness may also reflect the success of the organization. These measures include job satisfaction, organizational commitment, and employee turnover (Zulkifli & Jamaluddin, 2000).

Job satisfaction is defined as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences (Rich, 1997). Similarly, Robbins (2003) defines job satisfaction as a general attitude toward one's job; the amount of rewards received should at least be equal to the expected. However, according to Hackman and Oldham (1975), job satisfaction is associated with five core dimensions: skill variety, task identity, task significance, autonomy, and feedback from the job itself. These lead to satisfaction with supervision, satisfaction with co-workers, satisfaction with work, satisfaction with pay, and satisfaction with promotion. Job satisfaction represents an attitude rather than behaviour, thus it has important implications on employees' physical and mental health that can affect firm's performance. Hence, job satisfaction is a key determinant to demonstrate relationship to performance factors and value preferences in most of the organizational behaviour researches (Hackman & Oldham, 1975; Hansen,

Morrow & Batista, 2002; Robbins, 2003). Increased affective organizational commitment is essential to the retention of quality employees (Nyhan, 2000). Both job satisfaction and organizational commitment are in fact related to employees' turnover. Employees who are low in job satisfaction and organizational commitment tend to have low morale and less motivated. These employees will have the tendency to leave their employment, thereby increasing the turnover rate (Nyhan, 2000; Robbins, 2003).

Hence, in this study, employee turnover is used as the non-financial measure of organizational performance as it encompasses both job satisfaction and organizational commitment. The approach adopted in this study is similar to previous studies by Newman (1974) and Arthur (1994). Employee turnover can be an important indicator of organizational success. Firms that are able to reduce voluntary employee turnover can reduce costs and increase profitability. Although turnover may be either functional (that is, beneficial to the firm) or dysfunctional (that is, harmful to the firm), as a general rule, it is extremely costly and most employers are better served with lower rates of employee turnover (Newman, 1974; Arthur, 1994). According to Mayer and Schoorman (1992), employees' trust on management has a direct impact on the turnover rate. Hence, the managers or CEOs as leaders of top management play a vital role in maintaining the level of trust among the employees. When the employees have high level of trust on the managers or CEOs, they are more likely to believe that their contributions to the organization, both direct and indirect, will be recognized and rewarded in some ways. On the other hand, if the level of trust is low, the employees are more likely to devalue the incentives which lie in them to continued membership in the organizations (Hassan, 2002).

Johnson and Kaplan (1987) claim that performance measurement based on traditional cost or management accounting system that was introduced in early 1900s is not suitable in today's business environment anymore due to its over reliance on cost information and other financial data which are short-term in nature and less emphasis, if any, is given to long-term value creation activities which are intangible in nature. Kaplan and Norton (2001) have argued that many organizations nowadays focus on managing

intangible assets (for example, customer relationships, innovative products and services, high-quality and responsive operating processes), which are non-financial in nature, rather than managing tangible assets (such as fixed assets and inventory), which are financial in nature. Therefore, the changing nature of value creation complicates the performance measurement process when the performance measurement systems are not kept abreast with this latest phenomenon.

Ghalayini and Noble (1996) argues that traditional performance measures are outdated and lagging metrics that are a result of past decision; not related to corporate strategy; not relevant to practice and difficult to understand by the factory shop-floor people; conflict with continuous improvement, unable to meet customer requirements; and emphasize too much on cost reduction efforts. These shortcomings have led to the development of new performance measurement systems called strategic performance measurement systems (SPMS). According to Chenhall (2005), a distinct feature of SPMS is that they are designed to present managers with financial and non-financial measures covering different perspectives which, in combination, provide a way of translating strategy into a coherent set of performance measures. Chenhall argue that it is the integrative nature of SPMS that provide them with the potential to enhance an organization's strategic competitiveness.

One of the famous SPMS is the balanced scorecard (BSC), organized by Kaplan and Norton in 1992. Attempting to overcome the shortcomings of using traditional performance measurement system, Kaplan and Norton (1992, 1996a, b, c, 2001) introduced the balanced scorecard, well known as BSC, offering a combination of both financial and non-financial performance measures. By focusing not only on financial outcomes but also on the human issues, the Balanced Scorecard helps provide a more comprehensive view of a business, which in turn helps organizations act in their best long-term interests. The strategic management system helps managers focus on performance metrics while balancing financial objectives with customer, process and employee perspectives. Balanced scorecard is a tool to execute and monitor the organizational strategy by using a combination of financial and non financial measures.

It is designed to translate vision and strategy into objectives and measures across four balanced perspectives; financial, customers, internal business process and learning and growth. It gives a framework ensuring that the strategy is translated into a coherent set of performance measures. Empirical research on BSC has become prominent and gained momentum in accounting research (Muhammad, 2008).

The use of multiple performance measures in the BSC model is timely in today's competitive environment as business cannot rely solely on the narrowly focused internal financial measures for performance evaluation. The term 'balanced' refers to the balance between financial and non-financial performance measures, between lagging and leading indicators and between internal and external perspective of performance measurement. The BSC measures are linked together on a cause-and-effect relationship covering four perspectives, namely, financial, customer, internal business process, and learning and growth. Every performance measure on a BSC attempts to address an aspect of a company's strategy because there should be a link between performance measures and strategy. The BSC is regarded as a tool for focusing the organization, improving communication, setting organizational objectives, and providing feedback on strategy (Anthony & Govindarajan, 2003).

2.4.2 Corporate Culture

Corporate/Organizational culture has been characterized by many authors as something to do with people and the unique quality and style of the organization (Kilman et al; 1985), and the way things are done in the organizations (Deal & Kennedy, 1982). Sometimes, organization culture is also known as 'corporate culture'. 'Corporate Culture' is used to denote the more 'commercialized' meaning of organizational culture (Deal & Kennedy, 1982).

According to Hofstede (1980), organizational culture refers to the collective programming of the mind that distinguishes the members of one organization from another. This includes shared beliefs, values and practices that distinguish one

organization from another. The beginning of formal writing in organizational culture started with Pettigrew (1979). He introduced the anthropologist concepts like 'symbolism', 'myths,' and 'rituals' that could be used in organizational analysis. Although there is no consensus on the definition of organizational culture, most authors agree that organizational/corporate culture refer to something that is holistic, historically determined (by founders or leaders), related to things anthropologists study (like rituals and symbols), socially constructed (created and preserved by the group of people who together form the organization), soft, and difficult to change.

It is clear from the several definitions of culture that while the language differs, the phrases and terminology used are similar. Common terms include attitudes, values and beliefs. Schein defines OC as a pattern of basic shared assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think and feel in relation to those problems (Schein, 1985).

Types of Corporate Culture

There have been many approaches to the classification of organizational culture. Harrison (1972) classifies organizational cultures using the degree of formalization and centralization as criteria. Deal and Kennedy (1982) differentiate cultures in terms of the speed of feedback and the amount of risk taken. Quinn and Rohrbaugh (1983) developed the competing-values model, which incorporates two sets of competing values along two axes: the control/flexibility dilemma which refers to preferences about structure, stability, and change; and the people/organization dilemma which refers to differences in organizational focus. From these two axes emerge four quadrants which reflect four types of culture, namely rational, hierarchical, developmental, and group.

For their part, O'Reilly *et al.* (1991) point out seven cultural dimensions that could be used to make comparisons across organizations. They comprise: innovation and risk-

taking, which express the willingness to experiment, take risks, and encourage innovation; attention to details, which emphasize the precision; outcome orientation, which favours results-oriented over process-oriented procedures; people orientation, which reflects the degree of value and respect for people; individual versus team orientation, that is, are individuals or collected efforts more highly valued?; aggressiveness, which reveals the willingness to take action and deal with conflict; and stability, which means the openness to change.

Deshpande and Farley (1999) introduced four types of corporate culture: competitive culture, entrepreneurial culture, bureaucratic culture, and consensual culture. In the competitive culture, values relating to demanding goals, competitive advantage, marketing superiority, and profits are emphasized. The emphasis of the entrepreneurial culture is placed on innovation, risk taking, a high level of dynamism, and creativity. Values such as formalization, rules, standard operating procedures, and hierarchical coordination are particularly relevant in the bureaucratic culture. Finally, in the consensual culture the elements of tradition, loyalty, personal commitment, extensive socialization, teamwork, self-management, and social influence are important in the organization's values. According to Green and Aiman-Smith (2004) some researchers see a framework of organizational culture characterized by two dimensions: internal versus external focus, which primarily stress what is going on inside and outside the organization respectively; stability and control versus flexibility and discretion, which respectively favour keeping things the same and making changes.

It can be seen that the four cultural classifications reviewed are similar, except for the approach suggested by Goffee and Jones (1998) and by Denison, *et al.* (2004), although they carry different names. For example, competitive culture as described by Deshpande and Farley (1999) is very similar to the market culture of Cameron and Freeman (1991), and the task culture of Harrison (1972). The groupings of cultural approaches shown above can be used to identify the organizational culture of a business organization.

Dimensions of the Organizational Culture

Although there are many dimensions of organizational culture, three major ones that have been widely recognized are Hofstede (1980), Schein's (1985) and Denison's (1990). These dimensions of organizational culture are a useful way of comparing the basic properties of organizational culture in general.

Hofstede's Cultural Dimensions

Hofstede's Theory of Organisational Culture is critical to this research in terms of evaluating the organisational culture (OC) in the studied state corporations. It is critically important to analyse the dimensions of OC introduced by Hofstede in 2001 because they have been one of the pioneers in culture studies (Mohd Saudi, 2014). These dimensions have been used time and again by international researchers in many countries (Loene, 1996; Gore, 1999; Sin & Tze, 2000; Joiner, 2000; Thomas & Au, 2002; Damanpuor *et.al.*, 2002). Due to its relevance to the managerial world, there has been scholarly development of this construct. For example, the Global Leadership and Organizational Behaviour Effectiveness (GLOBE) - a research programme of 825 organizations in 62 countries has utilized and expanded Hofstede's cultural dimensions. Using Hofstede's classification approach enables comparisons between studies which can be done neater and the level of objectivity involved is generally higher (Sackman, 1991). Its dimensions have appropriate construct validity (Damanpour, Pothukuchi & Choi, 2002). Hofstede (1980) initially developed four "dimensions" of culture values namely: power distance - the extent to which the less powerful members of an organization accept that power is distributed unequally; uncertainty avoidance - the extent to which people feel threatened by ambiguous situations and have created beliefs and institutions that they try to avoid; individualism/collectivism- this dimension reflects an ethnic position of the culture in which people are supposed to look after themselves and their immediate families, or a situation in which people belong to groups or collectives which are supposed to look after them in exchange for loyalty; masculinity/femininity- a situation in which the dominant values are success, money and

professions as opposed to the situation in which the dominant values are caring for others and the quality of life.

According to Hofstede (1980), national culture is primarily based on differences in values which were learned during early childhood. These values are strong enduring beliefs, which are unlikely to change throughout the person's life. On the other hand, organizational culture is based more on differences in norms and shared practices, which are learnt at the workplace and considered as valid within the boundaries of a particular organization. Hence, in the context of organizational culture, cultural differences in workplaces reside more on practices while at the national level, the differences lie in values. In addition, according to Hofstede (1980), there are three factors that determine employees' behaviour in the workplace: national culture, occupational culture and organizational culture. Organizational culture practice is the most crucial factor that will determine organization success than national or occupational culture. The study of organizational culture should hence look into the differences in organizational culture which distinguish one organizational culture from another.

A fifth dimension had been added to the list (Hofstede, 1991) when Hoppe (1990) used the same measure in China. This dimension is Confucian Dynamism or long term/short term orientation dimension - the degree to which there is concern for the maintenance of traditional social orders (such as the family, the society), versus more individualist, liberal social orders based on negotiation, rather than obligation.

Schein's Model

Schein's (1980, 1985, 1990) model uses three levels as shown in Figure 2.2.

Artefacts and Behaviours: According to Du Toit (2002), artefacts are visible, obvious expressions of culture. They are tangible and audible demonstrations of behaviour supported by organisational norms, values and assumptions. They range from aspects such as architecture, office design, language, rituals and celebrations.

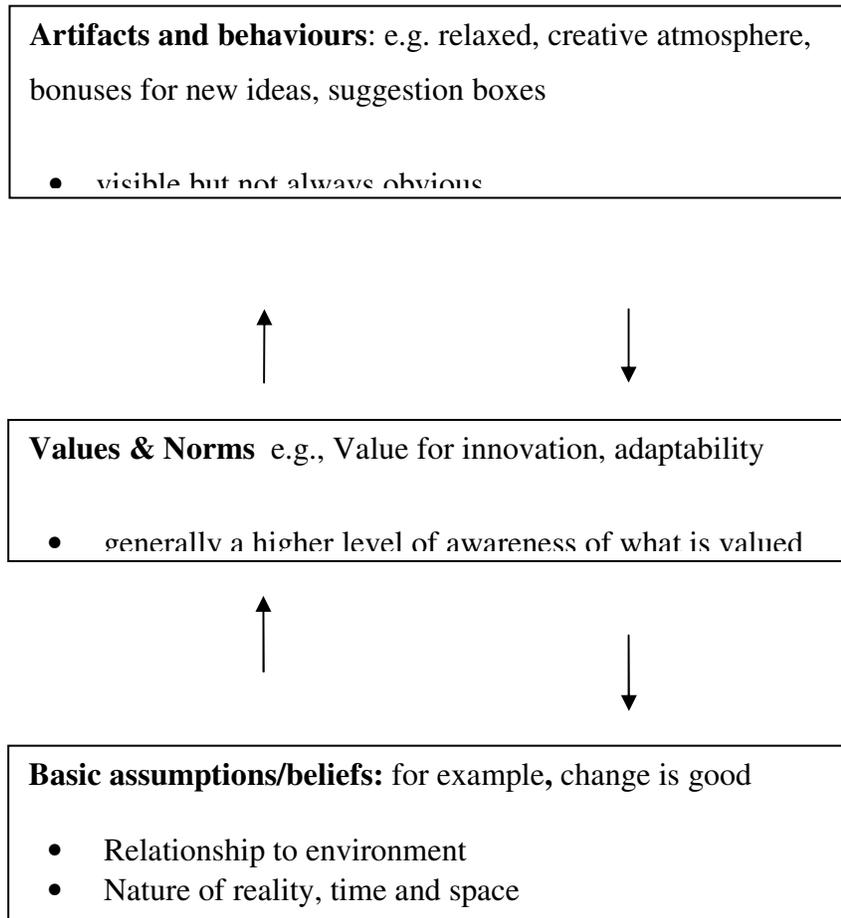


Figure 2.2: Schein's model of levels of organizational culture.

Source: Schein, 2004

Values and Norms: According to Schein (1985), values represent the principles and standards valued by the organisation's employees. Values form the basis as to what is acceptable and what is not acceptable. They indicate that which is considered right and wrong and forms an ethical code of the organisation. Du Toit (2002) states that norms relate to values in that they indicate what the expectations are amongst the organisation's employees. Norms provide the organisation with unwritten rules that indicate the

expectations in terms of actions relevant to certain situations. Norms and values support the artefacts of a culture.

Assumptions and Beliefs: At the basis of an organisation's culture are the assumptions and beliefs. Assumptions are unconscious and are often taken for granted, but are the basis for how the organisation's employees feel. Basic assumptions become taken for granted to the extent that there is little variation within the cultural unit. They guide behaviour and tell people how to think, feel and perceive work, performance goals, relationships and performance of colleagues (Du Toit, 2002). One of Schein's key assertions is that the changes in culture flow from the higher (inner) to the lower (outer) levels, with the "basic underlying assumptions" being the highest level. In Schein's model, the higher levels drive the lower levels and introducing change at a high level can bring transformative change throughout all the lower levels (Unwin, 2002). Cameron and Robert (1999), referring to Schein's artifacts and creations, state that while the deeper levels may have been somewhat invisible in the past, this may no longer be so. As greater attention is being directed at managing culture, organisations are recognising the importance of stressing their fundamental assumptions.

The Denison Model

Developed based on 20 years of studies and research, the Denison Model of organisational culture describes a theory of organisational behaviour that emphasises the strong link between culture and performance. Ascertaining cultural effect on the organisation is complex and carries many dimensions including behavioural, social, cognitive and induced change (Muhammad, 2008). This model is appropriate for business terms, as it focuses on management and organisational practices related to culture and leadership. In addition, this model is claimed can be applied for all industries, including government, education and non-profits (Denison Consulting, 2010).

Denison, the creator of this model, has emphasised the following cultural dimensions: involvement, consistency, adaptability and mission. Each of these dimensions includes

three other features. As many other contemporary models of management and organisational effectiveness, the Denison circumplex focuses on the contradictions that arise as organisations achieve the internal integration processes and the external adaptation. For example, the market-oriented organisations towards the external environment often have internal integration problems. On the other hand, those that focus on internal integration and on intensive control, have difficulties in adapting to the external environment. Effective organisations are those that are able to resolve these contradictions without resorting to compromises. The model consists of a 60-statement survey instrument that is developed based on four cultural traits and 12 indices (Dharmayanti, 2013).

As it can be seen from Figure 2.3, the Denison model has two axes, a vertical and a horizontal one, which have divided the model into four quadrants. The vertical split of the profile distinguishes between a flexible organisation (left half) and a stable organisation (right half). Involvement and adaptability emphasize an organization's capacity for flexibility and change. In contrast, consistency and mission traits emphasize the organization's capacity for stability and direction. Organizations that are oriented towards consistency and mission are more likely to reduce the variety and place a larger emphasis on control and stability while in contrast, those oriented towards adaptability and involvement will introduce more variety, more input and more possible solutions to a given situation than the systems oriented who are towards a high level of consistency and a strong sense of mission. Denison's research shows that the highest performances are achieved by the companies that have strengths in all four quadrants. These are those that know very well "why they exist" and which is the direction towards they go (mission). The employees share and support the company's vision; they use their skills and abilities to achieve organizational goals (involvement).

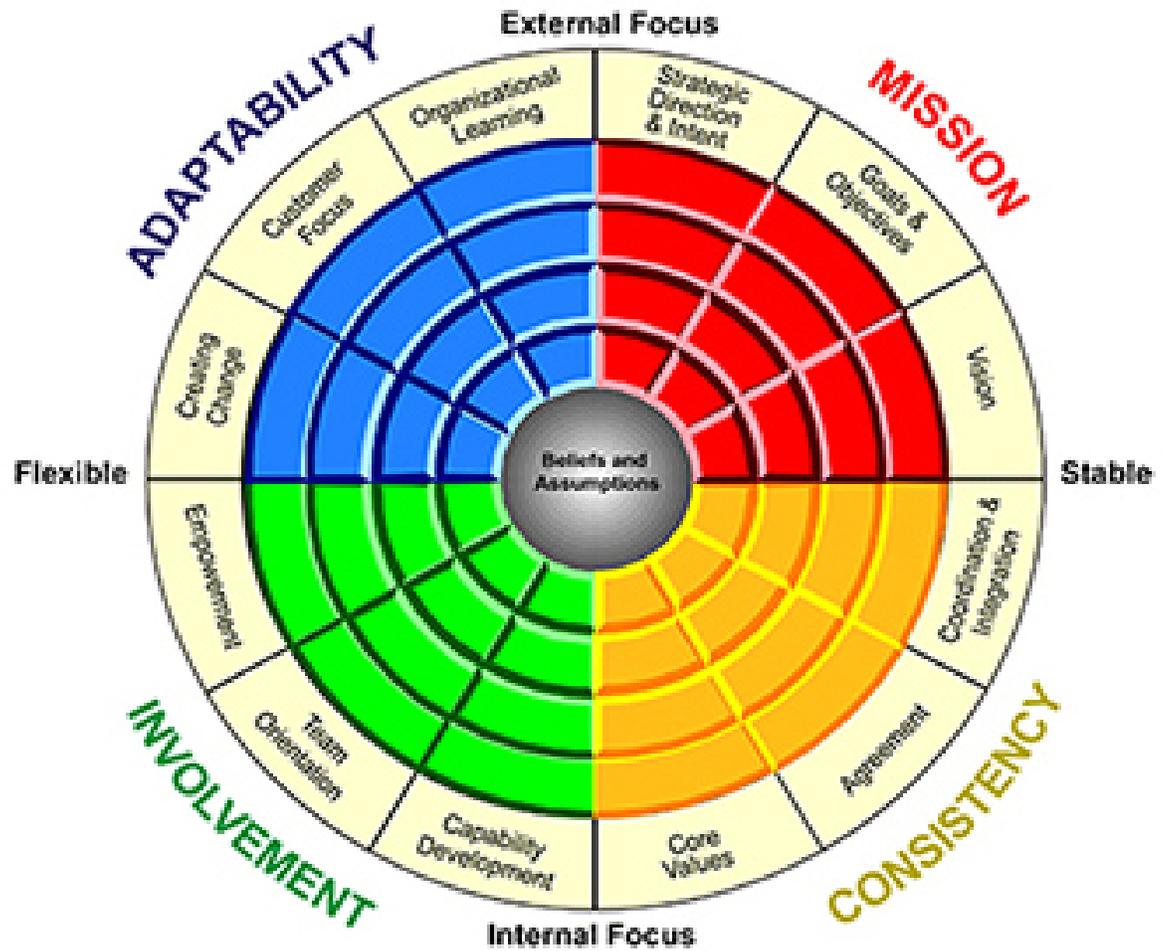


Figure 2.3: The Denison Model of Organizational Culture Assessment

Source: <http://www.denisonconsulting.com/>

The model is often used as a diagnostic method in profiling organizations to highlight strengths and weaknesses and to suggest ways in which organizational culture can influence their effectiveness. This study focuses mainly on Denison’s cultural constructs based on the four traits that result in strong culture required to achieve efficient and effective performance. As an integral part of human behaviour, culture depicts the

phenomena of ‘the things taking place around a particular situation’. Pennington (2003) has identified five strategies for change of organizational culture and its performance. His study attempts to establish the relationship among performance, organizational culture and the management style. It was found that organizational culture and management style remained linked with performance. The same study declares that participative management style engendered through cultural change would have auspicious effect on performance in the organisation. Lim (1995) observes that the relationship between culture and performance is not clear. There is need, therefore, to illuminate on the applications and the moderating variables involved in the link. Sin and Tse (2000) are of the view that an organisation with vivid culture is linked with marketing effectiveness and profitability. Balthazard, Cooke & Potter (2006) measured behaviour norms and expectations and its impact on the performance. The results demonstrate positive influence of constructive culture style whereas negative impact was illustrated with dysfunctional defensive styles on the individuals and organisation.

The Denison model uses business language to convey business level issues that are applicable to all levels of the organisation. It emphasizes that all business academic issues be linked with practical business matters to get the results. Denison’s study suggests that cultural elements in relation to performance usually demand more time to implement and achieve results. Denison developed a model that groups measures of an organisation’s culture into four traits: involvement (by employees in decisions and day-to-day tasks), consistency (of organizational procedures), adaptability (organizational change in response to customers) and mission (a sense of direction and performance expectations).

Involvement Culture

Involvement represents internal focus and supports flexibility. Here people embrace this defined direction, have line of sight from job to company goals, and bring the full complement of their skills to their work. Jones and Kato (2005) suggest that high employee involvement affects performance in all areas though its effect is weaker for

sales revenue and market share. There is high pressure for better corporate performance and output placed on SCs in Kenya. Employees are being given great importance and therefore effective utilisation of human resources is becoming a norm. Entrepreneurship demands that sense of initiative be explored and employees be empowered to decide about the trivial nature of work. Concerted effort of group members is a characteristic of performance in organisations; hence there is a necessity that team work be encouraged to complete tasks. In order to remain abreast with the era of development, employees' skills and knowledge need to be updated; hence capability development keeps pace with the growth of the organisation. It can therefore be concluded that empowered employees, integrated with team and remaining current with the latest innovations would be in a better position to involve themselves in the overall development of an organisation (Muhammad, 2008).

According to Lawler (1996) and Likert (1961), efficient organisation authorises employees, encourages teamwork and enhances their talents. This facet includes empowerment, team orientation and capability development. Sense of employees towards job is defined as involvement in the organisation (Denison, 1990). Involvement means the building of human capability, ownership and responsibility. Jones et al (2005) holds that involvement of employees in the organisation demonstrates improved state of performance which in turn leads to better investment. It is therefore important that involvement status of employees is measured and its contributory factor in improved performance established. While evaluating the impact of involvement as an element of culture, it can be safely deduced once an employee reaches a state of mind where he considers organisation as of his own; the responsibility culminates in involvement. It is an auto-mode of work, where sense of responsibility is improving strength in the discharge of one's duties in an organisation (Muhammad, 2008).

Davidson (2003) views involvement as a process of putting together all human skills, sense of possessiveness and assumption of entrusted assignment in a responsible manner. Involvement then serves as an impetus for the employees to become effective members of the team even with informal organisational structure. This kind of

arrangement enhances ownership and commitment, in addition to developing a sense of initiative and application of their functions and achievement of the organisational objectives. Figure 2.4 shows the involvement construct and its facets.

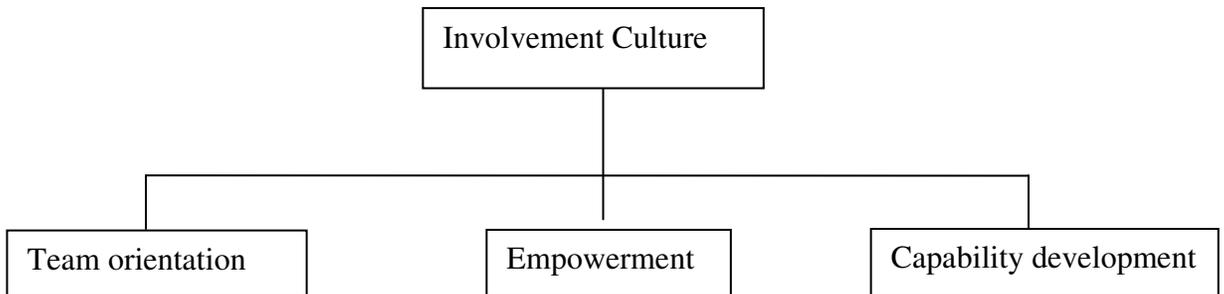


Figure 2.4: Involvement Culture Construct and its Facets

Denison (1990) argues that acceptable arrangement by the entire employees to function in a particular approved manner develops cooperation towards widespread objectives of an organisation. In this practice the employee generally feels accountable to the assigned work. Among the measures of this construct include: cooperation and collaboration across functional roles are actively encouraged; working in this organisation is like being part of a team; work is sensibly organized in this organisation so that each person can see the relationship between his/her work and the goals of the organisation, among others.

Empowerment Construct

Assigning responsibility without authority is a bad practice in management (Davidson, 2003). It is imperative for employees' initiatives to be given due weightage; they ought to be given authority to take certain on-the-spot decisions for better execution of work. Nature of empowerment vested with employees in an organisation is a gauge of their involvement, which needs to be established through various forms and surveys. Denison (1990) argues that empowering employees in their domain of work will develop capability to manage their work in the most befitting manner and continuously improve

their standards and shape up as a value in the organisation. The survey elements that measure this construct include: most employees in this organisation are highly involved in their work; decisions in this organisation are usually made at the level where the best information is available; everyone in this organisation believes that s/he can have a positive impact, among others.

Capability Development Construct

Stagnation in employees' performance becomes a barrier in advancement of organisation; hence, there is a dire need to develop their skill as an element of involvement and measure its effect as an integral part of involvement. Denison (1990) states that the present change-prone environment and practices of work demand that employees must remain effective members with full utilisation of their capabilities. To enhance employees' capability and to maintain market based skill, it is essentially required to train them and provide them exposure to compete with the market based skill. The survey items that measure the capability development index include; this organisation delegates authority so that people can act at their good judgement for the usefulness of the employees; the capability of the people in this organisation is viewed as an important source of competitive advantage, among others.

Consistency Culture

Consistency represents internal focus and supports stability. Successful organisations have systems, structures and processes in place to help align them as a company, while being both efficient and effective in producing results (Fisher, 2000). Consistency of plans provides a steady approach towards achievements of organisation. Employees remain focused towards their set goals. Often variations in the plans not only confuse the employees but retard the progress of the programmes rolled out. To achieve consistency, it is important to respect core values in practice by the organisation, maintain an agreement on the goals set up and ensure effective control in the coordination. All these

integrated actions would supplement greatly the development of organisational culture which would have greater potential to improve the performance (Muhammad, 2008).

Adkins *et al.* (1999) are of the view that consistency in the inner system and the core values of an organisation facilitate problem solving and enhancement of effectiveness at each sphere and in the organizational values. Denison (1990) argues that consistency serves the role of a roof of a pillar gluing people to remain woven up with the cause through noticeable coordination in the organization. Specifically it creates a particular system within the organization which has acclamations of all members in the team. This team respects values, discrete way of conducting business and internal system. Consistency develops a formidable culture, having regard for values, beliefs and the signs that are widely accepted by members of the society.

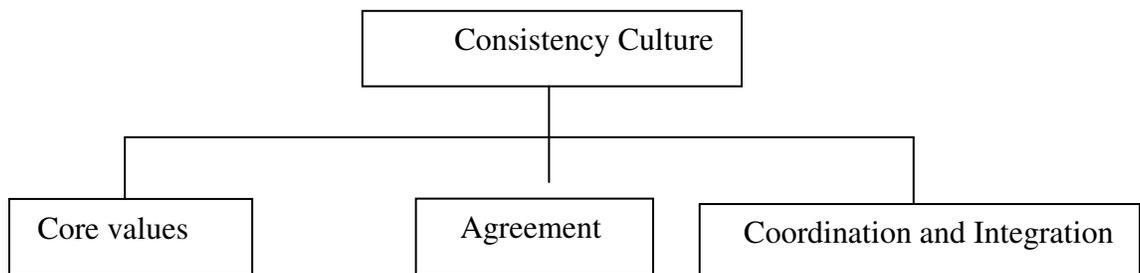


Figure 2.5: Consistency Culture Construct and its Facets

Coordination among the team members takes a cue from the rules, regulations and procedures followed by the organization. The facets of this construct include: core values, agreement, and coordination and integration as shown in Figure 2.5.

Core Values Construct

This is the internal and implicit existing system of each organisation adopted by the employees through which expectations are embedded in the scheme to run in a particular manner (Muhammad, 2008). Ivancevich & Matteson (1996) say that the core values are

sentimental desires and cognizant practices symbolizing the system. Members in the organisation have sense of identity and respect for the values with vivid expectations. Denison (1990) argues that there is a clear and consistent set of values in organizations that govern the way things are done. Different organizations have specific management styles and practices. Organisations adhere to ethical codes governing behaviour and management practices that they actually believe.

Agreement Construct

Consensus of opinion on major issues represents agreement in the organisation. According to Davidson (2003) agreement is fundamental intensity to accommodate dissimilarity into conformity. Denison (1990) says that agreement encompasses the ability of an organisation to attain harmony on important matters. It includes the implicit level of agreement and carries out the adjustment. It serves to develop agreement in the organisation to achieve 'win-win' situation. Where there is a strong culture people can easily reach consensus even on difficult matters.

Coordination and Integration Construct

Integration refers to woven activities among the elements of the organisation for attainment of general objectives. It is an organisation that creates harmony in the discharge of functions in a firm (Davidson, 2003). This maintains a kind of formidability. Business is done in a systematic manner and with great vision and care. Organisation objectives are kept under consideration during discharge of the work.

Adaptability Culture

Adaptability represents external focus and supports flexibility. Successful organisations hear what their customers want or understand customer needs enough to lead their customers to new products/services, and are able to learn what is needed to respond to changing marketplace demands. Adaptability to environmental changes and technical

development makes an organisation to perform better. People are seen developing their capacity through learning new method of organisation practices.

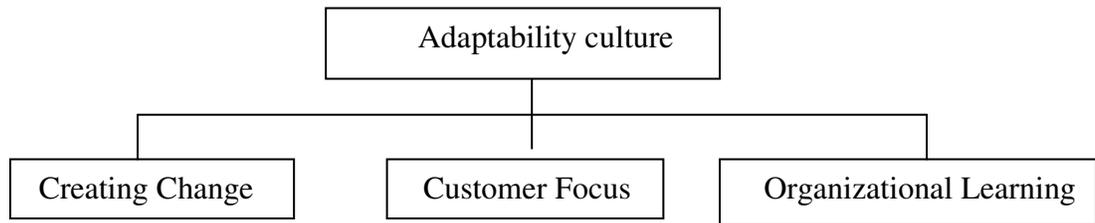


Figure 2.6: Adaptability culture construct and its facets

Mission Culture

Mission represents external focus and supports stability. It is an outlook that the organisation adopts for achieving objectives. It is the core activity that the organisation shares as futuristic direction.

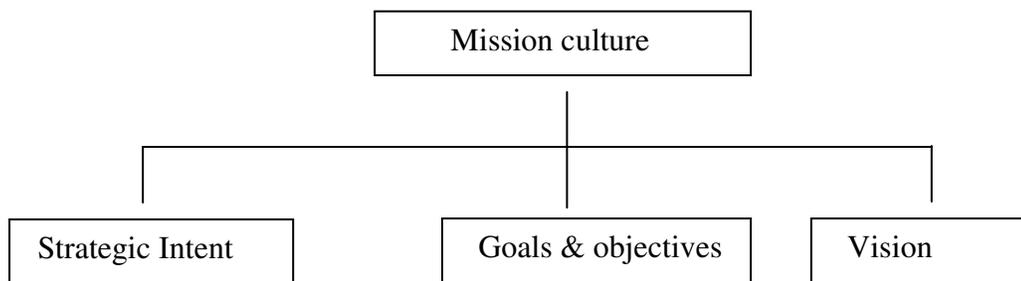


Figure 2.7: Mission culture construct and its facets

Denison's (1996) research shows that the highest-performing companies are those with cultures that fully address the paradoxical demands facing them. They are crystal clear about why they exist and where they are going. There are three facets of this construct: strategic direction and intent, goals and objectives, and vision. These are illustrated by Figure 2.7.

Strategic Direction and Intent Construct

Broad policy guidelines, with target of the organisation in mind, influence the organisation. Such targets should be accounted for by drawing an outlook of particular segments of work in the organisation. Denison (2003) holds that vivid strategic vision binds members of an organisation together for performance of the role assigned to the individuals. The survey items that comprise this facet are outlined in the questionnaire.

Goals and Objectives Construct

Robust guidelines are targeted at achieving the mission of an organisation. Once there are explicit intents then goals and directions will facilitate everyone with clear visibility to perform their functions with ease and comfort (Denison, 2003).

2.4.3 CEO Values as Moderator Variable

Statistical moderation implies that a moderating variable conditions or alters the independent variable's effect on the dependent variable (Garnett et al., 2005). Instead of being channeled through the mediator, the independent variable's effect takes on a qualitatively different character as a result of the interaction between it and the moderator. As a result, moderators are often characterized as having "when and how" effects, meaning they describe when and how the independent variable affects the dependent variable. Some moderators mitigate or dampen the independent variable's effect, where others amplify or strengthen it.

Some moderator effects are so strong that relationship between the independent and dependent variables is present only when the moderator takes on a particular value or range of values. All moderators have in common the fact that they alter the substantive relationship between the independent and dependent variables. Schwartz (1992) describe values as certain conditions that people yearn for (example, joy), object, goal or behaviour, and they are also the surmounting concrete scene (does not exist; rely on

concrete scene), and can be the judgment and the choice standard in a series of behavioural patterns.

Table 2.1: Part of Schwartz’s value types and the associated individual level values items

Value-Type Definitions	Value Items For Each Value Type
Stimulation: Excitement, novelty, and challenge in life	Daring, a varied life, an exciting life
Self-direction: Independent thought and action—choosing, creating, exploring	Creativity, curious, freedom, independent, choosing own goals

Source: Lee, Soutar and Sneddon (2010).

Individuals with different values tend to emphasize different outcomes and are driven to achieve different goals. The impact of values is pervasive in that they influence the most basic ways in which people perceive their environments (Meglino, 1998). According to Berson (2008), organizational culture represents an active, living, phenomenon by which key members of the organization, such as executives, create shared meaning. As such, CEO values shape the organizational culture as a component affecting the manner of decision making, management style and behaviour models in the organization. Since CEOs are leaders they also have a central role in shaping and controlling organizational culture (Schein, 1992). Cultures have been known to change in the hands of subsequent CEOs (Kerr et al., 2005). Leadership is one of the key driving forces for improving firm performance. CEOs, as the key decision-makers, determine the acquisition, development, and deployment of organizational resources, the conversion of these resources into valuable products and services.

Leadership helps organizations achieve their current objectives more efficiently by linking job performance to valued rewards and by ensuring employees have the resources needed to get the job done. Transformational leaders are known to create a

strategic vision, communicate that vision through framing and use of metaphor, model the vision by walking the talk and acting consistently, and build commitment towards the vision (Avolio, 1999). Thus the values of a leader in the organization have critical importance because they shape the behaviour and attitude of the leader.

2.5 Critique of Existing Literature Relevant to the Study

Corporate culture can be a liability, resulting in the erection of barriers to change, diversity and acquisitions and mergers (Ng & Kee, 2013). Nevertheless, organisations remain skeptical of its dysfunctional roles in handling change. For example, General Motor which has strong culture faces enormous difficulty in its attempts to change its ways in a dynamic and highly competitive environment (Schermerhorn *et al.*, 1994). Robbins and Judge (2010) concurred that cultural change is inevitable and necessary under these conditions of a dramatic crisis, turnover in leadership, young and small organisations and weak culture. In fact, if element of culture becomes dysfunctional, it is the leader's responsibility to do something to speed up culture change (Schein, 1997).

Argyris (2010) asserted that culture can be counterproductive for inhibiting change when: organisations are rigid and bureaucratic they contain organisational defensive routines that inhibit learning and change; fear of getting into trouble by taking initiatives that organisational norms define as unpopular; lack of appropriate organisational rewards; human beings resist accepting their share of the responsibility for the problem by blaming others or the system; people develop a victim mentality that is encouraged by the organisation defensive routines; lack of genuine and enthusiastic commitment by the top; most top executives do not have the time that is required to be persistent champions for persistent change and surprisingly many executives are concerned about harming their reputation if they take 'people' initiative that are too risky.

Sims and Brinkmann (2003) examined the Enron Corporation debacle, collapse and eventual bankruptcy through a systematic analysis of the organisational culture. Their findings demonstrate the company's culture have profound effects on the ethics of its

employees. This case confirms a critique on the mainstream view that there is no ‘one best way’ to manage culture and therefore, strong organisational culture may not be desirable.

There are notable contradictions and ambiguities (Ng & Kee, 2013). It is true that the mainstream perspective supports that organisational culture bring benefits to organisation. On the other hand, the critical perspective sceptically questions the contradictory roles and contributions of organisational culture (Knights & Willmott, 2006; Smircich, 1983). There are contradictory views on the level of importance of characteristics of organisational culture. While Robbins and Judge (2010) listed six characteristics namely; innovation and risk taking, attention to detail, outcome orientation, people orientation, team orientation, aggressiveness and stability on the other hand, Brown and Harvey (2006) listed down another six characteristics namely; member identity, team emphasis, people focus, autonomy, control and risk tolerance.

Parker (2000) argued that organisational culture should be seen as ‘fragmented unities’ in which members identify themselves as collective at some time and divided at others. Thinking about organisational culture therefore involves recognizing the inseparability of binaries-together and apart, general and unique, structure and agents, organisations and identities-in sum organisational culture both as a constraint and as an everyday accomplishment (Ng & Kee, 2013).

2.6 Research Gaps

Some conceptual, theoretical, knowledge and methodological gaps arise from the literature reviewed by this study. The government has invested heavily in SCs because this is seen as an engine of social, economic and political development of Kenya. Besides, there are immense expectations from the government, the citizens, development partners, management and employees of the SCs. It is about performance of these organisations in terms of efficiency, productivity, service delivery and value for money. More needs to be understood about the SCs if they are to achieve their objectives.

The literature reviewed shows that studies relating performance and corporate culture have largely been done on private companies or organizations. No similar studies have been conducted about public sector organizations particularly on SCs. Available literature on efforts to unravel factors influencing performance of organizations have used variables like leadership, employee commitment, financial management, among others. There is a gap on how corporate culture influences corporate performance. Studies on performance of parastatals in Kenya have used different theories and models to speculate on causes of poor performance of the parastatals. None of these studies have employed Denison's Model to understand the role that corporate culture plays in performance. Neither have they investigated the moderation role of CEO values in the relationship between corporate culture and performance of state corporations. Despite the research efforts and recommendations from past studies the parastatals have continuously presented discouraging performance in general. This study is designed to apply Denison's Model to find out how elements of corporate culture influence performance and how it can be used to improve performance of SCs in Kenya.

2.7 Summary of the chapter

An overview of the literature has been presented to provide premises for the study. The chapter introduced concepts and definitions of organizational performance and corporate culture in order to provide a context for the study. The different types of culture were noted and various theories and models of organizational culture were highlighted. Previous studies were referred to and the chapter concludes with the research gap in the literature reviewed.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The way in which research is conducted may be conceived of in terms of the research philosophy subscribed to, the research strategy employed and to the research instruments utilized in the pursuit of the research objectives and the quest for the solution of a problem. Research objectives and hypotheses have been outlined in Chapter One. The study is basically a replication of the Denison's Model of Culture (1990) but it integrates the other models and also takes into consideration both internal and external factors. The rationale is that this was a quantitative study on corporate culture and organizational performance of commercial state corporations in Kenya. This chapter discusses the research design, area of study, target population, sample of the population, sampling technique, instrument for data collection, validation of the questionnaire, administration of the instrument, and method of data analysis and presentation.

3.2 Research Design

3.2.1 Research Philosophy

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. The term epistemology (what is known to be true) as opposed to doxology (what is believed to be true) encompasses the various philosophies of research approach. The purpose of science, then, is the process of transforming things *believed* into things *known*: doxa to episteme. Two major research philosophies have been identified in the Western tradition of science, namely positivist (sometimes called scientific) and interpretivist (also known as antipositivist) (Galliers, 1991).

Positivists believe that reality is stable and can be observed and described from an objective viewpoint (Levin, 1988), that is, without interfering with the phenomena being studied. They contend that phenomena should be isolated and that observations should be repeatable. This often involves manipulation of reality with variations in only a single independent variable so as to identify regularities in, and to form relationships between, some of the constituent elements of the social world. Predictions can be made on the basis of the previously observed and explained realities and their inter-relationships. 'Positivism has a long and rich historical tradition. It is so embedded in our society that knowledge claims not grounded in positivist thought are simply dismissed as ascientific and therefore invalid' (Hirschheim, 1985, p.33).

Interpretivists contend that only through the subjective interpretation of and intervention in reality can that reality be fully understood. The study of phenomena in their natural environment is key to the interpretivist philosophy, together with the acknowledgement that scientists cannot avoid affecting those phenomena they study. They admit that there may be many interpretations of reality, but maintain that these interpretations are in themselves a part of the scientific knowledge they are pursuing. Interpretivism has a tradition that is no less glorious than that of positivism, nor is it shorter.

In addressing the key research questions identified in Chapter One, it is important to adopt an appropriate epistemological, ontological and axiological approach, which would enable appropriate data collection, analysis and interpretation of the findings for the benefit of practitioners and researchers. Positivism as a research paradigm was adopted in this study to reflect the epistemological, ontological and axiological approach involved. To this effect, a quantitative approach was used in eliciting the relevant data from key respondents from the SCs. It utilized an empirical setting to investigate the theoretical relational paths drawn from literature and test them through hypotheses. The conceptual framework sought to quantify the data for the purposes of explaining the causal relationships. The concept of positivism is directly associated with the idea of objectivism. In this kind of philosophical approach, scientists give their viewpoint to evaluate social world with the help of objectivity in place of subjectivity (Cooper &

Schindler, 2006). The positivist position is derived from that of natural science and is characterized by the testing of hypothesis developed from existing theory (hence deductive or theory testing) through measurement of observable social realities (Saunders, Lewis & Thornhill, 2007). Positivism is said to be in the realm of theory, where the data is theory driven and designed to test the accuracy of the theory. Predictions can be made on the basis of the previously observed and explained realities and their inter-relationships (Sang, 2015).

3.2.2 Research Design

According to Cooper and Schindler (2006) a research design is the blue print for fulfilling research objectives and answering questions. It is the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them (Chumo, 2011). Selecting a design may be complicated by availability of a large variety of methods, techniques, procedures, protocols and sampling plans. This study was descriptive in nature, as the relationship between corporate culture and performance was described through the research. Christensen (1997) indicates that the primary characteristic of the descriptive research approach is that it represents an attempt to provide an accurate description or picture of a particular situation or phenomenon. It attempts to identify variables that exist in a given situation and describes the relationship that exists between those variables. This research meets these requirements as the characteristics and constructs of corporate culture and performance were clearly defined and were analysed using quantitative techniques, and the aim of the research was to determine the nature of the relationship between the two variables.

Explanatory research goes further than merely indicating that relationships exist between variables (Mouton & Marais, 1994). It indicates the direction of the relationships in a causal relationship model. In this research, a particular organizational culture profile is hypothesized to have a role in the performance of the SCs. This research can thus also be described as being explanatory in nature.

Thus the study adopted a descriptive survey research with commercial SCs in Kenya as the unit of analysis because the design best serves to answer the questions and the purposes of the study. The survey research is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. In other words, only a part of the population is studied, and findings from this are expected to be generalized to the entire population (Nworgu, 1991).

The hypotheses that were put forth by the researcher were tested through statistical outcomes, and the choice of statistical tests were based upon the level of measurement of the data; the validity of the instrument utilized for measuring the variables of interest; the power of the statistical test selected; and the methodological limitations of the research (Teddie & Tashakkori, 2008 cited in Sang, 2015).

3.3 Target Population

A population is the total collection of elements about which inferences are made and refers to all possible cases which are of interest for a study (Sekeran, 2008; cited in Chumo, 2011). In Kenya there are 34 commercial state corporations (PTPR, 2013). This study is a census since the population was drawn from all the 34 commercial state corporations.

Target population is that population upon which the researcher wants to generalise the results of the study. In defining the accessible population one should define the population as consistently as possible with the purpose of the study. Target population for this research was defined to include the 34 purely commercial State corporations in Kenya as shown in appendix C.

3.4 Sample and Sampling Techniques

3.4.1 Sampling Frame

According to Cooper and Schindler (2006) a sampling frame is closely related to the population. It is the list of elements from which the sample is actually drawn. According to Kothari (2004), a census approach is a complete enumeration of all items in the population. It is presumed that in such an inquiry when all items are covered, no element of chance is left and the highest accuracy is obtained. This study took all 34 State corporations as sampling units. This is the most preferred method because the population is relatively small as well as not homogeneous. Each of the unit comprised elements that were the source of information. The sampling frame included the heads of departments. These are the accessible population since they are the people within the researcher's reach. They constitute the people responsible for routine operations in their organizations. Most of them had several years of working with and managing people and, therefore, they were in the best position to furnish the researcher with the information needed to answer the research questions about the State Corporations in this study. The researcher obtained the required information by administering the data collection instrument to these people. The target population was categorized into three: very good performers, good performers, and poor performers. The sample of 102 respondents is shown in Appendix D.

3.4.2 Sampling Techniques

Once the sample size has been determined the researcher should come up with a procedure to select the subjects to be included in the sample. In order to come up with a representative sample a researcher must have a sampling frame. This can be a list, directory or index of cases from which a sample can be selected. In this study, the researcher purposefully chose to study commercial SCs because their performance can be measured. Respondents were the various heads of departments including finance, human resources, marketing operations/corporate affairs (public relations). This is

because the organizational structure of state corporations is centralized at the headquarters with all reports from branches being consolidated here. Therefore for each SC, heads of key departments were targeted because they have information related to the study problem and therefore representative of their respective SC.

A total of 102 respondents were selected to participate as shown in appendix D. This survey method was appropriate for this kind of study because it provided a quantitative description of role of corporate culture on performance of the organisation. Relevant studies elsewhere have used different representative populations for measuring corporate culture. Some studies (for example Fey & Denison, 2003; Hartog & Verburg, 2004) collected data only from executives and top management within the organization. Collecting data only from higher hierarchical positions may provide important insights about top management (Bavik, 2014).

3.5 Data Collection Instruments

Structured questionnaire survey was used in eliciting the main data (including piloting). The research adopted Denison's questionnaire as one of the data collection instrument for this study. It was modified to include questions on CEO values and performance. The key persons in the SCs filled the questionnaire. The questions (Appendix B) were aimed at eliciting relevant information concerning corporate culture and performance in their organisations. Questions relating to involvement culture, consistency culture, adaptability culture, mission culture, CEO values and performance were asked in the questionnaire.

The questionnaire had seven sections: A, B, C, D, E, F, G and H. Section 'A' was on personal data of the respondents and had six items; section 'B' was on organisation information with a total of two items; section 'C' contained questions on involvement culture with nine items; section 'D' was on consistency culture, which had nine items; section 'E' made up of nine items was on adaptability culture; section 'F' had nine questions on mission culture; and section 'G' focused on organisational performance

with 11 items. Section 'H' was on CEO values with nine items. The instrument was structured in the modified Likert fashion, on a five – point scale, ranging from 'strongly agree' (SA), through 'agree' (A), neutral (N), 'disagree' (D) to 'strongly disagree' (SD). Subjects responded to their degree of agreement with the statements contained in the instrument. The secondary data from the prospectuses and annual performance reports, statistical reports, books, journals, publications, business, websites and investment plans of the selected SCs was gathered and analyzed to complement primary sources.

3.6 Data Collection Procedure

After the pilot testing and all necessary modifications, two research assistants were recruited and trained so that the study could yield quality results. The questionnaires were self- administered directly to the chosen sample for the study. One hundred and thirty-six copies of the questionnaire were distributed on 'drop and pick' mode. There were follow-ups using phone calls and the internet to keep track of the respondents.

3.7 Pilot Testing

A pilot study tries to maximize the reliability and validity of the data collected (Mugenda & Mugenda, 2003). The rule of thumb is that at least 10% of the sample should constitute a pilot test Creswell (2003). Using Denison's validated questionnaire, a pilot testing was carried out on the instrument using three respondents from five SCs (14.7% of sample) that were not going to be covered in the actual research. Mugenda and Mugenda (2003) explain that pilot testing is done to gauge validity and reliability of research instrument. This was done in order to see how the subject were to react to the questionnaire; whether the items were clear enough and easily understood; whether there was the need to include more items in certain areas; or whether there were some items to which they would not like to respond; as well as to determine the workability of the proposed method of data analysis for the study. From the pilot test, the researcher was able to understand whether there is ambiguity of some items and if so modify them to the level of the questionnaire.

3.7.1 Validity of Research Instruments

The Denison's questionnaire used in this study has been subjected to a validation process for face and content validity; hence it is standardized. In research, the Denison Organizational Culture Survey (DOCS) has been applied both in the US and in other national contexts such as Russia, Europe, the Middle-East, Africa and Asia (Hong Kong). Denison and his US-based consulting firm have also widely applied the instrument in companies such as Daimler Chrysler, Norsk Hydro, Clariant, Danfoss, Swiss Re, IKEA, Roche, Shell, UBS or Credit Suisse. Face and content validity have been defined by McBurney (1994) as follows: face validity is the idea that a test should appear superficially to test what it is supposed to test; and content validity is the notion that a test should sample the range of behaviour represented by the theoretical concept being tested.

In order to increase the validity content of the questionnaire the following instruments have been used: studying the questionnaires and questions that have already been used in similar research; examining of numerous articles and books regarding this issue and related models; and consulting experienced people (Pirayeh, Mahdavi & Nem, 2011).

3.7.2 Reliability of Research Instruments

Reliability is defined as the extent to which a questionnaire, test, observation or any measurement procedure produces the same results on repeated trials. In short, it is the stability or consistency of scores over time or across raters (Cronbach, 1951). One simple way of testing reliability of a questionnaire is to apply it twice under exactly the same conditions and see if similar results are obtained by, for example, calculating the correlation coefficient (Brinkman, 2009). This is called test-retest reliability. Although this sounds straightforward, it can be tricky as the same conditions also mean the same person, under the same condition. For example measuring attitudes, beliefs and intention might be affected as people can change their mind over time.

Another approach to examine the reliability is to look for consistency within a single measurement. Two methods often mentioned in this context are the split-half method and Cronbach's alpha. The split-half method splits the questions of a dimension in two, for example odd-numbered questions versus even-numbered questions, or just randomly split. Next, it correlates the scores across the two groups. This study will perform a split-half analysis in SPSS on the original items from the pilot survey questionnaire. The correlation between the two groups will be compared. However, splitting a group into two also reduces the reliability, as reliability is increased with the number of questions. The Spearman-Brown prophecy coefficient can compensate for this.

Since the result of the split-half method changes when you split up the items differently it is suggested to try all possible combinations and come up with some average. This is what Lee Cronbach might have thought when he was developing his measure. When items have equal variance (for example after a z- transformation) the Cronbach's alpha measure becomes:

$$\alpha = \frac{N \times \bar{r}}{1 + (N-1) \times \bar{r}} \dots\dots\dots \text{Equation 2}$$

Source: Brinkman, W.P. (2009).

Here *N* is the number of items and *r*-bar the average correlation between the items.

Cronbach-alpha is widely used in business research when instrument for gathering data have items that are scored on a range of values, such as attitude scales in which the item responses are in continuum (Strongly Agree=5, Agree=4, neutral=3, Disagree=2, Strongly Disagree=1) because it takes into consideration the variance of each item (Oluwatayo, 2012). Indeed, Whiston (2005) points out that when the scoring of items is not dichotomous, then the appropriate method of estimating reliability is Cronbach-alpha. Moreover, Ary, Jacobs and Razavich (2002) emphasize that if the test items on an instrument are heterogenous, that is, measuring more than one trait or attribute, then reliability index is best computed using Cronbach-alpha.

However, there arises a question as to what should be the acceptable magnitude of correlation when using Cronbach-alpha. Criteria of acceptable levels of alpha qualify a value of 0.8 and higher as good, and above 0.7 as satisfactory (Loewenthal, 2001). For example, Nunnally (1994) suggests 0.70 (70% of variance reliable) and above while some authors suggest that it is acceptable if it is 0.67 (Cohen et al, 2008). Therefore to check for reliability Cronbach's alpha coefficients were calculated for each group of indicators to determine how the items correlate among themselves. Cronbach's alpha is interpreted as the mean of all possible split-half coefficients (Ngugi, 2012).

3.8 Measurement of variables

3.8.1 Measurement of Dependent Variable

The performance measures were examined at organizational level. The measures were obtained from Fisher (2000), and are the same measures used by Denison (2000) but with some modifications. The study measures were: new product introduction, product quality, personnel activities coordination, internal process coordination, sales/revenue growth, profitability/ROA, personnel absenteeism, productivity, employee satisfaction, labour turnover and overall corporation performance. All the variable items were measured using five-point Likert scale. Respondents were asked to evaluate the performance of their organizations on each item on the scale ranging from 1=strongly disagree to 5=strongly agree. A high performance is represented by high scores in the above stated measures.

3.8.2 Measurement of Independent Variables

Trying to effectively measure culture is a complex process. Pellegrin *et al.* (2011) endeavour to demystify the issue, explaining that to the organizational scientists, culture is simply a collection of behaviours; all meaningful behaviours are measurable and what is measurable can be changed. Taras *et al.* (2009) describe a typical instrument as measuring culture by quantifying values, assumptions or practices along cultural dimensions or factors. In this study the organizational culture traits were examined at organizational level. Organizational culture was measured using the culture traits as identified by Denison including mission, involvement, adaptability and consistency on a five-point Likert scale.

3.8.3 Measurement of Moderating Variable

Many researchers have developed instruments to measure values, but the most popular scale of personal values is the Social Value Survey (SVS) developed by Schwartz (1994; 2004). The SVS instrument contains 10 motivationally distinct types of values, postulated to be recognized implicitly in all cultures. To reflect the intermixed nature of value types, Schwartz (1994) organized the 10 value types into two basic, bipolar dimensions that can also be justified on conceptual and empirical grounds. The first basic dimension, 'Openness to Change versus Conservation', opposes values emphasizing one's own independent thought and action and favouring change to those emphasizing submissive self-restriction, preservation of traditional practices, and protection of stability. The second dimension, 'Self-enhancement versus Self-transcendence', opposes values pursuing one's own success and dominance over others to those pursuing enhancement of others and transcendence of selfish interests and emphasizing the acceptance of others as equals.

This study focussed on one of the two bipolar dimensions: 'self-enhancement versus self-transcendence', which has shown to be related to the CEO's emphasis of different stakeholders of the organization (Agle, Mitchell & Sonnenfeld, 1999) and the transformational leadership behaviour of corporate managers (Sosik, 2005). Individually, these two types of value orientation emphasize, respectively, the pursuit of one's own relative success and dominance over others versus acceptance of others as equals and concern for their welfare. The two can coexist, but often, one would find the pursuit of achievement values conflicting with the pursuit of benevolence values; that is, seeking personal success for oneself is likely to obstruct actions aimed at enhancing the welfare of close others who need one's help (Ros, Schwartz, & Surkiss, 1999).

To operationalise the variables under study measurement of the variables is summarised in Table 3.1:

Table 3.1: Measurement of Study Variables

Variable type	Variable name	Sub-variables/indicators/measures	Measurement tool
Dependent variable	Organizational performance	Quality product or service	5 point Likert scale items
		Internal process coordination Personnel activities coordination	
		New product development	Documents analysis
		Overall corporation performance	
		Employee satisfaction	
		Personnel absenteeism	
Independent variables	Involvement culture	Labour turnover	5 point Likert scale items
		Empowerment	
		Team orientation	
	Consistency culture	Capability development	5 point Likert scale items
		Core values	
	Adaptability culture	Agreement	5 point Likert scale items
		Coordination and integration	
		Creating change	
	Mission culture	Customer focus	5 point Likert scale items
		Organisation learning	
Strategic direction and intent			
Moderating variable	CEO values	Goals and objectives	5 point Likert scale items
		vision	
		Self direction	
		Stimulation	

3.9 Data Processing and Analysis

This section describes how data was processed and analyzed.

3.9.1 Data Analysis

The study expected to produce both quantitative and qualitative data. Therefore both descriptive and inferential statistics were used to analyze the data. Once the questionnaires were received they were coded and edited for completeness and consistency. Each questionnaire response was captured onto a computer software programme for the purpose of analysis. Once data from the questionnaires was edited, cleaned and coded, it was analyzed using descriptive statistics like percentages, means, measure of dispersion and frequencies. Descriptive analysis, factor analysis, reliability and validity tests and Pearson correlation were carried out using Statistical Package for Social Sciences (SPSS). The analysis was done to establish the patterns and trends inherent in the responses, and to figure out how corporate culture drives performance.

Data collected was initially subjected to Factor analysis. Factor analysis is defined by Mugenda and Mugenda (2003) as a powerful statistical procedure often used to validate hypothetical constructs. It attempts to cluster those indicators or characteristics that seem to correlate highly with each other. Kothari (2005) has emphasized that it is customary for a loading of 0.33 to be the minimum for interpretation. Factor analysis was used to determine correlations among culture and performance variables in order to eliminate traits that may be highly correlated to ensure validity of the variables, as well as reducing the data into relevant number of factors to enable further analyses.

The Normality of organizational performance as a dependent variable was determined using Kolgomorov-Siminov test and a Q-Q plot. This helped to check whether data provided by the dependent variable was normally distributed. A normal test is used to fit a multiple regression model and for the fit to be done, the dependent variable should be normally distributed (Hussey & Hussey, 1997; cited in Sang, 2015).

Once data screening was completed, descriptive statistics for all variables were run. Initial descriptive analysis was performed using SPSS 20. The mean, median and mode were used for descriptive analysis. This technique gives simple summaries about the sample data and present quantitative descriptions in a manageable form. This assisted with the generalization of results (Gupta, 1996).

Inferential statistics was also used in the analysis. SPSS was used to conduct correlation analysis, the analysis of variance (ANOVA) and regression. The analyses were carried out at a significance level of 5%.

A correlation analysis was conducted to establish the relationship between the independent and dependent variables; this helped to test the hypotheses of the study and show the degree of relationship between the independent and dependent variables. The purpose of doing correlations was to allow the study to make a prediction on how a variable deviates from the normal. Pearson *r* was used to determine if there was a significant, positive association between each independent variable and organisational performance. Pearson *r* is a measure of the degree of association between two variables which are both measured in either the interval or ratio scale. Its value ranges from -1.0 to +1.0, with bigger absolute values indicating stronger relationship; the sign denotes the direction of association. A positive correlation indicates that as one variable increases, the other also goes up; meanwhile a negative correlation suggests that as one variable increases, the other correspondingly goes down (Reid, 1987 cited in Sang, 2015).

$$r = \frac{\text{Cov}(X; Y)}{\Sigma X \Sigma Y} \dots\dots\dots \text{Equation 3}$$

The following values were used as a guide when interpreting data (Hussey & Hussey, 1997) .

Table 3.2: Guideline on Strength of relationship

r value	Interpretation
0.7 to 0.99	A high positive association
0.4 to 0.69	Moderate positive association
0.39 and below	Low positive association

According to Kothari (2004), correlation and regression analysis are used to determine the relationship between variables, and it helps to measure the strength of association between two or more variables. Previous research on the relationship between HR practices and organizational performance or productivity have used bivariate correlational analysis or multiple regression (Neal et al, 2005) to see if there is a significant relationship between independent, dependent and moderating variables. It is on this basis that correlation and multiple regression analysis were used. Multiple regression models attempt to determine whether a group of variables together predict a given dependent variable (James & Frank, 1985). A multiple regression model separates each individual variable from the rest allowing each to have its own coefficient describing its relationship to the dependent variable. This model was therefore adopted because the study had more than one variable.

Multiple regression models were used to determine the causal relationship between organizational culture and performance. Tabachnick and Fidell (2007) holds that multiple regression analysis is by far the most widely used in the business and social sciences to explore all types of independent relationships. Nguyen (2009) asserts that regression analyses are performed to predict the relative test of the study hypotheses. Generally, multiple regression model is given as $Y = \beta_0 + \beta_i X_i + \varepsilon$ where $i = [1,2,3,4]$.

Performance of the State corporations was regressed against four variables of corporate culture namely involvement culture, consistency culture, adaptability culture and mission culture. The regression model for this study was expressed as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \dots\dots\dots \text{Equation 4}$$

where:

β_0 = constant,

$\beta_1 - \beta_4$ = intercepts for the independent variables,

Y = performance,

X_1 = involvement culture, X_2 = consistency culture, X_3 = adaptability culture, X_4 = mission culture, ε = error term.

The independent variables were weighted to form the regression variate that was used to explain their relative contributions to the dependent variable (Berenson & Levine, 1992; cited in Boon & Arumugam, 2006). The analysis was done in two steps. First, corporate culture dimensions were entered into the equation as response variables (main effect). Organizational performance was used as the dependent variable in the regression analysis.

Second, moderation effect of CEO values was tested. The moderation model tests whether the prediction of a dependent variable, Y, from an independent variable, X, differs across levels of a third variable, Z. Moderator variables affect the strength and/or direction of the relation between a predictor and an outcome: enhancing, reducing, or changing the influence of the predictor. Moderation effects are typically an interaction between factors or variables, where the effects of one variable depend on levels of the other variable in analysis (Fairchild, 2009). The moderating effect of values (self-direction and stimulation) on the relationship between organizational culture and

organizational performance dimensions was evaluated by means of regression analysis where all predictor variables and their interaction term were centred prior to model estimation to improve interpretation of regression coefficients. General model for testing moderating (interaction) effect is

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_1 Z + \varepsilon \dots \dots \dots \text{Equation 5}$$

The model for testing hypothesis on moderating effect in this study is given as

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Z + \beta_6 X_1 Z + \beta_7 X_2 Z + \beta_8 X_3 Z + \beta_9 X_4 Z + \varepsilon \dots$$

.....**Equation 6**

Where β_1 is the coefficient relating the independent variable, X, to the outcome, Y, when Z= 0, β_5 is the coefficient relating the moderator variable, Z, to the outcome when X = 0, β_0 the intercept in the equation, and ε is the residual in the equation.

Analysis of Variance (ANOVA) was also done to establish whether the whole model was a significant fit of the data and therefore formed the tests of significance. ANOVA is a data analysis procedure that is used to determine whether there are significant differences between two or more groups of samples at a selected probability level (Mugenda & Mugenda, 2003). The data was presented using distribution tables for easier understanding.

Moderated multiple regression (MMR) was used to test the moderating effect of CEO values. Moderated multiple regression (MMR) analysis is defined as an inferential procedure which consists of comparing two different least-squares regression equations (Aguinis, 2004; Aiken & West, 1991). MMR analysis was used to compare the moderating effect of the CEO values analyzed by interpreting the R^2 change in the models obtained from the model summaries so as to test the hypothesis that CEO values does not moderate the relationship between corporate culture and organisational performance. A similar study by Kirui (2014) that involved analysis of a moderating effect also used moderated multiple regression (MMR).

The hypothesis testing was done at 5% level of significance and SPSS was used for this purpose.

3.9.2 Data Presentation

The output from data analysis was then presented in tables, charts, Q-Q plot, box plots and bar graphs.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter discusses research findings for the data collected from 70 respondents in commercial state corporations in Kenya. It is divided into six sections covering: response rate, data reliability and validity, factor analysis, background information of the state corporations, descriptive and inferential analysis of dependent variable which is performance of commercial state corporations in Kenya, the four independent variables: involvement, consistency, adaptability and mission culture. CEO values were adopted as the moderating variable. The chapter focuses on presentation of empirical findings, data analysis and interpretation of the results. Data was cleaned, coded and analyzed using the Statistical Package for Social Sciences (SPSS) version 21.

4.2 Response Rate

Data was collected from 26 commercial state corporations while targeting 34 commercial state corporations. A total of 70 out of 102 self administered questionnaires were filled and returned giving a response rate of 68%. This was considered appropriate as the recommended rate is 60% of respondents (Sekaran, 2009).

Table 4.1: Response Rate

	Frequency	Percentages
Number of questionnaires sent	102	100%
Number of questionnaires filled	70	68%

4.3 Demographic Information

This section describes the background information of the study participants and that of their organizations. It includes gender, age, highest level of education, position in the organization, job experience, management level, length of existence of the organization and size of the organization. These factors are included in the study on the premise that demographic profile of employees has direct impact on organizational performance (Muhammad, 2008).

4.3.1 Gender of Respondents

The findings in Figure 4.1 show that 42.9% of the respondents were female while 57.1% were male. Female segment of the sample is quite significant in the study. For a long time there has been a disproportionate male–female ratio in some professions especially in public sector employment making it difficult for several women to participate well in decision making as compared to their male colleagues. The reason for this, being that, men tend to see women who are in the same profession with them as rivals and not colleagues. This is due to the social orientation of the society to regard women as primarily home makers who are biologically different from men (Osarenren & Ogunleye, 2009). As a result of this assumed biological difference women are therefore not viewed to be competent or able to perform in the male dominated professions in the public sector. This study shows that the gender gap in state corporations in Kenya is narrowing.

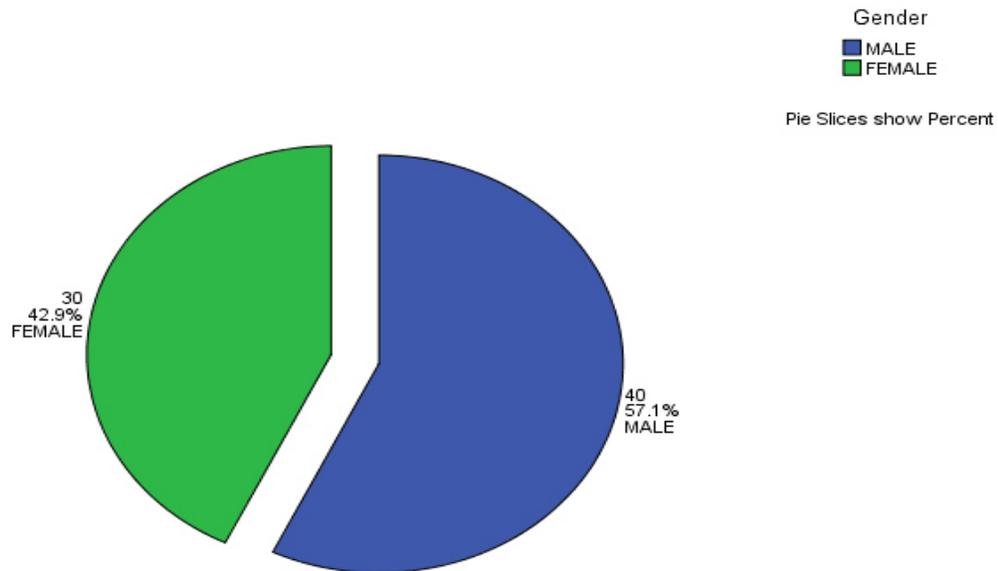


Figure 4.1: Gender of respondents

4.3.2 Age of Respondents

The survey results in Figure 4.2 shows that 24.3% of the respondents were in the range of 20-30 years, 32.9% were in the range of 31-40 years (indicating that more young employees participated in the study), 35.7% were in the range of 41-50 years while 7.1% were 51-and-above years. Those in the age between 31 and 50 years make 68.6% of the respondents. This is significant because approach of a person towards practical life and vigour varies from time to time; hence it is necessary to assess it bearing age group in consideration. It has been found that in the lower age group of 20-30 years people adopt some professions and work with vigour and zest in pursuit of professionalism (Muhammad, 2008). However, it has commonly been experienced that novelty of organizational culture and environment does retard efficiency in some professions for this group, which gets set aside, as they ground their existence in the organization. After initial adjustment, people get along with the working of an organization and carry out

tasks in accordance with the prevailing procedures. In most organizations the most stable period of service in the organization is in the age bracket of 41-50 years. This might be because of satiated personality or instilled domestic responsibility. People gain standing in the organization and it fills them with confidence.

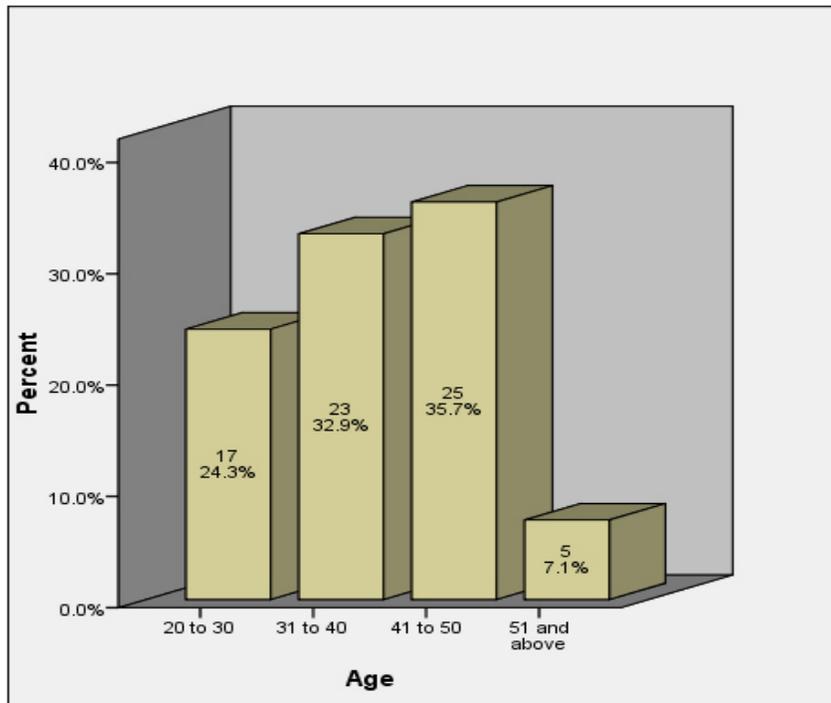


Figure 4.2: Age of Respondents

4.3.3 Level of Education

The findings in Table 4.2 show that 1.4% of the respondents had O'level as highest qualification, 2.9%, had A'level, 48.6% had bachelor's degree, 42.9% had master's degree, 1.4% had PhD, while 2.9% were those with other qualifications. Educated employees make a large proportion of workforce in any organization. However, standard of education varies from organization to organization on account of assigned role and task (Muhammad, 2008). It becomes a great concern to study corporate culture and its role in performance, through various levels of education. The respondents were placed in five groups on the basis of highest level of education and their approach towards

corporate culture was evaluated. It was found that the majority of the respondents 92.9% had university education. O’Level is the basic entry requirement into job market in public sector in Kenya. After entry adoption of any career is expected for every employee.

Some employees would enhance their academic profile in pursuit of their careers; others become contented and remain in the same category for larger duration of their job in the organization. The latter category appears to be skeptical of their growth in their profession; therefore their approach towards corporate culture is somewhat lukewarm. This uncertainty can impede their performance. Similarly, some employees can be aspiring for promotion but their education level or qualifications limit them, thus affecting their performance.

Table 4.2: Highest Education Level Attained

Highest Education Level Attained	Frequency	Percent
O'Level	1	1.4
A'Level	2	2.9
Bachelor Degree	34	48.6
Masters	30	42.9
PhD	1	1.4
Other	2	2.9
Total	70	100.0

Most responsible attitude towards the organizations has been experienced among highly educated employees (Muhammad, 2008). Such people are often placed in positions of responsibility and are considered to be mature enough to comprehend the required standards set by organizations. For instance employees with some experience combined with masters degree are in mid-academic contours with high expectations on them to make greater impact and display comparatively more concern for corporate culture. At this phase of their life they are at an important junction as regards mindset towards their careers. As the education standard increases, employee's perception towards corporate culture gets better. Lastly, the quality of responses (to questionnaires) by educated people increases validity of the study findings.

4.3.4 Position in the Organization

The data in Table 4.3 show that 15.7%, of the respondents were finance managers, 10% were general managers, 21.4% were human resource managers while 52.9% were other categories in the organizations.

Table 4.3: Position in the organization

Position in the organization	Frequency	Percent
Finance Manager	11	15.7
General Manager	7	10.0
Human Resource Manager	15	21.4
Other	37	52.9
Total	70	100.0

4.3.5 Experience of Respondents

It is envisaged that employees' performance and output varies depending on experience level. The results in Figure 4.3 show that 28.6% of the respondents have a job of above 15 years, 24.3% have 11-15 years experience, 34.3% have 5-10 years experience while 12.9% have below 5 years job experience. During 5-10 years of service many employees build a perception that they have attained adequate experience in their profession. They start exploring better opportunities which adversely affect the consistency and adaptability elements of corporate culture in their organizations. From this perspective, therefore, longevity of service can be linked to low performance in organizations. However, the sooner such employees are promoted to the higher grade they start to work with passion and drive. In the 11-15 years and above experience, the influence of culture on organization among employees is incremental with impact on performance. Here more domestic responsibilities, chance for progression in the service and diminished opportunity to secure job in other organizations persuade employees to demonstrate added involvement in the assigned roles, adapt to service system, both in letter and spirit, and focus towards attaining long term objectives of the organization. With the length of service employee's adaptability in the organization increases and generally becomes part of the system.

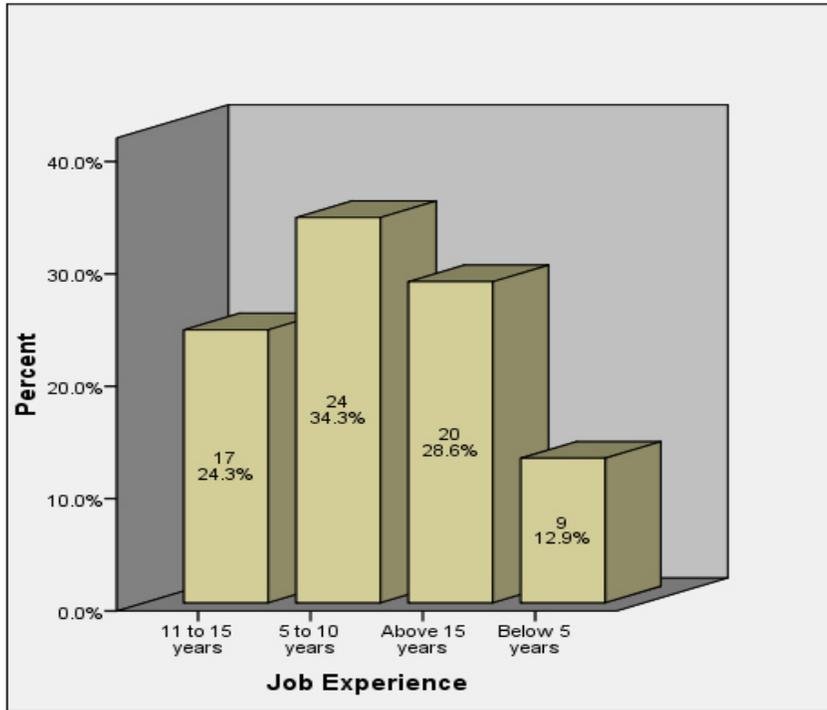


Figure 4.3: Job experience of respondents

4.3.6 Management Level of Respondents

Results in Figure 4.4 show that 24.3% of the respondents were in top management level, 60% were in middle management level while 15.7% were in lower management level. Each level of management has its own contribution. Top level management is generally lean in organizations but contribute significantly through formulation of strategy, policy and offering high level support to the other two levels of management. Top management and old members in an organization are the major source of transmitting culture; therefore strengthening them or turning them over brings change in the organization. Middle level managers ensure execution of objectives set up by top management whereas routine activities are performed by the lower management cadres. In order to earn maximum benefits from each of these segments, understanding of corporate culture and its role in performance is vital.

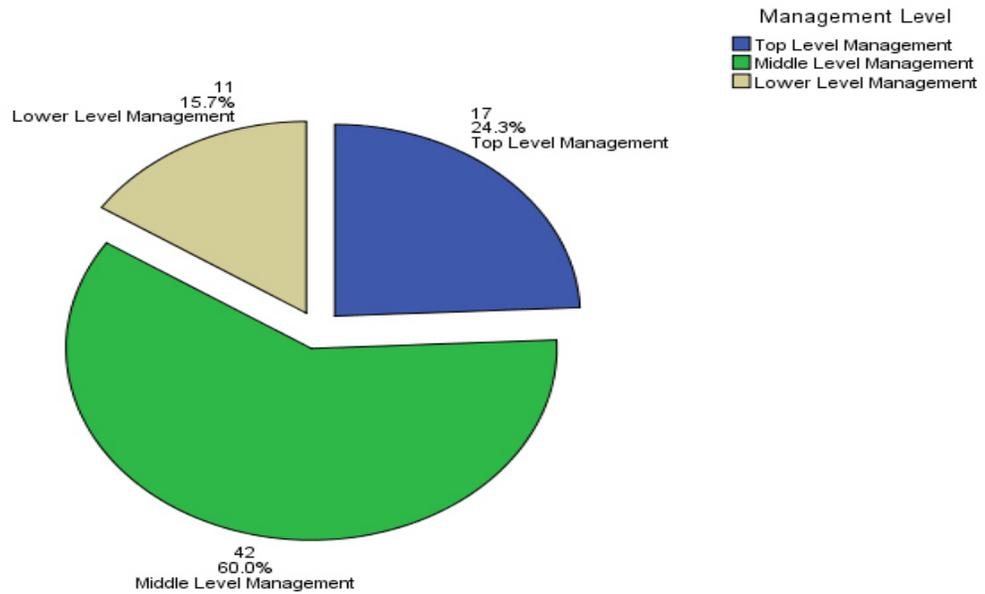


Figure 4.4: Management level of respondents

4.3.7 Length of Existence of Organization

Figure 4.5 shows that some respondents reported that their organization has been in existence for more than 80 years.

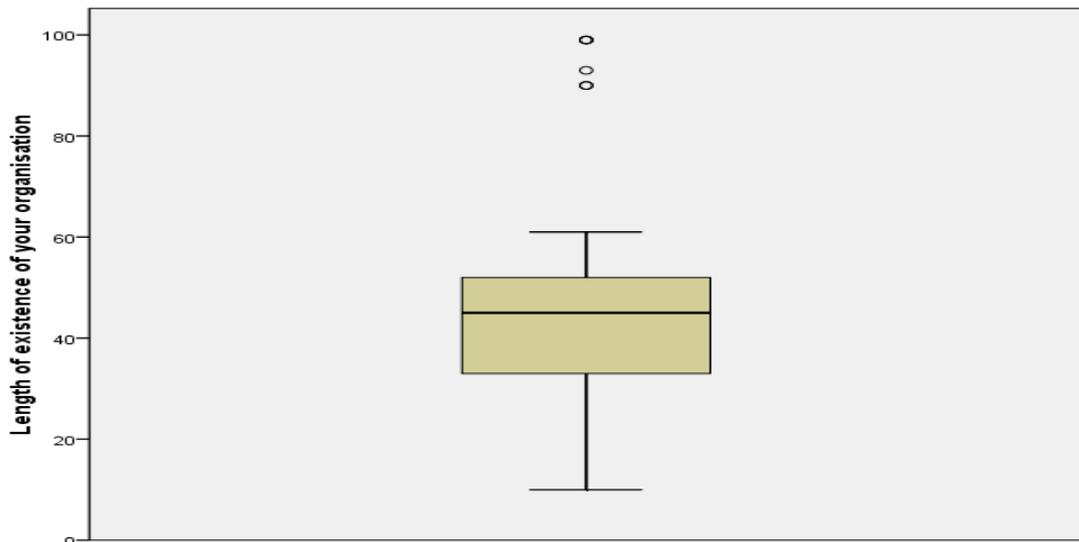


Figure 4.5: Length of existence of organization

Majority of the organizations have been in existence for a period of between 35 and 55 years. Those in existence for less than 30 years were very few. Organizational history does matter in terms of adoption of cultural changes; hence understanding of length of existence is important in this study.

4.3.8 Size of Organization

The results indicate that 52.9% of the respondents belong to organizations that have between 1 and 200 employees, 18.6% belong to those with between 201 and 500 employees while 28.6% belong to organizations with above 500 employees. Organizations bigger in size tend to have strong cultural values which holds them together. On the other hand smaller organizations are usually managed closely. This study evaluates all the three sizes of corporations. It is important to study all the three segments separately as it entails different level of cultural impacts.

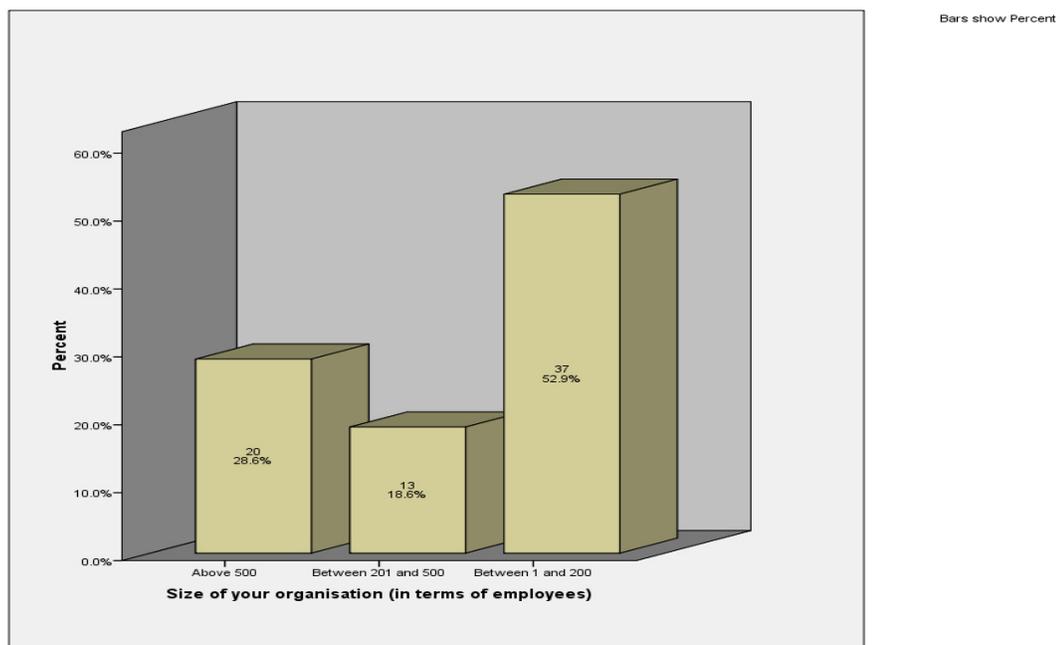


Figure 4.6: Size of organization

Managing culture in bigger organizations would have different connotations than medium or small size organizations. Muhammad (2008) notes that smaller size organizations easily accepts change in comparison with big size organizations. It is easy for the management to reach the employees. In changing corporate culture the major instrument is communication, which can easily occur in smaller organizations. However, larger size organizations have wider agreement of culture.

4.4 Analysis of Organizational Performance

4.4.1 Factor Analysis

According to Field (2009) items with factor loadings below 0.4 are insignificant and therefore need to be ignored. Bryman (2012) and Zikmund (2010) agree and recommend a factor component cut-off of 0.4. They view factor analysis as a data reduction technique that is important and used in multi-indicator measures to determine whether a group of indicators tend to converge or bunch together and form a distinct cluster (Weru, 2014). This method of data reduction is recommended because it promotes parsimony since explanations using a fewer components is better than one using more. Results of factor analysis on perceived performance of the organizations in the last three years showed that all the items had factor loadings greater than 0.4 and as such the items were retained as shown in Table 4.4.

Table 4.4: Component Matrix of Organizational Performance

Organizational Performance	Component 1
Internal process coordination	0.820
Employee Satisfaction	0.812
Overall corporation performance	0.799
Personnel activities coordination	0.781

New product development.	0.737
Quality product or service	0.661
Personnel absenteeism	0.577
Labour turnover	0.436

4.4.2 Reliability Analysis

Cronbach's alpha result was 0.842 as shown in Table 4.5. It shows good internal consistency of the items (George & Mallery, 2003).

Table 4.5: Reliability Measures of Organizational Performance

Variable	Number of Items	Cronbach's Alpha
Organizational performance	8	0.842

4.4.3 Descriptive Analysis

A modified five-point Likert scale was used to measure organisational performance and the results were as tabulated in Table 4.6. Percentages were used to describe the results. Performance in the organisations was measured using eight indicators. The respondents who were quite satisfied with the performance ticked ‘Excellent’ in their assessment of performance in terms of quality product (24.3%), internal process coordination (7.1%), personnel activities coordination (7.1%), new product development (20%), overall corporate performance (10%), employee satisfaction (2.9%), personnel absenteeism (12.9%) and labour turnover (15.7%).

Table 4.6: Organisational Performance

Organizational Performance	Poor %	Fair %	Good %	Very Good %	Excellent %	Subtotal	Mean	Median	Mode
	Quality product or service	1.4	2.9	17.1	54.3	24.3	4	4	4
Internal process coordination	1.4	4.3	37.1	50.0	7.1	4	4	4	
Personnel activities coordination	1.4	7.1	41.4	42.9	7.1	3	4	4	
New product development.	5.7	10.0	24.3	40.0	20.0	4	4	4	
Overall corporation performance	1.4	18.6	15.7	54.3	10.0	4	4	4	
Employee Satisfaction	5.7	21.4	40.0	30.0	2.9	3	3	3	
Personnel absenteeism	4.3	21.4	21.4	40.0	12.9	3	4	4	
Labour turnover	7.1	24.3	24.3	28.6	15.7	3	3	4	

4.4.4 Testing Regression Model Assumptions

Before regression analysis was done, the assumptions of multivariate analysis were tested to ensure that there were no violations of multivariate analysis assumptions. The data were checked for normality, homoscedasticity of residuals, and independence of observations. Graphical analyses were used to assess the actual degree of departure from normality and the results were presented in Q-Q plots.

4.4.5 Test of Normality

The basic assumption in regression analysis is normality of the residuals in the dependent variable in order to generalize findings of the study beyond the sample collected (Field, 2009 cited in Kimutai, 2014). Kolmogorov-Smirnov test was used to test for normality of organisational performance. The results indicate that the dependent variable (organisational performance) is normally distributed as shown in Table 4.7 with a mean of 17.34 and standard deviation of 5.04.

Table 4.7: Kolmogorov-Smirnov Test

One-Sample Test	Kolmogorov-Smirnov	Organizational Performance
N		70
Normal Parameters	Mean	17.337347
	Std. Deviation	5.0411655
	Absolute	0.078
	Positive	0.077
	Negative	-0.078
Kolmogorov-Smirnov Z		0.649
Asymp. Sig. (2-tailed)		0.794

Graphical analysis (quantile-quantile plot) was used to assess the actual degree of departure from normality. The graphical analysis results in Figure 4.7 shows that the line representing the actual data distribution closely follows the diagonal in the normal Q-Q plot, thus suggesting a normal distribution (Hair et al., 2006; cited in Kimutai, 2014).

Normal Q-Q Plot of ORGANIZATIONAL PERFORMANCE

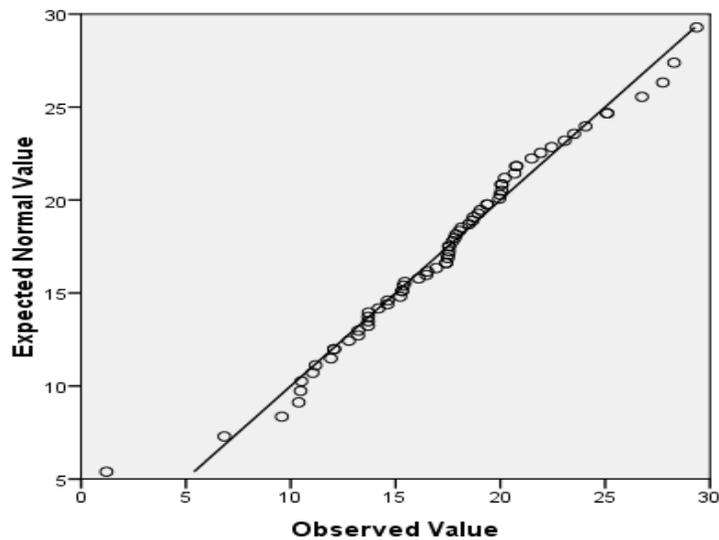


Figure 4.7: Normality plot of organisational performance (Dependent variable)

It is important to validate the assumption that data of this sample was from a normal distribution, through visual inspection of data plots because this validates generalising of results from the sample to the entire population of state corporations in Kenya. When majority of the responses are closer to the normality line it shows that the data was effective and therefore it is suitable for all types of statistical analysis including parametric and regression analysis (Weru, 2014).

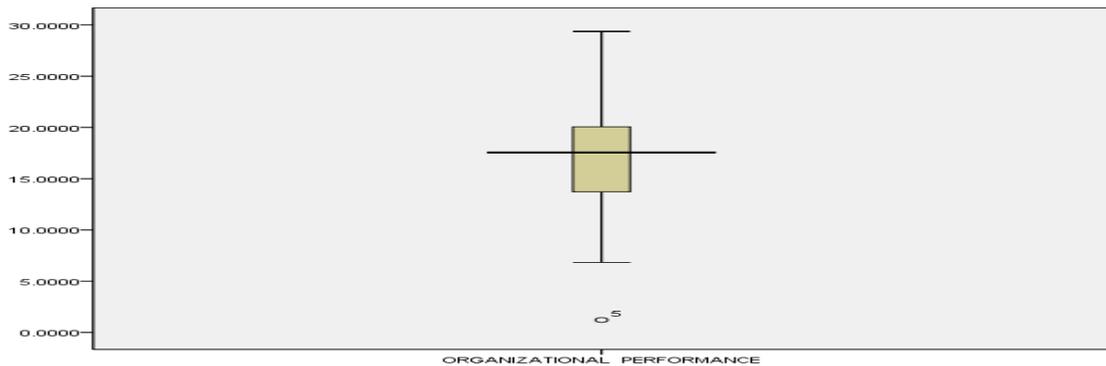


Figure 4.8: Box plot of organisational performance (Dependent variable)

The results of a box-plot also depicted that organisational performance lies between 14 and 20 units. However, there is one outlier at the bottom whose performance is low, as shown in Figure 4.8.

4.5 Analysis of Involvement Culture

In this study involvement was operationalized into empowerment, team orientation, and capability development. A five-point likert scale was used to measure each of the sub-variables and the results were presented in tables. Percentages were used to describe the results.

4.5.1 Factor Analysis

Principal Factor Analysis was conducted to determine if all factors/questionnaire items had significant factor loadings. All the factor loading were either greater than, or close to the threshold of 0.50 suggested by Hair et al (2006), supporting the reliability of the variables. The results of factor analysis are represented in Appendix F. All items were therefore retained since they had factor loadings greater than 0.5.

4.5.2 Reliability Test

Internal consistency refers to the degree to which responses are consistent across the items (variables) within a single measurement scale (Kline, 2005; cited in Nguyen, 2010). According to Cortina (1993), Cronbach's Alpha remains the most widely used measure of scale reliability. A low Cronbach's Alpha coefficient indicates that variables may be too heterogeneous, thus perform poorly in representing the measure (the construct). Accordingly, Cronbach's Alpha above 0.70 is considered an acceptable indicator of internal consistency, and the values of 0.60 to 0.70 are at the lower limit of acceptability as suggested in the literature (Hair, *et al.*, 2006). Since no factor was removed, reliability test results before and after factor analyses were the same as shown in Table 4.8.

Table 4.8: Reliability measurement results for Involvement Culture

Variable	Number of Items	Cronbach's Alpha
Involvement culture	9	0.834

Cronbach's alpha result of 0.834 obtained in this variable shows good internal consistency. Davidson et al. (2007) obtained Cronbach's alpha of 0.84 while Muhammad (2007) obtained alpha of 0.889 in a similar study.

4.5.3 Descriptive Analysis

4.5.3.1 Empowerment

Table 4.4 shows the results that 80% of the respondents were of the opinion that decisions are usually made at the level where the best information is available, 12.9% were neutral and 7.1% disagreed. It is deduced that decisions in the organizations are made where the best information is available. This facilitates quality of apt decisions at managerial level. On whether information is widely shared so that everyone can get the information he or she needs when it is needed, 68.6% agreed, 20% were neutral and

11.4% disagreed. This implies that information is widely shared in the organizations as and when required. It is a positive sign which facilitates employees to know all the details needed by them. Asked whether everyone believes that he or she can have a positive impact, 65.7% agreed, 21.4% were neutral and 12.9% disagreed. It is deduced that employees in their individual capacity consider their impact on performance of an organization. This can be attributed to their sense of positive contribution in the growth of the organization.

Table 4.9: Response on Empowerment

Empowerment	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Summary		
						Mean	Median	Mode
Decisions are usually made at the level where the best information is available.	1.4	5.7	12.9	54.3	25.7	4	4	4
Information is widely shared so that everyone can get the information he or she needs when it is needed.	0.0	11.4	20.0	48.6	20.0	4	4	4
Everyone believes that he or she can have a positive impact.	2.9	10.0	21.4	40.0	25.7	4	4	4

4.5.3.2 Team Orientation

A modified five-point Likert scale was used to measure team orientation and the results were as tabulated in Table 4.10. Percentages were used to describe the results. It was found that 75.7% agreed with the opinion that working in the respective organization is like being part of a team, 14.3% were neutral and 10% disagreed. It is deduced that

employees believe working in the team instead of taking instructions in the hierarchy. This is an appropriate method of working in the organizations.

Table 4. 10: Response on Team Orientation

Team orientation	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean	Median	Mode
Working in this organization is like being part of a team.	2.9	7.1	14.3	47.1	28.6	4	4	4
This organization relies on horizontal control and coordination to get work done rather than hierarchy.	2.9	28.6	20.0	35.7	12.9	3	3	4
Teams are the primary building blocks of this organization.	4.3	5.7	27.1	45.7	17.2	4	4	4

On whether the organization relies on horizontal control and coordination to get work done rather than hierarchy, 48.6% agreed, 20% were neutral and 31.5% disagreed. Lastly, for the opinion that teams are the primary building blocks of the organization, 62.9% agreed, 27.1% were neutral and 10% disagreed. This reveals that to a large extent organization teams are their building blocks.

4.5.3.3 Capability Development

A modified five-point Likert scale was used to measure capability development and the results were as tabulated in Table 4.11. Percentages were used to describe the results. From the findings, 60% agreed with the opinion that the organization is constantly improving its ‘bench strength’ in many dimensions, 34.3% were neutral and 5.7%

disagreed. It is deduced that there is continuous investment in order to improve the skills of employees. On whether the organization continuously invests in the skill of employees, 68.6% agreed, 17.1% were neutral and 5.7% disagreed. This shows that to a great extent concerted efforts are made to develop and utilize the skill of employees. Lastly, 74.3% agreed with the opinion that the capability of people in the respective organization is viewed as an important source of competitive advantage, 14.3% were neutral and 11.4% disagreed. This shows that capability of employees is viewed as an important source of competitive advantage.

Table 4.11: Response on Capability Development

Capability Development	S	D	N	A	S	Summary		
						Mean	Median	Mode
The organization is constantly improving its 'bench strength' in many dimensions.	1.4	4.3	34.3	42.9	17.1	4	4	4
This organisation continuously invests in the skill of employees.	2.9	11.4	17.1	32.9	35.7	4	4	5
The capability of people in this organisation is viewed as an important source of competitive advantage.	1.4	10.0	14.3	47.1	27.1	4	4	4

4.5.4 Correlation between Involvement Culture and Organisational Performance

Variables of this study were measured on Likert scale (nominal scale) and were converted into weighted data using R programme to gain at least approximate interval characteristic (Nguyen, 2013). The extent of linear approximation between two variables was indexed by a statistic known as the Pearson correlation coefficient (r) (Jaccard & Becker, 1997), which can assume any value from -1.00 to +1.00 inclusive. The size of the absolute value provides an indication of the strength of the relationship. A correlation coefficient of -1.00 or +1.00 and -0.50 or +0.50 indicates perfect and moderate correlation respectively (Pallant, 2007).

However, in behavioural science research, where complex behaviours are studied, significant correlation of 0.20 to 0.30 (and -0.20 to -0.30), are often considered important (Jaccard & Becker, 1997). The variable that was identified to have significant association with several other variables was further analysed through a stepwise regression process to reveal whether it (as a criterion) could be predicted or explained by those variables (as predictors). In this study, 43 factors which included 9 factors of involvement culture (IC), 8 of consistency culture (CC), 9 of adaptability culture (AC), 9 of mission culture (MC), and 7 of CEO values (CV) were used to test the hypotheses and answer the research questions. The correlation analysis was performed to identify aspects of the relationship among these dimensions. Table 4.12 shows the Pearson's Bivariate correlation between organisational performance and involvement culture.

Table 4.12: Correlation between organisational performance and involvement culture

Variable	Organizational Performance	Involvement Culture
Organizational Performance	Pearson Correlation 0.474**	1
	Sig. (2-tailed)	0.000
Involvement Culture	Pearson Correlation 0.474**	1
	Sig. (2-tailed)	0.000

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

The result shows that involvement culture is positively and significantly associated ($r = 0.474$, $p\text{-value}=0.000$) to organisational performance. This is further supported by the scatter plot diagram in Figure 4.9.

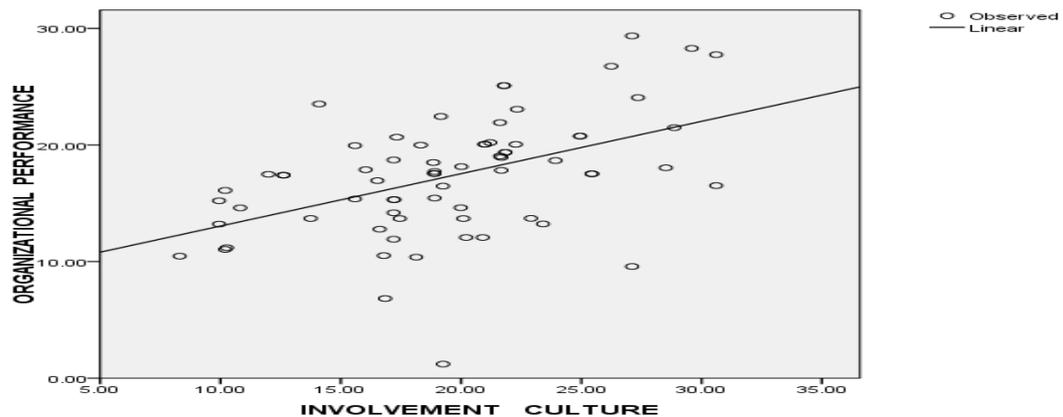


Figure 4.9: Scatter plot on relationship between involvement culture and organisational performance

A scatter diagram is a type of mathematical diagram using Cartesian Coordinates to display values for two variables for a set of data. The data are displayed as a collection of points on the horizontal and vertical axes (Kimutai, 2014). The results show that as magnitude of involvement culture increases organisational performance increases in the same positive direction and therefore the two variables are correlated positively. Since the two variables are associated with each other, a hypothesis that postulates a significant relationship between the two variables can be tested by examining the correlation between the two (Sekaran & Bourgie, 2010).

4.5.5 Regression Analysis of Organizational Performance on Involvement Culture

Table 4.13 shows that R^2 is 0.225, that is, 22.5% of the variation in organizational performance is explained by the model:-

$$Y = b_0 + b_1X_1 + \varepsilon \dots \dots \dots \text{Equation 7}$$

Where Y is Organisational Performance, b_0 is the Y intercept, b_1 is the gradient of the regression line, X_1 is Involvement Culture and ε is the error term. This result shows that involvement culture can only explain 22.5% of change in organizational performance and other factors explain 77.5% of variation in organizational performance (Sekaran & Borgie, 2010).

Table 4.13: Variation of the Regression Model for Involvement Culture

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.474	0.225	0.213	4.4715642

Analysis of variance (ANOVA) determines whether the regression model results in significantly better prediction using the ‘F’ values. The value determines how much variability the model can explain relative to how much it cannot explain. It is the ratio of how good the model is compared with how bad it is (Field, 2009 cited in Kimutai, 2014). The results of ANOVA in Table 4.14 give a p-value of the above fitted model as 0.000 which is less than the level of significance of 0.05.

Table 4.14: Significance of the Regression Model in Prediction of Organizational Performance

Model		Sum of Squares	df	Mean Square	F
1	Regression	393.869	1	393.869	19.698
	Residual	1359.652	68	19.995	
	Total	1753.521	69		

This implies a highly significant overall model at 0.000. It can, therefore be concluded that the regression model results in significantly better prediction of organizational performance than if we used the mean value of organizational performance.

In equation 7, b_0 is the Y intercept and this corresponds with value of B in the Table 4.15 for the constant. From Table 4.15 the value of b_0 is 8.560 units and this can be interpreted to mean that when involvement culture is not present or embraced by the organizations ($X_1 = 0$), the model predicts that organizational performance will be 8.560 units.

Table 4.15: Regression Coefficients of Involvement Culture

	Model	Coefficients			Sign.
		B	Std. Error	t	
1	(Constant)	8.560	2.049	4.178	0.000
	(1) INVOLVEMENT CULTURE	0.449	0.101	4.438	0.000

In equation 7, b_1 represents the gradient of the regression line. This line represents change in the outcome associated with a unit change in the predictor. Therefore the b-value tells about the relationship between organizational performance and involvement culture. If b-value is positive, then the relationship between organizational performance and involvement culture is positive; otherwise it is negative. For data in this study involvement culture had a positive b-value (0.449) indicating a positive relationship, and therefore, as involvement culture improves, organizational performance increases. In addition the b-value tells to what degree each predictor affects the outcome. Given b-value = 0.449, it implies that as involvement culture improves by one unit, organizational performance increases by 0.449 units. When the b-values are substituted in equation 7, the model can be defined as follows:-

$$Y = 8.56 + 0.449 (\text{Involvement Culture}).$$

4.5.6 Hypothesis Testing

The first hypothesis of the study was as follows:

H_{01} : Involvement culture has no influence on performance of commercial state corporations in Kenya.

To test this hypothesis, linear regression was performed to determine the level of significance of the relationship between mission culture and organizational performance of commercial state corporations in Kenya. As shown in Table 4.15, $b_1 = 0.449$, $p = 0.000$. Since p-value is less than 0.01, the null hypothesis is rejected and therefore it can be declared that there is a highly significant relationship between mission culture and organizational performance in Kenya's commercial state corporations.

To test whether the regression relationship was not positive, the b-value was subjected to further analysis using t-test. Calculated t-value was compared with the critical t-value. For involvement culture $t_{\text{calc}}(69) = 4.438$ while $t_{0.95}(69) = 1.6672$ at 0.05 level of significance. The null hypothesis was rejected because the calculated t-value was found

to be greater than the critical t-value and therefore the alternative hypothesis that there was a significant positive relationship between involvement culture and performance of commercial state corporations in Kenya was adopted.

In relation to hypothesis one, there is significant positive relationship between involvement culture and organisational performance. This implies that increase in employee involvement is associated with increase in organisational performance. This finding supports earlier reports by Denison (1984) and Denison and Mishra (1995) that involvement culture is significantly correlated with return on assets. There are several reasons why employee involvement is related to performance. Organizations that have participative corporate cultures and well-organized workplaces have better performance records than those that do not have (Denison, 1984). Receiving input from organization members tend to increase the quality of decision and improve their implementation. Profitability goals set by organizations are easily achieved when employees are involved in decision-making. Involvement empowers, and empowerment increases motivation. Superior performance capabilities are created by employee empowerment. Organizations in which employees are involved in decision making will achieve their goals better than those that do not involve employees in decision-making (Amah, 2012). Parastatals that set unattainable targets without inputs from their employees have witnessed high employee turnover.

Other studies have shown that employee involvement is positively related to productivity (Rossler & Koelling, 1993). There are several possible explanations for this significant relationship. Employees reduce cost through recommendations to senior executives and this result in higher productivity. Involvement creates a sense of ownership and responsibility amongst employees and this motivates them to be more productive. Involvement increases commitment to the organization amongst employees. Committed employees are more productive than uncommitted employees. Empowerment enhances creativity in employees and this could lead to increased productivity. The finding suggests that organizations in which employees are involved will be more productive than those in which they are not involved. Parastatals in Kenya

need to involve employees as much as possible to improve both the organizational processes and the individuals themselves. Denison (1990) stated that effective organizations require a high level of involvement. The finding that employee involvement is positively related to productivity is also supported by Kelleher (1995) in (McShane & Von Glinow, 2006) who stated that the strength of Southwest comes not from products or services but from a unique culture and management philosophy that emphasizes employee involvement and empowerment. Based on the results one can say that involvement and organisational performance are positively related.

4.6 Analysis of Consistency Culture

4.6.1 Factor Analysis

Results of factor analysis showed that 9 items had factor loadings greater than 0.5. One indicator ('we often have trouble reaching agreement on key issues') had factor loadings of 0.032. This indicator was removed since its loading is below the threshold of 0.5 (Hair et al., 2006). The rest were retained as shown in Appendix F.

4.6.2 Reliability Test

After one item was expunged, Cronbach's alpha reliability test results were as shown in Table 4.16.

Table 4.16: Reliability measurement results for consistency culture

Variable	Number of Items	Cronbach's Alpha
Consistency culture	8	0.797

Cronbach's alpha result of 0.797 shows a good internal consistency (Mugenda & Mugenda, 2003). Davidson (2007) obtained Cronbach alpha of 0.81, while Muhammad (2008) obtained alpha of 0.817 in a similar study.

4.6.3 Descriptive Analysis

4.6.3.1 Core Values

A modified five-point Likert scale was used to measure core values and the results were as tabulated in Table 4.17. Percentages were used to describe the results. The results show that 65.8% agreed that the leaders and managers follow the guidelines that they set for the rest of the organization, 27.1% were neutral and 7.1% disagreed. This is an indicator of following good management practices. Asked on whether there is a clear and consistent set of values in their organization that governs the way the organization do business, 78.6% agreed, 14.3% were neutral and 7.1% disagreed. This indicates that core values play an important role in organizations. Lastly, 82.8% agreed with the opinion that the organization has an ethical code that guides behaviour and tells right from wrong, 14.3% were neutral and 2.9% disagreed. Majority of employees believe that ethical code of conduct serves to guide their behavior and helps to distinguish between right and wrong.

Table 4.17: Response on Core Values

Core Values	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
						Mean	Median	Mode
The leaders and managers follow the guidelines that they set for the rest of the organization.	0.0%	5.7%	27.1%	42.9%	22.9%	4	4	4
There is a clear and consistent set of values in this organization that governs the way we do business.	0.0%	7.1%	14.3%	45.7%	32.9%	4	4	4
This organization has an ethical code that guides our behaviour and tells us right from wrong.	0.0%	2.9%	14.3%	48.5%	34.3%	4	4	4

4.6.3.2 Agreement

A modified five-point Likert scale was used to measure agreement and the results were as tabulated in Table 4.18. Percentages were used to describe the results. From the findings, 77.2% agreed with the opinion that when disagreements occur they work hard to achieve solutions that benefit both parties in the disagreement, 17.1% were neutral and 5.7% disagreed. This shows that employees put in dedicated efforts to achieve agreement in case problems in opinion arise. On whether it is easy to reach consensus, even on difficult issues, 44.3% agreed, 32.8% were neutral and 22.9% disagreed. This shows that achieving consonance on difficult issues becomes an uphill task. Lastly, asked on the opinion whether they often have trouble reaching agreement on key issues, 22.9% agreed, 34.3% were neutral and 42.8% disagreed. It is deduced that there is trouble in agreeing on key issues. This can affect decision making and have far reaching impact on performance.

Table 4.18: Response on Agreement

Agreement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
	%	%	%	%	%	Mean	Median	Mode
When disagreements occur, we work hard to achieve solutions that benefit both parties in the disagreement.	2.8	2.9	17.1	62.9	14.3	4	4	4
It is easy to reach consensus, even on difficult issues.	2.9	20.0	32.8	30.0	14.3	3	3	3
We often have trouble reaching agreement on key issues.	10.0	32.8	34.3	20.0	2.9	3	3	3

4.6.3.3 Coordination and Integration

A modified five-point Likert scale was used to measure agreement and the results were as tabulated in Table 4.19. The results show that 62.8% agree that people from different organizational units still share a common perspective, 30% were neutral and 7.2% disagreed. This indicates that people from different parts of the organization share a common perspective. They believe in achievement of organizational goals.

On whether it is easy to coordinate projects across functional units in the organization, 54.3% agreed, 24.3% were neutral and 21.4% disagreed. It is deduced that coordinating projects across different parts of the organization is, on average, easier. Lastly, 74.3% agreed on the opinion that there is good alignment of goals across levels of the organizations, 14.3% were neutral and 11.4% disagreed. This reveals that there is good alignment of goals across levels, hence facilitating ease in achieving defined objectives.

Table 4.19: Response on Coordination and Integration

Coordination and integration	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
	%	%	%	%	%	Mean	Median	Mode
People from different organizational units still share a common perspective.	2.9	4.3	30.0	51.4	11.4	4	4	4
It is easy to coordinate projects across functional units in this organization	1.4	20.0	24.3	42.9	11.4	3	4	4
There is good alignment of goals across levels of this organization	1.4	10.0	14.3	55.7	18.6	4	4	4

4.6.4 Correlation between Consistency Culture and Organisational Performance

The result of correlation between consistency culture and organisational performance is as presented in Table 4.20 which shows a positive and significant correlation ($r=0.488$, $p\text{-value}=0.000$).

Table 4.20: Correlations between consistency culture and organisational performance

Variable	Organizational Performance Consistency Culture		
Organizational Performance	Pearson Correlation	1	0.448**
	Sig. (2-tailed)		0.000
Consistency Culture	Pearson Correlation	0.448**	1
	Sig. (2-tailed)	0.000	

This is further supported by the scatter plot diagram in Figure 4.10. The result show that as intensity of consistency culture increases, organisational performance increases in the same positive direction. Since the two variables are associated to each other, a hypothesis that postulates a significant linear relationship between the two variables can be tested by examining the correlation between the two (Sekaran & Bougie, 2010).

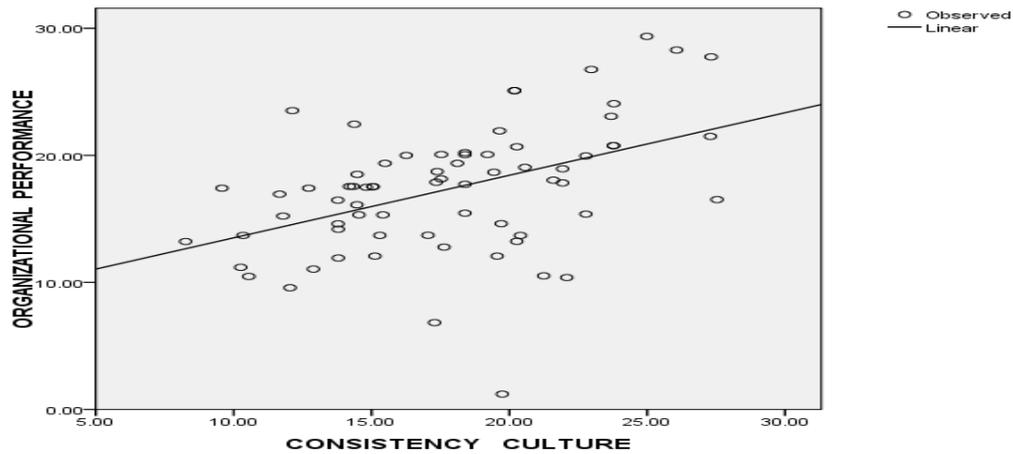


Figure 4.10: Scatter plot of correlation between Consistency Culture and Organisational Performance

4.6.5 Regression Analysis of Organizational Performance on Consistency Culture

As shown in Table 4.21, the R^2 value of 0.2 shows that 2% of the variation in organizational performance is explained by the model:

$$Y = b_0 + b_2X_2 + \varepsilon \dots \dots \dots \text{Equation 8}$$

Where Y is Organisational Performance, b_0 is the Y intercept, b_2 is the gradient of the regression line, X_2 is the Consistency Culture and ε is the error term. This implies that Consistency Culture explains 2% of change in organizational performance while other factors explain 98% (Sekaran & Bougie, 2010).

Table 4.21: Variation of the Regression Model for Consistency Culture

Model	R	R Square	Adjusted R Square	Std. Error the Estimate
1	0.448	0.200	0.1	4.5412007

As shown in Table 4.22, the results of ANOVA give a p-value of 0.000 which is less than 0.001. This implies a highly significant overall model at 0.000 (Field, 2009).

Table 4.22: Significance of the Regression Model in Prediction of Organizational Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	351.191	1	351.191	17.029	0.000
	Residual	1402.330	68	20.623		
	Total	1753.521	69			

Therefore, it can be concluded that the regression model results in significantly better prediction of organisational performance than if the mean value of organisational performance was used.

In equation 8, b_0 is the Y intercept and this value is the value of B in Table 4.23 for the constant.

Table 4.23: Regression Coefficients of Consistency Culture

Model		Coefficients			
		B	Std. Error	t	Sig.
2	(Constant)	8.586	2.189	3.922	0.000
	CONSISTENCY CULTURE	0.492	0.119	4.127	0.000

From the table b_0 is 8.586 units and this can be interpreted as meaning that when there is no consistency culture ($X_2 = 0$) the model predicts that organizational performance will have 8.586 units. For these data, consistency culture had a positive b-value (0.492)

indicating positive relationship and, therefore, as consistency culture increases, organizational performance improves. Secondly, the b-value also tells to what extent each predictor affects the outcome. The value $b_2 = 0.492$, indicates that as consistency increases by one unit, organisational performance improves by 0.492 units. If the b-values are substituted in equation 8, the model can be defined as follows:-

$$Y = 8.586 + 0.492 (\text{consistency culture}).$$

4.7.6 Hypothesis Testing

The second hypothesis for this study was as follows:-

H_{02} : Consistency culture has no influence on performance of commercial state corporations in Kenya.

To test this hypothesis, linear regression was performed to determine the level of significance of the relationship between consistency culture and performance of commercial state corporations in Kenya. As shown in Table 4.23, $b_2 = 0.492$, $p = 0.000$. Since p-value was less than 0.01, it was decided that the null hypothesis be rejected. The study, therefore, adopted the alternative hypothesis that there is a significant linear relationship between consistency culture and performance of commercial state corporations in Kenya.

To test whether the regression relationship was not positive, the b value was subjected to t-test. Calculated t-value was compared with the critical t-value. For consistency culture, $t_{\text{calc}} (69) = 4.127$ while $t_{0.95} (69) = 1.65$ at 0.05 level of significance. The null hypothesis was rejected because the calculated t-value was found to be greater than the critical t-value and therefore there was a highly significant relationship between consistency culture and performance of commercial state corporations in Kenya.

Result on hypothesis two shows that there is significant positive relationship between shared values (consistency) and organisational performance. In other words, consistency is associated with profitability and productivity. This finding supports an earlier report by Denison and Mishra (1995) that consistency is significantly correlated with performance. Several reasons may account for this significant relationship. Implicit control system based on internalized values tend to be more effective means of achieving coordination and integration, which are necessary for increased profitability. Integration results in commitment amongst employees, and organizations with committed employees are more profitable than those without committed employees. Values represent unseen magnet that pulls employees in the same direction, and when these align with organizational values, organizations succeed. The commercial state corporations have committed employees, key central values, distinct method of doing business and a clear set of dos and don'ts. They have a tendency to promote from within but also employ from outside. The high level of consistency found in the commercial state corporations stems from strong underlying values that stress thoroughness, objectivity and the efficiencies associated with service. The finding suggests that parastatals where employees have shared values will be more profitable than those in which employees do not have such shared values.

Consistency provides the central sources of integration, coordination and control. Coordination and integration enables different functions and units of the organization to work together well to achieve common goals including minimization of wastes and efficient use of resources. Organizational values that put people first could enable employees put customers first and provide exceptional services to them. Values of employees makes them more efficient and effective. Productivity increase when employees are more efficient and effective. The finding implies that organization with shared values will be more productive than those without shared values. The direction and control necessary to manage progressive parastatals tend to come from shared vision and shared values rather than a system of administrative oversight (Amah, 2012).

4.7 Analysis of Adaptability Culture

4.7.1 Factor Analysis

Results of factor analysis showed that all items had factor loadings greater than 0.5 and as such all nine items were retained (Hair et al., 2006).

4.7.2 Reliability Analysis

Since no item was expunged, Cronbach's alpha reliability test results were as shown in Figure 4.24 below:

Table 4. 24: Reliability measurement results for adaptability culture

Variable	Number of Items	Cronbach's Alpha
Adaptability culture	9	0.841

Cronbach's alpha result of 0.841 shows good internal consistency (George & Malley, 2003). In a similar study Davidson (2007) obtained an alpha of 0.82.

4.7.3 Descriptive Analysis

4.7.3.1 Creating change

A modified five-point Likert scale was used to measure the construct 'creating change' and the results were as tabulated in Table 4.25. The results show that 44.3% agreed with the opinion that the organisation is very responsive and changes easily, 37.1% were neutral and 18.6% disagreed. It is deduced that only a minority of the employees believe that flexibility exists and change could take place in response to environmental progression and advancement in technology.

Table 4.25: Response on Creating Change

Creating change	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
	%	%	%	%	%	Mean	Median	Mode
This organisation is very responsive and changes easily.	2.9	15.7	37.1	32.9	11.4	3	3	3
This organisation responds well to competitors and other changes in the business environment.	4.3	18.6	30.0	32.7	14.4	3	3	4
This organisation continually adopts new and improved ways to do work.	1.4	11.4	24.3	45.7	17.1	4	4	4

Next, 47.1% agreed with the opinion that the organisation responds well to competitors and other changes in the business environment, 30% were neutral and 22.9% disagreed. This shows that only a small section of employees believe that their organizations make prompt response to their competitors to remain viable in business. Lastly, 62.8% agreed that the organisation continually adopts new and improved ways to do work, 24.3 % were neutral and 12.8% disagreed.

4.7.3.2 Customer Focus

A modified five-point Likert scale was used to measure the construct ‘customer focus’ and the results were as tabulated in Table 4.26. The results show that 57.2% agreed with the opinion that customer comments and recommendations often lead to changes in the organization, 35.6% were neutral and 7.2% disagreed. It is deduced that customer preferences are, on average, valued in the organization and desired change is brought in the product, service or working. As regards to the opinion that customer input directly influences organizational decisions, 70.9% agreed, 28.5% were neutral and 18.6%

disagreed. This shows that decisions are made valuing input from customers. Lastly, 18.6% agreed to the opinion that the interests of the final customer often get ignored in organisational decisions, 15.6% were neutral and 65.8% disagreed. It can be deduced that planners are aware on the needs and wants of customers.

Table 4.26: Response on Customer focus

Customer Focus	Strongly Disagree	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree	Summary		
						Mean	Median	Mode
Customer comments and recommendations often lead to changes in this organisation.	2.9	4.3	35.6	42.9	14.3	4	4	4
Customer input directly influences our decisions.	4.3	14.3	28.5	50.0	2.9	3	4	4
The interests of the final customer often get ignored in our decisions.	22.9	42.9	15.6	14.3	4.3	2	2	2

4.7.3.3 Organizational Learning

A modified five-point Likert scale was used to measure the construct ‘organizational learning’ and the results were as tabulated in Table 4.27. The results show that 58.6% agreed on the opinion that they view failure as an opportunity for learning and improvement, 18.6% were neutral and 22.9% disagreed. This shows that most employees learn from the failure and hence improve upon their work. For the opinion that the organisation encourages and rewards those who take risk, 40% agreed, 37.1% were neutral and 22.9% disagreed. It is deduced that only a minority believe that initiative is encouraged and capabilities of employees fully utilized. This may make employees feel not appreciated and view their growth negatively with some

consequences on organizational performance. Lastly, 57.1% agreed with the opinion that they make certain that they coordinate their actions and efforts between different units in the organization so that ‘the right hand knows what the left hand is doing’, 24.3% were neutral and 18.6% disagreed.

Table 4.27: Response on Organizational Learning

Organizational learning	Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
	(%)	(%)	(%)	(%)	(%)	Mean	Median	Mode
We view failure as an opportunity for learning and improvement	2.9	20.0	18.6	52.9	5.7	3	4	4
This organisation encourages and rewards those who take risk.	7.1	15.8	37.1	31.4	8.6	3	3	3
We make certain that we coordinate our actions and efforts between different units in this organization so that ‘the right hand knows what the left hand is doing’.	4.3	14.3	24.3	50.0	7.1	3	4	4

4.7.4 Correlation between Adaptability Culture and Organisational Performance

The result of correlation between adaptability culture and organisational performance is presented in Table 4.28 which shows a positive correlation of 0.587.

Table 4.28: Correlation between Adaptability Culture and Organisational Performance

Variable	Organizational Performance	Adaptability Culture
Organizational Performance	Pearson Correlation	1
	Sig. (2-tailed)	0.587
Adaptability Culture	Pearson Correlation	0.587
	Sig. (2-tailed)	1

This is further explained by the scatter plot diagram in Figure 4.11. The result shows that as adaptability culture increases, organisational performance positively increases. Since the two variables are associated with each other, a hypothesis that postulates a significant relationship between the two variables can be tested by examining the correlation between the two (Sekaran & Bougie, 2010).

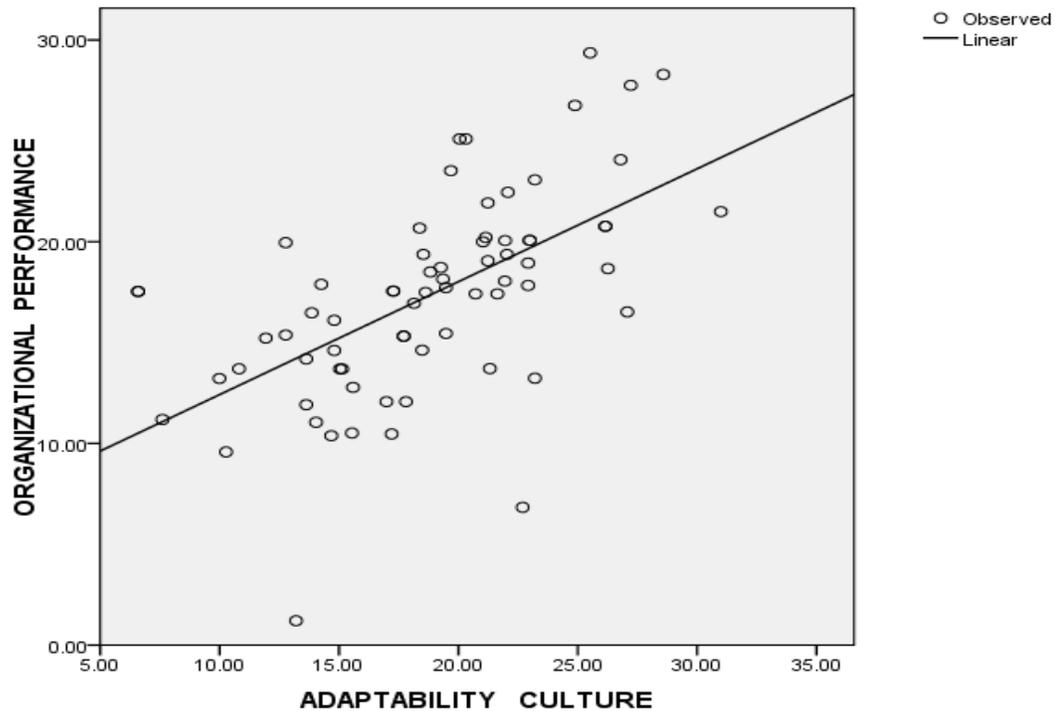


Figure 4.11: Scatter plot of correlation between Adaptability Culture and Organisational Performance

4.7.5 Regression Analysis of Organizational Performance on Adaptability Culture

As shown in Table 4.29, the R^2 value is 0.344 which means that 34.4% of the variation in organizational performance is explained by the model:

$$Y = b_0 + b_3X_3 + \varepsilon \dots \dots \dots \text{Equation 9}$$

Where Y is Organizational performance, b_0 is the Y intercept, b_3 is the gradient of the regression line, X_3 is Adaptability Culture and ε is the error term. This result shows that adaptability culture explains 34.4% of variation in organizational performance while 65.6% is explained by other factors (Sekaran & Bougie, 2010).

Table 4.29: Variation of the Regression Model for Adaptability Culture

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.587	0.344	0.335	4.1117500

As shown in Table 4.30, the results of ANOVA gives a p-value of the above fitted model as 0.000 which is less than 0.01. This implies a highly significant overall model at better prediction of organizational performance than if the mean value of organizational performance is used.

Table 4.30: Significance of the Regression Model in Prediction of Organizational Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	603.880	1	603.880	35.719	0.000
	Residual	1149.641	68	16.906		
	Total	1753.521	69			

In equation 9, b_0 is the Y intercept and this value is the value B in Table 4.31 for the constant. From the table the value of b_0 is 6.822 units which can be interpreted to mean that when there is no presence of adaptability culture, the model predicts that organizational performance will be 6.822 units.

For this data adaptability culture had a positive b-value of 0.56 indicating a positive relationship and therefore as adaptability culture improves, organizational performance improves. In addition the b-value shows the extent to which the predictor affects the outcome. The value $b_3 = 0.56$ indicates that as adaptability culture increases by one unit, organization performance improves by 0.56 units. When the b-value is substituted in equation 9, the model can be as below:

$$Y = 6.822 + 0.56 (\text{Adaptability Culture}).$$

Table 4.31: Regression Coefficients of Adaptability Culture

Model		Coefficients			
		B	Std. Error	t	Sig.
3	(Constant)	6.822	1.827	3.735	0.000
	(3)ADAPTABILITY CULTURE	0.560	0.094	5.977	0.000

4.7.6 Hypothesis Testing

The third hypothesis of the study was as follows:

H₀₃: Adaptability culture has no influence on performance of commercial state corporations in Kenya.

To test this hypothesis, linear regression was performed to determine the level of significance of the relationship between adaptability culture and organizational performance of commercial state corporations in Kenya. As shown in Table 4.31, $b_3 = 0.56$, $p = 0.000$. Since p-value is less than 0.01, the null hypothesis is rejected and therefore it can be declared that there is a highly significant relationship between adaptability culture and organizational performance in Kenya's commercial state corporations.

To test whether the regression relationship was not positive, the b-value was subjected to further analysis using t-test. Calculated t-value was compared with the critical t-value. For adaptability culture $t_{calc} (69) = 5.977$ while $t_{0.95} (69) = 1.65$ at 0.05 level of significance. The null hypothesis was rejected because the calculated t-value was found to be greater than the critical t-value and therefore the alternative hypothesis that there was a significant positive relationship between adaptability culture and performance of commercial state corporations in Kenya was adopted.

In hypothesis three, adaptability which is the ability of the organization to respond to change was found to be positively related to organisational performance. In other words, increase in organization's adaptability is significantly associated with increase in its

performance. Several reasons may account for this significant positive relationship. To begin with, managers tend to look for ways to change their business to improve profitability and productivity as it is often used to evaluate their performance. To survive and make profit, organizations adapt continuously to different levels of environmental uncertainty (Daft, 2003). Supporting this view Denison (1990) also stated that, ‘without the ability to implement adaptive response, an organization cannot be effective’. Lastly, the desire to be ahead of others in profit, productivity and customer satisfaction makes parastatals to constantly engage in innovative activities and implement adaptive responses. The finding indicates that parastatals that have the ability to adapt to changes in their environment will perform better than those that do not have such ability. Adaptive culture will encourage employees to focus on customers’ need and support initiative that will keep pace with change in the environment.

4.8 Analysis of Mission Culture

4.8.1 Factor Analysis

Results of factor analysis showed that all items had factor loadings greater than 0.5 and as such, all items were retained as shown in Appendix F (Hair *et al*, 2006).

4.8.2 Reliability Analysis

Since no item was expunged, Cronbach’s alpha reliability test results were as shown in Table 4.32 below:

Table 4.32: Reliability Measurement Results for Mission Culture

Variable	Number of Items	Cronbach's Alpha
Mission culture	9	0.877

Cronbach’s alpha result of 0.877 shows good internal consistency (George & Mallery, 2003). A similar study in South Africa (Davidson, 2007) obtained an alpha of 0.9.

4.8.3 Descriptive Analysis

4.8.3.1 Strategic Direction and Intent

A modified five-point Likert scale was used to measure the construct ‘strategic direction and intent’ and the results were as tabulated in Table 4.33.

Table 4.1: Response on Strategic Direction and Intent

Strategic direction and intent	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
	%	%	%	%	%	Mean	Median	Mode
This organisation has long-term purpose and direction.	0	5.8	20.0	37.1	37.1	4	4	4
This organisation has a clear mission that gives meaning and direction to our work.	0	2.9	14.3	41.4	41.4	4	4	4
This organisation has a clear strategy for the future	0	2.9	24.3	37.1	35.7	4	4	4

The results show that 74.2% agreed with the opinion that the organisation has long-term purpose and direction, 20% were neutral and 5.8% disagreed. This shows that a majority of employees are well aware of the activities of the organizations. They are therefore focused towards long term objectives of their organizations. On the opinion that the organisation has a clear mission that gives meaning and direction to employees work, 82.8% agreed, 14.3% were neutral and 2.9% disagreed. Vivid mission of organization guides intent of employees. It can make employees remain oriented towards long term goals of organizations. Lastly, 72.8% agreed on the opinion that their organisation has a

clear strategy for the future, 24.3% were neutral and 2.9% disagreed. It is deduced that clear strategy provides direction to the employees and makes them remain focused towards their objectives.

4.8.3.2 Goals and Objectives

A modified five-point Likert scale was used to measure the construct ‘goals and objectives’ and the results were as tabulated in Table 4.34.

Table 4.34: Response on Goals and Objectives

Goals and objectives	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
	%	%	%	%	%	Mean	Median	Mode
There is widespread agreement about goals of this organisation.	1.4	8.6	15.7	54.3	20.0	4	4	4
Leaders of this organisation set goals that are ambitious, but realistic.	5.8	10.0	21.4	47.1	15.7	4	4	4
The leadership has clearly stated the objectives we are trying to meet.	4.3	5.7	18.6	57.1	14.3	4	4	4

The results show that 74.3% agreed that there is widespread agreement about goals of their organization, 15.7% were neutral and 10% disagreed. This indicates that majority of employees have agreement of goals. On the opinion that leaders of the organisation set goals that are ambitious but realistic, 62.8% agreed, 21.4% were neutral and 15.8% disagreed. This shows that the leaders have vision to set the standards after evaluation of the situation in the corporate world. Lastly, 71.4% agreed that the leadership has clearly

stated the objectives they are trying to meet, 18.6% were neutral and 10% disagreed. It is deduced that majority of leaders have performed well in their organizations because of this.

4.8.3.3 Vision

A modified five-point Likert scale was used to measure the construct ‘vision’ and the results were as tabulated in Table 4.35. The results show that 65.7% agreed on the opinion that they have a shared vision of what the organisation will be like in the future, 21.4% were neutral and 12.9% disagreed.

Table 4.35: Response on Vision

Vision	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
	%	%	%	%	%	Mean	Median	Mode
We have a shared vision of what this organisation will be like in the future.	1.5	11.4	21.4	47.1	18.6	4	4	4
Leaders of this organisation have a long-term orientation.	7.1	11.4	18.6	44.3	18.6	4	4	4
Our vision creates excitement and motivation for our employees.	5.7	7.1	37.1	31.4	18.6	4	4	3

It is deduced that people have shared vision of what the organization will look like in the future. On the opinion that leaders of the organisation have a long-term orientation, 62.9% agreed, 18.6% were neutral and 18.5% disagreed. Employees perceive that their leaders have long term viewpoint. Lastly, on the opinion that the vision creates

excitement and motivation for their employees, 50% agreed, 37.1% were neutral and 12.8% disagreed. On average, employees believe their leaders have vision in organizations that creates excitement and motivation for employees.

4.8.4 Correlation between Mission Culture and Organisational Performance

The result of correlation between mission culture and organisational performance is presented in Table 4.36 which shows a positive and significantly associated correlation ($r= 0.600$, $p\text{-value}=0.000$).

Table 4.36: Correlations between Mission Culture and Organisational Performance

Variable	Correlation	Organizational Performance	Mission Culture
Organizational Performance	Pearson Correlation	1	0.600
	Sig. (2-tailed)		0.000
Mission Culture	Pearson Correlation	0.600	1
	Sig. (2-tailed)	0.000	

This is further presented by the scatter plot diagram in Figure 4.12. The result shows that as mission culture increases, organisational performance positively increases. Since the two variables are associated with each other, a hypothesis that postulates a significant relationship between the two variables can be tested by examining the correlation between the two (Sekaran & Bougie, 2010).

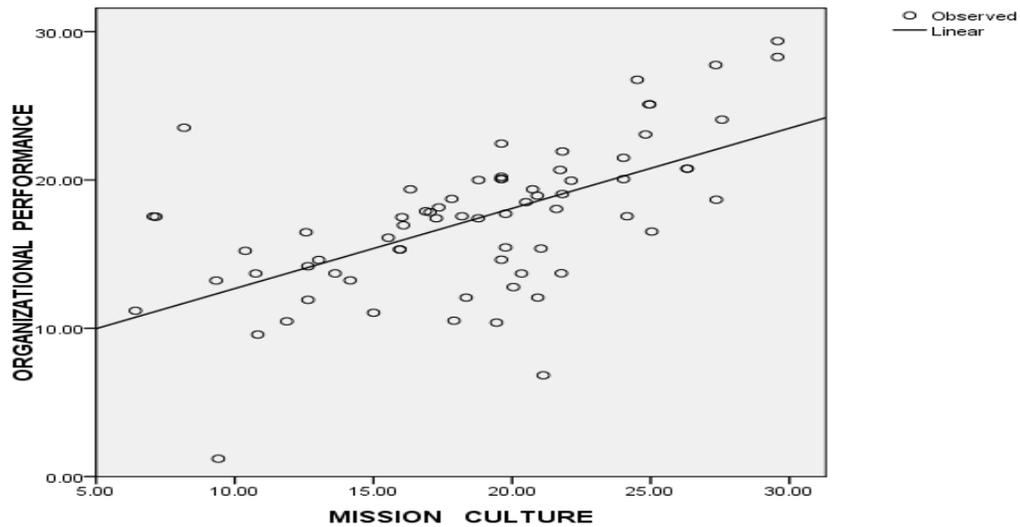


Figure 4.12: Scatter plot of correlation between Mission Culture and Organisational Performance

4.8.5 Regression Analysis of Organizational Performance on Mission Culture

As shown in Table 4.37, the R^2 value is 0.360 which means that 36% of the variation in organizational performance is explained by the model:

$$Y = b_0 + b_4X_4 + \varepsilon \dots \dots \dots \text{Equation 10}$$

Where Y is Organizational performance, b_0 is the Y intercept, b_4 is the gradient of the regression line, X_4 is Mission Culture and ε is the error term. This result shows that mission culture explains 36% of variation in organizational performance while 64% is explained by other factors (Sekaran & Bougie, 2010).

Table 4.37: Variation of the Regression Model for Mission Culture

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.600	0.360	0.350	4.0632022

Analysis of variance (ANOVA) results in Table 4.38 gives a p-value of 0.000 which is less than 0.01. This implies highly significant overall model at 0.000. Therefore, it can be concluded that the regression model results in significantly better prediction of organisational performance than if the mean value of organisational performance was used.

Table 4.38: Significance of the Regression Model in Prediction of Organizational Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	630.868	1	630.868	38.212	0.000
	Residual	1122.654	68	16.510		
	Total	1753.521	69			

In equation 10, b_0 is the Y intercept and this value is the B in Table 4.39 for the constant. From the table, b_0 is 7.275 units and this can be interpreted to mean that when there is no mission culture ($X_4 = 0$), the model predicts that organisational performance will be 7.275 units.

Table 4.39: Regression Coefficients of Mission Culture

Model		Coefficients			
		B	Std. Error	t	Sig.
1	(Constant)	7.275	1.699	4.282	0.000
	(4)MISSION CULTURE	0.540	0.087	6.182	0.000

For this data, mission culture had a positive b-value of 0.54 indicating a positive relationship and therefore as mission culture improves, organizational performance improves. In addition the b-value shows the extent to which the predictor affects the outcome. The value $b_4 = 0.54$ indicates that as adaptability culture increases by one unit, organization performance improves by 0.54 units. When the b-value is substituted in equation 10, the model can be as below:

$$Y = 7.275 + 0.54 (\text{Mission Culture}).$$

4.8.6 Hypothesis Testing

The fourth hypothesis of the study was as follows:

H_{04} : Mission culture has no influence on performance of commercial state corporations in Kenya.

To test this hypothesis, linear regression was performed to determine the level of significance of the relationship between mission culture and organizational performance of commercial state corporations in Kenya. As shown in Table 4.39, $b_4 = 0.54$, $p = 0.000$. Since p-value is less than 0.01, the null hypothesis is rejected and therefore it can be declared that there is a highly significant relationship between mission culture and organizational performance in Kenya's commercial state corporations.

To test whether the regression relationship was not positive, the b-value was subjected to further analysis using t-test. Calculated t-value was compared with the critical t-value. For mission culture $t_{\text{calc}} (69) = 6.182$ while $t_{0.95} (69) = 1.65$ at 0.05 level of significance. The null hypothesis was rejected because the calculated t-value was found to be greater than the critical t-value and therefore the alternative hypothesis that there was a significant positive relationship between mission culture and performance of commercial state corporations in Kenya was adopted.

In relation to hypothesis four, there is significant positive relationship between mission culture and organisational performance. This finding confirms an earlier report of Denison and Mishra (1995) that mission is correlated with return on investment. Several reasons may account for this significant relationship. Mission has a powerful impact on organizations (Calfee, 1993). Being able to internalize and identify with an organization mission contributes to both short and long-term commitment to the organization (Denison, 1990). Goals give a sense of direction to organizational members. Success is more likely when individuals and organizations are goal directed. Clear vision of organization purpose reflects a high level of competitiveness and profit-making orientation (Daft, 2003). Goals provide a standard for assessment. The level of organization performance, whether in terms of profits, units produced, or number of complaints, needs a basis for evaluation. Success is more likely when employees are committed to the achievement of the organisational goals. Most parastatals ensure their employees know their mission and know what to do to contribute their quota to the success of the organization. This could lead to increased profits, productivity and reduced number of complaints from customers. People tend to work towards the achievement of a mission they share in. Commercial state corporations have vision to be at the top in Kenya, Africa and to be among the best globally. They also have mission to satisfy their customers and shareholders. This vision and mission propel employees and management to work hard and this result in effectiveness. Thus appropriate corporate culture promotes organizational effectiveness.

Mission fosters cooperation and unity among departments and cooperative workforce tends to be more productive than one saddled with conflict. Denison (1990) argued that this process of internalization and identification contributes to short and long-term commitment and leads to effective performance. It is possible for employees that are goals-directed to use resources efficiently and effectively, minimize waste in the organization. Goals tend to motivate employees to be more productive. When employees are aware of the organization's goals, they tend to be committed towards the achievement of such goals (Amah, 2012).

4.9 Combined Effect of all Independent Variables on the Dependent Variable

The overall regression model was given as:-

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon, \dots\dots\dots \text{Equation 11}$$

Where Y is Organizational Performance, X₁ is Involvement Culture, X₂ is Consistency Culture, X₃ is Adaptability Culture, X₄ is Mission Culture, ε = error term. β₀ is constant whose influence on the model is insignificant, and β₁- β₄ are intercepts for the independent variables which are large to have a significant influence on the model.

As shown in Table 4.40, the R² value of 0.951 shows that the overall model explains 95.1% of the variation in the dependent variable while only 0.049 is explained by other factors (Sekaran & Bourgie, 2010).

Table 4.40: Variation of the Overall Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.975	0.951	0.948	4.1024619

As shown in Table 4.41, the result of ANOVA gives a p-value of the above regression model as 0.000 which is less than 0.001. This implies a highly significant overall model at 0.000 (Field, 2009). Therefore it can be concluded that the overall regression model results in significantly better prediction of organizational performance.

Table 4.41: Significance of the Overall Regression Model in Prediction of Organizational Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21683.580	4	5420.895	322.093	0.000
	Residual	1110.793	66	16.830		
	Total	22794.373	70			

Table 4.42 provides details of the overall regression model parameters (the beta values) and the significance of these values. From the table the b_1 , b_2 , b_3 , and b_4 values represent the gradients of the regression lines. Although these are values of the slopes of the regression lines, they can be thought of as representing the change in the outcome associated with a unit change in each of the predictors.

For these data three of the predictors have positive b-values indicating positive relationships. As involvement culture grows, so is organizational performance; as adaptability culture improves so is organizational performance; and as mission culture gets better, so is organizational performance. The value $b_1 = 0.299$ indicates that as involvement culture improves by one unit, organizational performance increases by 0.299 units. This interpretation is true, and only true, when the effects of consistency culture, adaptability culture and mission culture are held constant. The value $b_3 = 0.321$ indicates that as involvement culture improves by one unit, organizational performance increases by 0.321 units. This interpretation is true, and only true, when the effects of consistency culture, involvement culture and mission culture are held constant. The value $b_4 = 0.361$ indicates that as involvement culture improves by one unit, organizational performance increases by 0.361 units. This interpretation is true, and only true, when the effects of consistency culture, involvement culture and adaptability culture are held constant.

However, for these data one of the predictors has negative b-values indicating negative relationship. As consistency culture grows, organizational performance shrinks. The value $b_2 = -0.086$ indicates that as consistency culture improves by one unit, organizational performance decreases by 0.086 units. This interpretation is true, and only true, when the effects of involvement culture, adaptability culture and mission culture are held constant.

For the overall regression model, involvement culture ($t_{(69)} = 2.284$, $p = 0.026 < 0.05$), adaptability culture ($t_{(69)} = 2.134$, $p = 0.037 < 0.05$) and mission culture ($t_{(69)} = 2.141$, $p = 0.036 < 0.05$) were all highly significant predictors of organizational performance since

their p-values were less than 0.05. For consistency culture ($t_{(69)} = -0.462$, $p = 0.645 > 0.05$) the p-value was greater than 0.05. The p-value implied that Consistency culture was not a significant predictor of organizational performance at 5% level of significance but at 10% level of significance, consistency culture ($p = 0. > 0.05$) was significant.

Table 4.42: Overall Regression Model Coefficients

		Coefficients			
		B	Std. Error	t	Sig.
(1)	Involvement Culture	0.299	0.131	2.284	0.026
(2)	Consistency Culture	-0.086	0.185	-0.462	0.645
(3)	Adaptability Culture	0.321	0.151	2.134	0.037
(4)	Mission Culture	0.361	0.169	2.141	0.036

4.10 Analysis of CEO Values (Moderating Variable)

In this survey, CEO values were operationalised by stimulation and self-direction.

4.10.1 Factor analysis

Factor analysis was conducted in order to reduce the data to a meaningful and manageable set of factors (Sekaran, 2006) as indicated by the results on Table 4.43.

Table 4.2: Component Matrix of CEO Values

CEO Values	Component 1
He thinks it is important to do lots of different things in life. He always looks for new things to try.	0.740
He thinks it's important to be interested in things. He likes to be curious and to try to understand all sorts of things.	0.705
It is important to him to be independent. He likes to rely on himself.	0.667
He likes surprises. It is important to him to have an exciting life.	0.639
He likes to take risks. He is always looking for adventures.	0.621
It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself.	0.575
Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.	0.362

Results of factor analysis showed that all the items had factor loadings of 0.4 and above, and as such all items were retained.

4.10.2 Reliability Analysis

Since no item was removed, cronbach's alpha reliability test results were similar before and after factor analysis. Cronbach's alpha of 0.734 shows acceptable internal consistency (George & Mallery, 2003).

Table 4.44: Reliability Measurement Results for CEO Values

Variable	Number of Items	Cronbach's Alpha
CEO Values	7	0.734

4.10.3 Descriptive Analysis

From the responses the results are as presented in Table 4.45. A large proportion of respondents concurred that the CEOs in their organisations subscribed to values of stimulation and self direction as described by Schultz.

Table 4.45: CEO Value's response

CEO Values	Not like the CEO at all %	Not like the CEO %	Somewhat like the CEO %	Like the CEO %	Very much like the CEO %	Summary		
						Mean	Median	Mode
Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.	4.3	11.4	37.1	37.1	10.0	3	3	3
It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself.	5.7	22.9	25.7	32.9	12.9	3	3	4
He thinks it's important to be interested in things. He likes to be curious and to try to understand all sorts of things.	5.7	20.0	37.1	25.7	11.4	3	3	3
It is important to him to be independent. He likes to rely on himself.	11.4	27.1	25.7	25.7	10.0	3	3	2
He thinks it is important to do lots of different things in life. He always looks for new things to try.	8.6	27.1	34.3	21.4	8.6	3	3	3
He likes to take risks. He is always looking for adventures.	12.9	27.1	24.3	24.3	11.4	3	3	2
He likes surprises. It is important to him to have an exciting life.	34.3	22.9	28.6	10.0	4.3	2	2	1

4.10.4 Correlation between CEO Values and Organisational Performance

The result of correlation between CEO values and organisational performance is presented in Table 4.46 which shows a positive correlation of 0.126.

Table 4.46: Correlation between CEO Values and Organisational performance

Variables	Correlation	Organizational Performance	CEO Values
Organizational Performance	Pearson Correlation	1	0.126
	Sig. (2-tailed)		0.300
CEO Values	Pearson Correlation	0.126	1
	Sig. (2-tailed)	0.300	

This is further analysed by the scatter plot diagram in Figure 4.13. The result shows that as CEO values increases, organisational performance positively increases. Since the two variables are associated with each other, a hypothesis that postulates a significant relationship between the two variables can be tested by examining the correlation between the two (Sekaran & Bougie, 2010).

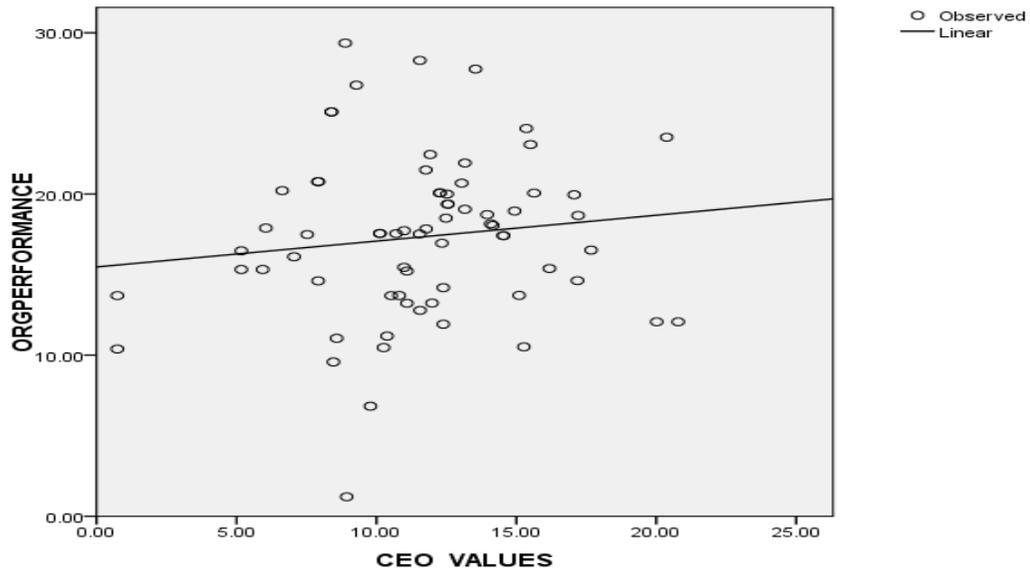


Figure 4.13: Scatter plot of correlation between CEO values and Organisational Performance

4.10.5 Hypothesis Testing

The fifth hypothesis of the study was:-

H₀₅: CEO values have no moderating effect on the relationship between corporate culture and performance of commercial state corporations.

Equation 12 below was used to represent the variables in the model to test this hypothesis.

$$Y = \beta_0 + \beta_1 X_i + \beta_2 X_i Z + \varepsilon \dots\dots\dots \text{Equation 12}$$

To test the presence of moderation (interaction) equation 12 was compared with the moderated multiple regression model (MMR) which is represented by equation 13 below:-

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5Z + \beta_6X_1Z + \beta_7X_2 Z + \beta_8X_3Z + \beta_9X_4 Z + \varepsilon \dots \dots \dots \text{Equation 13}$$

Where:-

β_1 is the coefficient relating the independent variable, X, to the outcome, Y, when Z = 0,

β_5 is the coefficient relating the moderator variable, Z, to the outcome when X = 0,

β_0 the intercept in the equation, and ε is the residual in the equation,

Y = Organizational performance as the dependent variable,

X = Corporate culture (Involvement, Consistency, Adaptability, Mission) as independent variable

Z = CEO values (Stimulation, Self-direction) as Moderator variable

X*Z = the interaction between the predictors (Corporate Culture * CEO values).

Hierarchical multiple regression was used to assess the presence of moderation by CEO values on each of the hypothesized relationship between independent variables (Corporate culture) and the dependent variable (organisational performance). Accompanying hypotheses were therefore developed.

4.10.5.1 Moderating Effect of CEO Values in the Relationship between Involvement Culture and Organisational Performance

Table 4.47 shows the model summary of the hypothesis that CEO values have no moderating effect on the relationship between Involvement culture and performance of commercial state corporations. Table 4.47 shows that for Model 1, $R^2 = 0.943$. This means that 94.3% of the variance in organizational performance is explained by Involvement culture and CEO Values.

Table 4.47: Variation in the Moderated Regression Model for Involvement Culture

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.97	0.943	0.940	4.4040255

Table 4.48 is the ANOVA which tests the goodness of fit of the overall moderated regression model for Involvement Culture: $Y = \beta_0 + \beta_1X_1 + \beta_5Z + \beta_6X_1Z + \varepsilon$. The result shows a significant presence of moderating effect.

Table 4.48: Significance of the Moderated Regression Model in Prediction of Organizational Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21494.878	3	7164.959	369.415	0.000
	Residual	1299.495	67	19.395		
	Total	22794.373	70			

Table 4.49 shows the results of coefficients of the regression equations 12 from Model 1. Model 1 indicates that Involvement Culture was statistically significant ($p=0.000<0.05$; Beta value = 0.877); CEO Values was found to be significant ($p = 0.000<0.05$, Beta value = 0.786) and Involvement Culture * CEO values was found to be significant ($p=0.000<0.05$; Beta value = 0.039). On substituting in equation 12,

$$Y = 0.877X_1 + 0.786 Z + 0.039 X_1Z \dots\dots\dots \text{Equation 14}$$

Table 4.49: Moderated Regression Model Coefficients for Involvement Culture

Model	<u>Coefficients</u>			
	B	Std. Error	t	Sig.
INVOLVEMENT CULTURE	0.877	0.087	10.124	0.000
CEO VALUES	0.786	0.172	4.564	0.000
Involvement Culture * CEO values	0.039	0.010	3.742	0.000

4.10.5.2 Moderating Effect of CEO Values in the Relationship between Consistency Culture and Organisational Performance

Table 4.50 shows the model summary of the hypothesis that CEO values have no moderating effect on the relationship between Consistency culture and performance of commercial state corporations. Table 4.50 shows that for Model 1, $R^2 = 0.941$. This means that 94.1% of the variance in organizational performance is explained by Consistency culture and CEO Values.

Table 4.50: Variation in the Moderated Regression Model for Consistency Culture

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.970	0.941	0.938	4.4896112

Table 4.51 is the ANOVA which tests the goodness of fit of the overall moderated regression model for Consistency Culture: $Y = \beta_0 + \beta_2X_2 + \beta_5Z + \beta_6X_2Z + \epsilon$. The result shows a significant presence of moderating effect.

Table 4.51: Significance of the Moderated Regression Model in Prediction of Organizational Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21443.880	3	7147.960	354.621	0.000
	Residual	1350.493	67	20.157		
	Total	22794.373	70			

Table 4.52 shows the results of coefficients of the regression equation 12 from Model 1. Model 1 indicates that Consistency Culture was statistically significant ($p=0.000<0.05$; Beta value = 0.906); CEO Values was found to be significant ($p = 0.000<0.05$, Beta value = 0.765) and Consistency Culture * CEO values was found to be significant ($p=0.000<0.05$; Beta value = 0.037). On substituting in equation 12,

$$Y = 0.906X_2 + 0.765 Z + 0.037 X_2Z \dots \dots \dots \text{Equation 15}$$

Table 4.52: Moderated Regression Model Coefficients for Consistency Culture

Model		Coefficients			Sig.
		B	Std. Error	t	
1	CONSISTENCY CULTURE	0.906	0.091	9.956	0.000
	CEO VALUES	0.765	0.179	4.277	0.000
	Consistency Culture * CEO values	0.037	0.011	3.316	0.001

4.10.5.3 Moderating Effect of CEO Values in the Relationship Between Adaptability Culture and Organizational Performance

Table 4.53 shows the model summary of the hypothesis that CEO values have no moderating effect on the relationship between Adaptability culture and performance of commercial state corporations. Table 4.53 shows that for Model 1, $R^2 = 0.951$. This means that 95.1% of the variance in organizational performance is explained by Adaptability culture and CEO Values.

Table 4.53: Variation in the Moderated Regression Model for Adaptability Culture

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.975	0.951	0.949	4.0740366

Table 4.54 is the ANOVA which tests the goodness of fit of the overall moderated regression model for Adaptability Culture: $Y = \beta_0 + \beta_3X_3 + \beta_5Z + \beta_6X_3Z + \varepsilon$. The result shows a significant presence of moderating effect.

Table 4.54: Significance of the Moderated Regression Model in Prediction of Organizational Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21682.322	3	7227.441	435.446	0.000
	Residual	1112.051	67	16.598		
	Total	22794.373	70			

Table 4.55 shows the results of coefficients of the regression equations 12 from Model 1. Model 1 indicates that Adaptability Culture was statistically significant ($p=0.000<0.05$; Beta value = 0.960); CEO Values was found to be significant ($p =$

0.000<0.05, Beta value = 0.620) and Adaptability*CEO values was found to be significant (p=0.000<0.05; Beta value = 0.035). On substituting in equation 12,

$$Y = 0.960X_3 + 0.620 Z + 0.035 X_3Z \dots \dots \dots \text{Equation 16}$$

Table 4.55: Moderated Regression Model Coefficients for Adaptability Culture

Model		Coefficients			
		B	Std. Error	t	Sig.
1	ADAPTABILITY CULTURE	0.960	0.086	11.182	0.000
	CEO VALUES	0.620	0.159	3.908	0.000
	Adaptability Culture * CEO values	0.035	0.010	3.586	0.001

4.10.5.4 Moderating Effect of CEO Values in the Relationship between Mission Culture and Organizational Performance

Table 4.56 shows the model summary of the hypothesis that CEO values have no moderating effect on the relationship between Mission culture and performance of commercial state corporations. Table 4.56 shows that for Model 1, $R^2 = 0.955$. This means that 95.5% of the variance in organizational performance is explained by Mission culture and CEO Values.

Table 4.56: Variation in the Moderated Regression Model for Mission Culture

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.977	0.955	0.953	3.9084858

Table 4.57 is the ANOVA which tests the goodness of fit of the overall moderated regression model for Mission Culture: $Y = \beta_0 + \beta_4X_4 + \beta_5Z + \beta_6X_4Z + \varepsilon$. The result shows a significant presence of moderating effect.

Table 4.57: Significance of the Moderated Regression Model in Prediction of Organizational Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21770.863	3	7256.954	475.048	0.000
	Residual	1023.510	67	15.276		
	Total	22794.373	70			

Table 4.58 shows the results of coefficients of the regression equations 12 from Model 1. Model 1 indicates that Mission Culture was statistically significant ($p=0.000<0.05$; Beta value = 0.927); CEO Values was found to be significant ($p = 0.000<0.05$, Beta value = 0.706) and Mission*CEO values was found to be significant ($p=0.000<0.05$; Beta value = 0.037). On substituting in equation 12,

$$Y = 0.960X_4 + 0.620 Z + 0.035 X_4Z \dots \dots \dots \text{Equation 17}$$

Table 4.58: Moderated Regression Model Coefficients for Mission Culture

Model		Standardized Coefficients			
		B	Std. Error	t	Sig.
1	MISSION CULTURE	0.927	0.077	12.018	0.000
	CEO VALUES	0.706	0.140	5.055	0.000
	Mission Culture * CEO values	0.037	0.009	4.214	0.000

The validated model of the study is shown in Figure 4.14 .

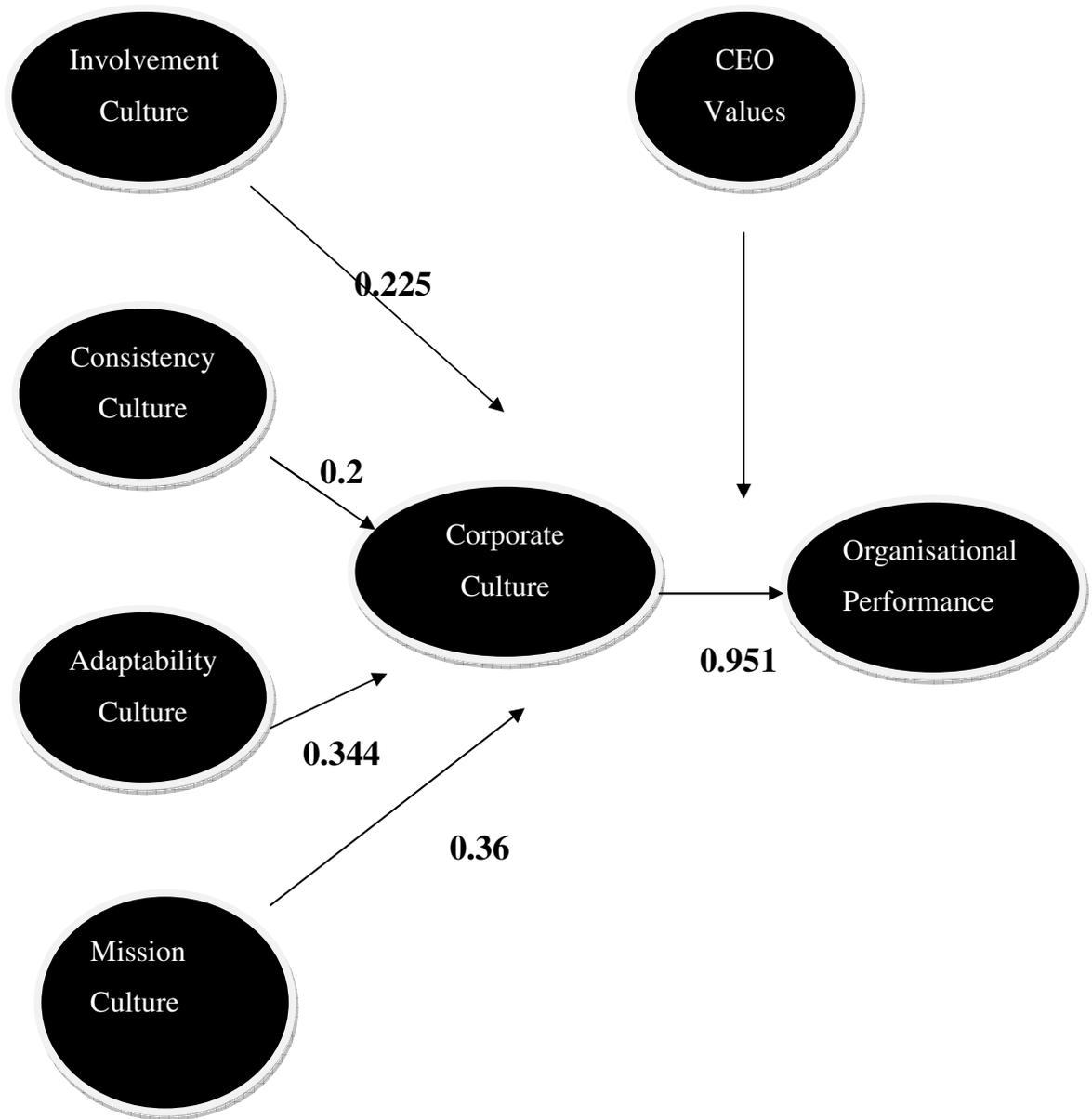


Figure 4.14: Validated Model of role of Corporate Culture in Organisation Performance

* R² -values are shown on the model.

4.11 Analysis of Secondary Data

In order to cross examine the results from the primary data, secondary data on performance of commercial state corporations (Return on Assets) was gathered and subjected to analysis.

4.11.1 Means for all the Parastatals from 2011 to 2014

Means of the ROAs for the 22 parastatals were computed and plotted as displayed in Figure 4.30. From the figure the ROAs varied for the different parastatals over the years 2011 to 2014. Nyayo Tea Zone Authority (3) had widest confidence band indicating highest performance, in terms of ROA, over the four-year period. This is followed by KNTC (8) and New KCC (17) However the trend shows that most parastatals reported fairly close but very low ROAs of 0.5 and below. This reflects poor performance. This suggests that poor performance is a characteristic of most parastatals because (perhaps) they have not embraced corporate culture that promotes productivity.

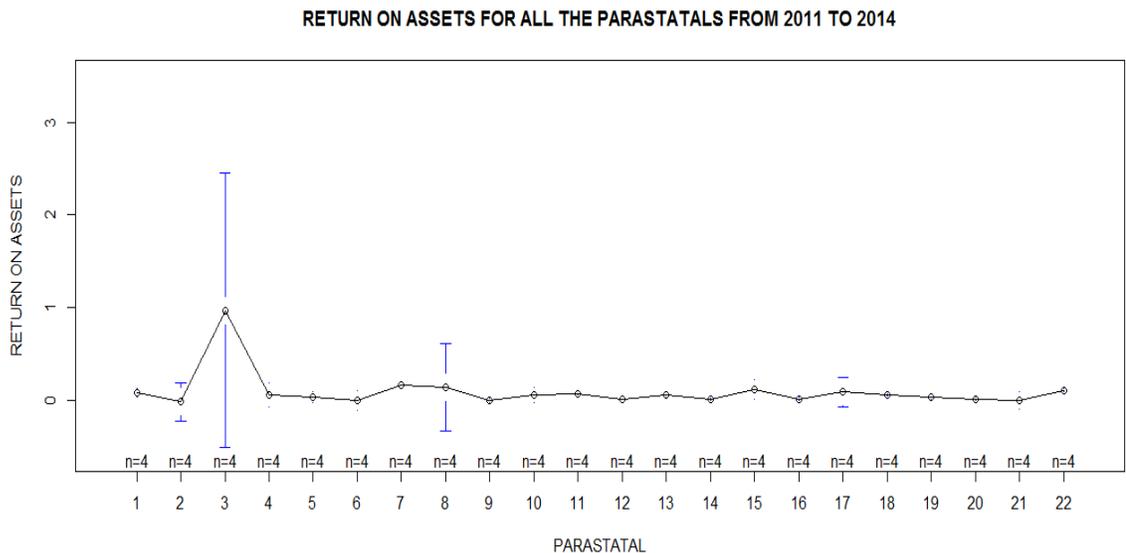


Figure 4.16: Plot to show Return on Assets for 22 parastatals from 2011 to 2014

The ANOVA result of performance of parastatals by return on assets is found in Table. In general, the ANOVA suggests that there are significant differences between return on assets for different parastatals with $F = 3.574$, $p < 0.05$. A research by HM Treasury (2000) supported the view that proportions of differences in productivity are accounted for by differences in return on assets.

Table 4.59: One-Way ANOVA of performance of Parastatals by Return on Assets

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.421	21	0.163	3.574	0.000
Within Groups	3.008	66	0.046		
Total	6.429	87			

Multiple comparisons of ROAs for the parastatals were computed as shown in Table 4.33. The only significant multiple comparison was that between Nyayo tea zones development authority and other parastatals; the rest were not significant as shown in the table. This shows that Nyayo tea zones development authority (NTZDA) was an exceptionally good performer in terms of ROA. Various factors might be contributing to excellent performance of NTZDA. The success of NTZDA can be found in its corporate culture and leadership values. According to Hamisi (2012) Nyayo Tea Zones Development Corporation was ranked as the best state corporation judging by contract performance for the 2008/2009 financial year. This was an improvement compared to the previous ranking as the second best performing parastatal of the 2006/2007 financial year. As a manufacturing and commercial company, the corporation was also ranked as the best performing parastatal in the commercial / manufacturing sector in both the 2006/2007 and 2008/2009 public service performance contract results.

As the corporation is growing large, the current management has managed to keep expenditure in check. This is demonstrated by the 2009/2010 seven fundamentals of institutional management evaluation results conducted by the ministry of agriculture, when the corporation emerged as the best at expenditure control. The company has

embraced total quality management as a way of management, In June 2009; the corporation attained the international quality management systems - ISO 9001:2008 Certified.

Nyayo Tea Zone is one of the companies which have put measures in place in order to compete with other organizations which conduct the same type of business. Nyayo Tea Zones Development Corporation decided to use total quality management as a strategic tool for business development and realization of their major objectives as a business organization. Nyayo Tea Zones Development Corporation has adopted the basic principles of the Quality Management Systems which draw attention to customer focus, leadership, involvement of people, factual approach to decision making and mutually beneficial supplier relationships as the guiding framework for the senior management. These principles are also embedded in the core values that guide operations at the Corporation, namely: integrity, professionalism, teamwork, commitment and respect for each other. As they marked the attainment of ISO certification, they reminisced about their steady development into a stable and profitable State Corporation, as they embarked on the journey to adopt the Quality Management System.

In order to see or to be certain that Total Quality Management actually works in Nyayo tea zone, they have to keep check on the following five lines to see if they correspond to the objectives of the company. The feedback they receive on them gives a clear picture of how TQM is performing.

Customer Focus

Tea zone has taken their customers satisfaction as their major concern while using TQM as a major strategic tool for business development. They offer high quality tea to their customers and also good type of wood to woodturning companies. The quality of their products is liked by the recipient, because there has been less rejection green leaf tea in recent years.

Leadership

The organization has well-structured leadership from the top management in the office to the lowest casual worker at the zonal level. It allows easy flow of information and duties from one department to the other and also keeps duplication of responsibilities in check.

People Involvement

Different people are involved in different areas of tea zones activities, the government, the staff of tea zone, the community around tea zones plantations are all involved in one way or another in making the company a successful one.

Decision Making

The organization makes most of its decisions at meetings of the board of directors which are chaired by a chairman appointed by the Government of Kenya.

Beneficial Suppliers

The company uses an open tendering system to acquire most of its inputs required to have quality production. Cost control and profit-making is important for achieving for company's goals, and, therefore, Tea Zones puts their main focus on suppliers who are beneficial to them. They always chose to deal with suppliers who are well-known, flexible, reliable, offer good prices and supply quality items on time.

Tea Zone's Target in Future

It was the desire of the board of directors to turn the corporation into a modern, efficient 21st century organization before formally seeking the ISO certification, and the current management introduced modern management practices which helped them realize the successes they had in the recent past, notably the award they received in 2008/2009 financial year for being the best ranked and performing parastatal.

Receiving this award is a sign that the corporation has met its target of achieving their objectives. Putting their target into consideration, currently tea zone have managed to establish over 11,789 acres of assorted tree species; and over 6,916 acres of mature tea bushes in gazette forests around the country, which have acted as buffer zones and play a major role in the protection of gazette forests from human encroachment and destruction.

To make their operations more sustainable in meeting their future targets, they intend to establish an additional 1,500 hectares of tea, 5000 hectares of assorted tree species and 500 hectares of indigenous trees in environmentally sensitive areas in the next five years.

Also as competition is becoming tougher, the company is making a major step towards value addition and is venturing into tea processing as evidenced by construction of the first tea factory, at Kipchabo in Nandi North District and planned construction of second factory in Kirinyaga.

According to the strategic plan, the corporation aims to achieve its objectives by using the ISO certification. The senior management team will be in charge of direction so as to realize the corporation's objectives and take innovative advantage of every opportunity to advance the goal of forest conservation and quality tea production.

Lastly the Corporation will aim to continually review the quality objectives and make improvements in order to maintain the ISO 9001:2008 Quality Management System standards, which will give the company the upper hand in present competitive business world.

4.11.2 Average Yearly Returns on Assets for the Entire Sector from 2011 to 2014

Average yearly ROAs for all parastatals was computed and plotted as displayed in Figure 4.32. The trend line shows that the average yearly ROA for Commercial State Corporations in Kenya for the four years was highest in 2011 declining to lowest in 2013

and then slightly increasing upto 2014. Notably the decline starts towards the end of PNU-ODM fragile coalition regime becoming lowest in 2013 during transition to a new Jubilee regime and beginning to pick up in 2014 following pronouncements that serious reforms are to be carried out in parastatals to enhance productivity. As noted in the Presidential Report the ‘Mali ya Umma’ culture works best around such times and circumstances characterized by general uncertainty, looting, reluctance, looming changes in parastatal leadership (since they are political appointees) and low productivity.

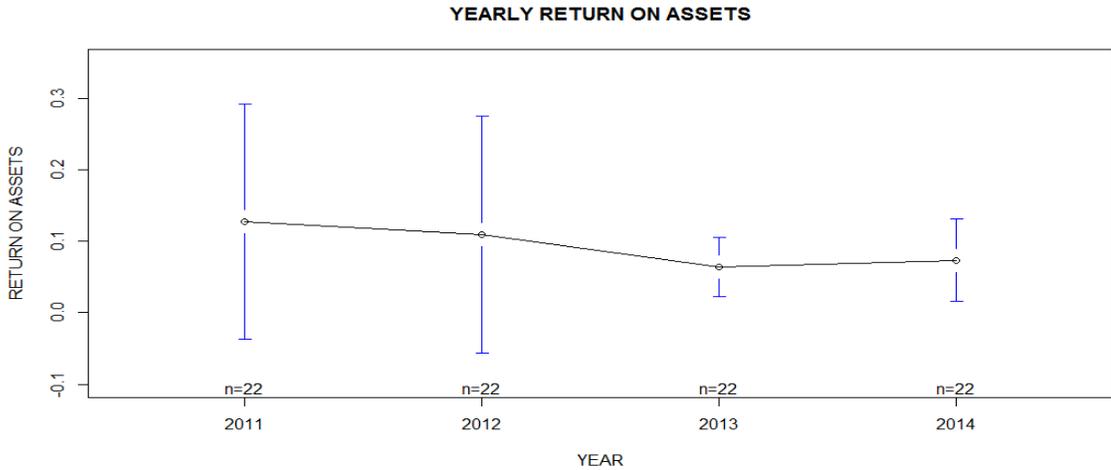


Figure 4.17: Yearly ROA for 2011 to 2014

The ANOVA result of yearly return on assets is found in Table 4.60. In general, the ANOVA suggests that return on assets is not significant ($F = 0.258, p > 0.05$) across the years.

Table 4.60: Return on Assets

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.059	3	0.020	0.258	0.855
Within Groups	6.371	84	0.076		
Total	6.429	87			

Table 4.61 is a summary of multiple comparison of ROAs of Commercial State Corporation in Kenya from 2011 to 2014. It shows that there is no significance in ROAs for all the parastatals across the years. This is an indicator that there is no growth in the parastatals confirming the various reports that have pointed out poor performance in the parastatals. For there to be growth there has to be a business oriented corporate culture suitable to stimulate performance.

Table 4.61: Multiple comparison of ROA of Commercial State Corporation in Kenya for 2011 to 2014

(I) Year	(J) Year	Mean Difference (I-J)	Std. Error	Sign.
2011	2012	0.0182909	0.0830342	0.826
	2013	0.0633455	0.0830342	0.448
	2014	0.0540864	0.0830342	0.517
2012	2011	-0.0182909	0.0830342	0.826
	2013	0.0450545	0.0830342	0.589
	2014	0.0357955	0.0830342	0.668
2013	2011	-0.0633455	0.0830342	0.448
	2012	-0.0450545	0.0830342	0.589
	2014	-0.0092591	0.0830342	0.911
2014	2011	-0.0540864	0.0830342	0.517
	2012	-0.0357955	0.0830342	0.668
	2013	0.0092591	0.0830342	0.911

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter is a summary of findings of the study as per the research objectives and hypotheses. Conclusions of major results from the study are outlined. Lastly, recommendations based on the study findings are made on the role of corporate culture on performance of commercial state corporations in Kenya.

5.2 Summary of Study Findings

The purpose of the study was to assess the role of corporate culture on performance of commercial state corporations in Kenya. The study investigated the roles of involvement culture, consistency culture, adaptability culture and mission culture on performance of commercial state corporations in Kenya. This was important because commercial state corporations are major players in economic growth and development of Kenya.

The study was conducted by use of questionnaires and secondary data. Out of 102 people only 70 responded giving a response rate of 68%. Majority of respondents were males (57.1%). Majority of respondents were of age ranging from 31 to 50 years (77.6%) and had university education level (92.9%). Respondents were from different management levels and different working experience with their organizations. Descriptive and inferential statistics including mean, mode, median, Pearson Product Moment correlation, scatter diagrams and regression were utilized to analyse data using Statistical Package for Social Sciences (SPSS). Cronbach alpha was used to establish reliability of the instrument. It established a reliability of 0.842 (Table 4.18) which is within the threshold according to Coopers & Schindler (2008) who gave alpha coefficient of 0.70 as threshold for reliability. Factor analysis was used to identify a small number of factors that can be used to represent a relationship among a set of

interrelated variables. The results and findings indicate that corporate culture had an effect on performance of commercial state corporations in Kenya.

5.2.1 Role of Involvement Culture in Performance of Commercial State Corporations in Kenya

Descriptive statistics were used to analyse this research objective before other subsequent analysis was done. The results and findings indicated that involvement culture a great influence on organizational performance of commercial state corporations in Kenya as indicated in Tables 4.4, 4.5 and 4.6. Factor analysis was done in order to reduce the involvement culture items to a manageable and meaningful size, where all the 9 items met the threshold of 0.5 and above. After factor analysis, reliability analysis was done to establish how the items were internally consistent and reliable. Cronbach's alpha established the reliability with a coefficient of 0.834 as indicated in Table 4.7.

Correlation was done to establish nature of the relationship and it indicated a positive Pearson correlation of 0.474 showing that involvement culture is positively and significantly associated to organizational performance of state corporations. Regression analysis was done whereby the results showed that involvement culture had a goodness of fit of 22.5%, showing that involvement culture only explained 22.5% of the variation in organizational performance of state corporations.

The results and findings therefore conclude that involvement culture had a positive and significant role in performance of commercial state corporations in Kenya.

5.2.2 Role of Consistency Culture in Performance of Commercial State Corporations in Kenya

Descriptive statistics were used to analyse this research objective before other subsequent analysis was done. The results and findings indicated that consistency culture had a great influence on organizational performance of commercial state corporations in Kenya as indicated in Tables 4.7, 4.8 and 4.9. Factor analysis was done

in order to reduce the consistency culture items to a manageable and meaningful size, where 8 items met the threshold of 0.5 and above. One item was dropped since it did not meet the threshold. After factor analysis, reliability analysis was done to establish how the items were internally consistent and reliable. Cronbach's alpha established the reliability with a coefficient of 0.797 as indicated in Table 4.7.

Correlation was done to establish nature of the relationship and it indicated a positive Pearson correlation of 0.488 showing that consistency culture is positively and significantly associated to organizational performance of state corporations. Regression analysis was done whereby the results showed that involvement culture had a goodness of fit of 20% showing that consistency culture only explained 20% of the variation in organizational performance of commercial state corporations.

The results and findings therefore conclude that consistency culture had a positive and significant role in performance of commercial state corporations in Kenya.

5.2.3 Role of Adaptability Culture in Performance of Commercial State Corporations in Kenya

Descriptive statistics were used to analyse this study objective before other subsequent analysis was done. The results and findings indicated that Adaptability Culture had a great influence on organizational performance of commercial state corporations in Kenya as indicated in Tables 4.10, 4.11 and 4.12. Factor analysis was done in order to reduce the Adaptability Culture items to a manageable and meaningful size, where all the 9 items met the threshold of 0.5 and above. After factor analysis, reliability analysis was done to establish how the items were internally consistent and reliable. Cronbach's alpha established the reliability with a coefficient of 0.841 as indicated in Table 4.8.

Correlation was done to establish nature of the relationship and it indicated a positive Pearson correlation of 0.587 showing that Adaptability Culture is positively and significantly associated to organizational performance of state corporations. Regression

analysis was done whereby the results showed that involvement culture had a goodness of fit of 34.4%, showing that Adaptability Culture only explained 34.4% of the variation in organizational performance of state corporations. The results and findings therefore conclude that Adaptability Culture had a positive and significant role in performance of commercial state corporations in Kenya.

5.2.4 Role of Mission Culture in Performance of Commercial State Corporations in Kenya

Descriptive statistics were used to analyse this research objective before other subsequent analysis was done. The results and findings indicated that Mission Culture had a great influence on organizational performance of commercial state corporations in Kenya as indicated in Tables 4.13, 4.14 and 4.15. Factor analysis was done in order to reduce the Mission Culture items to a manageable and meaningful size, where all the 9 items met the threshold of 0.5 and above. After factor analysis, reliability analysis was done to establish how the items were internally consistent and reliable. Cronbach's alpha established the reliability with a coefficient of 0.877 as indicated in Table 4.10.

Correlation was done to establish nature of the relationship and it indicated a positive Pearson correlation of 0.6 showing that Mission Culture is positively and significantly associated to organizational performance of state corporations. Regression analysis was done whereby the results showed that Mission Culture had a goodness of fit of 36%, showing that involvement culture only explained 36% of the variation in organizational performance of state corporations.

The results and findings therefore conclude that Mission Culture had a positive and significant role in performance of commercial state corporations in Kenya.

5.2.5 Moderating effect of CEO Values in the Role of Corporate Culture in Performance of Commercial State Corporations in Kenya

Descriptive statistics were used to analyse this research objective before other subsequent analysis was done. The results and findings indicated that CEO Values had an influence on the role of Corporate Culture in organizational performance of commercial state corporations in Kenya as indicated in Tables 4.20. Factor analysis was done in order to reduce the CEO Values items to a manageable and meaningful size, where all the 7 items met the threshold of 0.5 and above. After factor analysis, reliability analysis was done to establish how the items were internally consistent and reliable. Cronbach's alpha established the reliability with a coefficient of 0.734 as indicated in Table 4.7. Correlation was done to establish nature of the relationship and it indicated a positive Pearson correlation of 0.126 showing that CEO Values is positively and significantly associated to organizational performance of state corporations.

The first moderated regression analysis was done whereby the results showed that moderating effect of CEO Values in the relationship between Involvement Culture and organizational performance had a goodness of fit of 94.3%, showing that involvement culture and CEO Values only explained 94.3% of the variation in organizational performance of state corporations. The results and findings therefore conclude that CEO Values and Involvement Culture had a positive and significant role in performance of commercial state corporations in Kenya.

The second moderated regression analysis was done whereby the results showed that moderating effect of CEO Values in the relationship between Consistency Culture and organizational performance had a goodness-of-fit of 94.1%, showing that Consistency culture and CEO Values only explained 94.1%% of the variation in organizational performance of state corporations. The results and findings therefore conclude that CEO Values and Consistency Culture had a positive and significant role in performance of commercial state corporations in Kenya.

The third moderated regression analysis was done whereby the results showed that moderating effect of CEO Values in the relationship between Adaptability Culture and organizational performance had a goodness of fit of 95.1%, showing that Adaptability culture and CEO Values only explained 95.1% of the variation in organizational performance of state corporations. The results and findings therefore conclude that CEO Values and Adaptability culture had a positive and significant role in performance of commercial state corporations in Kenya.

The fourth moderated regression analysis was done whereby the results showed that moderating effect of CEO Values in the relationship between Mission Culture and organizational performance had a goodness of fit of 95.5%, showing that Mission culture and CEO Values only explained 95.5% of the variation in organizational performance of state corporations. The results and findings therefore conclude that CEO Values and Mission Culture had a positive and significant role in performance of commercial state corporations in Kenya.

5.3 Conclusions

The overall regression model in Table 4.42 shows significant role of three corporate culture constructs (involvement, adaptability and mission) on organisational performance. Consistency culture was not a significant predictor of performance. This study provides both a theoretical and empirical case arguing that a SC's culture and CEO's values are important for achieving best performance. It has been concluded in similar study (Momani & Amand, 2014) that not only does the corporate culture of a SC facilitate the effective implementation of governance practices that have been enacted by law or in plan, but it may also be a necessary precondition before the reforms are fully implemented correctly.

This study confirms the work of Denison (1990) and Schwatz (2004) and from the findings, some conclusions can be drawn. Involvement Culture plays a significant role in organizational performance. Valued connections of employees among themselves and

with the organization create a sense of involvement through empowering employees, teamwork and improving their skills. This is consistent with empirical literature. For instance Kaya (2014) found out that teamwork orientation provides many benefits to the organizations. These benefits include increased communication, increased innovation that can drive continuous improvement and increased work satisfaction. Increased workplace productivity, improvements to service quality, a reduced management structure, lower level of absenteeism, reduced employee turnover and increase in organizational effectiveness are other outcomes of teamworking. Employees must be integrated into and committed to the organization in order for teams to be effective. Team work offers the potential to achieve outcomes that could not be achieved by individuals working in isolation. Teamwork is frequently considered a best way to deliver superior performance (Tynan, 2003). These positive factors are considered to decrease negativity of organizational cynicism thus promoting performance.

Similarly, it was found that Adaptability Culture and Mission Culture had a significant positive relationship with organizational performance. Strong culture in an organization facilitates employees to focus their efforts towards achievement of organizational goals. It is, therefore, evident from the study that employees perceived some aspects of organizational culture more positive than others in predicting organizational performance of SCs.

Consistency Culture construct in this study remained marginally insignificant in predicting performance (Table 4.42). Hypothetically, organizational culture in (especially) large organizations enhances coordination and mutual bonds among the employees to discharge their functions. This finding can be attributed to employees not being entirely accustomed with how corporate culture facilitates consistency of work and approach in line with the organizational core values. CEO Values were found to moderate the relationship between corporate culture and organizational performance of state corporations in Kenya.

Corporate culture is an essential part of organizational success. It empowers and challenges companies in today's business world. A system that supports strategic and operational goals can fuel performance and ignite innovation and differentiation. The study agrees with Kelepile (2015) who found out that if the corporate culture opposes the company's strategy, the results can be disastrous. Many business leaders understand that corporate culture plays an important role in their businesses, but most have difficulty understanding how to use culture to improve performance. This is where the findings of this study are of great significance. Often overlooked in organizations, especially large ones, is the fact that performance, productivity, happiness, and engagement are all interrelated. Employees who are happier and more satisfied at work are more productive and more engaged in the mission of the organization. Corporate culture is a key factor not only in achieving organizational goals, but in attracting and keeping desirable employees, creating a positive public image, and building respectful relationships with stakeholders. Generally, it can be concluded from the results discussed above that corporate culture plays a significant role in performance though with varying levels in different state corporations. It is one of the most powerful and stable forces operating in different state corporations. Hence it can impact job satisfaction and performance of employees and the organization. Corporate culture is an essential part of organizational success.

5.4 Contribution of the Study to the Body of Knowledge, Theory, Practice and Methodology

The study contributes to the body of knowledge particularly in the Kenyan context. The results of this study indicate that involvement culture, consistency culture, adaptability culture and mission culture play a significant role in performance of commercial state corporations in Kenya.

In Kenya's commercial state corporations CEO values of self direction and stimulation provide a compass to steer performance of the corporations. When these values are embraced by CEOs they become champions of adopting new ideas, being creative,

making good decisions, encouraging innovations, taking calculated risks and creating exciting life in the parastatals.

In order to derive more valuable and broader conclusions, the methodology adopted in this research involved administering questionnaires across a wider range of state corporations in various sectors, in order to increase the generalizability of the results. Apart from analysis of primary data using SPSS, secondary data from the parastatals was analysed using advanced techniques (R-program) to compare performances of different parastatals for four years, establish trends and arrive at conclusions. As weak corporate culture leads to poor performance among state corporations, this study is of scholarly interest as it has further unpacked factors that lead to an increase in organizational performance. This is also true for the assessment of the role of corporate culture in organizational performance. In the context of examining the factors that increase organizational performance, recent studies ignored to examine what can be done to decrease the poor performance of commercial state corporations. This research gap has been addressed in this study by administering questionnaires at the top organizational level over and above quantitative analysis.

The study has established that involvement culture, consistency culture, adaptability culture and mission culture play a significant role as drivers of performance of state corporations. Further, the study has established that CEO values moderates the role of corporate culture in performance of commercial state corporations.

5.5 Recommendations

The following recommendations were extracted from the results, findings and conclusions of the study:-

5.5.1 Recommendations on Research Findings

Boards of Directors of Commercial State Corporations in Kenya need to consider corporate culture as an important ingredient in the performance of the corporations. To

turn around the corporations and achieve high performance they need to build and sustain a culture of involvement; seek and achieve consistency in their goals and targets; be adaptable to dynamics of internal and external business environment; and pursue their mandate through strategic plans. CEO values of stimulation and self direction in Kenyan parastatals should be adopted because they play a very important role in shaping corporate culture thus influencing the performance of state corporations. This can be a very critical factor to consider when setting selection criteria for CEOs of these state corporations.

5.5.2. Implications of the Study to Practice

Aligning human resources with the organization culture is a vital process for the organization in achieving its objectives and delivering results. Organizational culture may encourage its staff to collaborate or to participate in teamwork for improvements (Kaya, 2014). Alignment of the organizational culture and HR strategy help effect such aspects as merger success, productivity, and whether human capital can indeed be a core competency (Mathis & Jackson, 2008). In an organization which has a centralized strategic human resources management model, human resources management has a strong influence on the organizational culture. For example, the attraction of talented candidates in the recruitment process will affect the organizational culture, and the organizational culture affects the recruitment processes (Condrey, 2010).

Communication in the selection process (interviewing) is to inform the candidates about the organization, its culture, its vacancies and its demands; being an instrument of public relations of the organization, and give the candidates the opportunity to provide more detailed information on their professional past and their future aspirations (Kaya, 2014). Thus, the organizational culture has an important effect (sometimes a negative effect) on internal recruitment, selection, establishing compensation, evaluating performance. For instance change-resistant organizational culture has effects on HR practices and their effectiveness (Florea et al., 2011).

The study provides recommendations to the government as the owner of the parastatals. The culture adopted by most commercial state corporations is not yielding positive effects on the organizations, hence the poor performance noted over the years. It is recommended that productivity can be enhanced through employees' empowerment, team orientation and capability development similar to the manner it happens in leading private sector enterprises. This will increase satisfaction in the workforce and in turn affect productivity. It gives weight to the business and organization factors that affect corporate performance.

Consistency of work establishes systems of operations aligned to the mission of the organization which in turn builds and embeds a peculiar culture in the parastatals. Corporate culture plays an important role in performance of parastatals. For the parastatals to become competitive and remain successful it is recommended that they need to evolve a culture that promotes entrepreneurship and productivity. This is where the CEO values come in handy. CEOs have to provide leadership to ensure that the parastatals provide a conducive and healthy environment to the employees so that they are able to achieve not only their individual goals but attain organizational objectives as well. In a developing country like Kenya where the economy is struggling to grow, parastatals must be run competitively to generate revenue to the government by being left alone to operate profitably and being put on their toes to meet the challenges of the rapidly changing global business environment. This requires visionary leaders to be hired for the parastatals in a competitive manner just like in the private sector with set targets. This calls for a review of recruitment, employment, performance, compensation, training and development policies in these parastatals.

Corporate culture is a vital tool that can shelter organizations from the (un)intended failures witnessed in Kenya's commercial state corporations. Culture of an organization is neither static nor can it remain in isolation. It is recommended that it must be dynamic and has to interact with external environment. This might result into some unexpected, undesirable changes or turbulence leading to instability. It is this disequilibrium that drives change as organizations seek stability. It is the responsibility of the organization

to become adaptive and make the transition supportive so that the ensuing changes are useful to the employees in enhancing their individual performances and for the parastatal to remain a viable entity in the change scenario for eventually improving organizational performance.

5.5.3. Implications of the Study to Methodology

Most studies that have been conducted in this area using Denison' Organisational Culture Survey are in developed countries and most of them adopted use of questionnaires. In this study in Kenya, apart from analysis of primary data using SPSS, secondary data from the parastatals was analysed using advanced techniques (R-program) to compare performances of different parastatals for four years, establish trends and arrive at conclusions.

5.5.4. Recommendations for Further Research

Recommendations for further research arise from the gaps that the study did not address. The study was based on a cross-sectional survey and focused involvement culture, consistency culture, adaptability culture, mission culture, CEO values as factors in organizational performance of commercial state corporations. Future empirical study might be conducted to consider various commercial state corporations in similar sectors using other constructs of organizational culture. A longitudinal study of these factors will be handy to determine the cause-and-effect relationships over time to support theoretical arguments and also to establish the degree to which the findings can be generalized to other corporations in Kenya.

Further, a similar study can be carried out where corporate culture and its role can be measured using other scholar's instruments like Hofstede and Cameron. In addition, other scholars can undertake a study to compare role of corporate culture in performance of the commercial state corporations with counterparts in the private sector using other moderating variables or in combination with intervening variables.

This study targeted top level management as respondents. Future study can consider involving CEOs, Board Members and other employees as respondents to get a more diversified perspective. Lastly, this study did not use control variables in the conceptual model; other studies can introduce control variables like size of state corporations.

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APPENDICES

Appendix A: Covering Letter

Thomas Chuma Mose

School of Human Resource Development

Jomo Kenyatta University of Agriculture and Technology

CBD Campus

20th January 2015

Dear Sir/Madam,

RE: ROLE OF CORPORATE CULTURE IN ORGANISATIONAL PERFORMANCE

I am a Human Resource Management Doctoral student at the Jomo Kenyatta University of Agriculture and Technology (JKUAT). One of the requirements of the course is to conduct a research study. To do this I am conducting research on "The role of corporate culture in organisational performance of Commercial State Corporations in Kenya".

The expected outcome of the research is to help provide a comprehensive data for analysis on various aspects of corporate culture and its impact on performance of state owned enterprises in Kenya. I believe you have useful ideas on the important variables under study. Managing directors/senior managers may also use the findings to establish appropriate guidelines for steering performance of their organisations.

I would be grateful if you would assist me by completing the attached questionnaire. I appreciate that the questionnaire is going to take up some of your valuable time, however, I urge you to try and participate as your contribution is very important towards the success of the research. The results of the questionnaire will be used purely for academic purposes and will not impact your job in any way or form. All information

obtained will be treated with strict confidence. Your responses will remain anonymous. You are guaranteed that your name will not be used in the final report. To this end, I wish to take this opportunity to thank you in advance for your cooperation. If you require clarification and any further information, please do not hesitate to contact me.

I appreciate your feedback and thank you for taking the time to share your opinions with me.

Best regards,

Thomas Mose

PhD student

Appendix B: Questionnaire

Thank you for participating in this survey.

You will find that the questionnaire is easy to read. It should only take a few minutes to fill out. This survey presents a set of statements that describe different aspects of an organisation's culture and performance. To answer the items, think of your organisation as a whole and the way things are usually done. Use the scale to indicate the extent to which you agree or disagree with each of the statements. In cases where an item is not applicable, select *N/A*. Please help us by completing each of the items in the attached questionnaire and marking the appropriate block with a tick. This is not a test and there are no true or false responses.

Name of the Corporation

SECTION A: Personal Information (Please tick)		
1.	Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
2.	Age	<input type="checkbox"/> 20 to 30 <input type="checkbox"/> 31 to 40 <input type="checkbox"/> 41 to 50 <input type="checkbox"/> 51 and above
3.	Highest Education Level Attained	<input type="checkbox"/> O'Level <input type="checkbox"/> A'Level <input type="checkbox"/> Bachelor Degree <input type="checkbox"/> Masters

		<input type="checkbox"/> Ph.D Other _____
4.	Position in the organization	<input type="checkbox"/> CEO <input type="checkbox"/> Finance Manager <input type="checkbox"/> General manager <input type="checkbox"/> Human Resource Manager Other _____
5.	Job Experience	<input type="checkbox"/> Below 5 years <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 11 to 15 years <input type="checkbox"/> Above 15 years
6.	Management Level	<input type="checkbox"/> Top Level Management <input type="checkbox"/> Middle Level Management <input type="checkbox"/> Lower Level Management
SECTION B: Organisation Information		
1.	Length of existence of your organisation	
2.	Size of your organisation (in terms of employees)	<input type="checkbox"/> Between 1 and 200 <input type="checkbox"/> Between 201 and 500 <input type="checkbox"/> Above 500

Please answer the following statements by ticking appropriately.

SECTION C: Involvement Culture					
Key: 1-Strongly disagree	2- Disagree	3-Neutral	4-Agree	5-Strongly agree	
In this organization	1	2	3	4	5
Empowerment					
1. Decisions are usually made at the level where the best information is available.					
2. Information is widely shared so that everyone can get the information he or she needs when it is needed.					
3. Everyone believes that he or she can have a positive impact.					
Team orientation					
4. Working in this organisation is like being part of a team.					
5. This organisation relies on horizontal control and coordination to get work done rather than hierarchy.					
6. Teams are the primary building blocks of this organization.					
Capability development					
7. The organization is constantly improving its 'bench strength' in many dimensions.					
8. This organisation continuously invests in the skill of employees.					
9. The capability of people in this organisation is viewed as an important source of competitive advantage.					
SECTION D: Consistency culture					
Core values					
10. The leaders and managers follow the guidelines that they set for the rest of the organisation.					
11. There is a clear and consistent set of values in this organisation that governs the way we do business.					
12. This organisation has an ethical code that guides our behaviour and tells us right from wrong.					
Agreement					
13. When disagreements occur, we work hard to achieve solutions that benefit both parties in the disagreement.					
14. It is easy to reach consensus, even on difficult issues.					

15. We often have trouble reaching agreement on key issues.					
Coordination and integration					
16. People from different organisational units still share a common perspective.					
17. It is easy to coordinate projects across functional units in this organization					
18. There is good alignment of goals across levels of this organisation					
SECTION E: Adaptability Culture					
Creating change					
19. This organisation is very responsive and changes easily.					
20. This organisation responds well to competitors and other changes in the business environment.					
21. This organisation continually adopts new and improved ways to do work.					
Customer focus					
22. Customer comments and recommendations often lead to changes in this organisation.					
23. Customer input directly influences our decisions.					
24. The interests of the final customer often get ignored in our decisions.					
Organisational learning					
25. We view failure as an opportunity for learning and improvement					
26. This organisation encourages and rewards those who take risk.					
27. We make certain that we coordinate our actions and efforts between different units in this organization so that 'the right hand knows what the left hand is doing'.					
SECTION F: Mission Culture					
Strategic direction and intent					
28. This organisation has long-term purpose and direction.					
29. This organisation has a clear mission that gives meaning and direction to our work.					
30. This organisation has a clear strategy for the future					
Goals and objectives					
31. There is widespread agreement about goals of this organisation.					

32. Leaders of this organisation set goals that are ambitious, but realistic.					
33. The leadership has clearly stated the objectives we are trying to meet.					
Vision					
34. We have a shared vision of what this organisation will be like in the future.					
35. Leaders of this organisation have a long-term orientation.					
36. Our vision creates excitement and motivation for our employees.					
SECTION G: Organisational Performance					
The following set of questions asks about the performance of your organisation in the last three years. How would you assess your organisation's performance in the following areas?					
Key: 1 - Fair 2 - Average 3 - Good 4 - Very good 5 - Excellent					
	1	2	3	4	5
1. Quality product or service					
2. Internal process coordination					
3. Personnel activities coordination					
4. New product development.					
5. Overall corporation performance					
6. Employee Satisfaction					
7. Personnel absenteeism					
8. Labour turnover					
SECTION H: CEO Values					
Here is a brief description of some people. Please read each description and think about how much each person is or is not like your parastatal CEO. Put a tick in the box to the right that shows how much the person in the description is like your CEO.					
How much like your CEO is this person?	Very much like the CEO	Like the CEO	Some-what like the CEO	Not like the CEO	Not like the CEO at all
Self direction	5	4	3	2	1
1. Thinking up new ideas and being creative					

is important to him. He likes to do things in his own original way.					
2. It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself.					
3. He thinks it's important to be interested in things. He likes to be curious and to try to understand all sorts of things.					
4. It is important to him to be independent. He likes to rely on himself.					
Stimulation					
1. He thinks it is important to do lots of different things in life. He always looks for new things to try.					
2. He likes to take risks. He is always looking for adventures.					
3. He likes surprises. It is important to him to have an exciting life.					

Thank you very much for taking your time to respond to this questionnaire.

Research assistant's Name.....

I certify that I have checked the entire questionnaire to ensure that it has been completed properly.

Signature.....

Date.....

Appendix C: Reclassification of Government owned Entities as of October 9, 2013

Purely Commercial State Corporations

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

27. New Kenya Co-operative Creameries
28. Yatta Vineyards Ltd
29. National Housing Corporation
30. Research Development Unit Company Ltd
31. Consolidated Bank of Kenya
32. Kenya National Assurance Co. (2001) Ltd
33. Kenya Reinsurance Corporation Ltd
34. Kenya National Shipping Line

Source: Report of the Presidential Taskforce on Parastatal Reforms in Kenya, October 2013.

Appendix D: Sample of Respondents Corporation

Firms	Finance manager	HR manager	Corporate affairs manager	Total Respondents
Very good performers				
1. Nyayo Tea Zones Development Corporation	1	1	1	3
2. Nzoia Sugar Company Ltd	1	1	1	3
3. Kenya Literature Bureau	1	1	1	3
4. Kenya Safari Lodges	1	1	1	3
5. South Nyanza Sugar Company	1	1	1	3
6. Kenya Wines Agencies Ltd	1	1	1	3
7. Agro Chemical And Food Company Ltd	1	1	1	3
8. Kenya National Assurance Company (2001) Ltd				
9. Jomo Kenyatta Foundation				
Sub Total				27
Good Performers				
10. Kenya Re-Insurance Corporation	1	1	1	3
	1	1	1	3
11. National Housing Corporation	1	1	1	3
	1	1	1	3
12. Consolidated Bank Of Kenya	1	1	1	3
13. Chemilil Sugar Company				
14. Kenya Meat Commission				
Sub Total				15
Poor Performers				
15. Kenya National Shipping Line	1	1	1	3
	1	1	1	3
16. New Kenya Cooperative Creameries Ltd				
	1	1	1	3
17. School Equipment Production Unit				
18. University Of Nairobi Enterprises Service	1	1	1	3
	1	1	1	3
19. Kenya National Trading Corporation				

Sub Total				15
Others				
20. Simlaw Seeds Kenya	1	1	1	3
21. Simlaw Seeds Tanzania	1	1	1	3
	1	1	1	3
22. Simlaw Seeds Uganda	1	1	1	3
	1	1	1	3
23. Muhoroni Sugar Company Ltd	1	1	1	3
	1	1	1	3
24. Golf Hotel Kakamega	1	1	1	3
	1	1	1	3
25. Kabarnet Hotel Ltd	1	1	1	3
	1	1	1	3
26. Mt Elgon Lodge	1	1	1	3
	1	1	1	3
27. Sunset Hotel Kisumu	1	1	1	3
	1	1	1	3
28. Jomo Kenyatta University Enterprises Ltd				
29. University of Nairobi Press (UONP)				
30. KWA Holdings				
31. Yatta Vineyards Ltd				
32. Research Development Unit Company				
33. Rivatex (East Africa) Ltd				
34. Development Bank of Kenya Ltd				
Sub-Total				45
Grand Total				102

Source: List derived from *Report of the Presidential Taskforce on Parastatal Reforms in Kenya* (Government Printer, October 2013) and from *Report of Evaluation of the Performance of Public Agencies for the Financial Year 2010/2011* (Government Printer, March 2012).

Appendix E: Secondary Organisational Performance (for Finance Managers)

Please indicate the level of your organisation’s performance in the following years :

Year	Profit before tax	Total assets	Return on assets
2010			
2011			
2012			
2013			
2014			

Appendix F: Multiple Comparisons

(I) Parastatal	(J) Parastatal	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1 Agrochemical and Food Company	2 Kenya Meat Commission	0.0975000	0.1509610	0.521	-0.203903	0.398903
	3 Nyayo Tea Zones Development Corporation	-0.890000*	0.1509610	0.000	-1.191403	-0.588597
	4 South Nyanza Sugar Company Ltd	0.0200000	0.1509610	0.895	-0.281403	0.321403
	5 Simlaw Seeds Kenya	0.0495000	0.1509610	0.744	-0.251903	0.350903
	6 East African Portland Corporation	0.0802500	0.1509610	0.597	-0.221153	0.381653
	7 Kenya Pipeline Corporation	-0.0875000	0.1509610	0.564	-0.388903	0.213903
	8 Kenya National Trading Corporation (KNTC)	-0.0600000	0.1509610	0.692	-0.361403	0.241403
	9 Kabarnet Hotel Ltd	0.0796750	0.1509610	0.599	-0.221728	0.381078
	10 Jomo Kenyatta Foundation	0.0199500	0.1509610	0.895	-0.281453	0.321353
	11 Kenya Literature Bureau	0.0168250	0.1509610	0.912	-0.284578	0.318228
	12 School Equipment Production Unit (SEPU)	0.0667000	0.1509610	0.660	-0.234703	0.368103
	13 University of Nairobi Press	0.0225750	0.1509610	0.882	-0.278828	0.323978
	14 Development Bank of Kenya	0.0745750	0.1509610	0.623	-0.226828	0.375978
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0314000	0.1509610	0.836	-0.332803	0.270003
	16 Kenyatta International Convention Centre	0.0674500	0.1509610	0.656	-0.233953	0.368853
	17 New Kenya Cooperative Creameries	-0.0106750	0.1509610	0.944	-0.312078	0.290728
	18 Kenya Power Company	0.0208250	0.1509610	0.891	-0.280578	0.322228
	19 National Housing Corporation	0.0424250	0.1509610	0.780	-0.258978	0.343828
	20 Kenya Railways Corporation	0.0662500	0.1509610	0.662	-0.235153	0.367653
	21 Kenya National Assurance Company.(2001) Ltd	0.0814000	0.1509610	0.592	-0.220003	0.382803
	22 Kenya Reinsurance Corporation Ltd	-0.0296500	0.1509610	0.845	-0.331053	0.271753
	2 Kenya Meat Commission	1 Agrochemical and Food Company	-0.0975000	0.1509610	0.521	-0.398903
3 Nyayo Tea Zones Development Corporation		-0.9875000*	0.1509610	0.000	-1.288903	-0.686097
4 South Nyanza Sugar Company Ltd		-0.0775000	0.1509610	0.609	-0.378903	0.223903

	5 Simlaw Seeds Kenya	-0.0480000	0.1509610	0.752	-0.349403	0.253403
	6 East African Portland Corporation	-0.0172500	0.1509610	0.909	-0.318653	0.284153
	7 Kenya Pipeline Corporation	-0.1850000	0.1509610	0.225	-0.486403	0.116403
	8 Kenya National Trading Corporation (KNTC)	-0.1575000	0.1509610	0.301	-0.458903	0.143903
	9 Kabarnet Hotel Ltd	-0.0178250	0.1509610	0.906	-0.319228	0.283578
	10 Jomo Kenyatta Foundation	-0.0775500	0.1509610	0.609	-0.378953	0.223853
	11 Kenya Literature Bureau	-0.0806750	0.1509610	0.595	-0.382078	0.220728
	12 School Equipment Production Unit (SEPU)	-0.0308000	0.1509610	0.839	-0.332203	0.270603
	13 University of Nairobi Press	-0.0749250	0.1509610	0.621	-0.376328	0.226478
	14 Development Bank Of Kenya	-0.0229250	0.1509610	0.880	-0.324328	0.278478
	15 Kenya Wine Agencies Ltd (KWAL)	-0.1289000	0.1509610	0.396	-0.430303	0.172503
	16 Kenyatta International Convention Centre	-0.0300500	0.1509610	0.843	-0.331453	0.271353
	17 New Kenya Cooperative Creameries	-0.1081750	0.1509610	0.476	-0.409578	0.193228
	18 Kenya Power Company	-0.0766750	0.1509610	0.613	-0.378078	0.224728
	19 National Housing Corporation	-0.0550750	0.1509610	0.716	-0.356478	0.246328
	20 Kenya Railways Corporation	-0.0312500	0.1509610	0.837	-0.332653	0.270153
	21 Kenya National Assurance Company.(2001) Ltd	-0.0161000	0.1509610	0.915	-0.317503	0.285303
	22 Kenya Reinsurance Corporation Ltd	-0.1271500	0.1509610	0.403	-0.428553	0.174253
3 Nyayo Tea Zones Development Corporation	1 Agrochemical and Food Company	0.8900000*	0.1509610	0.000	0.588597	1.191403
	2 Kenya Meat Commission	0.9875000*	0.1509610	0.000	0.686097	1.288903
	4 South Nyanza Sugar Company Ltd	0.9100000*	0.1509610	0.000	0.608597	1.211403
	5 Simlaw Seeds Kenya	0.9395000*	0.1509610	0.000	0.638097	1.240903
	6 East African Portland Corporation	0.9702500*	0.1509610	0.000	0.668847	1.271653
	7 Kenya Pipeline Corporation	0.8025000*	0.1509610	0.000	0.501097	1.103903
	8 Kenya National Trading Corporation (KNTC)	0.8300000*	0.1509610	0.000	0.528597	1.131403
	9 Kabarnet Hotel Ltd	0.9696750*	0.1509610	0.000	0.668272	1.271078
	10 Jomo Kenyatta Foundation	0.9099500*	0.1509610	0.000	0.608547	1.211353
	11 Kenya Literature Bureau	0.9068250*	0.1509610	0.000	0.605422	1.208228
	12 School Equipment Production Unit (SEPU)	0.9567000*	0.1509610	0.000	0.655297	1.258103
	13 University of Nairobi Press	0.9125750*	0.1509610	0.000	0.611172	1.213978
	14 Development Bank Of Kenya	0.9645750*	0.1509610	0.000	0.663172	1.265978

	15 Kenya Wine Agencies Ltd (KWAL)	0.8586000*	0.1509610	0.000	0.557197	1.160003
	16 Kenyatta International Convention Centre	0.9574500*	0.1509610	0.000	0.656047	1.258853
	17 New Kenya Cooperative Creameries	0.8793250*	0.1509610	0.000	0.577922	1.180728
	18 Kenya Power Company	0.9108250*	0.1509610	0.000	0.609422	1.212228
	19 National Housing Corporation	0.9324250*	0.1509610	0.000	0.631022	1.233828
	20 Kenya Railways Corporation	0.9562500*	0.1509610	0.000	0.654847	1.257653
	21 Kenya National Assurance Company.(2001) Ltd	0.9714000*	0.1509610	0.000	0.669997	1.272803
	22 Kenya Reinsurance Corporation Ltd	0.860350*	0.1509610	0.000	0.558947	1.161753
4 South Nyanza Sugar Company Ltd	1 Agrochemical and Food Company	-0.0200000	0.1509610	0.895	-0.321403	0.281403
	2 Kenya Meat Commission	0.0775000	0.1509610	0.609	-0.223903	0.378903
	3 Nyayo Tea Zones Development Corporation	-0.910000*	0.1509610	0.000	-1.211403	-0.608597
	5 Simlaw Seeds Kenya	0.0295000	0.1509610	0.846	-0.271903	0.330903
	6 East African Portland Corporation	0.0602500	0.1509610	0.691	-0.241153	0.361653
	7 Kenya Pipeline Corporation	-0.1075000	0.1509610	0.479	-0.408903	0.193903
	8 Kenya National Trading Corporation (KNTC)	-0.0800000	0.1509610	0.598	-0.381403	0.221403
	9 Kabarnet Hotel Ltd	0.0596750	0.1509610	0.694	-0.241728	0.361078
	10 Jomo Kenyatta Foundation	-0.0000500	0.1509610	1.000	-0.301453	0.301353
	11 Kenya Literature Bureau	-0.0031750	0.1509610	0.983	-0.304578	0.298228
	12 School Equipment Production Unit (SEPU)	0.0467000	0.1509610	0.758	-0.254703	0.348103
	13 University of Nairobi Press	0.0025750	0.1509610	0.986	-0.298828	0.303978
	14 Development Bank Of Kenya	0.0545750	0.1509610	0.719	-0.246828	0.355978
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0514000	0.1509610	0.735	-0.352803	0.250003
	16 Kenyatta International Convention Centre	0.0474500	0.1509610	0.754	-0.253953	0.348853
	17 New Kenya Cooperative Creameries	-0.0306750	0.1509610	0.840	-0.332078	0.270728
	18 Kenya Power Company	0.0008250	0.1509610	0.996	-0.300578	0.302228
	19 National Housing Corporation	0.0224250	0.1509610	0.882	-0.278978	0.323828
	20 Kenya Railways Corporation	0.0462500	0.1509610	0.760	-0.255153	0.347653
	21 Kenya National Assurance Company.(2001) Ltd	0.0614000	0.1509610	0.686	-0.240003	0.362803
	22 Kenya Reinsurance Corporation Ltd	-0.0496500	0.1509610	0.743	-0.351053	0.251753
5 Simlaw Seeds Kenya	1 Agrochemical and Food Company	-0.0495000	0.1509610	0.744	-0.350903	0.251903
	2 Kenya Meat Commission	0.0480000	0.1509610	0.752	-0.253403	0.349403

	3 Nyayo Tea Zones Development Corporation	-0.939500*	0.1509610	0.000	-1.240903	-0.638097
	4 South Nyanza Sugar Company Ltd	-0.0295000	0.1509610	0.846	-0.330903	0.271903
	6 East African Portland Corporation	0.0307500	0.1509610	0.839	-0.270653	0.332153
	7 Kenya Pipeline Corporation	-0.1370000	0.1509610	0.367	-0.438403	0.164403
	8 Kenya National Trading Corporation (KNTC)	-0.1095000	0.1509610	0.471	-0.410903	0.191903
	9 Kabarnet Hotel Ltd	0.0301750	0.1509610	0.842	-0.271228	0.331578
	10 Jomo Kenyatta Foundation	-0.0295500	0.1509610	0.845	-0.330953	0.271853
	11 Kenya Literature Bureau	-0.0326750	0.1509610	0.829	-0.334078	0.268728
	12 School Equipment Production Unit (SEPU)	0.0172000	0.1509610	0.910	-0.284203	0.318603
	13 University of Nairobi Press	-0.0269250	0.1509610	0.859	-0.328328	0.274478
	14 Development Bank Of Kenya	0.0250750	0.1509610	0.869	-0.276328	0.326478
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0809000	0.1509610	0.594	-0.382303	0.220503
	16 Kenyatta International Convention Centre	0.0179500	0.1509610	0.906	-0.283453	0.319353
	17 New Kenya Cooperative Creameries	-0.0601750	0.1509610	0.691	-0.361578	0.241228
	18 Kenya Power Company	-0.0286750	0.1509610	0.850	-0.330078	0.272728
	19 National Housing Corporation	-0.0070750	0.1509610	0.963	-0.308478	0.294328
	20 Kenya Railways Corporation	0.0167500	0.1509610	0.912	-0.284653	0.318153
	21 Kenya National Assurance Company.(2001) Ltd	0.0319000	0.1509610	0.833	-0.269503	0.333303
	22 Kenya Reinsurance Corporation Ltd	-0.0791500	0.1509610	0.602	-0.380553	0.222253
6 East African Portland Corporation	1 Agrochemical and Food Company	-0.0802500	0.1509610	0.597	-0.381653	0.221153
	2 Kenya Meat Commission	0.0172500	0.1509610	0.909	-0.284153	0.318653
	3 Nyayo Tea Zones Development Corporation	-0.970250*	0.1509610	0.000	-1.271653	-0.668847
	4 South Nyanza Sugar Company Ltd	-0.0602500	0.1509610	0.691	-0.361653	0.241153
	5 Simlaw Seeds Kenya	-0.0307500	0.1509610	0.839	-0.332153	0.270653
	7 Kenya Pipeline Corporation	-0.1677500	0.1509610	0.271	-0.469153	0.133653
	8 Kenya National Trading Corporation (KNTC)	-0.1402500	0.1509610	0.356	-0.441653	0.161153
	9 Kabarnet Hotel Ltd	-0.0005750	0.1509610	0.997	-0.301978	0.300828
	10 Jomo Kenyatta Foundation	-0.0603000	0.1509610	0.691	-0.361703	0.241103
	11 Kenya Literature Bureau	-0.0634250	0.1509610	0.676	-0.364828	0.237978
	12 School Equipment Production Unit (SEPU)	-0.0135500	0.1509610	0.929	-0.314953	0.287853
	13 University of Nairobi Press	-0.0576750	0.1509610	0.704	-0.359078	0.243728

	14 Development Bank Of Kenya	-0.0056750	0.1509610	0.970	-0.307078	0.295728
	15 Kenya Wine Agencies Ltd (KWAL)	-0.1116500	0.1509610	0.462	-0.413053	0.189753
	16 Kenyatta International Convention Centre	-0.0128000	0.1509610	0.933	-0.314203	0.288603
	17 New Kenya Cooperative Creameries	-0.0909250	0.1509610	0.549	-0.392328	0.210478
	18 Kenya Power Company	-0.0594250	0.1509610	0.695	-0.360828	0.241978
	19 National Housing Corporation	-0.0378250	0.1509610	0.803	-0.339228	0.263578
	20 Kenya Railways Corporation	-0.0140000	0.1509610	0.926	-0.315403	0.287403
	21 Kenya National Assurance Company.(2001) Ltd	0.0011500	0.1509610	0.994	-0.300253	0.302553
	22 Kenya Reinsurance Corporation Ltd	-0.1099000	0.1509610	0.469	-0.411303	0.191503
7 Kenya Pipeline Corporation	1 Agrochemical and Food Company	0.0875000	0.1509610	0.564	-0.213903	0.388903
	2 Kenya Meat Commission	0.1850000	0.1509610	0.225	-0.116403	0.486403
	3 Nyayo Tea Zones Development Corporation	-0.802500*	0.1509610	0.000	-1.103903	-0.501097
	4 South Nyanza Sugar Company Ltd	0.1075000	0.1509610	0.479	-0.193903	0.408903
	5 Simlaw Seeds Kenya	0.1370000	0.1509610	0.367	-0.164403	0.438403
	6 East African Portland Corporation	0.1677500	0.1509610	0.271	-0.133653	0.469153
	8 Kenya National Trading Corporation (KNTC)	0.0275000	0.1509610	0.856	-0.273903	0.328903
	9 Kabarnet Hotel Ltd	0.1671750	0.1509610	0.272	-0.134228	0.468578
	10 Jomo Kenyatta Foundation	0.1074500	0.1509610	0.479	-0.193953	0.408853
	11 Kenya Literature Bureau	0.1043250	0.1509610	0.492	-0.197078	0.405728
	12 School Equipment Production Unit (SEPU)	0.1542000	0.1509610	0.311	-0.147203	0.455603
	13 University of Nairobi Press	0.1100750	0.1509610	0.468	-0.191328	0.411478
	14 Development Bank of Kenya	0.1620750	0.1509610	0.287	-0.139328	0.463478
	15 Kenya Wine Agencies Ltd (KWAL)	0.0561000	0.1509610	0.711	-0.245303	0.357503
	16 Kenyatta International Convention Centre	0.1549500	0.1509610	0.308	-0.146453	0.456353
	17 New Kenya Cooperative Creameries	0.0768250	0.1509610	0.613	-0.224578	0.378228
	18 Kenya Power Company	0.1083250	0.1509610	0.476	-0.193078	0.409728
	19 National Housing Corporation	0.1299250	0.1509610	0.393	-0.171478	0.431328
	20 Kenya Railways Corporation	0.1537500	0.1509610	0.312	-0.147653	0.455153
	21 Kenya National Assurance Company.(2001) Ltd	0.1689000	0.1509610	0.267	-0.132503	0.470303
	22 Kenya Reinsurance Corporation Ltd	0.0578500	0.1509610	0.703	-0.243553	0.359253
	8 Kenya National	1 Agrochemical and Food Company	0.0600000	0.1509610	0.692	-0.241403

Trading Corporation (KNTC)	2 Kenya Meat Commission	0.1575000	0.1509610	0.301	-0.143903	0.458903	
	3 Nyayo Tea Zones Development Corporation	-0.083000*	0.1509610	0.000	-1.131403	-0.528597	
	4 South Nyanza Sugar Company Ltd	0.0800000	0.1509610	0.598	-0.221403	0.381403	
	5 Simlaw Seeds Kenya	0.1095000	0.1509610	0.471	-0.191903	0.410903	
	6 East African Portland Corporation	0.1402500	0.1509610	0.356	-0.161153	0.441653	
	7 Kenya Pipeline Corporation	-0.0275000	0.1509610	0.856	-0.328903	0.273903	
	9 Kabarnet Hotel Ltd	0.1396750	0.1509610	0.358	-0.161728	0.441078	
	10 Jomo Kenyatta Foundation	0.0799500	0.1509610	0.598	-0.221453	0.381353	
	11 Kenya Literature Bureau	0.0768250	0.1509610	0.613	-0.224578	0.378228	
	12 School Equipment Production Unit (SEPU)	0.1267000	0.1509610	0.404	-0.174703	0.428103	
	13 University of Nairobi Press	0.0825750	0.1509610	0.586	-0.218828	0.383978	
	14 Development Bank of Kenya	0.1345750	0.1509610	0.376	-0.166828	0.435978	
	15 Kenya Wine Agencies Ltd (KWAL)	0.0286000	0.1509610	0.850	-0.272803	0.330003	
	16 Kenyatta International Convention Centre	0.1274500	0.1509610	0.402	-0.173953	0.428853	
	17 New Kenya Cooperative Creameries	0.0493250	0.1509610	0.745	-0.252078	0.350728	
	18 Kenya Power Company	0.0808250	0.1509610	0.594	-0.220578	0.382228	
	19 National Housing Corporation	0.1024250	0.1509610	0.500	-0.198978	0.403828	
	20 Kenya Railways Corporation	0.1262500	0.1509610	0.406	-0.175153	0.427653	
	21 Kenya National Assurance Company.(2001) Ltd	0.1414000	0.1509610	0.352	-0.160003	0.442803	
	22 Kenya Reinsurance Corporation Ltd	0.0303500	0.1509610	0.841	-0.271053	0.331753	
	9 Kabarnet Hotel Ltd	1 Agrochemical and Food Company	-0.0796750	0.1509610	0.599	-0.381078	0.221728
		2 Kenya Meat Commission	0.0178250	0.1509610	0.906	-0.283578	0.319228
3 Nyayo Tea Zones Development Corporation		-0.09696750*	0.1509610	0.000	-1.271078	-0.668272	
4 South Nyanza Sugar Company Ltd		-0.0596750	0.1509610	0.694	-0.361078	0.241728	
5 Simlaw Seeds Kenya		-0.0301750	0.1509610	0.842	-0.331578	0.271228	
6 East African Portland Corporation		0.0005750	0.1509610	0.997	-0.300828	0.301978	
7 Kenya Pipeline Corporation		-0.1671750	0.1509610	0.272	-0.468578	0.134228	
8 Kenya National Trading Corporation (KNTC)		-0.1396750	0.1509610	0.358	-0.441078	0.161728	
10 Jomo Kenyatta Foundation		-0.0597250	0.1509610	0.694	-0.361128	0.241678	
11 Kenya Literature Bureau		-0.0628500	0.1509610	0.679	-0.364253	0.238553	
12 School Equipment Production Unit (SEPU)		-0.0129750	0.1509610	0.932	-0.314378	0.288428	

	13 University of Nairobi Press	-0.0571000	0.1509610	0.706	-0.358503	0.244303
	14 Development Bank of Kenya	-0.0051000	0.1509610	0.973	-0.306503	0.296303
	15 Kenya Wine Agencies Ltd (KWAL)	-0.1110750	0.1509610	0.464	-0.412478	0.190328
	16 Kenyatta International Convention Centre	-0.0122250	0.1509610	0.936	-0.313628	0.289178
	17 New Kenya Cooperative Creameries	-0.0903500	0.1509610	0.552	-0.391753	0.211053
	18 Kenya Power Company	-0.0588500	0.1509610	0.698	-0.360253	0.242553
	19 National Housing Corporation	-0.0372500	0.1509610	0.806	-0.338653	0.264153
	20 Kenya Railways Corporation	-0.0134250	0.1509610	0.929	-0.314828	0.287978
	21 Kenya National Assurance Company.(2001) Ltd	0.0017250	0.1509610	0.991	-0.299678	0.303128
	22 Kenya Reinsurance Corporation Ltd	-0.1093250	0.1509610	0.472	-0.410728	0.192078
10 Jomo Kenyatta Foundation	1 Agrochemical and Food Company	-0.0199500	0.1509610	0.895	-0.321353	0.281453
	2 Kenya Meat Commission	0.0775500	0.1509610	0.609	-0.223853	0.378953
	3 Nyayo Tea Zones Development Corporation	-.09099500*	0.1509610	0.000	-1.211353	-0.608547
	4 South Nyanza Sugar Company Ltd	0.0000500	0.1509610	1.000	-0.301353	0.301453
	5 Simlaw Seeds Kenya	0.0295500	0.1509610	0.845	-0.271853	0.330953
	6 East African Portland Corporation	0.0603000	0.1509610	0.691	-0.241103	0.361703
	7 Kenya Pipeline Corporation	-0.1074500	0.1509610	0.479	-0.408853	0.193953
	8 Kenya National Trading Corporation (KNTC)	-0.0799500	0.1509610	0.598	-0.381353	0.221453
	9 Kabarnet Hotel Ltd	0.0597250	0.1509610	0.694	-0.241678	0.361128
	11 Kenya Literature Bureau	-0.0031250	0.1509610	0.984	-0.304528	0.298278
	12 School Equipment Production Unit (SEPU)	0.0467500	0.1509610	0.758	-0.254653	0.348153
	13 University of Nairobi Press	0.0026250	0.1509610	0.986	-0.298778	0.304028
	14 Development Bank of Kenya	0.0546250	0.1509610	0.719	-0.246778	0.356028
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0513500	0.1509610	0.735	-0.352753	0.250053
	16 Kenyatta International Convention Centre	0.0475000	0.1509610	0.754	-0.253903	0.348903
	17 New Kenya Cooperative Creameries	-0.0306250	0.1509610	0.840	-0.332028	0.270778
	18 Kenya Power Company	0.0008750	0.1509610	0.995	-0.300528	0.302278
	19 National Housing Corporation	0.0224750	0.1509610	0.882	-0.278928	0.323878
	20 Kenya Railways Corporation	0.0463000	0.1509610	0.760	-0.255103	0.347703
	21 Kenya National Assurance Company.(2001) Ltd	0.0614500	0.1509610	0.685	-0.239953	0.362853
	22 Kenya Reinsurance Corporation Ltd	-0.0496000	0.1509610	0.744	-0.351003	0.251803

11 Kenya	1 Agrochemical and Food Company	-0.0168250	0.1509610	0.912	-0.318228	0.284578
Literature Bureau	2 Kenya Meat Commission	0.0806750	0.1509610	0.595	-0.220728	0.382078
	3 Nyayo Tea Zones Development Corporation	-0.09068250*	0.1509610	0.000	-1.208228	-0.605422
	4 South Nyanza Sugar Company Ltd	0.0031750	0.1509610	0.983	-0.298228	0.304578
	5 Simlaw Seeds Kenya	0.0326750	0.1509610	0.829	-0.268728	0.334078
	6 East African Portland Corporation	0.0634250	0.1509610	0.676	-0.237978	0.364828
	7 Kenya Pipeline Corporation	-0.1043250	0.1509610	0.492	-0.405728	0.197078
	8 Kenya National Trading Corporation (KNTC)	-0.0768250	0.1509610	0.613	-0.378228	0.224578
	9 Kabarnet Hotel Ltd	0.0628500	0.1509610	0.679	-0.238553	0.364253
	10 Jomo Kenyatta Foundation	0.0031250	0.1509610	0.984	-0.298278	0.304528
	12 School Equipment Production Unit (SEPU)	0.0498750	0.1509610	0.742	-0.251528	0.351278
	13 University of Nairobi Press	0.0057500	0.1509610	0.970	-0.295653	0.307153
	14 Development Bank of Kenya	0.0577500	0.1509610	0.703	-0.243653	0.359153
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0482250	0.1509610	0.750	-0.349628	0.253178
	16 Kenyatta International Convention Centre	0.0506250	0.1509610	0.738	-0.250778	0.352028
	17 New Kenya Cooperative Creameries	-0.0275000	0.1509610	0.856	-0.328903	0.273903
	18 Kenya Power Company	0.0040000	0.1509610	0.979	-0.297403	0.305403
	19 National Housing Corporation	0.0256000	0.1509610	0.866	-0.275803	0.327003
	20 Kenya Railways Corporation	0.0494250	0.1509610	0.744	-0.251978	0.350828
	21 Kenya National Assurance Company.(2001) Ltd	0.0645750	0.1509610	0.670	-0.236828	0.365978
	22 Kenya Reinsurance Corporation Ltd	-0.0464750	0.1509610	0.759	-0.347878	0.254928
12 School	1 Agrochemical and Food Company	-0.0667000	0.1509610	0.660	-0.368103	0.234703
Equipment	2 Kenya Meat Commission	0.0308000	0.1509610	0.839	-0.270603	0.332203
Production Unit	3 Nyayo Tea Zones Development Corporation	-0.09567000*	0.1509610	0.000	-1.258103	-0.655297
(SEPU)	4 South Nyanza Sugar Company Ltd	-0.0467000	0.1509610	0.758	-0.348103	0.254703
	5 Simlaw Seeds Kenya	-0.0172000	0.1509610	0.910	-0.318603	0.284203
	6 East African Portland Corporation	0.0135500	0.1509610	0.929	-0.287853	0.314953
	7 Kenya Pipeline Corporation	-0.1542000	0.1509610	0.311	-0.455603	0.147203
	8 Kenya National Trading Corporation (KNTC)	-0.1267000	0.1509610	0.404	-0.428103	0.174703
	9 Kabarnet Hotel Ltd	0.0129750	0.1509610	0.932	-0.288428	0.314378
	10 Jomo Kenyatta Foundation	-0.0467500	0.1509610	0.758	-0.348153	0.254653

	11 Kenya Literature Bureau	-0.0498750	0.1509610	0.742	-0.351278	0.251528
	13 University of Nairobi Press	-0.0441250	0.1509610	0.771	-0.345528	0.257278
	14 Development Bank of Kenya	0.0078750	0.1509610	0.959	-0.293528	0.309278
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0981000	0.1509610	0.518	-0.399503	0.203303
	16 Kenyatta International Convention Centre	0.0007500	0.1509610	0.996	-0.300653	0.302153
	17 New Kenya Cooperative Creameries	-0.0773750	0.1509610	0.610	-0.378778	0.224028
	18 Kenya Power Company	-0.0458750	0.1509610	0.762	-0.347278	0.255528
	19 National Housing Corporation	-0.0242750	0.1509610	0.873	-0.325678	0.277128
	20 Kenya Railways Corporation	-0.0004500	0.1509610	0.998	-0.301853	0.300953
	21 Kenya National Assurance Company.(2001) Ltd	0.0147000	0.1509610	0.923	-0.286703	0.316103
	22 Kenya Reinsurance Corporation Ltd	-0.0963500	0.1509610	0.526	-0.397753	0.205053
13 University of Nairobi Press	1 Agrochemical and Food Company	-0.0225750	0.1509610	0.882	-0.323978	0.278828
	2 Kenya Meat Commission	0.0749250	0.1509610	0.621	-0.226478	0.376328
	3 Nyayo Tea Zones Development Corporation	-0.912575*	0.1509610	0.000	-1.213978	-0.611172
	4 South Nyanza Sugar Company Ltd	-0.0025750	0.1509610	0.986	-0.303978	0.298828
	5 Simlaw Seeds Kenya	0.0269250	0.1509610	0.859	-0.274478	0.328328
	6 East African Portland Corporation	0.0576750	0.1509610	0.704	-0.243728	0.359078
	7 Kenya Pipeline Corporation	-0.1100750	0.1509610	0.468	-0.411478	0.191328
	8 Kenya National Trading Corporation (KNTC)	-0.0825750	0.1509610	0.586	-0.383978	0.218828
	9 Kabarnet Hotel Ltd	0.0571000	0.1509610	0.706	-0.244303	0.358503
	10 Jomo Kenyatta Foundation	-0.0026250	0.1509610	0.986	-0.304028	0.298778
	11 Kenya Literature Bureau	-0.0057500	0.1509610	0.970	-0.307153	0.295653
	12 School Equipment Production Unit (SEPU)	0.0441250	0.1509610	0.771	-0.257278	0.345528
	14 Development Bank of Kenya	0.0520000	0.1509610	0.732	-0.249403	0.353403
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0539750	0.1509610	0.722	-0.355378	0.247428
	16 Kenyatta International Convention Centre	0.0448750	0.1509610	0.767	-0.256528	0.346278
	17 New Kenya Cooperative Creameries	-0.0332500	0.1509610	0.826	-0.334653	0.268153
	18 Kenya Power Company	-0.0017500	0.1509610	0.991	-0.303153	0.299653
	19 National Housing Corporation	0.0198500	0.1509610	0.896	-0.281553	0.321253
	20 Kenya Railways Corporation	0.0436750	0.1509610	0.773	-0.257728	0.345078
	21 Kenya National Assurance Company.(2001) Ltd	0.0588250	0.1509610	0.698	-0.242578	0.360228

	22 Kenya Reinsurance Corporation Ltd	-0.0522250	0.1509610	0.730	-0.353628	0.249178
14 Development	1 Agrochemical and Food Company	-0.0745750	0.1509610	0.623	-0.375978	0.226828
Bank Of Kenya	2 Kenya Meat Commission	0.0229250	0.1509610	0.880	-0.278478	0.324328
	3 Nyayo Tea Zones Development Corporation	-0.09645750*	0.1509610	0.000	-1.265978	-0.663172
	4 South Nyanza Sugar Company Ltd	-0.0545750	0.1509610	0.719	-0.355978	0.246828
	5 Simlaw Seeds Kenya	-0.0250750	0.1509610	0.869	-0.326478	0.276328
	6 East African Portland Corporation	0.0056750	0.1509610	0.970	-0.295728	0.307078
	7 Kenya Pipeline Corporation	-0.1620750	0.1509610	0.287	-0.463478	0.139328
	8 Kenya National Trading Corporation (KNTC)	-0.1345750	0.1509610	0.376	-0.435978	0.166828
	9 Kabarnet Hotel Ltd	0.0051000	0.1509610	0.973	-0.296303	0.306503
	10 Jomo Kenyatta Foundation	-0.0546250	0.1509610	0.719	-0.356028	0.246778
	11 Kenya Literature Bureau	-0.0577500	0.1509610	0.703	-0.359153	0.243653
	12 School Equipment Production Unit (SEPU)	-0.0078750	0.1509610	0.959	-0.309278	0.293528
	13 University of Nairobi Press	-0.0520000	0.1509610	0.732	-0.353403	0.249403
	15 Kenya Wine Agencies Ltd (KWAL)	-0.1059750	0.1509610	0.485	-0.407378	0.195428
	16 Kenyatta International Convention Centre	-0.0071250	0.1509610	0.962	-0.308528	0.294278
	17 New Kenya Cooperative Creameries	-0.0852500	0.1509610	0.574	-0.386653	0.216153
	18 Kenya Power Company	-0.0537500	0.1509610	0.723	-0.355153	0.247653
	19 National Housing Corporation	-0.0321500	0.1509610	0.832	-0.333553	0.269253
	20 Kenya Railways Corporation	-0.0083250	0.1509610	0.956	-0.309728	0.293078
	21 Kenya National Assurance Company.(2001) Ltd	0.0068250	0.1509610	0.964	-0.294578	0.308228
	22 Kenya Reinsurance Corporation Ltd	-0.1042250	0.1509610	0.492	-0.405628	0.197178
15 Kenya Wine Agencies Ltd (KWAL)	1 Agrochemical and Food Company	0.0314000	0.1509610	0.836	-0.270003	0.332803
	2 Kenya Meat Commission	0.1289000	0.1509610	0.396	-0.172503	0.430303
	3 Nyayo Tea Zones Development Corporation	-0.858600*	0.1509610	0.000	-1.160003	-0.557197
	4 South Nyanza Sugar Company Ltd	0.0514000	0.1509610	0.735	-0.250003	0.352803
	5 Simlaw Seeds Kenya	0.0809000	0.1509610	0.594	-0.220503	0.382303
	6 East African Portland Corporation	0.1116500	0.1509610	0.462	-0.189753	0.413053
	7 Kenya Pipeline Corporation	-0.0561000	0.1509610	0.711	-0.357503	0.245303
	8 Kenya National Trading Corporation (KNTC)	-0.0286000	0.1509610	0.850	-0.330003	0.272803
	9 Kabarnet Hotel Ltd	0.1110750	0.1509610	0.464	-0.190328	0.412478

	10 Jomo Kenyatta Foundation	0.0513500	0.1509610	0.735	-0.250053	0.352753
	11 Kenya Literature Bureau	0.0482250	0.1509610	0.750	-0.253178	0.349628
	12 School Equipment Production Unit (SEPU)	0.0981000	0.1509610	0.518	-0.203303	0.399503
	13 University of Nairobi Press	0.0539750	0.1509610	0.722	-0.247428	0.355378
	14 Development Bank of Kenya	0.1059750	0.1509610	0.485	-0.195428	0.407378
	16 Kenyatta International Convention Centre	0.0988500	0.1509610	0.515	-0.202553	0.400253
	17 New Kenya Cooperative Creameries	0.0207250	0.1509610	0.891	-0.280678	0.322128
	18 Kenya Power Company	0.0522250	0.1509610	0.730	-0.249178	0.353628
	19 National Housing Corporation	0.0738250	0.1509610	0.626	-0.227578	0.375228
	20 Kenya Railways Corporation	0.0976500	0.1509610	0.520	-0.203753	0.399053
	21 Kenya National Assurance Company.(2001) Ltd	0.1128000	0.1509610	0.458	-0.188603	0.414203
	22 Kenya Reinsurance Corporation Ltd	0.0017500	0.1509610	0.991	-0.299653	0.303153
16 Kenyatta International Convention Centre (KICC)	1 Agrochemical and Food Company	-0.0674500	0.1509610	0.656	-0.368853	0.233953
	2 Kenya Meat Commission	0.0300500	0.1509610	0.843	-0.271353	0.331453
	3 Nyayo Tea Zones Development Corporation	-0.957450*	0.1509610	0.000	-1.258853	-0.656047
	4 South Nyanza Sugar Company Ltd	-0.0474500	0.1509610	0.754	-0.348853	0.253953
	5 Simlaw Seeds Kenya	-0.0179500	0.1509610	0.906	-0.319353	0.283453
	6 East African Portland Corporation	0.0128000	0.1509610	0.933	-0.288603	0.314203
	7 Kenya Pipeline Corporation	-0.1549500	0.1509610	0.308	-0.456353	0.146453
	8 Kenya National Trading Corporation (KNTC)	-0.1274500	0.1509610	0.402	-0.428853	0.173953
	9 Kabarnet Hotel Ltd	0.0122250	0.1509610	0.936	-0.289178	0.313628
	10 Jomo Kenyatta Foundation	-0.0475000	0.1509610	0.754	-0.348903	0.253903
	11 Kenya Literature Bureau	-0.0506250	0.1509610	0.738	-0.352028	0.250778
	12 School Equipment Production Unit (SEPU)	-0.0007500	0.1509610	0.996	-0.302153	0.300653
	13 University of Nairobi Press	-0.0448750	0.1509610	0.767	-0.346278	0.256528
	14 Development Bank of Kenya	0.0071250	0.1509610	0.962	-0.294278	0.308528
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0988500	0.1509610	0.515	-0.400253	0.202553
	17 New Kenya Cooperative Creameries	-0.0781250	0.1509610	0.607	-0.379528	0.223278
	18 Kenya Power Company	-0.0466250	0.1509610	0.758	-0.348028	0.254778
	19 National Housing Corporation	-0.0250250	0.1509610	0.869	-0.326428	0.276378
	20 Kenya Railways Corporation	-0.0012000	0.1509610	0.994	-0.302603	0.300203

	21 Kenya National Assurance Company.(2001) Ltd	0.0139500	0.1509610	0.927	-0.287453	0.315353
	22 Kenya Reinsurance Corporation Ltd	-0.0971000	0.1509610	0.522	-0.398503	0.204303
17 New Kenya Cooperative Creameries	1 Agrochemical and Food Company	0.0106750	0.1509610	0.944	-0.290728	0.312078
	2 Kenya Meat Commission	0.1081750	0.1509610	0.476	-0.193228	0.409578
	3 Nyayo Tea Zones Development Corporation	-0.879325*	0.1509610	0.000	-1.180728	-0.577922
	4 South Nyanza Sugar Company Ltd	0.0306750	0.1509610	0.840	-0.270728	0.332078
	5 Simlaw Seeds Kenya	0.0601750	0.1509610	0.691	-0.241228	0.361578
	6 East African Portland Corporation	0.0909250	0.1509610	0.549	-0.210478	0.392328
	7 Kenya Pipeline Corporation	-0.0768250	0.1509610	0.613	-0.378228	0.224578
	8 Kenya National Trading Corporation (KNTC)	-0.0493250	0.1509610	0.745	-0.350728	0.252078
	9 Kabarnet Hotel Ltd	0.0903500	0.1509610	0.552	-0.211053	0.391753
	10 Jomo Kenyatta Foundation	0.0306250	0.1509610	0.840	-0.270778	0.332028
	11 Kenya Literature Bureau	0.0275000	0.1509610	0.856	-0.273903	0.328903
	12 School Equipment Production Unit (SEPU)	0.0773750	0.1509610	0.610	-0.224028	0.378778
	13 University of Nairobi Press	0.0332500	0.1509610	0.826	-0.268153	0.334653
	14 Development Bank of Kenya	0.0852500	0.1509610	0.574	-0.216153	0.386653
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0207250	0.1509610	0.891	-0.322128	0.280678
	16 Kenyatta International Convention Centre	0.0781250	0.1509610	0.607	-0.223278	0.379528
	18 Kenya Power Company	0.0315000	0.1509610	0.835	-0.269903	0.332903
	19 National Housing Corporation	0.0531000	0.1509610	0.726	-0.248303	0.354503
	20 Kenya Railways Corporation	0.0769250	0.1509610	0.612	-0.224478	0.378328
	21 Kenya National Assurance Company.(2001) Ltd	0.0920750	0.1509610	0.544	-0.209328	0.393478
	22 Kenya Reinsurance Corporation Ltd	-0.0189750	0.1509610	0.900	-0.320378	0.282428
18 Kenya Power Company	1 Agrochemical and Food Company	-0.0208250	0.1509610	0.891	-0.322228	0.280578
	2 Kenya Meat Commission	0.0766750	0.1509610	0.613	-0.224728	0.378078
	3 Nyayo Tea Zones Development Corporation	-0.09108250*	0.1509610	0.000	-1.212228	-0.609422
	4 South Nyanza Sugar Company Ltd	-0.0008250	0.1509610	0.996	-0.302228	0.300578
	5 Simlaw Seeds Kenya	0.0286750	0.1509610	0.850	-0.272728	0.330078
	6 East African Portland Corporation	0.0594250	0.1509610	0.695	-0.241978	0.360828
	7 Kenya Pipeline Corporation	-0.1083250	0.1509610	0.476	-0.409728	0.193078
	8 Kenya National Trading Corporation (KNTC)	-0.0808250	0.1509610	0.594	-0.382228	0.220578

	9 Kabarnet Hotel Ltd	0.0588500	0.1509610	0.698	-0.242553	0.360253
	10 Jomo Kenyatta Foundation	-0.0008750	0.1509610	0.995	-0.302278	0.300528
	11 Kenya Literature Bureau	-0.0040000	0.1509610	0.979	-0.305403	0.297403
	12 School Equipment Production Unit (SEPU)	0.0458750	0.1509610	0.762	-0.255528	0.347278
	13 University of Nairobi Press	0.0017500	0.1509610	0.991	-0.299653	0.303153
	14 Development Bank of Kenya	0.0537500	0.1509610	0.723	-0.247653	0.355153
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0522250	0.1509610	0.730	-0.353628	0.249178
	16 Kenyatta International Convention Centre	0.0466250	0.1509610	0.758	-0.254778	0.348028
	17 New Kenya Cooperative Creameries	-0.0315000	0.1509610	0.835	-0.332903	0.269903
	19 National Housing Corporation	0.0216000	0.1509610	0.887	-0.279803	0.323003
	20 Kenya Railways Corporation	0.0454250	0.1509610	0.764	-0.255978	0.346828
	21 Kenya National Assurance Company.(2001) Ltd	0.0605750	0.1509610	0.690	-0.240828	0.361978
	22 Kenya Reinsurance Corporation Ltd	-0.0504750	0.1509610	0.739	-0.351878	0.250928
19 National Housing Corporation	1 Agrochemical and Food Company	-0.0424250	0.1509610	0.780	-0.343828	0.258978
	2 Kenya Meat Commission	0.0550750	0.1509610	0.716	-0.246328	0.356478
	3 Nyayo Tea Zones Development Corporation	-0.932425*	0.1509610	0.000	-1.233828	-0.631022
	4 South Nyanza Sugar Company Ltd	-0.0224250	0.1509610	0.882	-0.323828	0.278978
	5 Simlaw Seeds Kenya	0.0070750	0.1509610	0.963	-0.294328	0.308478
	6 East African Portland Corporation	0.0378250	0.1509610	0.803	-0.263578	0.339228
	7 Kenya Pipeline Corporation	-0.1299250	0.1509610	0.393	-0.431328	0.171478
	8 Kenya National Trading Corporation (KNTC)	-0.1024250	0.1509610	0.500	-0.403828	0.198978
	9 Kabarnet Hotel Ltd	0.0372500	0.1509610	0.806	-0.264153	0.338653
	10 Jomo Kenyatta Foundation	-0.0224750	0.1509610	0.882	-0.323878	0.278928
	11 Kenya Literature Bureau	-0.0256000	0.1509610	0.866	-0.327003	0.275803
	12 School Equipment Production Unit (SEPU)	0.0242750	0.1509610	0.873	-0.277128	0.325678
	13 University of Nairobi Press	-0.0198500	0.1509610	0.896	-0.321253	0.281553
	14 Development Bank of Kenya	0.0321500	0.1509610	0.832	-0.269253	0.333553
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0738250	0.1509610	0.626	-0.375228	0.227578
	16 Kenyatta International Convention Centre	0.0250250	0.1509610	0.869	-0.276378	0.326428
	17 New Kenya Cooperative Creameries	-0.0531000	0.1509610	0.726	-0.354503	0.248303
	18 Kenya Power Company	-0.0216000	0.1509610	0.887	-0.323003	0.279803

	20 Kenya Railways Corporation	0.0238250	0.1509610	0.875	-0.277578	0.325228
	21 Kenya National Assurance Company.(2001) Ltd	0.0389750	0.1509610	0.797	-0.262428	0.340378
	22 Kenya Reinsurance Corporation Ltd	-0.0720750	0.1509610	0.635	-0.373478	0.229328
20 Kenya Railways Corporation	1 Agrochemical and Food Company	-0.0662500	0.1509610	0.662	-0.367653	0.235153
	2 Kenya Meat Commission	0.0312500	0.1509610	0.837	-0.270153	0.332653
	3 Nyayo Tea Zones Development Corporation	-0.9562500*	0.1509610	0.000	-1.257653	-0.654847
	4 South Nyanza Sugar Company Ltd	-0.0462500	0.1509610	0.760	-0.347653	0.255153
	5 Simlaw Seeds Kenya	-0.0167500	0.1509610	0.912	-0.318153	0.284653
	6 East African Portland Corporation	0.0140000	0.1509610	0.926	-0.287403	0.315403
	7 Kenya Pipeline Corporation	-0.1537500	0.1509610	0.312	-0.455153	0.147653
	8 Kenya National Trading Corporation (KNTC)	-0.1262500	0.1509610	0.406	-0.427653	0.175153
	9 Kabarnet Hotel Ltd	0.0134250	0.1509610	0.929	-0.287978	0.314828
	10 Jomo Kenyatta Foundation	-0.0463000	0.1509610	0.760	-0.347703	0.255103
	11 Kenya Literature Bureau	-0.0494250	0.1509610	0.744	-0.350828	0.251978
	12 School Equipment Production Unit (SEPU)	0.0004500	0.1509610	0.998	-0.300953	0.301853
	13 University of Nairobi Press	-0.0436750	0.1509610	0.773	-0.345078	0.257728
	14 Development Bank of Kenya	0.0083250	0.1509610	0.956	-0.293078	0.309728
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0976500	0.1509610	0.520	-0.399053	0.203753
	16 Kenyatta International Convention Centre	0.0012000	0.1509610	0.994	-0.300203	0.302603
	17 New Kenya Cooperative Creameries	-0.0769250	0.1509610	0.612	-0.378328	0.224478
	18 Kenya Power Company	-0.0454250	0.1509610	0.764	-0.346828	0.255978
	19 National Housing Corporation	-0.0238250	0.1509610	0.875	-0.325228	0.277578
	21 Kenya National Assurance Company.(2001) Ltd	0.0151500	0.1509610	0.920	-0.286253	0.316553
	22 Kenya Reinsurance Corporation Ltd	-0.0959000	0.1509610	0.527	-0.397303	0.205503
21 Kenya National Assurance Company.(2001) Ltd	1 Agrochemical and Food Company	-0.0814000	0.1509610	0.592	-0.382803	0.220003
	2 Kenya Meat Commission	0.0161000	0.1509610	0.915	-0.285303	0.317503
	3 Nyayo Tea Zones Development Corporation	-0.971400*	0.1509610	0.000	-1.272803	-0.669997
	4 South Nyanza Sugar Company Ltd	-0.0614000	0.1509610	0.686	-0.362803	0.240003
	5 Simlaw Seeds Kenya	-0.0319000	0.1509610	0.833	-0.333303	0.269503
	6 East African Portland Corporation	-0.0011500	0.1509610	0.994	-0.302553	0.300253
	7 Kenya Pipeline Corporation	-0.1689000	0.1509610	0.267	-0.470303	0.132503

	8 Kenya National Trading Corporation (KNTC)	-0.1414000	0.1509610	0.352	-0.442803	0.160003
	9 Kabarnet Hotel Ltd	-0.0017250	0.1509610	0.991	-0.303128	0.299678
	10 Jomo Kenyatta Foundation	-0.0614500	0.1509610	0.685	-0.362853	0.239953
	11 Kenya Literature Bureau	-0.0645750	0.1509610	0.670	-0.365978	0.236828
	12 School Equipment Production Unit (SEPU)	-0.0147000	0.1509610	0.923	-0.316103	0.286703
	13 University of Nairobi Press	-0.0588250	0.1509610	0.698	-0.360228	0.242578
	14 Development Bank of Kenya	-0.0068250	0.1509610	0.964	-0.308228	0.294578
	15 Kenya Wine Agencies Ltd (KWAL)	-0.1128000	0.1509610	0.458	-0.414203	0.188603
	16 Kenyatta International Convention Centre	-0.0139500	0.1509610	0.927	-0.315353	0.287453
	17 New Kenya Cooperative Creameries	-0.0920750	0.1509610	0.544	-0.393478	0.209328
	18 Kenya Power Company	-0.0605750	0.1509610	0.690	-0.361978	0.240828
	19 National Housing Corporation	-0.0389750	0.1509610	0.797	-0.340378	0.262428
	20 Kenya Railways Corporation	-0.0151500	0.1509610	0.920	-0.316553	0.286253
	22 Kenya Reinsurance Corporation Ltd	-0.1110500	0.1509610	0.465	-0.412453	0.190353
22 Kenya Reinsurance Corporation Ltd	1 Agrochemical and Food Company	0.0296500	0.1509610	0.845	-0.271753	0.331053
	2 Kenya Meat Commission	0.1271500	0.1509610	0.403	-0.174253	0.428553
	3 Nyayo Tea Zones Development Corporation	-0.860350*	0.1509610	0.000	-1.161753	-0.558947
	4 South Nyanza Sugar Company Ltd	0.0496500	0.1509610	0.743	-0.251753	0.351053
	5 Simlaw Seeds Kenya	0.0791500	0.1509610	0.602	-0.222253	0.380553
	6 East African Portland Corporation	0.1099000	0.1509610	0.469	-0.191503	0.411303
	7 Kenya Pipeline Corporation	-0.0578500	0.1509610	0.703	-0.359253	0.243553
	8 Kenya National Trading Corporation (KNTC)	-0.0303500	0.1509610	0.841	-0.331753	0.271053
	9 Kabarnet Hotel Ltd	0.1093250	0.1509610	0.472	-0.192078	0.410728
	10 Jomo Kenyatta Foundation	0.0496000	0.1509610	0.744	-0.251803	0.351003
	11 Kenya Literature Bureau	0.0464750	0.1509610	0.759	-0.254928	0.347878
	12 School Equipment Production Unit (SEPU)	0.0963500	0.1509610	0.526	-0.205053	0.397753
	13 University of Nairobi Press	0.0522250	0.1509610	0.730	-0.249178	0.353628
	14 Development Bank of Kenya	0.1042250	0.1509610	0.492	-0.197178	0.405628
	15 Kenya Wine Agencies Ltd (KWAL)	-0.0017500	0.1509610	0.991	-0.303153	0.299653
	16 Kenyatta International Convention Centre	0.0971000	0.1509610	0.522	-0.204303	0.398503

17 New Kenya Cooperative Creameries	0.0189750	0.1509610	0.900	-0.282428	0.320378
18 Kenya Power Company	0.0504750	0.1509610	0.739	-0.250928	0.351878
19 National Housing Corporation	0.0720750	0.1509610	0.635	-0.229328	0.373478
20 Kenya Railways Corporation	0.0959000	0.1509610	0.527	-0.205503	0.397303
21 Kenya National Assurance Company.(2001) Ltd	0.1110500	0.1509610	0.465	-0.190353	0.412453

*. The mean difference is significant at the 0.05 level.

Appendix G: Factor Loadings and Reliability Measures

1. Involvement Culture

(a) Factor analysis

	Component
Teams are the primary building blocks of this organization.	.837
Working in this organisation is like being part of a team.	.741
This organisation continuously invests in the skill of employees.	.709
The organization is constantly improving its 'bench strength' in many dimensions.	.704
Information is widely shared so that everyone can get the information he or she needs when it is needed.	.686
The capability of people in this organisation is viewed as an important source of competitive advantage.	.655
Everyone believes that he or she can have a positive impact.	.603
Decisions are usually made at the level where the best information is available.	.598
This organisation relies on horizontal control and coordination to get work done rather than hierarchy.	.395

(b) Reliability analysis

Cronbach's Alpha	Number of Items
.834	9

2. Consistency Culture

a) Factor analysis

	Component
There is a clear and consistent set of values in this organisation that governs the way we do business.	.758
There is good alignment of goals across levels of this organisation	.708
It is easy to reach consensus, even on difficult issues.	.697
This organisation has an ethical code that guides our behaviour and tells us right from wrong.	.637
It is easy to coordinate projects across functional units in this organisation	.620
The leaders and managers follow the guidelines that they set for the rest of the organisation.	.606
People from different organisational units still share a common perspective.	.580
When disagreements occur, we work hard to achieve solutions that benefit both parties in the disagreement.	.528
We often have trouble reaching agreement on key issues	.032

The indicator marked yellow should be removed since its loading is below the threshold (0.4).

b). Reliability analysis

Cronbach's Alpha	Number of Items
.797	8

This reliability is after removing the indicator which had a factor loading of 0.032.

3. Adaptability culture

a) Factor analysis

	Component
This organisation continually adopts new and improved ways to do work.	.859
This organisation is very responsive and changes easily.	.776
This organisation responds well to competitors and other changes in the business environment.	.766
The interests of the final customer often get ignored in our decisions.	.726
Customer comments and recommendations often lead to changes in this organisation.	.718
We view failure as an opportunity for learning and improvement	.601
This organisation encourages and rewards those who take risk.	.585
Customer input directly influences our decisions.	.539
We make certain that we coordinate our actions and efforts between different units in this organization so that 'the right hand knows what the left hand is doing'.	.378

b). Reliability analysis

Cronbach's Alpha	Number of Items
0.841	9

4. Mission culture

a) Factor analysis

	Component
This organisation has a clear strategy for the future	.782
We have a shared vision of what this organisation will be like in the future.	.779
Leaders of this organisation set goals that are ambitious, but realistic.	.756
The leadership has clearly stated the objectives we are trying to meet.	.724
Leaders of this organisation have a long-term orientation.	.707
This organisation has a clear mission that gives meaning and direction to our work.	.694
This organisation has long-term purpose and direction.	.688
There is widespread agreement about goals of this organisation.	.680
Our vision creates excitement and motivation for our employees.	.617

b) Reliability analysis

Cronbach's Alpha	Number of Items
0.877	9

5. Organisational performance

a) Factor analysis

	Component
Internal process coordination	.820
Employee Satisfaction	.812
Overall corporation performance	.799
Personnel activities coordination	.781
New product development.	.737
Quality product or service	.661
Personnel absenteeism	.577
Labour turnover	.436

b). Reliability analysis

Cronbach's Alpha	Number of Items
0.842	8