Influence of Core-Competencies on the Relationship between Co-Alignment Variables and Performance of Profit-Oriented Parastatals in Kenya

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DECLARATION

I declare that this is my original work and has not been submitted to any other university other than the University of Nairobi for award of a degree or any other qualification.

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DEDICATION

To my late father Chiyoge Kasikalulu,

My mother Germaine Ntabiruba M'butu,

My husband Kizungu Mushamalirwa Dieudonne,

My children :

Melissa Chinama

Vanessa Nshobole

Raissa Oganze and

All the Chiyoges

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ABSTRACT

The need to align environment (social, political, economic and technological) to its organizational structure has received attention since the dawn of the study of management as a discipline (Barnard, 1938; Rice and Emery, 1951; Woodward, 1958; Burns and Stalker, 1961; Pugh et al., 1969). Most of these studies were carried out in the private sector, yet understanding environment-structure linkage in the public sector is equally important. Furthermore, None of these studies have examined the role of core-competencies on the relationship between co-alignment variables and organizational performance, yet research has demonstrated that managerial core-competencies are crucial for success of any organization.

The objectives of this study were to determine the relationship between environment, core-competence, strategy, structure, and firm performance in profit-oriented parastatals in Kenya and to establish if the strength of the relationship between the co-alignment variables (environment, strategy, structure) and firm performance is dependent on the level of core competencies in profit-oriented parastatals in Kenya.

The research design was based on the positivist philosophy of science. The method used to carry out the research was a cross-sectional correlational survey since most of the variables and their relationships have been established by previous studies.

The results of the study showed that there was a positive relationship between co-alignment variables and organizational performance and that core-competence moderated the relationship between the co-alignment variables and firm performance. That is, the higher the core-competencies, the stronger the relationship between the co-alignment variables and performance and vice versa.

The unique contribution of this study is the finding that the strength of the relationship between the co-alignment variables and performance depends on the level of core-competencies. This finding validates the resource-based theory of the firm and its relevance

in the public sector. The fact that the results of this study are largely consistent with those of the studies done in the private sector serves as a confirmation of the robustness of the co-alignment model across economic sectors. The study showed the importance of core-competencies in the link between co-alignment variables and individually or jointly, and organizational performance. The effect of core-competencies is significant in as much as it shows that they can help organizations to achieve their missions and objectives and enhance corporate strategies and structures. There are indications that core-competencies can create synergy and thus add value to corporate performance. Moreover, the findings of this study imply that what the public enterprises need is the modified co-alignment model to improve their performance.

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CHAPTER ONE: INTRODUCTION

1.1 Background

The alignment of firm environment (social, political, economic and technological) and organizational structure has received attention since the dawn of the study of management as a discipline (Barnard, 1938; Woodward, 1958; Burns and Stalker, 1961; Pugh et al., 1969). Additionally seminal studies have involved strategy and structure these include: strategy and structure (Chandler, 1962) and environment, strategy, and structure (Lawrence and Lorsch, 1967). Most of these studies were carried out in the private sector, yet understanding these linkages in the public sector is equally important to their managers given this sector dynamics. These variables in many studies (Olsen, West, and Tse, 1993) are referred to as co-alignment variables.

1.1.1 Co-alignment Variables

The co-alignment model in strategic management refers to the linkage between environment, strategy, structure, and organizational performance (Olsen, West, and Tse, 1993) and has its roots in the environmental and design schools of strategy and organization theory. The environmental school suggests that the environment is the central actor in the strategy-making process. According to this view, organizations must respond to the environment or else be selected out (Mintzberg, 1973; Hannan and Freeman, 1977; and Miller, Droge and Toulouse, 1998).

The design school proposes a model of strategy making in which a match or fit is sought between internal capabilities and external possibilities. A match between qualifications (internal) and opportunities (external) positions a firm in its environment. Two works were influential in the development of this school: Philip Selznick's Leadership in Administration (1957) and Alfred Chandler's Strategy and Structure (1962). Selznick introduces the ideas of distinctive competence and matching internal state with external expectations, while Chandler introduces the notion of strategy and structure.

Organization theory contributes to the co-alignment model through contingency theory, which was coined for the first time by Lawrence and Lorsch (1967): "Contingency theory is

guided by the general orienting hypothesis that organizations whose internal features best match the demands of their environments will achieve the best adaptation" (Scott, 1998). This theory evolved from scientific management (Taylor,1911), continued through classical bureaucratic studies (Weber & Gerth, 1958) and so-called "natural" approaches (Bernard, 1938), then split into two quite different open-system categories. One is a rational, economic/political branch, and the other is natural, sociological/psychological branch. The former started with bounded rationality (March & Simon, 1958), moved through contingency theory, then later blossomed into the "new economics of organization," based on theories that seek to explain the existence and structure of organizations as solutions to cooperation or coordination problems. A good example is transaction cost (Williamson, 1985) economies. The latter includes garbage can theory (March & Olsen, 1986), population ecology (Hannan & Freeman, 1977), and the new sociological institutionalism (Meyer & Rowan, 1977). Ansoff (1990) came up with a success formula to complement the design and environmental schools in strategy and the contingency theory by advocating that the firm's optimal performance is assured when the responsiveness of its strategy matches the turbulence in its environment, but also its capabilities match the aggressiveness of its strategy.

Current research trends in strategic management also support the co-alignment model. The re-emergence of internal firm characteristics and the evident emphasize on competitive dynamics and boundary relationships between the firm and its environment, supported by the resource-based view of authors such as Kamani and Wernerfelt (1985), Chen (1996), and Gimeno and Woo (1996), agree with the theory of co-alignment.

From the available research, there is evidence that the co-alignment model contributes to improvement in firm performance. Al-Tuwaijri, Christensen, and Theodore (2004) found that performance is significantly associated with economic performance. Kuprenas (2003) found that firm performances in project delivery improved significantly under a matrix structure suggesting a link between structure and performance. Baum and Wally (2003) confirmed that fast strategic decision-making predicts subsequent firm growth and profit and mediates the relation of dynamism, munificence centralization, and formalization with firm performance. Covin. Slevin. and Heeley (2001) suggested that different combinations of management style and structure predict firm financial performance in high-tech and low-tech environments. Carillo and Kopelman (1991) reported evidence in support of the hypothesis that diversification in technologically related activities resulted in economies of scope and greater firm per-

formance. Slevin and Govin (1997) found that planned strategies were positively related to sales growth among firms with mechanistic structures and operating in hostile environments. Emergent strategies, on the other hand, were positively related to sales growth among firms with organic structures and operating in benign environments. Miles, Covin, and Heeley (2000) argued that environmental dynamism appeared to promote organization structures even among small firms. In addition, the relationship between dynamism of the environment and structure seems to relate to performance. Chathoth (2002) pointed out that there is inter-relationship among environment, strategy, and structure and that each construct individually and jointly has a positive impact on firm performance. However, little is known about the contribution of core-competencies to the relationship between the above co-alignment variables and performance in both private and public organizations..

1.1.2 Core-competencies

Core-competencies can be said to have its roots from the studies of Selznick (1957) when he introduced the concept of distinctive competencies. Pitelis (2005) when evaluating the work of Penrose (1959) argues that by bringing in issues of endogenous knowledge, innovation and growth, human resources, the role of "image" and "productive opportunity", and the dynamic interaction between internal and external, agency and structure, Penrose went well further than existing economic theories to provide what we consider the first economics based yet interdisciplinary organization theory of the firm. She emphasizes value creation through innovative activity affected through internal and external stimuli to growth and innovation.

Prahalad and Hamel (1990) define core competencies as those capabilities that are critical to a business achieving competitive advantage. They add that over time companies may develop key areas of expertise, which are distinctive to that company and critical to the company's long-term growth. These areas of expertise may be in any area but are most likely to develop in the critical, central areas of the company where the most value is added to its products. Prahalad and Hamel (1990) comment further, that

"In the 1990s, managers will be judged on their ability to identify, cultivate, and exploit the core competencies that make growth possible – indeed, they'll have to rethink the concept of the corporation it self. And that core competencies are not fixed. They change in response to changes in the company's environment. Core competencies are flexible and evolve over time.

As a business evolves and adapts to new circumstances and opportunities, so its core competencies will have to adapt and change".

1.1.3 Organizational Performance

Many scholars have investigated the relationship between organizational performance and other variables such as environment, strategy, and structure; they include Chandler (1962). In his review of the growth and development of large US firms, he found that as each of these companies grew through a strategy of product diversification they implemented a divisional organizational structure. Rumelt (1974) further expanded on Chandle's work in a study of the financial performance of over 200 Fortune 500 companies from 1949-1969. The resulting research showed that certain strategy and structure combinations significantly outperformed other combinations. Firms diversifying into a related product line or business, for example, showed consistently better performance than either firms diversifying other unrelated businesses or through firms with vertical integration and limited diversification options.

The alignment of strategy and structure is considered a baseline requirement for organizational performance. In fact, at least a minimal fit is viewed as a requirement for firm survival (Miles and Snow, 1984). Furthermore, more recent research stresses that external and internal contingency factors should be considered when developing and deploying strategies (Porter, 1980, 1985). Miller and Friesen (1984) suggest that strategic, structural and contextual variables are related and that the detrimental effect on organizational performance stemming from the lack of complementarities among organizational attributes.

1.1.4 Co-alignment Model in Public sector

Many scholars have shown the importance of strategic thinking in public organisations (Friedman and Hudak, 1984; Bryson and Roering, 1987; Joubert, 1988; Evans and Bellamy, 1995; Salauroo and Burnes, 1997; McHugh, 1997; Bennington and Cummane, 1997; Green, 1998; Wright and Nguyen, 2000). Scholars such as Bower (1986), Porter (1985), and Prahalad and Hamel (1998) argue that public organisations were not exposed to many kinds of competition until recently, due to the growing number of external pressures, which call for radical rethinking. They propose the following as some of the environmental factors that affect public organisations: mergers and acquisitions, changing customer expectations, technical discontinuities, emergence of trading blocks, global competition, excess capacity,

deregulation, structural changes, market share, anticipating customers' needs, providing timely delivery, producing superior products and services and pricing them competitively, and assuring the retention of customer loyalty, struggling for increased productivity through better planning, more efficient organisation of work, and automation of production, continually contending with union demands and still maintaining the level of productivity, retaining competitive positions on the market, paying confidence-inspiring dividends to stockholders where applicable, and generating sufficient retained earnings to meet the company's growth needs.

Public sector organizations find strategic management difficult because of distinctive constraints and contexts. For example, the beneficiaries of the services of the public sector organizations are not necessarily the service-payers. Also, some objectives in the public sector are difficult to measure, since they cannot be quantified (Wernham, 1985; Ring L. and Perry, 2001; Rainey *et al.*, 1976). Other scholars argue that the desire for improvement in the quality of public services, along with resistance to higher taxes, has acted as the catalyst for change (Ansoff, 1990; Hannan & Freeman, 1977; Granovetter, 1985; and Mottram, 1995). Although the study of strategy has made tremendous progress, most of the research has been carried out in private sector of the developed countries. Haines (1988) argues that the foremost thinking in this field reflects business circumstances in the developed countries, since very little research has been done in the developing countries. Glueck and Jauch (1984) recognised this knowledge gap when they observed that little was known about strategic management processes in developing countries. Not much has changed twenty five years down the line.

Blunt and Merrick (1986) concurred with Haines (1988), Glueck and Jauch (1984), and pointed out that little research and analysis of managerial processes in Africa had been done. Hussey (1989) and Osigweh (1989) suggested that environmental and organisational differences across countries might affect the way strategic management is practiced and the latter stressed the importance of being sensitive to environmental influences. Austin (1991) argued that although basic management was practised all over the world, the difference in developing countries lay in the context in which managers operated and the special challenges they faced. Das (2000) said that there is a fundamental difference between research in strategy in advanced and developing economies and argued that research in advanced economies has focused more on the process of strategy development and implementation, rather than on the strategy itself, and suggested that research in developing economies should focus on both

strategy, its process and implementation. He suggested that the issue is to address the problems of managing strategic changes during transition periods.

A few studies have been carried out in Africa on corporate planning practices, such as Woodburn's (1984) study in South Africa. Imoisili (1978), Adegbite (1986) and Fubara (1986) focused on key success factors in doing business in Nigeria, while the Kenyan scene was addressed by Aosa (1992), focusing more on the planning and implementation of strategy in large manufacturing companies in Kenya. However, none of theses studies focused on the environmental factors, strategic behaviour and processes, organizational structures and core competencies in public organisations in the developing countries in general and Kenya in particular.

1.1.5 The Public Sector in Kenya

The public sector organizations in Kenya comprise parastatals or state corporations and government ministries or departments. State corporations or parastatals comprise of commercial organizations and regulatory agencies owned fully or partially by the government. Profit-oriented parastatals have been defined as all the public enterprises owned partially or fully by the government and which provide goods or services to customers in exchange for money. Aparastatal, through its constitution and budgetary arrangements, enjoys some degree of operational autonomy and insulation from direct political interference. In Kenya many parastatals have been characterized by monopolistic production, highly indigenised management,and appointments of a large number of top managers based on political considerations. The memorandum and articles of association of 1972 are the founding documents of the parastatals in Kenya. These articles of association define the powers and functions of the different organs. A fairly standard provision in every company's articles is the provision that the business of the firm be managed by an independent board of directors.

The exceptions to the framework outlined above are those that are required by the Companies Act or articles of association to hold annual general meetings. Shareholders in a general meeting can therefore not deprive directors of such powers. The finance management act prohibits the board of a parastatal from taking certain decisions that directors ordinarily are empowered to take. For instance, a public entity and its accounting authority (the board) is prohibited from participating in a "significant" partnership, trust, unincorporated joint venture

or a similar arrangement. It cannot acquire or dispose of a significant asset or, more problematically, make a significant change in the nature or extent of any interest in a partnership, trust or unincorporated joint venture unless it has the prior approval of the minister concerned.

The shareholders also seek to give shareholders more rights than they would usually have in a private sector firm. While the framework admits that boards should have total accountability for all corporate activities, it still specifies functions such as making decisions, acquisitions, disposals and appointing senior management as functions that are "best performed by the shareholders". The role of the board is reduced to being a participant in such processes (The memorandum and articles of association, 1972).

Since its inception, public sector has undergone several reforms in order to improve performance in the delivery of services and goods in both the developed and the developing countries. At the dawn of their political independence, developing countries such as Kenya introduced a series of laws and regulations that not only established public sector commercial enterprises, but also gave the government power to intervene at will in the economy through, among others, business registration and trade licensing (K'Obonyo, 1999). The second public sector reform was the establishment of parastatal organizations, including several development finance institutions, with the mandate to provide financial and technical support to the local industrialists and traders. Liberalization in the form of privatization and deregulation could be regarded as the third reform measures. To implement these changes, Kenya received financial support from the World Bank and IMF (O'Brien and Ryan, 1999). Strategic planning came as the latest reform and was repackaged under various names, among them, result oriented management and performance based contract. All Public Service Reform initiatives and programmes in Kenya are mandated to ensure that the objectives of the Economic Recovery Strategy for Wealth and Employment Creation 2003/7 are achieved and in the process, the country progressively achieves the Millennium Development Goals (MDGs). The Government is currently in the process of institutionalizing the theme "results for Kenyans" as a focused approach for the reform process. Further, the government is in the process of initiating reforms in a comprehensive manner through the development of a public sector reform strategy (Ntimama, 2005).

The reform measures being undertaken in Kenya can be interpreted in light of the co-alignment model of strategic management, which states that when the environment is chang-

ing, the strategy and structure/firm capabilities should be re-aligned to match the changed environment to ensure good performance. So, the Kenyan government in its attempt to adapt to the changing environment has used different strategies (commercialization, liberalization, strategic planning) in order to improve its performance. These strategies have led to improvement in parastatals' performance, especially since 2003. The current coalition government, formed in March 2008 is keeping the same spirit and has launched a new strategy called Vision 2030 to channel all the efforts aimed at national economic reforms in general and public sector reform in particular, that will, hopefully push Kenya to a middle income country by the year 2030.

There is strong argument that public sector organizations should embrace the management styles and practices of the private business sector (PSM and Privatisation movement). This raises the question as to whether private sector approach such as the co-alignment model should be bought wholesale by the public sector organizations or should it be re-adjusted to suit the particular needs of the public sector? Also, there is a concern that if business models can be applied in Public Sector Organisations, then there may be no need to privatise them.

1.2 Statement of the Problem

Several studies have been done on the co-alignment variables. Some of these studies have linked the co-alignment variables independently while others have linked them jointly to firm performance. Chathoth's (2002) study showed that there was a positive relationship between the co-alignment model and organizational performance. He also found that the full model, which measured all the variables (risk environment, strategy, and capital structure), explained only 59 percent of variance in the firms' return on equity. This implies that there are other factors which account for the remaining 41 per cent, not represented in the traditional co-alignment model, that do influence performance. This further suggests a need to expand the notion of a co-alignment model to include other relevant variables. From the foregoing, it appears that the co-alignment variables provide only partial explanation of variation (i.e. 59%) in firm performance. Specifically, one important factor that is critical for performance has not been taken into account. That is, the critical role of core competencies of management is missing. Indeed it appears that the fit among the contingency variables is a necessary but not a sufficient condition for firm performance (Leiponen, 2005; Miller, 2004; Madhok, 2002).
The present study is an attempt to modify the co-alignment model by incorporating the core competencies as a moderating variable on the relationship between co-alignment variables and firm performance. Apart from the key variables of the model, there is concern with the context in which previous studies were done. The original co-alignment model had been tested in large and small business organizations from different industries, such as finance and information technology. The model has been tested in large and small business organisations

from different industries, such as finance, information technology, (Carrillo and Kopelman, 1991; Covin, Slevin and Heely, 2001; Miles, Covin, and Heeley, 2000; Barth, 2003).

The full model comprising environment, strategy, and firm capability (organisational structure) has so far received little attention in public sector organizations, especially from developing countries (Ansoff, 1990). While the application of the co-alignment model in business organizations seems to be relatively well documented, its application in the public sector has received little attention (Kuprenas, 2003), yet public-sector organizations operate in an environment which, in some cases, is fundamentally different from that faced by private firms. For example, unlike private firms, public sector organizations have to deal with social objectives that sometimes comprise economic objectives; also, they have to operate within broader policy and within strategic direction that is set by the government and which they cannot change. Thus, the departure of this study is the modified and more enriched co-alignment model and the public sector environment. Therefore, this study sought to address the questions of whether there was a relationship between co-alignment variables (environment, strategy, and structure), core competencies, and firm performance in profit-oriented parastatals in Kenya, and secondly, whether the relationship between co-alignment variables (environment, strategy, and structure) and performance depend on the level of core competencies in profit-oriented parastatals in Kenya.

1.3 Objectives of the Study

The overall objective is to determine the moderating effect of the core competencies on the relationship between co-alignment variables and firm performance. This is broken down into the following specific objectives: To determine the relationship between environment, core-competence, strategy, structure, and firm performance in profit-oriented parastatals in Kenya, and to establish whether or not the relationship between the co-alignment variables (environment, strategy, structure) and firm performance is dependent on the level of core competencies in profit-oriented parastatals in Kenya.

1.4 Significance and Justification of the Study

Strategic management has made tremendous progress, in terms of both its theories and its methodologies over the last four decades. However, most of the research has been carried out

in developed countries Glueck and Jauch (1984); Blunt and Merrick (1986); Haines (1988); Hussey (1989); Osigweh (1989); Austin (1991); Das (2000). A few studies have been carried out in Africa to document corporate planning practices (Imoisili (1978), Woodburn (1984), Adegbite (1986), Fubara (1986) and Aosa (1992). However, none of these studies has focused on core-competencies and its influence on the relationship between co-alignment variables and performance. Therefore is a need to assess the importance of the co-alignment model in the public domain.

The greatest importance of this study is to determine whether what is needed is indeed the privatisation of PSUs or the adoption of some of the business models, such as the co-alignment model, to improve performance in PSUs. There is increased pressure on public organisations to adopt private management models. This poses a big challenge to both scholars and practitioners of strategy regarding how best to manage and improve the performance of PSUs in the era of environmental discontinuity. The greatest value of the study derives from its ability to determine the special factors of the public sector that need to be observed in applying the business model, with the example of the co-alignment model, in helping the PSUs to cope with their new environment.

The research contributes to the debates on strategy formulation process and how it interacts with other variables such as environment, structure, and core-competencies to influence organization performance. The study will expand the notion of the relationship between core-competencies and other co-alignment variables in explaining firm performance. Hence further validates the resource based view theory which treats enterprises as potential creators of value-added capabilities. The study also will foster the principle of generalisability from the business world to public and non-profit-making organisations.

1.5 Scope of the Study

The Public Service Motivation (PSM) Research Center defines the public sector as comprising governmental, quasi-governmental, and voluntary agencies, as well as the new "executive agencies" and newly emergent forms, such as regional bodies. The public sector organizations in Kenya comprise of organizations such as ministries, departments, and state corporations present in Kenya. This study comprises only commercial state corporations known as

parastatals which do not receive subsidies from the government on a regular basis but do exchange goods or services with money to the public. The study focused on the environment, strategy, structure, core-competencies and performance of the said parastatals from the period covering year 2001 through 2005.

1.6 Organization of the Study

The study is organized in five chapters. Chapter one Introduction gives a brief history of the literature pertinent to the various components of the conceptual framework that informs this study and revealing literature gaps. Additionally, this chapter identifies the research problem and outlines the objectives of the study. The significance and justification of this study form the last part of this chapter. Chapter two, the literature review examines theories and empirical studies conducted on co-alignment variables, firm performance and public organizations. A substantive discussion of each of the key variables is presented. A conceptual framework is developed from the foregoing discussion and six hypotheses are derived for examination in this study. Chapter three, research methodology lays the philosophical assumptions of the research and specifies the methods and procedures for achieving the research objectives namely: research design, population, census, and data collection techniques, operationalization of the study variables, data collection instruments, data analysis procedures and techniques. Chapter four presents research findings and discussions. The demographics and personal characteristics of the respondents are discussed and descriptive analysis is presented using means, standard deviations, and tests for reliability and validity. The results of the tests for hypotheses and interpretations of the relationships between co-alignment variables and firm performance are also examined. Chapter five covers summary, conclusions and implications based on the research findings and discussions. It also discusses the implications and contributions of the findings for theory, practice and policy. The chapter also reports on opportunities for future related research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Theoretical Perspective

There are several theories in the field of Strategic management. For the purpose of this study, the following theories are the most relevant: Structure-Conduct-Performance (SCP) Model, The Industrial Organization, Porter's Five Forces Model, and Resource Based view theory (RBV). The primary approach of examining market-performance relationship has been known as Structure-Conduct-Performance (SCP) paradigm, which postulates that certain market attributes (such as barriers to entry and market concentration) affect company conduct (behaviour), which in turn impacts company profitability within the relevant market. This approach was originally employed by Bain (1956). The author tested the effect on industry-level profitability of such attributes of market power as market concentration and barriers to entry in US manufacturing firms. Later works expanded the SCP paradigm by including additional variables to control for both Industry-and firm-level aspects, but the proponent of the SCP paradigm continued to attribute higher profitability to higher market power.

The Industrial Organization was born out of a number of academic projects in the US, already yielding significant results by early 1950s. In Britain the term "Industrial economics" was preferred. By early 1950s Chamberlin and Mason promoted industry-wide studies, helping to test the hypothesis that market or Industrial structures determined member firms' conduct and performance. While this structure-conduct-performance relationship featured prominently in industrial organization studies until the 1970s, its importance declined once empirical research yielded only weak practical results and scholars began to accept that the widespread market form of oligopoly made business behaviour very difficult to forecast. One breakthrough was achieved by Bain who in 1956 suggested that pricing theory should take account of two relatively neglected factors, namely time and potential entry. Today's price might be governed by tomorrow's profit targets, while the threat of competition could well be as effective in determining business conduct as current market structure.

When in the early 1970s, the research impetus of the previous two decades appeared to slacken the identification of current problems and possible future directions of study.

Two areas which they specified were the internal organization of the firm and technical progress. Despite being a key determinant of US industrial growth, the latter had been inadequately analysed, probably being regarded as falling outside the scope of traditional corporate theory. These topics helped to influence thinking in the 1970s, and in turn created an empirical renaissance in industrial organization studies during the following decade.

The work of Chandler (1962) greatly boosted the progress of studies on internal organization. Other authors extended the work of Chandler. Porter (1999) argues, we can create competitive advantage as we make tough choices about what we do and not do. Competitive advantage is normally defined as the ability to earn returns on investment consistently above the average for the industry (Porter, 1985). Barney (1991) indicates that a firm is said to have a competitive advantage when it implements a value creating strategy not simultaneously being implemented by any current or potential competitors.

The Resource Based View of the firm is one of the most popular theories in strategic management literature. It treats enterprises as potential creators of value-added capabilities. In this theory organizational competencies are viewed as assets and resources of the firm from knowledge perspective (Prahalad and Hamel, 1990). A firm's resources consist of all assets both tangible and intangible, human and nonhuman that are possessed or controlled by the firm and that permit it to devise and apply value-enhancing strategies (Barney, 1991; Wernerfelt, 1984).

Structural Conduct Performance Model, Industrial Organization Theory, Porter's five forces Model and the Resource Based View have all contributed to the co-alignment Model in strategic management. The following section aims at giving account of theories and empirical studies conducted to test and validate the importance of the co-alignment model in understanding firm performance. The relevant literature is based on the key dimensions of environment, strategy, organisational structure, firm performance, and public organisations.

2.2 Environment

Austin (1990) identifies the environment as composed of those institutions or forces that affect the performance of the organisation over which the organisation has little or no direct control. In other words, the organisation's environment can be defined as its surrounding that directly or indirectly affects the organisation and is largely uncontrollable. Therefore, the organisation can only try to adapt or die. Adaptation is important for survival in order for organisations to maintain and increase their survival; they should operate as open systems. Organisations develop monitoring systems and feedback mechanisms in order to identify and respond accordingly to their environments, since changes in those environments are inevitable. Different organisations face different kinds of environments, depending upon the degrees of uncertainty, ranging from minimum uncertainty to maximum uncertainty. They are respectively the munificent/static environment, the stable/extrapolative environment, and the turbulent/hostile environment.

Emery and Trist (1965) were the first to produce a classification of environment. They proposed four types of environments, which they classified as placid randomised, placid clustered, disturbed reactive and turbulent field. Placid randomised represents a relatively unchanging and homogeneous environment, whose demands are randomly distributed. Placid clustered is relatively unchanging, but its threats and rewards are clustered. Disturbed reactive is an environment where there is competition between organizations and this may includes hindering tactics. Turbulent Field is described as a dynamic and rapidly changing environment, in which organizations must adapt frequently in order to survive. Emery and Trist commenting on turbulent field, say that this type of environment is where, existing formal, or bureaucratised, structures are ill suited.

To define and measure the environment, three basic perspectives have evolved the objective, the perceived, and the enacted views. In the objective environment perspective, March and Simon (1958) recognised that the objective environment has an impact upon organisations. This marked the beginning of a view of the external environment as a source of uncertainty, because it constitutes some set of sources impinging on the organisation. The writers who follow suggest that an organisation is embedded within an external environment that exists independently of the organisation [Chandler, (1962); Emery & Trist, (1965); Thompson, (1967); Child, (1972); Aldrich, (1979)].

These researchers assume that the organisation and its environment are real and separate. A debate in the environment literature centres on whether the environment should be treated as an objective reality or a perceptual phenomenon. At one extreme, Weick (1969) suggests that there is no such thing as an objective environment. Rather, the environment is those parts of the external information flow that the firm "enacts" through attention and belief. Other early writers (e.g., Duncan, 1972; Lawrence & Lorsch, 1967) were not particularly concerned about the objective environment's existence, but argued that managerial perceptions – particularly concerning uncertainty – shaped managerial choice. Recently, there has been a resurgence of interest in enactment and managerial sense making about the environment (Dutton & Jackson, 1987; Smirchich & Stubbart, 1985). Following earlier work, these researchers believe that perceptions shape behaviour, and their research focuses on how such perceptions are formed. The perceived environment perspective considers the environment to be external, real, and material. However, uncertainty is a product of strategists' imperfect and incomplete knowledge of the objective environment (Lawrence & Lorsh, 1967; Perrow, 1970; Duncan, 1972 & 1973; Pfeffer & Salancik, 1978).

A new perspective surfaced in the 1980s. Smircich and Stubbart (1985) clarify the environment perspective suggested by many writers, including Anderson (1975), Weick (1977, 1979), Pfeffer and Salancik (1978), Miles and Snow (1978, 1984), Bourgeois (1980, 1984) and Davis (1982). The view that managers can influence their external environment was inspired by Chamberlin (1968), who described how organisations adapt to and manipulate their environments. The enacted environment perspective suggests that separate objective environments do not exist. Rather, the organisation and its environment are enacted concurrently through the interaction of principal participants (Burrell & Morgan, 1979; Smircich & Stubbart, 1985). Researchers have questioned for some time the relationship between managerial perceptions and/or "objective" environmental indicators. Several writers (e.g., Downey, Hellreigel, & Slocum, 1975; Tosi, Aldag, & Story, 1973) criticised earlier work for its failure to compare managerial perceptions to objective criteria. These studies found perceptual and objective measures to be unrelated, suggesting several potential explanations. For example, managers' perceptions may be too limited, attending only to those environmental sectors that specifically affect their functional areas (Aldrich, 1979). Alternatively, recent environmental events

may cause managers to over generalise from these events to the overall state of the environment, thus biasing their perceptions.

The Objective-Environment Perception and Enactment (OEPE) Model of Langford and Hunsicker (1996), suggests that each perspective offers insight into the nature of the environment-organisation relationship. However, each perspective suggests diverse avenues. OEPE synthesises the three perspectives and related factors into a single conceptual view of a logical relationship between the external environment, boundary-spanning strategists, strategies, and structures. Although some researchers (e.g., Tung, 1979) attempted to integrate perceptual and objective perspectives into a single framework, Aldrich's (1979) typology of environmental dimensions led the field away from perceptual measures. His typology assumes the existence of an objective environment and makes predictions about its impact on the firm. It was the theoretical basis for Dess and Beard's (1984) development of measures of the objective environment, which in turn became the basis for more recent work examining the relationship of the firm to its environment (e.g., Keats & Hitt, 1988; Lawless & Finch, 1989).

The various terms that have been used to describe the environment fall generally into three categories: complexity (the level of complex knowledge that understanding the environment requires), instability or dynamism (the rate of unpredictable environmental change) and resource availability (the level of resources available to firms from the environment). The terms are used in the stream of environmental research from March and Simon (1958) to Dess and Beard (1984).

Thompson (1967) uses two dimensions to describe the environment: "heterogeneity/homogeneity" and "stability/dynamism". The former dimension describes whether the elements in the environment are similar to or different from one another while the latter deals with whether the elements are changing unpredictably or are stable. Child (1972) uses similar dimensions in his research, labelling them "complexity" and "variability". Child adds a third dimension, "illiberality", which reflects the availability of resources in the environment, and is similar to munificence (March & Simon, 1958).

Mintzberg (1979) describes three dimensions of the environment similar to those proposed by Child (1972), but adds new facets to each dimension. He introduces the term

"market diversity" to reflect what Thompson (1967) meant by "heterogeneity" and Child (1972) by "complexity", while reserving the term "complexity" for the degree of sophisticated knowledge necessary to operate in a given environment of a technical or scientific nature. Market diversity and the degree of sophisticated knowledge required appear to be distinct aspects of complexity, representing perhaps the breadth and depth of knowledge needed. Mintzberg's concept of "stability" includes both market and technological stability, recognising that firms must keep abreast of developments in both areas. Finally, he discusses environmental hostility in terms of both "availability of resources" (Child's "illiberality") and "competition for resources".

Aldrich (1979) discusses the dimensions of the environment in his synthesis of the two bodies of literature. He proposes that six environmental dimensions subsume all others: geographic concentration and heterogeneity, stability and turbulence (unpredictability based on environmental interconnection), and domain consensus (similar to competition) and capacity. These three pairs of constructs roughly correspond to and expand the meaning of each of the three dimensions proposed by Child (1972).

The most consistent feature of the environmental literature is the presence of the three concepts. Throughout this literature, we have found the discussion of (a) the degree to which the number and sophistication of elements in the environment make understanding it more difficult, (b) the stability/predictability of an environment, and (c) the level of resources available in an environment, relative to the number of firms competing for those resources.

Aldrich advanced the field theoretically; however, he devoted little attention to how these dimensions might actually be measured. Dess and Beard (1984) operationalised these dimensions, using a variety of archival data. These authors made an important advance by their use of industry-level data (using Standard Industrial Classifications, or SICs) to operationalise Aldrich's environmental constructs.

Porter (1985) defines the task or industry environment in terms of five forces, namely customers, suppliers, creditors, competitors (existing as well as new-entrants) and substitutes. These are factors with which the organisation is in con-

stant contact. A more concise definition of task environment is those environmental elements with which the focal organisation has direct interaction and that influence the achievement of organisational goals and objectives use the same resources, compete directly with the organisation or produce close substitutes, or are customers or potential customers (Dess & Beard, 1984; Starbuck, 1976; Yuchtman & Seashore, 1967).

The remote or general environment consists of all other environmental elements that impact the firm only indirectly (Dess & Beard, 1984). This is constituted by the political, economic, socio-cultural, technological, and geo-ethical factors that are beyond the organisation's control. Ultra-remote environment encompasses factors that the management cannot imagine occurring, although there is a small probability that they will occur. Examples are earthquakes, natural calamities, wars, etc. The management should not lose sight of any of these levels.

Theoretical approaches to understanding the environment's effect on organisations include task/decision uncertainty (Duncan, 1972; Lawrence & Lorsch, 1967; Leblebici & Salancik, 1981), environmental conditions and perceived uncertainty (Downey, Hellreigel, & Slocum, 1975; Duncan, 1972; Tosi, Aldag, & Storey, 1973), the environment as a source of resources (Pfeffer & Salancik, 1978; Thompson, 1967; Yuchtman & Seashore, 1967), and as a source of variation in organisational forms (Aldrich, 1979; Hannan & Freeman, 1977, Aldrich, 1979,; Des & Beard, 1984 and Tung, 1979)

2.3 Strategy

Different authors have defined strategy according to their respective schools of thought. There are ten schools, each focusing on a certain perspective. Each, at least, is one aspect of the strategy formation process. The Design School, with Chandler (1962) among other pioneers, views strategy formation as a process of conception (design or conceive ideas). The Planning School, championed by Ansoff (1965), sees strategic process as a formal process (formal planning process). Porter (1980) stimulated interest in the positioning school. In his book, *Competitive Strategy*, he looks at strategy formation as an analytical process. He argues that companies should position after analysis. Mintzberg

(1973) suggested the chief characteristics of the entrepreneurial school which is vision. It defines strategy formation as a visionary process (vision is to entrepreneurs). The Cognitive School views strategy formation as a mental process (cognitive is to the mind). The Learning School believes that strategies arise or emerge as strategists continue learning or gaining experience, the school was initiated by Lindblom (1959). Quinn (1959) is among the early contributors to the power school. He views strategy formation as a process of negotiation (active discussions, the powerful take it all). The Culture School defines strategy formation as a collective process (culture is many things). Pettigrew (1985) says that culture is important in the way organisations are run. The Environmental School defines the strategy formation process as a reactive process (we react and produce to the environment). This school grew from the so-called "contingency theory", which describes the relationship between particular dimensions of the environment and specific attributes of the organisation (e.g. the more stable the environment, the more stable the organisational structure). Mintzberg (1973) is among the pioneers of this school. Other theorists, called "population ecologists", added their voices. They postulated that external conditions force organisations into particular niches. The organisation does what the environment dictates. Contributors to the ecology view include Hannan and Freeman (1977). The configuration school sees strategy formation as a process of transformation. As you configure or make meaning you change or transform. The school has two main sides described as configuration and transformation. Configurations are the states of the organisation and its surrounding context while Transformation is the strategy making process. The ten schools of thought attempt to identify how strategy is formulated and each school has its credibility and its critics.

Whittington (1993) developed four basic conceptions of strategy: rational, fatalistic, pragmatic and relativist. They correspond, respectively, to the four generic approaches to strategy. All have radically different implications for how to go about formulate and implement strategy. The classical approach, the oldest and still the most influential, relies on rational planning methods and is the most dominant in the literature. Next, the evolutionary approach draws on the fatalistic metaphor of biological evolution, but substitutes the discipline of the market for the law of the jungle. Processualists emphasise the sticky, imperfect nature of all

human life, pragmatically accommodating strategy to the fallible processes of both organisations and markets. Finally, the systematic approach is relativist, regarding the ends and means of strategy as inescapably linked to the cultures and powers of the local social systems in which it takes place. The four approaches differ fundamentally along two dimensions: the outcomes of strategy and the processes by which it is made.

Associated with authorities such as Ansoff (1965, 1990) and Porter (1980, 1985), the classical approach defines strategy as a rational process of deliberate calculation and analysis, designed to maximise long-term advantage. For the classicists, good planning is what it takes to master internal and external environments. Strategy matters, in that rational analysis and objective decisions make the difference between long-run success and failure.

Evolutionists, such as Hannan and Freeman (1988), reply that strategy, in the classical sense of rational future-oriented planning, is irrelevant. The environment is typically too implacable, too unpredictable to anticipate effectively. They argue that the dynamic, hostile and competitive nature of markets means not only that long-term survival cannot be planned for, but also ensures that only those firms that somehow do hit upon profit-maximising strategies will survive. Businesses are like the species of biological evolution: competitive processes ruthlessly select out the fittest for survival; the others are powerless to change themselves quickly enough to ward off extinction. From the evolutionary perspective, then, it is the market, not managers, that makes the important choices. Successful strategies only emerge as the process of natural selection delivers its judgment. The only thing that managers can do is to ensure that they fit as efficiently as possible to the environment demands of the day.

Processualists agree that long-range planning is largely futile, but are less pessimistic about the fate of businesses that do not somehow optimise environment. For them, the processes of both organisations and markets are rarely perfect enough for either the strategising of classical theory or the survivalism of the evolutionists. According to Cyert and March (1963), people are too different in their interests, limited in their understanding, wondering in their attention, and careless in their actions to unite around

and then carry through a perfectly calculated plan. In any event, the plan is bound to be forgotten as circumstances change. In practice, strategy emerges more from a rational series of grand leaps forward (Mintzberg, 1987). It does not matter much if the emergent strategy is not quite optimal. The selection processes of the market are actually rather lax. As no one else is likely to know what the optimal strategy is and no one would be able to stick to it anyway, failure to devise and carry out the perfect strategic plan is hardly going to deliver any fatal competitive disadvantage.

From the systematic perspective, strategy does matter, but not quite in the sense that classicists believe. Systematic theorists are much less pessimistic than processualists about people's capacity to conceive and carry out rational plans of action, and much more optimistic than evolutionists about their ability to define their strategies in defiance of market forces. Following Granovetter's (1985) stress on the social "embeddedness" of economic activity, the systematic view proposes that the objectives and practices of strategy depend upon the particular social system in which strategy-making takes place. Strategists often deviate from the profit-maximising norm quite deliberately. Their social background may give them interests other than profit – professional pride, managerial power or national patriotism, perhaps. The pursuit of these different objectives, even at the cost of profit maximisation, is, therefore, perfectly rational, even if the rationale may often be disguised.

Alternatively, strategists may deviate from the textbook rules of rational calculation, not because they are stupid, but because, in the culture in which they work, such rules make little sense. These deviant strategies matter because they can be carried through effectively. Competitive pressures do not ensure that only evolutionary profit-maximisers survive: markets can be manipulated or bamboozled and societies have criteria for supporting enterprises other than mere financial performance. The systematic approach, therefore, believes that strategy reflects the particular social system in which strategists participate, defining for them the interests in which they act and the rules by which they can survive. Class and country make a difference to strategy. Thus, each perspective has its own view of strategy and how it matters for managerial practice.

Miles and Snow (1978) developed a theory that there are three superior performing business types and all others are average or less than average, defenders, analysers, and

prospectors. Their theory holds that, in order to be superior, there must be a clear and direct match between the organisation's mission/values (their definition), the organisation's strategies (their basic strategy set), and the organisation's functional strategies (their characteristics and behaviour).

2.4 Structure

Organisational structure designates formal reporting relationships, including the number of levels in the hierarchy of the span of control of managers and supervisors. Organisational structure identifies the grouping together of individuals into departments and of department into the total organisation. Organisational structure includes the design of systems to ensure effective communication, coordination and integration of efforts across departments.

Weber (1930) was the first to look at management from a structural perspective. He developed a theory of authority structures and described organizational activity as based on authority relation and described an ideal type of organization, that he called bureaucracy. Bureaucracy was a system characterized by division of labor, a clearly defined hierarchy, detailed rules and regulations, and impersonal relationships. His theory became the design prototype for large organizations. The detailed features of Weber's ideal bureaucratic structure are job specialization, where jobs are broken down into simple, routine, and well-defined tasks. authority hierarchy pertaining to offices and positions, organized in a hierarchy, each lower one being controlled and supervised by a higher one, formal rules and regulations to ensure uniformity and regulate the actions of employees and managers, impersonality of rules and controls and career orientation.

Barnard (1938) was influenced by Weber's writings. But unlike him who had a mechanistic and impersonal view of organizations, Barnard saw organizations as social systems that require human cooperation. He argued that success depend on maintaining good relations with people and institutions outside the organization with whom the organization regularly interacts. Barnard introduced the idea that managers had to examine the environment and then adjust the organization to maintain a state of equilibrium. The contingency approach can be traced back to Barnard's work.

Lawrence and Lorsch (1967) were the first to coin the label, contingency approach. They seek to answer the questions, what kind of organization does it take to deal with various economic and market conditions. The major emphasis of their study was on the states of differentiation and integration in organizations. Differentiation was defined as the mere division of labour or specialization. It also referred to the differences in attitude and behaviour of the managers concerned. Integration was defined as the quality of the state of collaboration that exists among department. What they hoped was to provide a systematic understanding of what states of differentiation and integration are related to effective performance under different environmental conditions. Effective performance was judged in terms of change in profits over the past five years, change in sales volume over the same period, new products introduced over the period as a percentage of current sales. The main conclusions were that, the more dynamic and diverse the environment, the higher the degree of both differentiation and integration required for successful organization; less changeable environments require a lesser degree of differentiation, but still require a high degree of integration; the more differentiated an organization, the more difficult it is to resolve conflict; high-performing organizations tend to develop better ways of resolving conflict than their less effective competitors. Improved ways of conflict resolution lead to states of differentiation and integration that are appropriate for the environment. Where the environment is uncertain, the integrating functions tend to be carried out by middle and low-level managers; where the environment is stable; integration tends to be achieved at the top end of the management hierarchy.

Burns and Stalker (1961) took a sample of 20 firms in the electronics industry and studied them from the point of view of how they adapted themselves to deal with changing market and technical conditions. The researchers were interested in how management systems might change in response to the demands of a rapidly changing external environment. As a result of their studies, they came up with two distinctive "ideal types" of management system, mechanistic systems and organic systems.

Mechanistic systems are appropriate for conditions of stability. By contrast, organic systems are appropriate for conditions of change. Woodward (1965) conducted a study, which established the key role of technology as a major variable affecting organization structures. Her researches strongly suggested that not only was the system of production

a key variable in determining structure, but that also there was a particular form of organization which was most suited to each system.

Pugh et al. (1969) studied the various aspects of structure, technology, and environment. They adopted a multi-dimensional and attempted to develop the idea of an organizational mix, which can be applied to an organization at a particular point in time in order to achieve successful results. The group distinguished six primary variables of structure (specialization, standardization of employment practices, standardization of procedures and methods, formalization, centralization and configuration), and considered them against a number of contextual variables (origin and history, ownership, size of organization, charter, technological features, and interdependencies). The conclusions reached showed the relevance of size to structural variables. As an organization grows beyond the stage at which it can be controlled by personal interaction, it has to be more explicitly structured. Organization with large size tends to lead to more specialization, more standardization, more formalization, but less centralization. The overall conclusion was that, it was possible to predict fairly closely the structural profile of an organization on the basis of information obtained about the contextual variables (Pugh et al., 1969).

The environments, both internal and external to the organisation, are constantly changing. Consequently, the organisation must change, adapt, and modify all the time to fit the new requirements. This requires constant innovation through incremental and/or radical change. Incremental change occurs through established structures and management processes using new technologies, etc. Radical change involves creation of new structures and new management processes. Depending upon the levels of chains-of-command, there are large bureaucratic and small flexible types of organisational structures.

All formal organisations have a structure of roles and a set of arrangements to achieve the organisation's objectives. This is known as the organisation's design. It embraces the distribution of tasks that organisation members perform and the mechanisms of coordination and control. Design is thus more than the simple lines of authority and accountability shown in the organisational chart. In organisational analysis, three dimensions of structure are usually seen as fundamental. Centralisation, the number of levels in the hierarchy and the extent to which decisions are taken at the top of the organisa-

tion. Specialisation, the extent to which the total activities of the organisation are broken down into specialised jobs for individuals. Standardisation is the extent to which the conduct of activities necessary to achieve the organisation's goals are controlled and coordinated by standard, written rules.

Organisations differ along these dimensions depending on their environments and strategies. The following are some of the different types of organisational structure: mechanistic organisation, organic/organismic organisation, functional structure, product-based structure, H-form, and matrix structure. The terms "mechanistic organisation" and "organismic organisation" were first used by Burns and Stalker (1961) to contrast two different types of organisation. Mechanistic organisations are characterised by high and rigid job specialisation and centralised decision-making, with vertical channels of communication. Organismic organisations, by contrast, display loose job definitions, greater horizontal communication, and some evolution of decision-making to lower levels of the hierarchy.

Matrix structure is a design in which individuals report to managers in more than one department or function. The simple chain-of-command found in the classic bureaucracy is replaced by potentially a multiplicity of reporting relationships. This type of structure may characterise part of the organisation – for project team management, for instance, where a project manager assures authority over team members drawn from a number of departments – or it may extend to the entire organisation (Burns and Stalker, 1961).

H-form is a form of company structure in which constituent companies are completely or partially owned by a holding company. Generally, such structures arise out of merger or acquisition activity. The product range, production, facilities and management structures are often left largely unchanged and constituent companies can thus be said to be undigested. Little direct control is exercised by the holding company, other than receipt of profits. The absence of central direction is often contrasted with that in an M-form company, but in so far as the holding company confines itself to acquisitions, divestment and simple financial control, it could be said to be a "pure" form of the letter (Burns and Stalker, 1961).

Product-based structure is an organisational structure where activities are grouped according to product or service, and formal coordination of management functions occurs separately for each. This structure duplicates management functions, potentially losing some economies of scale. It enables their activities to be tailored to the requirements of a particular product and its market. It is, therefore, said to be an appropriate structure for a diversified organisation. The locus of authority and coordination occurs at a relatively decentralised level compared to functional structures, thereby facilitating swift adjustment to changing market conditions. The geographically based structure takes a similar form. Each unit is based on a particular geographical area. Mixed geo-product-based structures are quite common. An extension of this form is the multidivisional or M-product company. Here, the units are organised as separate divisions or profit centres, with considerable autonomy in operational decision-making (Burns and Stalker, 1961).

Functional structure is an organisational structure where activities are grouped into departments by functions and formal coordination occurs at the apex. Such structures provide a generally effective means of coordination, both within departments and across the organisation as a whole, when there is a single product or service. They also provide clear cancer paths for functional specialists, though there is a possibility that loyalty to departments will displace loyalty to the organisation. Functional structures become less appropriate when an organisation diversifies. It can be difficult to adapt functions to possibly varying product or service requirements, since the centralisation of authority in this model tends to encourage uniformity. This type of structure is often referred to as U-form, since authority within the organisation can be traced up the chain-of-command to a unitary source (Burns and Stalker, 1961).

Critical function structure is an organisational structure in which one management function is considered so important that it is organised separately to some extent from the rest of the organisation. For example, in retailing, the overall structure is often the geographical variant of the product-based structure, with centralisation of authority to an area or regional manager. Standardised merchandising, however, is considered so critical to the organisation's success that this function is centralised on a functional basis.

2.5 Core Competencies

The term "core competency" has its root from the concept of distinctive competencies that Selznick (1957) defined as those things that an organization does especially well in comparison to its competitors. However, as perceived by Prahalad and Hamel (1990) core competencies are those capabilities that are critical to a business achieving competitive advantage. Core competence can cover a number of themes such as one business may feel that the way it serves customers is its core competence, another may have an excellent sales force and expert maintenance and repair personnel and that constitutes its core-competencies, a manufacturer may feel that quality and innovation are its core competence, or a company may hire expert technicians and engineers and use state-of-the-art technology and consider them its core-comepetncies.

Ever since Prahalad and Hamel introduced the term in the 1990's, many researchers have tried to highlight and further illuminate the meaning of core competence. According to Hunger and Wheelen (1993), capabilities are considered core if they differentiate a company strategically. Their central idea is that over time companies may develop key areas of expertise, which are distinctive to that company and critical to the company's long term growth. Gallon, Stillman, and Coates (1995) made it explicit that core competencies are more than the traits of individuals. They defined core competencies as aggregates of capabilities, where synergy is created that have sustainable value and broad applicability. That synergy needs to be sustained in the face of potential competition and, as in the case of engines, must not be specific to one product or market. Therefore, core competencies are harmonized, intentional constructions.

Coyne, Hall, and Clifford (1997) proposed that a core competence is a combination of complementary skills and knowledge bases embedded in a group or team that results in the ability to execute one or more critical processes to a world class standard. On the other hand, Galunic and Rodan (1998) argue that a core competence differentiates not only between firms but also inside a firm it differentiates amongst several competencies. In other words, a core competency guides a firm in recombining its competencies in response to demands from the environment. According to Chandan (2003) a competency is an internal capability that a company performs better than other internal capabilities.

A core competency is a well-performed internal capability that is central, not peripheral, to a company's strategy, competitiveness, and profitability.

Researchers such as Prahalad and Hamel (1993) argue that the concept of competencies thus implies that resources should avoid being standardized and easily available if the firm is to achieve a competitive advantage over its rivals. Proponents of this framework emphasize the importance of a dynamic strategy in today's more dynamic business environment. They argue that a strategy based on a "war of position" in industry structure works only when markets, regions, products, and customer needs are well defined and durable. As markets fragment and proliferate, and product life cycles accelerate, "owning" any particular market segment becomes more difficult and less valuable. In such environment, the essence of strategy is not the structure of a company's products and markets but the dynamics of its behaviours. A successful company will move quickly in and out of products, markets, and sometimes even business segments. Underlying it all, though, is a set of core competencies or capabilities that are hard to imitate and distinguish the company from competition. These core competencies, and a continuous strategic investment in them, govern the long-term dynamics and potential of a company.

How a business achieves and sustains strategic advantages, such as competitive advantage, comparative advantage, and distinctive advantage has long been the central focus of strategic management research. The dominant pattern in the field has been the competitive forces approach that states that intensity of competition determines that profit potentional for individual firms (Porter, 1985). According to this framework, a firm seeks a position in an attractive market that can be defended against both existing and potential competitors.

The internal analysis emphasizes building distinctive and core competencies, resources, advantages, and decision-making into a firm such that it continues to thrive in a changing environment. The four concepts are inherently interlinked; starting with the basic concept of assets, upon which capabilities are established, and thus developing core competencies and distinctive advantages. Therefore, as mentioned before, a core competency is a well-performed internal capability that is central, not peripheral, to a company's strategy, competitiveness, and profitability whilst a distinctive advantage is a competitive valuable capability that a company performs better than its rivals.

More recently, there has been growing interest in the role of resource-based capabilities; or rather competencies have on attaining competitive advantage (Hunger and Wheelen, 1993). As mentioned above, relying on the traditional strategic management construct of distinctive competence (Bartol and Martin, 1991), the resource-based view suggests that the resource of firm's strategic advantages is rooted in a firm's resources and capabilities (competencies). Resources include capital equipment, skills of individual employees, reputation, and brand names (Lamb, 1988). Capabilities, on the other hand, refer to a firm's skill at effectively coordinating its resources. In other words, resources are the source of a firm's capability, and capabilities refer to a firm's ability to bring these resources together and to deploy them advantageously (Rumelt, 1974). Capabilities also differ from resources in that they cannot be given a monetary value, as can tangible plant and equipment, and are so deeply embedded in the organizational routines and practices that they cannot be easily imitated (Chandan, 2003).

Hunger and Wheelen (1993) argue that with technology circumventing the use of many scarce elements in production (for example, ceramics substituting for aluminium) and many less developed countries reaching a basic maximum level of development, competitive advantage replaces comparative advantage as the most useful concept in international trade. Every organization possesses many capabilities that enable it to perform the activities necessary to provide its products or services. Some of these activities may simply be performed adequately, while others may actually be performed rather poorly. However, successful organizations conceivably possess certain capabilities allowing them to perform key activities exceptionally well. These capabilities have been termed "distinctive competencies" and generally refer to the unique skills and activities that a firm can do better than rival firms (Hunger and Wheelen, 1993), enabling it to achieve both a competitive and comparative advantage. Moreover, these are the distinctive capabilities that support a market position that is valuable and difficult to imitate. Leadership is among the key managerial capabilities that together with tangible and intangible assets form core competencies.

2.6 The Interaction between the Environment, Strategy, Structure And Core-competencies

Lenz (1980) reports the findings of an empirical field study of savings and loan associations. The investigation centres upon whether combinations of environment, strategy, and organisational structure of high-performance firms differ from combinations associated with low-performance firms. Results show that such combinations differ, both statistically and with respect to their basic character. There is also evidence that norms held by managers of competing institutions and the nature of relationships between organisations and populations served to influence the vigour and form of inter-firm rivalries and, in turn, organisational performance. The performance implications of different combinations of environment, strategy and organisation may be largely explained by three interrelated circumstances. These are: the form of inter-firm rivalries within a particular competitive context, differences in the level of consensus about original missions and domains, and the character of relationships between organisations and populations served. The success of high-performance firms is partly attributed to having fewer direct competitors, i.e. other thrift institutions in the environment.

Slevin and Govin (1997) analyzed the effects of a company's organizational structure and environmental context on the relationship between that company's pattern and its sales growth rate. Results indicate that planned strategies are positively related to sales growth among firms with mechanistic structures and operating in hostile environments. Emergent strategies, on the other hand, are more positively related to sales growth among firms with organic structures and operating in benign environments. They concluded that the context in which strategy is formed does affect the level of firm performance (growth) associated with particular strategy formation patterns. Neither the planned nor the emergent approach appears to be universally effective, and each must be matched to a congenial context before success in implementation can be reasonably expected.

The link between strategy and performance remains elusive. No causal relationship has been established between strategy and company performance. Thune and House (1970) observe that companies that engage in formal long-range planning have historically outperformed informal planners. They add, however, that it would be naïve to conclude

that formal planning is the sole cause of success in firms. Firms may be using other management practices that contribute to success, e.g. organisation design, good human resource practices, corporate culture, etc. They conclude that it is more likely that formal planning is a characteristic of a well-managed firm than the single cause of successful firm performance. Ansoff *et al.* (1970) add that formal planners out-perform non-planners in virtually all-relevant financial criteria. They continue by saying that formal planning pays and appears to assist firms to achieve success.

Greenley (1986), reacting to Thune and House (1970), Ansoff *et al.* (1970) and Buzzell and Gale (1984), says that the relationship between strategic planning and performance is yet to be established, that studies linking strategic planning and performance are inconclusive, and that more research needs to be done in this area. He also says that it cannot be concluded that strategic planning causes improved company performance. There is a range of potential advantages, however, to be gained from utilisation of strategic planning. Hence need for further research on the relationship between strategy and structure. Baum (2003) contributing on the debate finds that fast strategic decision-making predicts subsequent firm growth and profit and mediates the relationship of dynamism, centralization and formalization with firm performance. Though Baum (2003) made a great contribution to the debate, there is still need however, to look at other aspects/attributes of strategy and how it interacts with structure in terms of less flexible, flexible, or highly flexible; environment in terms of less changing, changing, and highly changing; core-competencies in terms of less competencies, moderate competencies and high competencies; and finally performance in terms of sales growth and return on assets.

Miles, Covin, and Heeley (2000) investigated the organizational structures, strategic postures, business practices, and performance levels of small firms in stable and dynamic environments. After examining the issue of how small firms behave under different levels of environmental dynamism, they made the following general conclusions: environmental dynamisms appear to promote organic structures even among small firms; the relationship between dynamism and structure seems to relate to performance; and the organic structures correlate positively with performance in dynamic environments and negatively with performance in stable environments. Their findings also indicate that entrepreneurial strategic postures are more prevalent among small firms in dy-

namic environments, while stable environments seem to favour more conservative strategic postures. These results are consistent with prior research, which examined larger firms (Harvey, 1968; Khandwalha, 1977; Miller, 1983; Dean, 1993).

Gordon et al. (2000) re-examined the strategic orientation, a change in strategy combined with change in at least two of organizational structure, power distribution, and control systems, presented by Lant, Milliken, and Batra (1992), by using archival data (1987-1993) for firms in the stable furniture and turbulent computer software industries. While enabling direct comparability of results from the two studies, they specify an extended, integrated model of change forces, and test the hypotheses with a more robust data analytic technique, hierarchical regression analysis. The results support industry turbulence and CEO turnover as precursors to strategic reorientation, and suggest that industry turbulence conditions managers' external attributions for negative financial performance in influencing strategic orientation. Alternatively, the results indicate that top management team turnover is negatively related to strategic reorientation. The results do not support the conclusion of Lant et al. (1992) that low past financial performance, top management team heterogeneity, awareness of environmental changes, and external attributions for negative financial performance outcomes are significantly associated with strategic reorientation. Structural equation analysis indicates the predictive superiority of the re-specified model, and they offer suggestions for theoretical refinement and development of strategic reorientation.

Covin, Slevin, and Heeley (2001) describe how the relationship between decision-making style and firm performance is impacted by technological sophistication and organizational structure. The findings suggest that different combinations of managerial style and structure predict firm financial performance in high-tech and low-tech environments. For example, in high-tech environments, sales growth rates were found to be higher when the technocracy dimension of decision-making style and the organicity dimension of organizational structure are negatively related. In low-tech environments, on the other hand, sales growth rates were found to be higher when these dimensions are positively related. Different results were observed, however, when firm financial performance was operationalized in terms of return on sales.

Barth (2003) argues that the fit among the competitive strategy followed by a firm, the utilization of administrative mechanisms, and the performance of the firm are related to industry maturity. He conducted a comparative study on manufacturing industries and software firms. The findings support the assumption that firms in new industries grow faster than firms in mature industries. Few cases of misfits with a high level of managerial skills are found, and the distribution of firms indicates that the fit between differentiation strategy and decentralized structure is the more common one. Some small business managers undertake little or no systematic analysis of their environment prior to making a strategic decision.

Kuprenas (2003) analyzed the implementation and performance of a matrix organization installed at the city of Los Angeles, Bureau of Engineering. The study found that, although implementation problems had occurred, the performance of the organization while operating under a matrix structure has improved with respect to project delivery. He commented further that there is little research available to demonstrate: what core competencies are considered to exist in organizations, how they have been identified, how they have been used, or how their existence can be verified objectively. However, there are some factors within the organization, which are believed to be associated with successful managers and organizations such as leadership and governance and their derivatives like motivation and employee commitment (Kuprenas, 2003).

Madhok (2002) came up with a model which he called the triangular alignment between the triumvirate of governance structure, transaction, and resource attributes and demonstrates how the identity and strategy of a particular firm influences how its resources interact with the transaction and how the firm chooses to govern it. The general argument is then applied to the context of inter firm collaborative relations where the key focus is broadened from just cost to include also skills, knowledge, and the interdependence between cost and skills with respect to firm boundaries, both in terms of choice and nature. Such a broadening of focus enables us to additionally examine the transacting process as a productive endeavour, which underpins the co-evolution of the competencies of partner firms.

Miller (2004) demonstrates that while agency theory claims managerial self-interest creates a diversification discount, strategic theory explains that firms with certain kinds

of resources should diversify. Longitudinal data on 227 firms that diversify between 1980 and 1992 reveal that the sample firms invest less in Research and Development (R & D) and have greater breadth of technology than their industry peers prior to the diversification event. Also, acquiring firms that use internal growth rather than acquisition pursue less extensive diversification. These findings help explain how diversification and financial performance are endogenous. Leiponen (2005) argues that the technological and institutional environment drives firms' decisions to organize innovation and invest in learning, which determine firm performance in terms of innovation and growth; however, independent government activities of complementarities may become optional when depreciation of knowledge is rapid due to radical technical change.

Leiblein and Miller (2003) developed a model based on insights from transaction cost economics, the resource-based view, and real options theory to examine how transaction-level characteristics, firm specific capabilities, and product-market scope influence the governance of production. Empirical evidence derived from analysis of 469 make – or-buy decisions involving 117 semiconductor firms indicates that decisions regarding the governance of production activities are strongly influenced by both transaction and firm-level effects.

Scarbrough and Medcof (2001) argue that a linking of the Resource Based-View (RBV) of the firm, resource dependency theory and the Vroom-Yetton model of leadership is used to show that when important technical R&D are located offshore for strategic and efficiency reasons, resource-based power goes with them. The extra-national technology units that embody those strategically important resources should be managed with inclusive methods that respect that power shift. This analysis suggests that when strategically important technical work is located overseas, resource-based power goes with it. Putting strategically important work offshore carries with it the necessity of managing that work with systems that respect the location of the resource-based power. An inclusive method of management is recommended. If a top management team is not prepared to use inclusive methods, it should resist the temptation to place strategically important technical work at extra-national locations. Core, Holthausen, and Larcker (1999) suggest that firms with weaker governance structures have greater agency problems that CEOs at firms with greater agency problems receive greater compensation and that firms with greater agency problems perform worse.

Lee, Lee and Pennings (2001) examined the influence of internal capabilities and external networks on firm performance by using data from 137 Korean technological start-up companies. Internal capabilities were operationalized by entrepreneurial orientation, technological capabilities, and financial resources invested during the development period. External networks were captured by partnership and sponsorship-based linkages. Partnership-based linkages were measured by strategic alliances with other enterprises and venture capitalists, collaboration with universities or research institutes, and participation in venture associations. Sponsorship-based linkages consisted of financial and non-financial support from commercial banks and the Korean government. Sales growth indicated the start-up's performance. Regression results showed that the three indicators of internal capabilities are important predictors of a star-up's performance. Among external networks, only the linkages to venture capital companies predicted the start-up's performance. Several interaction terms between internal capabilities and partnership-based linkages have a statistically significant influence on performance. Sponsorship-based linkages do not have individual effects on performance but linkage with financial institutions has a multiplicative effect with technological capabilities and financial resources invested on a start-up's performance.

Lorenzoni and Lipparini (1999) through a study of three lead firm-network relationships at two points in time used data on companies in the packaging machines industry and studied the process of vertical disintegration and focused on the ability to coordinate competencies and combine knowledge across corporate boundaries. They argued that the capability to interact with other companies-which they call relational capability-, accelerates the lead firm's knowledge access and transfer with relevant effects on company growth and innovativeness. This study provides evidence that interfirm networks can be shaped and deliberately designed: over time managers develop a specialized supplier network and build a narrow and more competitive set of core competencies. The ability to integrate knowledge residing both inside and outside the firm's boundaries emerges as a distinctive organizational capability. Their main goal was to contribute to the discussion on cooperative ties and dynamic aspects of interfirm networks, adding new dimensions to resource-based and knowledge-based interpretations of company performance.

Lorezon and Lipparini (1999) conclude that interfirm networks can be shaped and deliberately designed: overtime managers develop a specialized supplier network and build a narrower and more competitive set of core competencies. The ability to integrate knowledge residing both inside and outside the firm's boundaries emerges as a distinctive organizational capability. Interfirm relationships play a significant role in the development of new products and in the fine-tuning of competencies of partnered organizations. The Table 1 below summarises the empirical studies that have been carried out on co-alignment variables either individually with performance or in combination and bring out the knowledge gap especially about the effect of the core-competencies on the relationship between co-alignment variables and firm performance.

Table 1: Empirical Studies on Co-Alignment Model

Author(s)	Study Title	Main hypothesis	Statistical Tests	Key findings	Major Contribution
Lenz (1980	An empirical field study of savings and loan associations on whether combinations of environment, strategy, and organizational structure of high-performance firms differ from combinations associated with low-performance firms	The success of high-performance firms is partly attributed to having fewer direct competitors, i.e. other thrift institutions in the environment. However, both thrift institutions and commercial banks can make mortgage loans.	Regression Analysis	Results show that such combinations differ, both statistically and with respect to their basic character. There is also evidence that norms held by managers of competing institutions and the nature of relationships between organizations and populations served to influence the vigor and form of inter-firm rivalries and, in turn, organizational performance.	The performance implications of different combinations of environment, strategy, and organization may be largely explained by three interrelated circumstances: These are the form of inter-firm rivalries within a particular competitive context, differences in the level of consensus about original missions and domains, and the character of relationships between organizations and populations served
Armstrong (1986)	Strategic Planning Improves Manufacturing Performance	Strategic Planning Improves Manufacturing Performance	Quantitative critiques of 28 studies	Nine studies found formal planning to be associated with better performance and none found detrimental performance	Reacting to Thune and House (1970). Ansoff *et al.* (1970) and Buzzell and Gale (1984), says that the

					relationship between strategic planning and performance is yet to be established, that studies linking strategic planning and performance are inconclusive, and that more research needs to be done in this area. He also says that it cannot be concluded that strategic planning causes improved company performance. There is a range of potential advantages, however, to be gained from utilization of strategic planning
Slevin and Govin (1997)	The effects of a company's organizational structure and environmental context on the relationship between that company's pattern and its sales growth rate	Planned strategies are positively related to sales growth among firms with mechanistic structures and operating in hostile environments. Emergent strategies, on the other hand, are more positively related to sales growth among firms with organic structures and operating in benign environments.	Regression Analysis	They concluded that the context in which strategy is formed does affect the level of firm performance (growth) associated with particular strategy formation patterns. Neither the planned nor the emergent approach appears to be universally effective, and each must be matched to a congenial context before success in implementation can be reasonably expected.	
Lorenzoni & Lipparini (1999)	The Leveraging of Interfirm Relationships as a Distinctive Organizational Capability	H1: Lead firms potentially can lower the overall coordination and production costs of a net-	Longitudinal through a study of three lead firm-network	This study provides evidence that interfirm networks can be shaped and deliberately designed: over time managers develop	Their main goal was to contribute to the discussion on cooperative ties and dynamic aspects of inter-

		work through multiple, repeated. Trust-based relationships with key suppliers. H2: multiple, repeated. Trust-based relationships with key suppliers favor lead firm's access to complementary capabilities and specialized knowledge with positive effects on the networks as a whole	relationships at two points in time used data on companies in the packaging machines industry and studied the process of vertical disintegration and focused on the ability to coordinate competencies and combine knowledge across corporate boundaries	a specialized supplier network and build a narrow and more competitive set of core competencies. The ability to integrate knowledge residing both inside and outside the firm's boundaries emerges as a distinctive organizational capability	firm networks, adding new dimensions to resource-based and knowledge-based interpretations of company performance.
Miles, Covin, and Heeley (2000)	Organizational structures, strategic postures, business practices, and performance levels of small firms in stable and dynamic environments.	Environmental dynamisms appear to promote organic structures even among small firms; the relationship between dynamism and structure seems to relate to performance; and the organic structures correlate positively with performance in dynamic environments and negatively with performance in stable environments.	Regression Analysis	They made the following general conclusions: environmental dynamisms appear to promote organic structures even among small firms; the relationship between dynamism and structure seems to relate to performance; and the organic structures correlate positively with performance in dynamic environments and negatively with performance in stable environments. Their findings also indicate that entrepreneurial strategic postures are more prevalent among small firms in dynamic environments, while stable environments seem to favor more conservative strategic	These results are consistent with prior research, which examined larger firms (Harvey, 1968; Khandwalha, 1977; Miller, 1983; Dean, 1993).

				postures.	
Gordon et al. (2000)	re-examined the strategic orientation, a change in strategy combined with change in at least two of organizational structure, power distribution, and control systems, presented by Lant, Milliken, and Batra (1992)	While enabling direct comparability of results from the two studies, they specify an extended, integrated model of change forces, and test the hypotheses	By using archival data (1987-1993) for firms in the stable furniture and turbulent computer software industries. While enabling direct comparability of results from the two studies, they specify an extended, integrated model of change forces, and test the hypotheses with a more robust data analytic technique, hierarchical regression analysis	The results support industry turbulence and CEO turnover as precursors to strategic reorientation, and suggest that industry turbulence conditions managers' external attributions for negative financial performance in influencing strategic orientation. Alternatively, the results indicate that top management team turnover is negatively related to strategic reorientation.	The results do not support the conclusion of Lant et al. (1992) that low past financial performance, top management team heterogeneity, awareness of environmental changes, and external attributions for negative financial performance outcomes are significantly associated with strategic reorientation. Structural equation analysis indicates the predictive superiority of the respecified model, and they offer suggestions for theoretical refinement and development of strategic reorientation.
Covin, Slevin, and Heeley (2001)	Strategic decision making in an intuitive Vs. technocratic mode: structural and environmental considerations	The relationship between decision-making style and firm performance is impacted by technological sophistication and organizational structure	Cross-sectional study using the regression analysis.	The findings suggest that different combinations of managerial style and structure predict firm financial performance in high-tech and low-tech environments	In high-tech environments, sales growth rates were found to be higher when the technocracy dimension of decision-making style and the organicity dimension of organizational structure are negatively related. In low-tech environments, on the other hand, sales growth

					rates were found to be higher when these dimensions are positively related
Lee, Lee and Pennings (2001)	Internal Capabilities, External Networks, and performance: A study on technology-based ventures	The level of entrepreneurial orientation is positively associated with technological start-up's performance	Lagged dependent variable in a correlational analysis	Regression results showed that the three indicators of internal capabilities are important predictors of a star-up's performance. Among external networks, only the linkages to venture capital companies predicted the start-up's performance. Several interaction terms between internal capabilities and partnership-based linkages have a statistically significant influence on performance. Sponsorship-based linkages do not have individual effects on performance but linkage with financial institutions has a multiplicative effect with technological capabilities and financial resources invested on a start-up's performance	This study can provide several managerial implications for entrepreneurs of technological start-ups.
Chathoth (2002)	Co-Alignment between Environment Risks, Corporate Strategy, Capital Structure, and Firm Performance: an Empirical Investigation of Restaurant Firms	Co-Alignment between Environment Risks, Corporate Strategy, Capital Structure, and Firm Performance improves firm performance more than the outcome of individual variables.	Regression Analysis	The study showed that there was a positive relationship between the co-alignment model and organizational performance. He also found that the full model, which measured all the constructs (risk environment, strategy, and capital structure), explained only 59 percent of variance in the firms' return	This implies that there are other factors which account for the remaining 41 per cent, not represented in the traditional co-alignment model, that do influence performance. This further suggests a need to expand the notion of a co-alignment model to in-

				on equity.	clude other relevant variables
Madhok (2002)	Reassessing The Fundamentals And Beyond: Ronald Coase, The Transaction Cost And Resource-Based Theories Of The Firm And The Institutional Structure Of Production	the identity and strategy of a particular firm influences how its resources interact with the transaction and how the firm chooses to govern it improve firm performance	The general argument is then applied to the context of interfirm collaborative relations where the key focus is broadened from just cost to include also skills, knowledge, and the interdependence between cost and skills with respect to firm boundaries, both in terms of choice and nature.	demonstrates how the identity and strategy of a particular firm influences how its resources interact with the transaction and how the firm chooses to govern it	Such a broadening of focus enables us to additionally examine the transacting process as a productive Endeavour, which underpins the co-evolution of the competencies of partner firms.
Baum and Wally (2003)	Strategic decision speed and firm performance	Strategic decision speed mediates the relation between environmental and organizational characteristics and performance	Data was collected from 318 CEOs from 1996-2000 and was analyzed using the structural equation modelling.	The study finds that fast strategic decision-making predicts subsequent firm growth and profit and mediates the relation of dynamism, centralization, and formalization with firm performance	Contribute to the debate on strategic decision-making theory and organization theory.
Barth (2003)	Fit among competitive strategy, administrative mechanisms, and performance: A comparative study of small firms in mature and new industries.	the fit among the competitive strategy followed by a firm, the utilization of administrative mechanisms, and the performance of the firm are related to industry matur-	Regression analysis	The findings support the assumption that firms in new industries grow faster than firms in mature industries. Few cases of misfits with a high level of managerial skills are found, and the distribution of firms indi-	The study offers at least two different administrative mechanisms for the small business manager to develop and to pursue a competitive strategy

		ity		cates that the fit between differentiation strategy and decentralized structure is the more common one. Some small business managers undertake little or no systematic analysis of their environment prior to making a strategic decision.	
Kuprenas (2003)	The implementation and performance of a matrix organization structure.	performance of the organization while operating under a matrix structure has improved with respect to project delivery	Case study of the city of Los Angeles, Bureau of Engineering	The study found that, although implementation problems have occurred, the performance of the organization while operating under a matrix structure has improved with respect to project delivery.	The benefits of this work are as follow: how the need for a matrix structure was identified; steps in the creation of the matrix and the organizational options; process problems associated with the implementation; tangible, tested solutions to process problems associated with the implementation, and evaluation tools to measure the effectiveness of the project management process within the matrix organization.
Leiblein and Miller (2003)	examine how transaction-level characteristics, firm specific capabilities, and product-market scope influence the governance of production	transaction-level characteristics, firm specific capabilities, and product-market scope influence the governance of production	developed a model based on insights from transaction cost economics, the resource-based view, and real options theory	Empirical evidence derived from analysis of 469 make –or-buy decisions involving 117 semiconductor firms indicates that decisions regarding the governance of production activities are strongly influenced by both transaction and firm-level effects.	The study shows a positive relationship between the environment, firm characteristics and firm performance
Miller (2004)	Firms' Technological re-	H1: Prior to the diversifica-	Longitudinal data on	Demonstrates that while agency the-	These findings help explain

	sources and the performance effects of diversification: A longitudinal study	tion event, diversifying firms have lower R&D intensify than matched firms that stay focused. H2: Prior to the diversification event, diversifying firms have less specialized knowledge assets than matched firms that stay focused.	227 firms that diversify between 1980 and 1992 using correlational analysis.	ory claims managerial self-interest creates a diversification discount, strategic theory explains that firms with certain kinds of resources should diversify. They reveal that sample firms invest less in R&D to have greater breadth of technology than their lower performance because of accounting conventions and because firms that use internal growth rather than acquisition pursue less extensive diversification.	how diversification and financial performance are endogenous.
Leiponen (2005)	Core Complementarities of the Corporation: Organization of an innovating Firm	The technological regime indirectly influences organization choice, and similarly, the institutional environment indirectly influences learning investments.	Economic model	The technological and institutional environment drives firms' decisions to organize innovation and invest in learning, which determine firm performance in terms of innovation and growth; however, independent government activities of complementarities may become optional when depreciation of knowledge is rapid due to radical technical change.	A new framework for analyzing innovation. Knowledge and organizational choices in firms.

2.7 Organisational Performance

Cole (1997) argues that organisational performance relates to the efficiency and effectiveness of the firm. Understanding organisational goals and strategies is the first step toward understanding organisational effectiveness. Organisational effectiveness is the degree to which an organisation realises its goals. Efficiency is a function of the quan-

tity of resources used to produce a unit of output. Efficiency sometimes leads to effectiveness, but not always. In other organisations, efficiency and effectiveness are not related. When managers tie performance measurement to strategy execution, this can also be valuable for helping organisations reach their goals.

Bonoma (1989) says that success has much to do with management's expectations versus results obtained. When trying to assess performance, there is no business function top executives worry about more than marketing. Management's expectation of the products is the relative performance of any market programme. Programme managers and brand managers have to arrange and conduct their marketing projects to avoid arousing undue optimism on the part of their superiors. Personnel performance appraisal is the process of considering and evaluating the performance of an employee, with the objective of improving job performance. Employees are individuals who, over a given time, invest a large proportion of their lives in their organisations. Thus, much of their personal lives, as well as their role as employees, depend upon the success or failure of the corporate strategies adopted by their employers.

Qualitative performance refers to other concerns of top management, including a review of performance in terms of the company's mission statement, qualitative goals, and conduct of its policies. These indicate how responsibly and how ethically the organisation has behaved in carrying out its business goals during the period under review. Mission statements, once made, are unlikely to be frequently changed. Nevertheless, it is important for an organisation to assess its adherence to its missions and policies, which are major aspects of its culture (Cole, 1997).

Cole (1997) highlights the key areas of concern that organisations must focus on when measuring strategic performance: corporate strategy; corporate objectives; corporate policies and review procedures; Strategic Business Units' objectives; efficiency in the use of resources as allocated, especially personnel and physical. Assessing organisational performance concerns the extent to which a strategy has achieved its broad goals. Goals can be either qualitative or quantitative, thus, assessing whether the organisation has done the right things (efficiently).

Regarding financial performance, Ansoff *et al.* (1970) prove that properly installed strategic planning can more than pay for itself in terms of better performance. One of the earliest research studies asked the question whether strategically planned mergers and acquisitions produced better results than ad hoc acquisitions based on intuition and experience. The findings of analysis of the financial performance of *planners* vs. *non-planners*, according to a variety of measures (sales growth, earning growth, earnings/share growth, total assets growth, earnings/common equity growth, payout ratio growth, total equity growth, total capital growth, stock price growth, debt/equity growth, price/earning growth, debt/equity ratio, payout ratio, price/equity ratio, total equity, and earning/total equity), show that planners perform overwhelmingly better than non-planners. Goldsmith and Clutter (1984) identify what constitute success: high growth in assets, turnover and profit over the past ten years; a consistent public reputation within the industrial sector as a leader; and a solid public reputation.

Linking strategy to budgets is important for successful strategy implementation. Aosa (1992) confirms that a major purpose of strategy is the identification of key issues and priorities in a company. The budget is then used as a tool for control and resource allocation. Resources are best allocated according to the key issues and priorities identified in a company's strategy. Hence, the importance of specifying strategy before budgets.

2.8 Public Organizations

Weber (1930) defined the core features of the modern organization in his analysis of bureaucracy. In his view, the bureaucratic organization is the dominant mode of organization in modern industrial societies. Organizations of this sort are often also called formal organizations, since they exist independently of the individuals who belong to them at any given time and the roles and activities of organization members are formally prescribed, at least to some extent. Barnard (1938) describes an organization as "a system of consciously coordinated activities or faces of two or more persons". Other public administrative theorists have largely equated public administration with governmental administration, that is, with carrying out the mandates of government.

Some authors assert that public organizations are large, complex, and are said to be groups of people brought together to accomplish some purpose; they are seen as direct-

ing the activities of many individuals, so that some particular goal can be achieved. In addition, the direction of these activities occurs through a series of authority relationships, in which superiors and subordinates interact. Characteristically, in these relationships, authority flows primarily from the top down. Bureaucratic organizations are also defined by their structure, or hierarchy, which results from dividing labor and clarifying authority relationships (so that each person has only one boss).

Public-sector units and business organizations were considered different, due to their perceived vision, mission, and objectives, and as such should pursue different strategies (Gunn, 1988, and Salmon), 1994. Parry (1992) notes that the following seven variables that bear upon public sector managers and constrain the extent to which they can set and pursue objectives as private sector managers can: electoral process, management of public expenditure and taxation, working with rules, accountability, facelessness and secrecy, security and tenure, and risk taking. The conflict between commercial and political objectives can also be observed in the financial dealings of public firms, as state ownership restricts their access to capital in several ways. For instance, their claims on public money must compete with other demands for development of infrastructure, such as roads, schools, hospitals, and other popular claims on governmental funds.

Denhardt, (2000) argue that the New Public Management grew out of the mainstream interpretation of public administration, especially as augmented by market models and public choice economics, and is concerned with reducing red tape and increasing governmental efficiency and productivity (Denhardt, 2000). The New Public Management puts the emphasis on giving administrators great latitude to acts as entrepreneurs. As entrepreneurs, the new public managers are judged to be accountable if they are efficient, cost effective, and responsive to market forces (Denhardt and Denhardt, 2000). Public servants today are called upon to be responsible to a host of various sources of accountability: the public interest, statutory and constitutional law, other agencies, other levels of government, the media, professional standards, community values and standards, contingency factors, democratic norms, and citizens. Denhardt and Denhardt (2000) also point out that these accountability sources (institutions and standards) interact in complex and dynamic ways, and for this reason the action of public servants affect, and are affected by, demands for public services by the citizens. This means that public servants influence and are influenced by all the different sources of accountabil-

ity. The competing values and standards of democratic government interact in complex and dynamic ways to present challenging and sometimes conflicting points of responsibility.

The New Public Service (NPS) deals with these responsibilities by recognizing that public officials must answer to conflicting value systems and expectations. Its concern is on how best to serve citizens (public interest). The NPS recommends that public servants not make decisions independently. They should instead join with citizens in a process of dialogue, brokerage, citizen empowerment, and broad-based citizen engagement in determining and implementing policy. To improve the process of discourse in responsibility, public servants must make citizens aware of all conflicts and parameters. Supporters of the NPS argue that government should not be run like a business; it should be run like a democracy. What is most significant, and most valuable, about public administration is that public administrators serve citizens to advance a common good. The soul of the profession should be grounded in public interest, in the ideals of democratic governance, and in a renewal of civic engagement. New Public Service flows more clearly from the democratic, humanistic tradition in public administration and is concerned with issues of citizenship and community. Public Sector Enterprises (PSEs) were set up specifically to meet felt gaps in social and economic development, such as industrial growth, economic development of weaker sections of society, employment creation, and provision of amenities. health, and education (Panwar).

There are three different approaches to public organizations: the political approach, the generic approach, and the professional approach. In the political approach, the public bureaucracy is recognized not only as being an arm of government, but also as playing a significant role in the governmental process. Public organizations are said to affect the "authoritative allocation of values" in society (Easton, 1965). The advocates of the generic approach, such as Wilson (1887), argue that the basic concerns of management are the same, whether one is managing a private corporation or a public agency. That is, in either case the manager must deal with issues of power and authority, with issues of communication, and so forth. This approach has its origin in business administration through scientific principles to increase the productivity of public organizations. Waldo (1975) pioneered the professional approach and states:

"There is no single, unified theory of illness or health. Theories and technologies based on them constantly change, there are vast unknowns, there is bitter controversy over medical questions of vital importance, the element of "art" remains large and important. "Health" proves, on close scrutiny, to be as "good administration".

2.9 Conceptual Framework

The theoretical framework of the present study is based on co-alignment model and the theory of organisations serving the environment. The independent variables: environment, strategy, structure and core competencies are believed to have a positive influence on the dependent variable (firm performance) in parastatals in Kenya. The environment comprises internal factors and the task, remote, and ultra-remote environments – can be classified as stable, changing, or turbulent, depending upon the degrees of uncertainty that it purports to the organisation (Porter 1980 and Ansoff, 1993). The strategy can either be defensive, reactive or proactive to match the levels of uncertainty in its environment. But only parastatals in Kenya that use proactive strategies in highly turbulent environments will perform well. The organisational structure to implement the corporate strategy should be sufficiently flexible and in line with that particular strategy, in order for the organisation to achieve great performance.

The Management competencies can either be motivational, forward planning, acting as a team, or communicating. The core competencies to lead to great success are characteristics of firms that are able to create new products/ services, with skills that enable a business to deliver a fundamental customer benefit, and with a competence that other competitors wish had within their own business. The nature of goods/services will influence other factors of the hexagon model depending on whether goods or services are highly commerciable on one end spectrum or not commerciable at all on the other end of the spectrum. These variables are interrelated and influence one another continuously.

Strategic organisations are those that have performed well and, due to their high performance resulting from the co-alignment model, are able to influence their environment for their own advantages, making the environment to depend on firm performance, its strategy, and structure. The relationships are reciprocal, giving rise to two scenarios.

In the first scenario, the organisation's performance depends upon environment, strategy, and structure. In the second scenario, the environment becomes the dependent variable.

As evident from the literature review, the independent variables in the core-alignment model are environment, strategy, and structure. The core competencies are the moderating variables, which need to be re-aligned with the independent variables. Firm performance is the dependent variable. Evidence from the study indicates that performance is moderated by core competencies such that the higher the core competencies, the stronger the relationship between the co-alignment variables and performance, and vice versa. The review has exposed the following gaps in knowledge, that is, omission of core competencies of management. Clearly, without competent management, a firm's performance will be sub-optimal, the fit among environment, strategy, and structure not withstanding. The impact of the public sector context has not been tested in the previous studies. This omission is significant because public sector organizations face constraints from their stakeholders that are different in magnitude and substance from their private sector counterparts. First and foremost, public sector organizations' primary purpose is to provide public goods and services as opposed to commercial goods and services.
The environment can be classified as stable, changing, or turbulent, depending upon the degrees of uncertainty and complexity to the organization. The strategy as proposed by

Miles and Snow (1984) can be defensive, reactive, or proactive depending on the levels of uncertainty in the organization's environment. Leadership is part of managerial capabilities and tangible and intangible assets, which are organizational capabilities, constitute core competencies. The core competencies that lead to success are characteristic of firms that are able to create new products or services, with skills that enable them to deliver a fundamental customer benefit, and with a competence that other competitors wish they had within their own business; firm resources and capabilities such as core competencies and the structure should therefore reflect the particular strategy in use. These variables are interrelated and influence one another continuously. Their alignment will ensure high performance, arising from synergistic affects created by their complementary functions. These variables and their interrelationships are summarised in table 2 and figure 1. The table depicts the match between the different levels of the variables.

Table 2:Co-Alignment Variables

ENVIRONMENT	STRATEGY	STRUCTURE	CORE COMPETENCIES
Less changing	Reactors Defenders	Less flexible	Fewer core competencies
Changing	Analyzers	Flexible	Moderate core competencies
Highly changing	Prospectors	Highly flexible	High core competencies

Author (2009)

Figure 1: The Relationship between the Co-alignment variables, core-competencies, and Performance

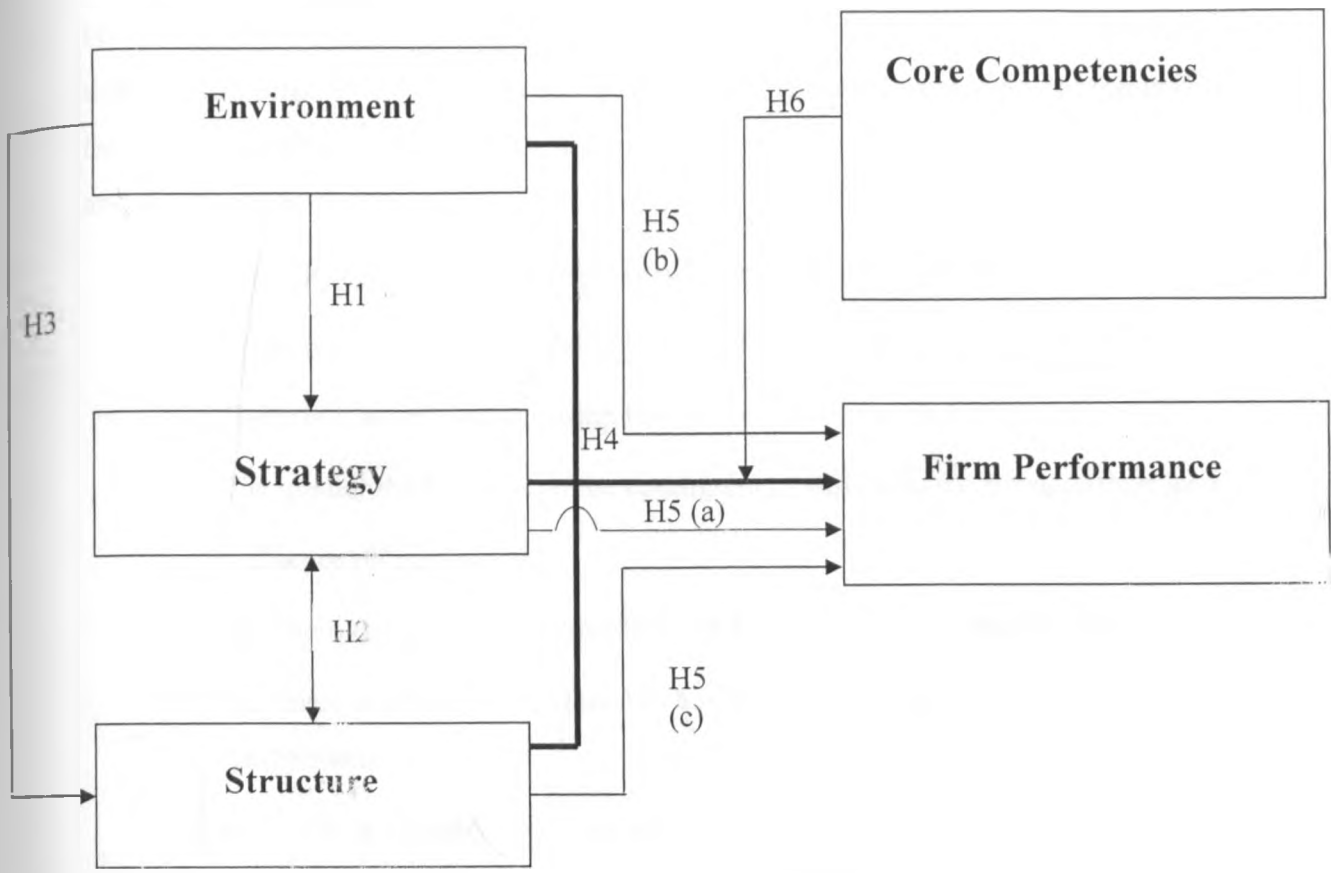


Figure 1 presents the conceptual framework depicting the variables and how they are linked. The framework is constructed from the ideas and arguments in section 2.10 of the thesis. The variables in Table 2 and their linkages constitute a conceptual framework presented as Figure 1.

2.10 Hypotheses

Hypotheses drawn from the above conceptual framework and related to research questions and objectives are presented below. The main hypothesis suggests that the higher the core competencies, the stronger the relationship between the co-alignment variables and performance.

H1: There is a positive relationship between environment and strategy.

H2: There is a positive relationship between structure and strategy.

H3: There is a positive relationship between environment and structure.

H4: The greater the link among the co-alignment variables, the stronger their joint influence on performance.

H5 (a): There is a positive relationship between strategy and firm performance.

H5 (b): There is a positive relationship between environment and firm performance

H5 (c): There is a positive relationship between structure and firm performance

H6: The strength of the relationship between the core-alignment variables and firm performance depends on core-competencies.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter specifies the methods and procedures used to achieve the research objectives. The design served to minimise the dangers of collecting data haphazardly and ensuring that data collected met the requirements of the research objectives and, therefore, fulfil the information needs. From a philosophical perspective, there are two broad methodological positions. The first is positivism, which is the underlying philosophical assumption of research in most pure and applied sciences. Positivism is based on ideas of objectivity, scientific method, and empiricism. Positivism was a reaction to the idea that metaphysical speculation could provide a basis for obtaining "true" knowledge of phenomena.

The second position is phenomenology which has risen out of rejection of the view that scientific empiricism can be applied to the social world. There is no one philosophical basis, but phenomenology is seen as providing the basis for what is generally called interpretative research where the assumption is that social reality can only be understood through social constructions based on language, consciousness and shared meanings. Interpretive research does not predefine variables, but explores human sense making in natural settings.

There is a middle position referred to as triangulation method, which combines two or more methods of data collection. Triangulation makes it possible to combine quantitative and qualitative research methods and has the added advantage of overcoming the deficiencies that can result from employing one method. The methodology used in this study was based on positivism. This approach was considered appropriate for this study because of the need to collect data from across-section of organizations in parastatals sector in Kenya to facilitate generalization of the research findings and to allow the researcher to compare the research findings of this study with those of the previous studies on co-alignment variables and performance It is worth noting that the previous studies were designed almost exclusively within the positivist paradigm.

3.2 Research Design

This study is a cross-sectional, correlational survey of the parastatals in Kenya that utilized multiple design elements and applied quantitative methods. Data was collected only once on the 46 profit-oriented parastatals in Kenya for environment, strategy, structure and core-competence variables. For performance variable, the researcher used the composite score of five years form year 2001 through 2004. The use of retrospective (past performance) of parastatals from the period covering year 2001 through 2005 was to minimize the shortfalls of the cross sectional design. Adding retrospective (past behaviour) and prospective (future propensities) items to a cross-sectional survey may help to minimize the shortcomings of the cross sectional survey in analyzing the direction of causal relationships. This study is concerned with describing and analysing the environments, strategies, structures, core competencies, and performances of theses parastatals. Hence, a cross-sectional design was deemed most appropriate. This is the most commonly seen survey which asks questions of people at one point in time.

3.3 Population

The list of parastatals in Kenya as per December 15th, 2006 came from the Kenya Bureau of Statistics and is presented in appendix 5. it comprises of a total of 156 Parastatals, among them are 46 which do not receive regular subsidies from the government and where therefore perceived by the researcher as being able to compete fairly with their counter-part in private sector and thus referred to as profit oriented. The population of this study therefore, consists of all the 46 profit-oriented parastatals out off the 156 commercial state corporations. The remainder 110 are commercial, that is, they exchange their services or goods with money, however, and they are regularly subsidized by this study. the State.

3.4 Sampling technique

A Census survey was conducted, as the population was not very large e.g., 46 profit-oriented parastatals which sampled managers using judgemental technique performing the functions of planning, human resource, and finance. The selected managers are better placed to having knowledge in the area of study in the absence of strategic managers.

The targeted respondents therefore were 138 (i.e., 46 parastatals and three managers (planning, human resource, and finance) from each parastatal) from which only 74 responded, that is, 53.6 per cent respondent rate. This approach was to ensure that nothing important is omitted and to facilitate checking for consistency of respondents from the same parastatal.

3.5 Type of Data and Data Collection

Both primary and secondary data were collected. A questionnaire was used to collect data from key people (planning, human resource, and finance managers) who formulate and implement strategies from the parastatals in Kenya. A wide range of publications was also used, including annual financial reports as secondary data.

The survey questionnaire was the main primary data collection instrument. The questionnaire using Likert scale was used to collect the data. This questionnaire was divided into four sections: Section A asked them about organization's characteristics such as name, sub-sector, and number of employees; Section B asked for personal information such as age, job title, and educational qualifications. Section C had questions focusing on environment, strategy, structure, and core-competencies. Section D targeted organizational performance. However for C and of D of the questionnaire, the Cronbach's Alpha Coefficient was computed from a pilot study to confirm reliability because the scales were adaptations and not exact scales that have been used previously (Porter 1985, Miles and Snow 1978, Burns and Stalker's, 1969, Prahalad and Hamel 1990, and Stillman and Coates ,1995).

3.6 Reliability and validity of the measurement instrument

Reliability of the measurement scales on section C and D was assessed using data obtained from a pilot study to compute Cronbach Alpha. The results are presented in Table 3. The five-item environment scale showed high reliability ($\alpha = 0.841$). Strategy scale had 42 items and showed a high reliability ($\alpha = 0.909$). The scale for structure had 7 items that showed high reliability ($\alpha = 0.837$) the scale for measuring core-competencies had 39 items that showed high reliability ($\alpha = 0.942$)

Table 3: Summary of Test for Internal Consistency

Variable	Number of Items	Cronbach Alpha
Environment	5	0.841
Strategy	42	0.909
Structure	7	0.837
Core-competencies	39	0.942

3.7 Data Analysis Techniques

To test the hypotheses, we have used several data analysis techniques among them correlation analysis and multiple regression analysis. In probability theory and statistics, correlation (often measured as a correlation coefficient) indicates the strength and direction of a linear relationship between two random variables. A regression analysis is a collective name for techniques for the modelling and analysis of numerical data consisting of values of a dependent variable (also called response variable or measurement) and of one or more independent variables (also known as explanatory variables or predictors).

3.7.1 Correlation Analysis

Hypotheses one , two and three sought to determine if there is a relationship between environment and strategy, structure and strategy and environment and structure respectively, whereas hypotheses five(a), (b), and (c) sought to determine if environment, strategy and structure respectively and individually has a relationship with performance. Correlation analyses using the Pearson coefficient moments were used to study the relationship between the co-alignment variables among and with each co-alignment variable individually with performance.

The closer the coefficient is to either −1 or 1, the stronger the correlation between the variables. If the variables are independent then the correlation is 0, but the converse is not true because the correlation coefficient detects only linear dependencies between two variables. Cohen (1988) has observed, however, that all such criteria are in some ways arbitrary and should not be observed too strictly. This is because the interpretation of a correlation coefficient depends on the context and purposes.

3.7.2 Regression Analysis

Most of the study data was on relationships between the dependent variable (firm performance) and the independent variables (environment, strategy, and structure). Hypothesis four sought to determine if the co-alignment variables jointly explained greater variation in performance than the sum of the individual co-alignment variables whereas hypothesis six sorts to determine if the strength of the relationship between co-alignment variables and firm performance depends on the level of core-competencies. A regression analysis and a moderated multiple regression analysis were used for that purpose. We anticipated the use of the hierarchical linear model to help find the best fitting line. The correlation coefficient helped in determining the strength as well as the nature of these relationships. The multiple regressions can be mathematically represented by:

$$Y= a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_1 X_4 + \beta_6 X_2 X_4 + \beta_7 X_3 X_4 + e$$

Where Y= the dependent variable performance (Average growth in Sales and Average Growth in Return on Assets)

X_1 = the independent variable environment

X_2 = the independent variable strategy

X3 = the independent variable structure

X4= the moderator variable core competencies

X_1X_4= the interaction term

X_2X_4= the interaction term

X_3X_4= the interaction term

e=error term

3.8 Measurement Techniques: Operational definition of the study variables

Bergh and FanBank (2000) summarise the requirements for measuring and testing change in the following terms:

> "The most basic approach to conceiving measuring change is as a simple difference between multiple measures of the same variable. From an operational perspective, change is most directly defined as Cx = x1-x2, where Cx is called a change score and variable X is measured. The issues of satisfying reliability assumptions and removing the correlation between the change

score and its initial component measures influence how to measure and test change more effectively."

There are two types of performance indicators: efficiency indicators and effectiveness indicators. These indicators are based on specific criteria and also relate to such aspects (goods and services) as quantity, quality, timeliness, and cost. The performance in sampled parastatal was assessed using the financial measures (return on assets) and qualitative measures (growth in sales).

Neither a single set of constructs nor a single set of measures of the organisational environment is widely accepted. The study used the five constructs, new entrants, threat of substitutes products, bargaining power of buyers, bargaining power of suppliers and rivalry among the existing players, common to most industry environmental research to measure organisational environment (Porter, 1985) to determine if the environment was less changing, changing, or highly changing.

The study measures strategy based on Miles and Snow's (1978) strategy topology that there are three superior performing business types and all others are average or less than average namely reactors/defenders, analysers, and prospectors. Their theory holds that, in order to be superior, there must be a clear and direct match between the organisation's mission/values (their definition), the organisation's strategies (their basic strategy set), and the organisation's functional strategies (their characteristics and behaviour) Management adheres to a particular strategy-structure relationship that is not relevant to the environment.

Burns and Stalker's (1969) model measures organisational structure in contrasting two different types of organisation. Mechanistic organisations are characterised by high and rigid job specialisation and centralised decision-making with vertical channels of communication. Organistic organisations, by contrast, display loose job definitions, greater horizontal communication and some evolution of decision-making to lower levels of the hierarchy. The study adopted Burns and Stalker's model to determine if the structures of the parastatals were not flexible, flexible or highly flexible.

Prahalad and Hamel (1990) suggested that core competencies are those capabilities that are critical to a business achieving competitive advantage. Core competence can cover a number of themes such as one business may feel that the way it serves customers is its core competence, another may have an excellent sales force and expert maintenance and repair personnel and consider it its core-competencies, a manufacturer may feel that quality and innovation are its core competence, or a company may hire expert technicians and engineers and use state-of-the-art technology and consider them its core-competencies. According to Hunger and Wheelen (1993), capabilities are considered core if they differentiate a company strategically. Their central idea is that over time companies may develop key areas of expertise that are distinctive to that company and critical to the company's long term growth. Stillman, and Coates (1995) made it explicit that core competencies are more that the traits of individuals. They defined core competencies as aggregates of capabilities, where synergy is created that have sustainable value and broad applicability. That synergy needs to be sustained in the face of potential competition and, as in the case of engines, must not be specific to one product or market. Therefore, core competencies are harmonized, intentional constructions. The present study used Prahalad and Hamel (1990) constructs to measure organizational competencies and an adaptation of Stillman and Coates (1995) to measure managerial competencies. The main study variables are operationalized as per Table 4.

Table 4: Operational Definition of Study Variables

CO-ALIGNMENT VARIABLES	INDICATORS	QUESTIONS
Environment	**Entry of competitors** • How easy or difficulty it is for new entrants to start competing, which barriers do exist. **Threat of substitutes** • How easy can a product or service be substituted, especially made cheaper **Bargaining power of buyers** • How strong is the position of buyers? Can they work together in ordering large volumes? **Bargaining power of suppliers** • How strong is the position of sellers? Do many potential suppliers exist or only few potential suppliers, monopoly? **Rivalry among the existing players.** • Does a strong competition between the existing players exist? Is one player very dominant or are all equal in strength and size?	Appendix 2 Section B-Q-8 Section B Q-9 Section B Q-10 Section B Q-11 Section B Q-7

Core Competencies	**Organizational Competencies** **Core competence can cover a number of themes such as** • one business may feel that the way it serves customers is its core competence, • It may have an excellent sales force and expert maintenance and repair personnel. • a manufacturer may feel that quality and innovation are its core competence, or • It may hire expert technicians and engineers and use state-of-the-art technology. **Managerial Competencies** **Informal search** • Gathers many different kinds of information and uses a wide variety of sources to build a rich informational environment in preparation for decision making in the organization. **Concept formation** • Builds frameworks or models or forms concepts, hypotheses, or ideas on the basis of information; becomes aware of patterns, trends, and cause/effect relations by linking disparate information. **Conceptual flexibility** • Identifies feasible alternatives or multiple options in planning and decision making; holds different options in focus simultaneously and evaluates their pros and cons. **Interpersonal search** • Uses open and probing questions, summaries, paraphrasing, etc., to understand the ideas, concepts, and feelings of another; can comprehend events, issues, problems, opportunities from the viewpoint of others. **Managing intervention** • Involves others and is able to build cooperative teams in which group members feel valued and empowered and have shared goals. **Developmental orientation** • Creates a positive climate in which staff increases the accuracy of their awareness of their own strengths and limitations; provides coaching, training, and developmental resources to improve performance. **Impact** • Uses a variety of methods (e.g., persuasive arguments. modelling behavior, inventing symbols, forming alliances, and appealing to the interest of others) to gain support for ideas and strategies and values. • States own "stand" or position on issues; unhesitatingly takes decisions when required and commits self and others accordingly; expresses confidence in the future success of the actions to be taken. **Presentation** • Presents ideas clearly with ease and interest so that the other person (or audience) understands what is being communicated; uses technical, symbolic, nonverbal, and visual aids effectively. **Proactive orientation** • Structures the task for team; implements plans and ideas; takes responsibility for all aspects of the situation even	Appendix 2 Section E Q61-73 Section E Q74-94 Section E-Q75 Section E Q76 Section E-Q76-78 Section E Q79-81 Section E Q82-83 Section E Q84-85 Section E Q86-90 Section E Q91-92 Section E Q93-95

	beyond ordinary boundaries and for the success and failure of the group. **Achievement orientation** Possesses high internal work standards and sets ambitious, risky, and yet attainable goals; wants to do things better, to improve, to be more effective and efficient; measures progress against targets.	Section E Q96-99
Strategy	**Defenders** are organizations that • Aggressively maintain prominence within their chosen market segment. • Ignore developments outside of this domain. • Penetrate deeper into current markets. • Normally, grow cautiously and incrementally.	Appendix 2 Section C Q16-18
	Prospectors are organizations Characteristics and Behaviour: • Exhibit a broad domain, in a continuous state of development • Monitor a wide range of environmental conditions, trends, and events. • Create change in their industries • Grow primarily from new markets and new products • Exhibit is uneven, spurt-like growth • Single core technology, often vertically integrated, updates current technology to maintain efficiency • Stable structure and process • Dominant coalitions are finance and production • Planning is intensive, not extensive • Promote from within • Functional structure • Extensive division of labor and high degree of formalization • Centralized control • Vertical information flows • Simple and inexpensive coordination • Managers evaluated on efficiency versus the past	Section C Q18-33
	Analyzers are organizations Characteristics and Behaviour: • Not efficient • Changing structure and technology • Frequent prototype production, multiple technologies • Technologies in people not machines • Dominant coalitions are marketing and research and development • Key executives as likely to come from outside as inside • Executive tenure is shorter than defender's • Planning is broad, not intensive • Product based structure	Section C Q34-48

	• Less division of labor, low formalization • Control is results-oriented • Info flow to decentralized decision-makers • Complex and expensive coordination • Conflict directly confronted and resolved • Managerial appraisal versus similar organizations **Reactors** are organizations: Characteristics and Behavior: • Dual technology core, moderate efficiency • Dominant coalition is marketing, applied research, and production • Planning is both intensive and comprehensive • Structure is matrix, functional and product • Control difficult; must be able to trade off efficiency and effectiveness • Coordination is both simple and complex • Managerial is dual efficiency versus past, effectiveness versus similar organizations • Management fails to articulate a viable organizational strategy. • Management articulates an appropriate strategy, but technology, structure, and process are not linked to strategy appropriately. • Management adheres to a particular strategy-structure relationship that is not relevant to the environment.	Section C Q49-56
Structure	**Specialization** • The extent to which the total activities of the organization are broken down into specialized jobs for individuals, e.g., roles and functions, **Standardization of employment practices** • Extent to which the conduct of employment activities to achieve the organization's goals are controlled and coordinated by standard, written rules, **Standardization of procedures and methods,** • Extent to which the conduct of activities to achieve the organization's goals are controlled and coordinated by standard, written rules, **Formalization** • Extent of written rules, procedures, etc, **Centralization** • The number of levels in the hierarchy and the extent to which decisions are taken at the top of the organization. and **Configuration** • Has to do with the shape of the organization e.g., product, functional, matrix.	Appendix 2 Section D Q57 Section D Q58 Section D Q59 Section D Q60 Section D Q61-62 Section D

		Q63
FIRM PERFORMANCE	**INDICATORS**	**QUESTIONS**
Financial performance	• Annual percentage growth in total sales for the last five years • Profitability ratio (ROA)	Section F Q100, 102-108
Organizational Attributes	• **Indicators**	**QUESTIONS**
Size	• Number of permanent employees	Section F Q3
Sector	• Belonging to agricultural, industrial, finance or commercial	Section F Q1-2

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION

This chapter presents and discusses the findings of the study. After the data collection, a number of statistical tools were used to analyse the data and test the hypotheses. Descriptive statistics are first presented followed by inferential statistics obtained from the test of hypotheses. The parastatals used in the study were coded using alphanumeric values to maintain confidentiality.

4.1 Demographic Results

The various characteristics captured in the study were the types of organizations and the corresponding sectors, number of employees as an indicator of firm size, various positions held (current and previous) by respondents and the length of time in the position was important as an indicator of how knowledgeable the respondents were about the operations of the firm. Sections A and B of the questionnaire sought data on the characteristics of the organizations and the individual respondents and the results are presented from table 5 through table 13. The descriptive analyses were used for that purpose and their findings are reported and discussed below. The results are presented in form of frequency tables, charts and graphs.

4.1.1 Characteristics of the Firms

Findings in Table 5 suggest that 25.7% of the firms were in the financial or commercial sector, 14.9% were in the industrial sector, 32.5% were in the service sectors and 1.4% came from the agricultural sector. The rest of the firms, another 25.7% did not disclose the area in which they operate. Most of the Kenyan parastatals (58.25%) are in services (either financial, commercial, or others).

Table 5: Distribution of Respondents by Type of Organization

Type of Organization	Frequency	Percent
Agricultural	1	1.4
Financial/Commercial	19	25.7
Industrial	11	14.9
Service	24	32.5
Non response	19	25.7
Total	74	100.0

Source: Primary data 2009

Table 6 shows the distribution of the firms by number of employees, which in turn indicate the distribution of the firms by size. It shows that the average number of employees among the firms studied was 1315; the firm with the largest number of employees had 9000 while the lowest had 15 employees while the most common number of employee is 1000. That means that most of the Kenyan parastatals are moderately large enough.

Table 6: Distribution of Firms by Number of Employees

Number of Employees	Frequency	Percent
100 and below	14	21.9
101-500 employees	25	39.1
501-1000 employees	6	9.4
Over 1000 employees	19	29.7
Total	64	100.0
System	10	
Total	74	
Mean	1315.05	
Mode	1000.00	
Std. Deviation	2279.98	
Minimum	15.00	
Maximum	9000.00	

Source: primary data 2009

The findings in Table 7 show that 29.7% of the respondents were in the finance section, 33.8% were in the human resource management, 29.7% were in the area of planning and strategic management and only 4.1% were managing directors. This shows that most parastatals in Kenya give more weight to finance and Human resource than they give to planning. So planning is, in most of the parastatals that is 63.5% a subsection in either finance or human Resource department.

Table 7: Distribution of Respondents by Positions held within the Organization

Position held by the Respondent	Frequency	Percent
Non response	2	2.7
Finance	22	29.7
Human Resource Management	25	33.8
Managing Director	3	4.1
Planning and strategic management	22	29.7
Total	74	100.0

Source: primary data 2009

Findings presented in Table 8 showed that most of the respondents, 33.8%, had previously worked in the human resource management section, 25.7% had worked in the area finance and accounting while another 25.7% previously worked in the planning and strategic management sections and 8.1% had worked as managing directors before their current positions. Based on this, it can be assumed that the respondents were knowl-

edgeable enough about the questions that the study was concerned with.

Table 8: Distribution of Respondents by Previous Positions Held

Previous position held by the respondent	Frequency	Percent
R Non response	5	6.8
Finance or accounting	19	25.7
Human Resource Management	25	33.8
Managing director	6	8.1
Planning and strategic management	19	25.7
Total	74	100.0

Source; primary data 2009

Although the findings indicated in Table 9 show that the most common duration in the current position is 4 years, the average length of time on the current position is 5 years while the shortest and longest is half a year and 25 years respectively. The findings in Table 9 also show that over 60% of the respondents have worked in their current position for between one to five years and about 25% of them have been in their current positions for between five to ten years. Those who have been in the current position for over ten years are about 6%.

Table 9: Distribution of Respondents by Length of Time in the Current Position

Mean	5.18
Mode	4.00
Std. Deviation	4.75
Minimum	0.50
Maximum	25.00

Source: primary data 2009

4.1.2 Classification of parastatals by Co-alignment Variables

In order to understand how the firms adjust their operation in order to fit into the ever-changing business environment and hence re-align their strategies, structures and core-competencies the firms were further classified in terms of the environment in which they operate. Strategic adjustments, structural adjustment, and their co-competencies were also classified. The findings in Table 10 shows that about 14.9% of the parastatals sampled are operating in an environment that is less changing, 54.1% in just changing and 31.1% in highly changing. This shows that over the 4 years, the environment in which Kenya parastatals that is 85.2% are operating in is no longer stable, but rather changing. This change is attributable more to the external factors (customers, competi-

tors, supplies, new entrants) and to some extend to internal environment in terms of management capabilities.

Table 10: Classification of Firms by Types of Environment

Type of environment	Frequency	Percent
Less changing	11	14.9
Changing	40	54.1
Highly changing	23	31.1
Total	74	100.0

Source: primary data 2009

Table 11 shows that about 4.1 % of the parastatals sampled are reactors/defenders, 2.7% prospectors and 93.2% analysers.

Table 11: Classification of Firms by Types of Strategy

Type of Strategy	Frequency	Percent
Reactors/ Defenders	3	4.1
Prospectors	2	2.7
Analysers	69	93.2
Total	74	100.0

Source: primary data 2009

The findings in Table 12 show that about 9.5% of the parastatals sampled have less flexible structures, 71.6% flexible structures and 18.9% highly flexible structures.

Table 12: Classification of Firms by Types of Structure

Type of Structure	Frequency	Percent
Less flexible	7	9.5
Flexible	53	71.6
Highly flexible	14	18.9
Total	74	100.0

Source; primary data 2009

Table 13 shows that about 14 % of parastatals sampled have few number of core competencies, 83.8% have moderate number of core competencies and 14.9 % have high number of core competencies. It could be said further that most of the Kenyan parastatals that is 98.7% have moderate core competencies that is 83.8% that helped them capitalize on the alignment between environment, strategy, and structure to ensure great performance.

Table 13: Classification of Firms by Core Competencies

Core Competencies	Frequency	Percent
Few number of core competencies	1	1.4
Moderate number of core competencies	62	83.8
High number of core competencies	11	14.9
Total	74	100.0

The findings in the tables 10, 11, 12 and 13 show that about 85% of the firms sampled are operating in an environment which is either just changing or highly changing and therefore over 93% used analysing strategy as their main competitive strategy. It also show that due to the changing environment and strategies over 89% of the firm have either flexible or highly flexible structures to enable then cope with changing environment and strategies, while almost the all of them 99% have either moderate or high core competencies. As evident from the descriptive statistics shown in Table 15, environment variable has a mean score of 3.78, implying that the firms under study are operating in an environment that is changing to a great extent. Owing to the fact that the environment is changing greatly, the strategy variable with a mean score of 3.14 out of a possible score of 5 implies that the firms are mainly use analyser strategy. This means that these firms adjust their strategy to environmental change only moderately. Also, their structures mean score of 3.69 are flexible to a great extent. On the average these firms have high core competencies. This re-alignment does explain the high performance of Kenyan parastatals as shown in the next session.

4.2 Co-alignment Variables and Core-Competencies

The chi-squares results helped in interpretation conclusion about inferences that we made in generalizing the research findings to the all population.

Table 14: Chi-Square Results of the Test of Association between Environment and Structure

Environment			Structure			Total
			Less flexible	Flexible	Highly flexible	
	Less changing	Frequencies	3	4	4	11
		Percentage	27.3%	36.4%	36.4%	100.0 %
	Changing	Frequencies	3	32	5	40
		Percentage	7.5%	80.0%	12.5%	100.0 %
	Highly changing	Frequencies	1	17	5	23
		Percentage	4.3%	73.9%	21.7%	100 0 %
Total		Frequencies	7	53	14	74
		Percentage	9.5%	71.6%	18.9%	100.0 %

Source: primary data 2009

Chi-square statistic was used to test for the significance of the association between environment and structure. As shown in Table14, the association was significant ($X^2 = 9.54$, df = 4, $p<0.05$) meaning that there is a positive relationship between the environment of Kenyan parastatals and their structure.

Table 15: Chi-Square Results of the Test of Association between Environment and Core Competencies

Environment			Core competencies			Total
			Few core competencies	Moderate core competencies	High core competencies	
	Less changing	Frequencies	1	8	2	11
		Percentage	9.1%	72.7%	18.2%	100.0%
	Changing	Frequencies	0	35	5	40
		Percentage	.0%	87.5%	12.5%	100.0%
	Highly changing	Frequencies	0	19	4	23
		Percentage	.0%	82.6%	17.4%	100.0%
Total		Frequencies	1	62	11	74
		Percentage	1.4%	83.8%	14.9%	100.0%

Source: primary data 2009

Chi-square test of association was used to test for the significance of the association between environment and core-competencies. The test showed that the association was not significant ($X^2 = 6.288$, df = 4, $p<0.179$) meaning that there is weak relationship between environment and core-competencies. The degree of freedom, df = (n-1) (m-1) where n is n the number of rows and m the columns in the table.

Table 16: Chi-Square Results of the Test of Association between Strategy and Structure

Strategy			Structure			Total
			Less flexible	Flexible	Highly flexible	
	Reactors	Frequencies	2	1	0	3
		Percentage	66.7%	33.3%	.0%	100.0%
	Defenders	Frequencies	1	1	0	2
		Percentage	50.0%	50.0%	.0%	100.0%
	Analysers	Frequencies	4	51	14	69
		Percentage	5.8%	73.9%	20.3%	100.0%
Total		Frequencies	7	53	14	74
		Percentage	9.5%	71.6%	18.9%	100.0%

Source: primary data 2009

Chi-square test of association was used to test for the significance of the association between Strategy and structure. The test showed that the association was significant (X2 = 16.64, df = 4, $p<0.02$) meaning, Kenyan parastatals re-aligned their strategy and structure to ensure great performance.

Chi-square statistic was used to test for the significance of the association between environment and structure. As shown in Table14, the association was significant ($X^2 = 9.54$, df = 4, $p<0.05$) meaning that there is a positive relationship between the environment of Kenyan parastatals and their structure.

Table 15: Chi-Square Results of the Test of Association between Environment and Core Competencies

Environment			Core competencies			Total
			Few core competencies	Moderate core competencies	High core competencies	
	Less changing	Frequencies	1	8	2	11
		Percentage	9.1%	72.7%	18.2%	100.0%
	Changing	Frequencies	0	35	5	40
		Percentage	.0%	87.5%	12.5%	100.0%
	Highly changing	Frequencies	0	19	4	23
		Percentage	.0%	82.6%	17.4%	100.0%
Total		Frequencies	1	62	11	74
		Percentage	1.4%	83.8%	14.9%	100.0%

Source: primary data 2009

Chi-square test of association was used to test for the significance of the association between environment and core-competencies. The test showed that the association was not significant ($X^2 = 6.288$, df = 4, $p<0.179$) meaning that there is weak relationship between environment and core-competencies. The degree of freedom, df = (n-1) (m-1) where n is n the number of rows and m the columns in the table.

Table 16: Chi-Square Results of the Test of Association between Strategy and Structure

Strategy			Structure			
			Less flexible	Flexible	Highly flexible	Total
	Reactors	Frequencies	2	1	0	3
		Percentage	66.7%	33.3%	.0%	100.0%
	Defenders	Frequencies	1	1	0	2
		Percentage	50.0%	50.0%	.0%	100.0%
	Analysers	Frequencies	4	51	14	69
		Percentage	5.8%	73.9%	20.3%	100.0%
Total		Frequencies	7	53	14	74
		Percentage	9.5%	71.6%	18.9%	100.0%

Source: primary data 2009

Chi-square test of association was used to test for the significance of the association between Strategy and structure. The test showed that the association was significant (X2 = 16.64, df = 4, $p<0.02$) meaning, Kenyan parastatals re-aligned their strategy and structure to ensure great performance.

Table 19: Chi-Square Results of the Test of Association between Structure and Core Competencies

Structure			Core competencies			Total
			Few core competencies	Moderate core competencies	High core competencies	
	Less flexible	Frequencies	1	6	0	7
		Percentage	14.3%	85.7%	.0%	100.0%
	Flexible	Frequencies	0	48	5	53
		Percentage	.0%	90.6%	9.4%	100.0%
	Highly flexible	Frequencies	0	8	6	14
		Percentage	.0%	57.1%	42.9%	100.0%
otal		Frequencies	1	62	11	74
		Percentage	1.4%	83.8%	14.9%	100.0%

Source: primary data 2009

Chi-square test of association was used to test for the significance of the association between Structure and Core-competencies. The test showed that the association was significant ($x^2 = 20.52$, df = 4, $p<0.00$). The findings show that there is a positive relationship between the structure of Kenyan parastatals and their core-competencies.

In conclusion, the chi-square further validates the findings from other descriptive statistics such as the means and standard deviations discussed earlier and confirm that Kenyan parastatals re-aligned their strategy and structure to their changing environment. However, core-competencies had mix reactions. The core-competencies had positive relationship with strategy and structure meaning, the more aggressive the strategy, that is analysers, the more flexible the structures of the parastatals which also deployed more core-competencies. But the relationship between core-competencies and environment was not established directly, unless by extension from strategy and structure, suggesting more research. Chi-square results of the test of association among the co-alignment variables (as per Table 2), are summarized in Table 20.

Table 19: Chi-Square Results of the Test of Association between Structure and Core Competencies

Structure			Core competencies			Total
			Few core competencies	Moderate core competencies	High core competencies	
	Less flexible	Frequencies	1	6	0	7
		Percentage	14.3%	85.7%	.0%	100.0%
	Flexible	Frequencies	0	48	5	53
		Percentage	.0%	90.6%	9.4%	100.0%
	Highly flexible	Frequencies	0	8	6	14
		Percentage	.0%	57.1%	42.9%	100.0%
Total		Frequencies	1	62	11	74
		Percentage	1.4%	83.8%	14.9%	100.0%

Source: primary data 2009

Chi-square test of association was used to test for the significance of the association between Structure and Core-competencies. The test showed that the association was significant ($x^2 = 20.52$, df = 4, $p<0.00$). The findings show that there is a positive relationship between the structure of Kenyan parastatals and their core-competencies.

In conclusion, the chi-square further validates the findings from other descriptive statistics such as the means and standard deviations discussed earlier and confirm that Kenyan parastatals re-aligned their strategy and structure to their changing environment. However, core-competencies had mix reactions. The core-competencies had positive relationship with strategy and structure meaning, the more aggressive the strategy, that is analysers, the more flexible the structures of the parastatals which also deployed more core-competencies. But the relationship between core-competencies and environment was not established directly, unless by extension from strategy and structure, suggesting more research. Chi-square results of the test of association among the co-alignment variables (as per Table 2), are summarized in Table 20.

Table 20: Alignments of Co-Alignment Variables

ENVIRONMENT										STRATEGY										STRUCTURE										CORE-COMPETENCIES					
	Stra			Stru			Core-Comp				Env			Stru			Core-Comp				Env			Stra			Core-Comp				Env			Stra			Stru		
	R/D	A	P	L/F	F	H/F	F	M	H		L/C	C	H/C	L/F	F	H/F	F	M	H		L/C	C	H/C	R/D	A	P	F	M	H		L/C	C	H	R/D	A	P	L/F	F	H/F
L/C	9.1	8.1	9.1	27.3	36.4	36.4	9.1	72.7	18.2	R/D	9.1	2.5	2.7	66.7	33.3	60	33.3	66.7	0.0	L/f	27.3	7.5	4.3	66.7	50.0	5.8	14.3	85.	0.0	F	9.1	0.0	0.0	33.3	0.0	0.0	14.3	0.0	0.0
C	25	92.5	5.0	7.5	80.0	12.5	0.0	87.5	12.5	A	818	92.5	93.2	500	50.0	0.0	0.0	100.0	0.0	F	36.4	80.0	7.39	33.3	50.0	7.39	0.0	90.6	9.4	M	72.7	87.5	82.6	66.7	50.0	7.3.	85	90.6	57.1
H/C	27	93.2	4.1	4.3	7.39	7.39	0.0	82.6	17.4	P	9.1	5.0	4.1	58	7.39	20.3	0.0	84.1	15.9	H/F	36.4	12.5	7.39	6.0	0.0	20.3	0.0	57.1	42.9	H	18.2	12.5	17.4	60	0.0	15.9	0.0	9.4	42.9

KEY: **STRA** = STRATEGY
STRU = STRUCTURE
CORE-COMP = CORE-COMPETENCIES
ENV = ENVIROMENT
R/D = REACTORS/DFENDERS
A = ANALYSERS
P = PROSPECTORS
LC = LESS CHANGING
C = CHANGING
HC = HIGHLY CHANGING
LF = LESS FLEXIBLE
F = FLEXIBLE
HF = HIGHLY FLEXIBLE
F = FEW
M = MODERATING
H = HIGH

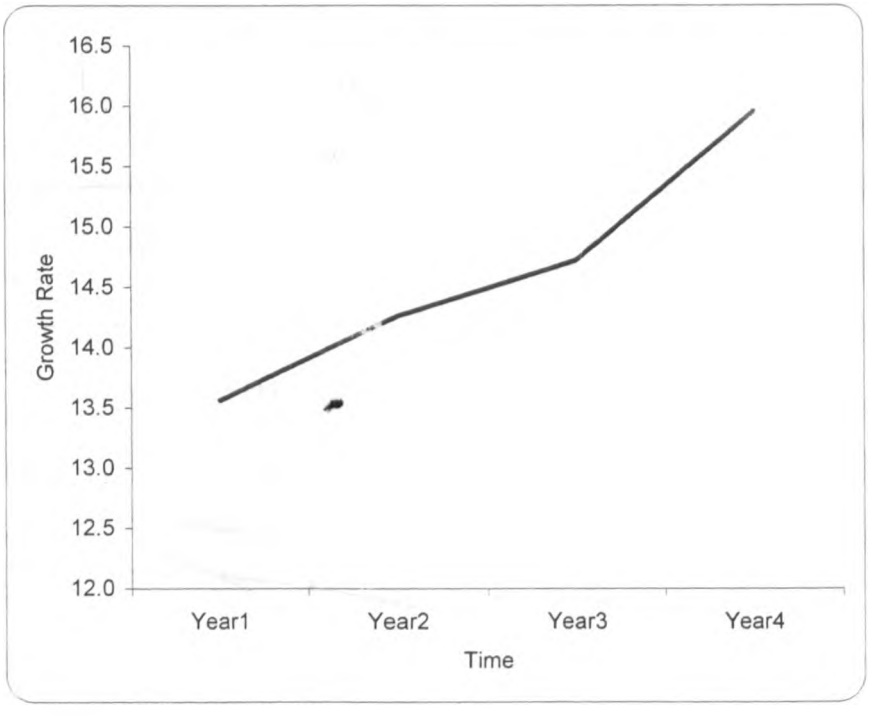
Table 20 shows that there is significant association between most of the co-alignment variables and this further validate previous researches on the relationship between co-alignment variables.

4.3 Performance of the firms

The performance of the firms was measured through the growth of returns on assets and total sales. This was to make it possible to relate the performance of the firms and their various core-competencies. Section D in the questionnaire captured the performance of parastatals and the results are presented in figures 5 and 6, respectively.

The Kenyan government in its attempt to adapt to its changing environment has used different strategies (commercialisation, liberalization, strategic planning) in order to improve its performance. These strategies have led to improvement in parastatals performance, especially for the last four years with the coming to power of the National Rainbow Coalition (NARC) government, which the grand coalition government between ODM and PNU is also fostering. Figure 2 and 3 show an aggregate of the rate of return on assets and growth in sales respectively of all the parastatals under study.

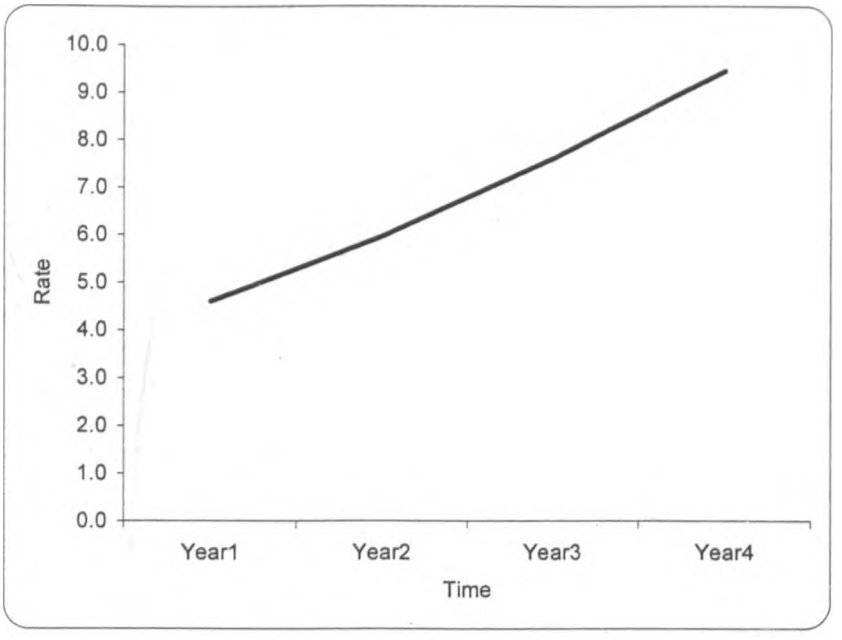
Figure 2: Annual Growth Rates in Total Sales



Source: Primary data 2009

Figure 2 shows an increase in the annual growth rate in total sales over the last four year from about 13.6% to 15.8% that is a change of about 2.2% indicating a growth rate of 0.55% every year. This could be attributed to the strategic planning (Performance contracts and Results for Kenyans) initiated in the early 1990s which is now bearing fruit.

Figure 3: Annual Rate of Return on Assets



Source: Primary data 2009

Figure 3 shows that there has been a steady increase in the rate of return on assets over the last four years. That is, there has been an increase from about 4.6% to 9.1%, (a change of about 5%), indicating a growth of about 1% every year. The improved performance by Kenyan parastatals from year 2000 through year 2004 could be explained by the increased liberalization of the Kenyan economy in the late 1990s, which was followed by an aggressive strategic planning in the public sector, and more specifically by parastatals.

4.4 Test of Hypotheses H1 to H4

This section attempts to answer the research questions and also to address the research objectives by presenting the results of the tests of hypotheses 1, 2, 3 and 4. Inferential statistics, namely Pearson's product moment correlation analysis, simple linear and multiple regression analytical tools were used to test the hypotheses. The results of the correlation analysis are presented in Table 21.

Table 21: Mean Scores, Standard Deviations and Results of Correlation Analysis for the Relationships between the Key Study Variables

	Descriptive		Correlations (rs)			
Variables	Mean	Std. Dev	Environment	Strategy	Structure	Core competencies
Environment	3.78	0.88	1			
Strategy	3.14	00.38	.298	1		
Structure	3.69	0.66	.223	.682**	1	
Core competencies	3.69	0.47	.085	.878**	.593**	1
Average sales growth rate	14.56	5.80	.466**	.509**	.433**	.199
Average growth rate of returns on assets	6.64	12.14	.044	.367*	.478**	.336*

** Correlation is significant at the 0.01 level (2-tailed).
Correlation is significant at the 0.05 level (2-tailed).
Source: Primary data 2009

As mentioned earlier, Table 21 contains the results of the tests of hypothesis 1 through 4. These results are explained below one by one for each hypothesis.

Hypothesis (H1) There is a significant relationship between environment and strategy

In order to establish the strength and direction and significance of the relationship between environment and strategy, Pearson's product moment correlation analysis was performed and the results are shown in Table 21. From the table, it is evident that environment and strategy are correlated ($r=0.298$, $p<=0.05$). Although, the relationship is significant it is not strong since the correlation is far below 0.5 midpoint. However, hypothesis one is accepted. These results do support the findings by Porter, (1985) who said that a firm in an excellent competitive position may be in such a poor industry that it is not very profitable, and further efforts to enhance its position will be of little benefit. Industry attractiveness change, industries become more or less attractive over time, and competitive position reflects an unending battle among competitors. The weak relationship between environment and strategy among parastatals in Kenya may be attributed to the fact that, though they are all state owned enterprises, the parastatals did compete in different competitive milieu, e.g., industrial, agricultural, financial and commercial sectors, and did pursue different competitive strategies. The findings from Tables 10 and 11 respectively show that the Kenyan parastatals, to some extent, did match their changing environment (54.1 % of parastatals have changing environment) with aggressive strategies (93.2 % of Kenyan parastatals are analysers). This conclusion

is justified because firms applying analyser strategy do make moderate changes in their product-market domain (Miles and Snow, 1978). However, the relationship between environment and strategy of Kenyan parastatals is weak because they are 93.2% of parastatals pursued analysers strategy, while only 54.1 of them said their environment is changing.

Hypothesis (H2): There is a significant relationship between structure and strategy

To test the above hypothesis, Pearson's product moment correlation technique was used and the results are presented in Table 21. As evident from the table, there is a significant correlation between structure and strategy ($r=0.682$ $p<0.01$). Thus hypothesis 2 is supported. The results support the findings of Chandler (1962), who established that different types of strategies generated different levels of administrative need, which called for changes in structure. Also, Ansoff (1990) who, in his strategic success formulae, states that for optimum return on investment, both the aggressiveness of the firm's strategy and its structure must match the turbulence of the environment. Thus, structures that are appropriate for a high level strategy will be costly and wasteful for firms operating in a low-level structure and vice-versa. The results presented in Tables 11 and 12 respectively show that 71.6% of the parastatals surveyed had flexible structures, while 93.2% of the same used analyser strategy. This is consistent with theoretical predictions and previous research findings. It is thus a demonstration that a large proportion of the Kenyan parastatals have matched their structures with their strategies.

Hypothesis (H3): There is a significant relationship between environment and structure

To test this hypothesis, Pearson's product moment correlation analysis was performed and the results are presented in table 21. As shown in the table, the correlation is significant ($r=0.223$, $p<= 0.05$). Although the relationship is significant it is not strong since the correlation is far below 0.5 midpoint. However, hypothesis three is accepted. These results support the findings by Pugh et al. (1969). The organisation must change, adapt, and modify its structure all the time to fit the new requirements resulting form constant changes in the environment. From available literature flexible structures are appropriate for changing environments. Thus the results of Tables 10 and 12 respec-

tively show that structures of Kenyan parastatals were flexible (73.6%) to match their changing environment (54.1%).

Hypothesis (H4): The greater the fit among the co-alignment variables, the stronger their joint influence on performance

Hypothesis four sought to establish if the co-alignment variables joint relationship with performance is significant and higher than each of the individual relationships between the co-alignment variables and performance. The co-alignment variables are strategy, environment and structure. Firm performance was measured through two variables namely Average sales growth rate and Average growth rate of returns on assets. A multiple regression analysis was used to establish this relationship and the summary of the results are shown in Table 22. It should be noted that the regression coefficient were standardized.

Table 22: Results of Regression Analysis

Variables	Average Growth in Sales	Average Growth in Return on Assets
Environment	0.338**	0.066
Strategy	0.045	0.042
Structure	0.278*	0.463**
Core competencies	-	-
Environ x Core com	-	-
Strategy x Core com	-	-
Structure x Core com	-	-
Intercept	34.593***	37.754***
F (full model)	8.241***	6.315***
R^2	0.292	0.231
Adj. R^2	0.256	0.195
Df	63	66

*p<.05; **p<.01; ***p<.001

Source: Primary data 2009

As shown in Table 22, column one and two, the co-alignment variables together explain up to 25.6 % and 19.5 % of the variance in sales growth and growth in return on assets, respectively. The model is significant ($F=8.24$, $p<0.001$) for sales growth and ($F=6.321$. $p<0.001$) for return on assets, indicating that the joint effect of the co-alignment variables on performance as measured by return on assets is significant. However, the combine effect of the co-alignment variables is still lower than the sum

total of the individual effects put together which ranged from 43.3% to 46.6%, all significant at p<0.001 (see Table 23). Hence hypothesis four which states that the greater the fit among the co-alignment variables, the stronger their joint influence on performance is rejected. In this study, the variance in performance (as measured by average sales growth and average return on assets (R^2= 25.6 and 19.5, respectively) was much lower compared to 59% obtained in a study by Chathoth (2002). This may be explained by the fact that the present study used different measures of performance. Chathoth (2002) used return on equity as a measure of performance.

4.5 Tests of Hypotheses H5 (a), H5 (b), H5(c)

Correlation analysis was used to test Hypotheses 5(a), 5 (b), and 5 (c). The results are presented in Table 23.

Table 23: Results of the Correlation Analysis for the Relationship between Individual Co-Alignment Variables and Performance

Variables	Correlation Analysis	Average sales growth	Average growth of returns on assets
Environment	Pearson Correlation (r)	.466(**)	.044
	n	61	64
Strategy	Pearson Correlation (r)	.509(**)	.367(*)
	n	29	32
Structure	Pearson Correlation (r)	.433(**)	.478(**)
	n	61	64

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

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

Source: Primary data 2009

Hypothesis (H5a): There is a significant relationship between strategy and firm performance

Table 23 shows that strategy and firm performance as measured by average sales growth are correlated (r =0.509, p<0.01), indicating that there is a positive and significant correlation between strategy and performance (sales growth) (r=0.509 p<0.01). The relationship is significant since the correlation coefficient is above midpoint of 0.50. However, the relationship as measured by average growth of returns on assets is weak (r= 0.367, p <0.05 which is far below midpoint of 0.50). Hence hypothesis 5a is partially accepted. The results support the findings of Baum and Wally (2003), Barth

(2003) and Miles and Snow (1984) who found that the strategy of an organization, its external environment as well as the internal environment have to be in perfect harmony for high organizational performance. As shown in Figures 2 and 3, the improved performance by Kenyan parastatals could be attributed partly to their strategies.

Hypothesis (H5b): There is a significant relationship between Environment and firm performance

The findings shown in Table 23 indicate a positive and significant correlation between environment and average sales growth ($r = 0.466$, $p < 0.01$). The relationship between environment and return on assets is not significant ($r = 0.044$, $p > 0.05$). Hence Hypothesis 5b is partially accepted since the correlation is only significant for one measure of performance (Average sales growth). The results on the relationship between environment and average sales growth support the findings of Porter (1985) who affirms that a firm in an excellent competitive position may be in such a poor industry that it is not very profitable. This could be explained by the fact that only 54.1% of Kenyan parastatals did acknowledge that their environment was changing.

Hypothesis (H5c): There is a significant relationship between structure and firm performance

As shown in Table 23, structure and firm performance are positively and significantly correlated ($r = 0.433$, $p < 0.01$) for average sales growth and ($r = 0.478$, $p < 0.01$) for average return on assets. It is noteworthy that the relationship between structure and average return on assets is stronger than with average sales growth. Hence, hypothesis 5c, which states that there is a significant relationship between structure and firm performance, is accepted. The result supports the findings of Miller (2004), Kuprenas (2003), Covin, Slevin, and Heeley (2001) who found that different combinations of managerial style and structure predict firm financial performance. The parastatals had flexible structures (73.6%) as shown in Table 20 to match their strategy (93.1%) and environmental needs (54.1%), hence good performance.

The moderated multiple regression analyses results are summarized in Table 24. It should be noted that the regression coefficient were standardized.

Table 24: Results of Regression Analysis for Moderating Effect of Core-Competencies

Variables	Average Growth in Sales	Average Growth in Return on Assets	Core-com as Moderator Average Growth in Sales	Core-com as Moderator Average Growth in Return on Assets
Environment	0.338**	0.066	1.928†	3.313*
Strategy	0.045	0.042	1.488*	0.244
Structure	0.278*	0.463**	3.625*	4.034***
Core competencies	-	-	2.029	0.723
Environ x Core com	-	-	4.587†	2.320
Strategy x Core com	-	-	3.093*	0.081
Structure x Core com	-	-	5.274*	5.500**
Intercept	34.593***	37.754***	-61.880	-62.021
F (full model)	8.241***	6.315***	3.568*	3.870***
R^2	0.292	0.231	0.610	0.588
Adj. R^2	0.256	0.195	0.439	0.436
Df	63	66	23	26

*p<.05; **p<.01; ***p<.001

Source: Primary data 2009

The effect of changes in environment on performance (measured by average growth in sales) is greater when core-competencies are present (β =4.587, $p<0.05$) than when they are controlled for (β = 0.338, $p<0.05$), indicating that the effect of environment on performance (average growth in sales) is moderated by core-competencies. The same is true when performance is measured by average growth of return on assets, where β = 2.320, $p<0.01$ when core-competencies are present compared with β =0.0066, $p< 0.01$, when core-competencies are controlled for.

The effect of changes in strategy on performance (measured by average growth in sales) is greater when core-competencies are present (β =3.093, $p<0.05$) than when they are controlled for (β =0.045, $p<0.05$), indicating that the effect of strategy on performance (average growth in sales) is moderated by core-competencies. The same is true when performance is measured by average growth of return on assets, where β = 0.081, $p<0.01$ when core-competencies are present compared with β =0.0042, $p< 0.01$, when core-competencies are controlled for.

The moderated multiple regression analyses results are summarized in Table 24. It should be noted that the regression coefficient were standardized.

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Structure x Core com	-	-	5.274*	5.500**
Intercept	34.593***	37.754***	-61.880	-62.021
F (full model)	8.241***	6.315***	3.568*	3.870***
R^2	0.292	0.231	0.610	0.588
Adj. R^2	0.256	0.195	0.439	0.436
Df	63	66	23	26

*p<.05; **p<.01; ***p<.001

Source: Primary data 2009

The effect of changes in environment on performance (measured by average growth in sales) is greater when core-competencies are present (β =4.587, $p<0.05$) than when they are controlled for (β = 0.338, $p<0.05$), indicating that the effect of environment on performance (average growth in sales) is moderated by core-competencies. The same is true when performance is measured by average growth of return on assets, where β = 2.320, $p<0.01$ wher core-competencies are present compared with β =0.0066, $p< 0.01$, when core-competencies are controlled for.

The effect of changes in strategy on performance (measured by average growth in sales) is greater when core-competencies are present (β =3.093, $p<0.05$) than when they are controlled for (β =0.045, $p<0.05$), indicating that the effect of strategy on performance (average growth in sales) is moderated by core-competencies. The same is true when performance is measured by average growth of return on assets, where β = 0.081, $p<0.01$ when core-competencies are present compared with β =0.0042, $p< 0.01$, when core-competencies are controlled for.

The effect of changes in structure on performance (measured by average growth in sales) is greater when core-competencies are present (β =5.274, $p<0.05$) than when they are controlled for (β =0.278, $p<0.05$), indicating that the effect of structure on performance (average growth in sales) is moderated by core-competencies. The same is true when performance is measured by average growth of return on assets, where β = 5.50, $p<0.01$ when core-competencies are present compared with β =0.0463, $p< 0.01$, when core-competencies are controlled for.

The values of F were found to be significant ($F=3.5668$, $p<0.05$ for Average growth in Sales and $F=3.870$, $p<0.001$ for Average growth in return on assets). The F ratio implies that the regression of performance respectively on {[61.880+1.928environment+1.488strategy+3.625strcuture+4.587(environment x core-competencies)+3.093(strategy x sore-competencies)+5.274(structure x core-competencies)] and [Y (Average growth in return on Assets)=-62.021+3.313environment+3.313strategy+4.034structure+2.320(environment x core-competencies)+0.081(strategy x sore-competencies)+5.500(structure x core-competencies)]} are statistically significant at less than 0.05 and 0.001 level respectively.

Also shown in the table are the Beta coefficients for independent variables (environment, β =1.928), (strategy, β =1.488), (structure, β =3.625) for Average growth in Sales are not statistically significant except for structure, while (environment, β =3.313), (strategy, β =3.313), (structure, β =4.034) for Average growth in return on Assets are all statistically significant.

The findings in Table 24 further shown core competencies moderated the relationship between co- alignment variables and performance explaining up to 43.9 % of the variance in performance ($R= 0.439$ $p < 0.05$ from $R=0.292$ $p < 0.05$, Average Growth in Sales) and 43.6% of variation ($R= 0.436$ $p < 0.05$ from $R= 0195$ $p < 0.05$,Average growth in return on Assets). The model did not explain 56.1 percent for Average Growth in Sales and 56.4 per cent of Average growth in return on Assets variation, implying that there are other factors associated with performance that were not captured in the regression model. However, the presence of core-competencies has improved this

relationship. Hence the core-competencies do moderate the relationship between co-alignment variables and firm performance.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND IMPLICATIONS

This chapter provides a summary, conclusions and implications of the research findings and discussions. Attempt is made to relate the results to the objectives of the study and hypotheses.

5.1 Summary

Table 26 outlines the objectives and corresponding hypotheses that guided the study. The type of analysis and interpretation of the results are also shown. The variables were measured using various rating scales. Co-alignment variables were measured using interval scales. Statistical tools used were Pearson's correlation, linear and multiple regression analysis, and moderated multiple regression analysis. Research objectives, hypotheses, analysis and summary of the results are presented in Table 25.

Table 25: Summary of the Research Findings

Objective	Hypotheses	Type of Analysis	Results
Objective 1 To determine the relationship between environment, co-competence, strategy, structure, and firm performance in profit-oriented parastatals in Kenya.	**H1:** There is a positive relationship between environment and strategy.	Pearson's product moment correlation coefficient (r) Mean, standard deviation	(r=0.298 p>0.05) hypothesis is accepted
	H2: There is a positive relationship between structure and strategy.	Pearson's product moment correlation coefficient (r) Mean, standard deviation	(r=0.682 p<0.01) hypothesis is accepted
	H3: There is a positive relationship between environment and structure.	Pearson's product moment correlation coefficient (r) Mean, standard deviation Multiple regression	(r=0.223 p<=0.05) hypothesis is accepted
	H4: The greater the fit among the co-alignment variables, the stronger their joint relationship with performance.	Multiple regression analysis	0.256,p<0.05 for average growth in sales and 0.195,p<0.05 for ROA hypothesis is rejected
	H5 (a): There is a positive relationship between strategy and firm performance.	Pearson's product moment correlation coefficient (r) Mean, standard deviation	r=0.509,p<0.01 and r=0.367,p<0.05 hypothesis is partially accepted
	H5 (b): There is a positive relationship between environment and firm performance	Pearson's product moment correlation coefficient (r) Mean, standard deviation	r=0.466,p<0.01 and r=0.044,p<0.01 hypothesis is partially accepted
	H5 (c): There is a positive relationship between structure and firm performance	Pearson's product moment correlation coefficient (r) Mean, standard deviation	r=0.433,p<0.01 and r=0.478, p< 0.01 hypothesis is accepted

Objective 2: To establish whether or not the relationship between the co-alignment variables (environment, strategy, structure) and firm performance depends on the level of core competencies in non-profit-oriented parastatals in Kenya	**H6:** The relationship between the core-alignment variables and firm performance depends on core-competencies.	Regression Analysis and,	R^2=0.436,p<0.05 for average growth in sales and 0.436,p<0.05 for ROA hypothesis is accepted

The first objective sought to determine the effects of environment, strategy and organization structure individually and jointly on firm performance and was addressed by testing hypothesis one, two, three, four and five using correlation and multiple regression analysers. In order to fulfil the first research objective, the tests were either viewed as leading to rejection or acceptance of the hypotheses.

Hypothesis one stated that there is a relationship between environment and strategy was accepted (r=0.298 p>0.05). The results obtained from correlation analysis show that there is a positive, though weak, relationship between environment and strategy. Hypothesis two suggested that there is a relationship between structure and strategy was accepted (r=0.682 p<0.01). The results from correlation analysis show that there is a strong positive relationship between structure and strategy. According to hypothesis three there is a relationship between environment and structure. This hypothesis was accepted (r=0.223 p<=0.05). The results obtained from correlation analysis show that there is a positive, though weak, relationship between environment and structure. Hypothesis four stated that the greater the fit among the co-alignment variables, the stronger their joint relationship with performance was rejected (r=0.256, p<0.05 for average growth in sales, r=0.195 p<0.05 for ROA for the joint effect against r=0.433 p<0.05 for average growth in sales, and r=0.4660 p<0.05 for ROA for the total sum of the individual variables). The results obtained from multiple regression analysis show that though the co-alignment variables explained the variation in performance, the total sum of individual ca-alignment variables was greater than their joint effect. Hypothesis five (a) suggested that there is a relationship between strategy and firm performance was partially accepted (r=0.509, p<0.01 and r=0.367, p<0.05). The results from correlation analysis show that there is a positive relationship between strategy and performance. According to hypothesis five (b) there is a relationship between environment and firm

performance was partially accepted (r=0.466, p<0.01 and r=0.044, p<0.01). The results from correlation analysis show that there is a positive relationship between environment and performance. Hypothesis five (c) stated that there is a relationship between structure and firm performance was accepted (r=0.433, p<0.01 and r=0.478, p< 0.01). The results from correlation analysis show that there is a positive relationship between structure and performance.

The second objective sought to determine the effect of core competencies on the relationship between environment, strategy and structure jointly and corporate performance. This objective was addressed by testing hypothesis six using moderated regression analysis. Hypothesis six suggested that the relationship between the core-alignment variables and firm performance depended on core-competencies. This hypothesis was accepted. The results of moderated regression analysis show that R^2 =0.436, p<0.05 for average growth in sales and 0.436, p<0.05 for ROA from 0.256, p<0.05 for average growth in sales and 0.195, p<0.05 for ROA.

5.2 Conclusions

From the results summarised above, the following conclusions are drawn. There is a positive, though weak relationship between environment and strategy (see Table 21). Based on this, it can be concluded that to a larger extent the Kenyan parastatals have not aligned their strategies to the environment.

The results of the correlation analysis for hypothesis 2 presented in Table 21 show that there is a strong positive relationship between structure and strategy. Kenyan government is changing its overall strategy to embrace the vision 2030, the government and all PSUs among them the parastatals are also changing structures to match the aggressiveness of its strategic vision.

Further, results of the correlation analysis (see Table 21) show a positive, though weak, relationship between environment and structure. This may be attributed to the fact that all the parastatals operate in environment where their structures are also dictated by the

Act of parliament and the government vision. This situation may explain the poor performance of Kenyan parastatals in the past.

The results from the multiple regression analysis show that though the co-alignment variables explained a good portion of variation in performance ($r=0.256$, $p<0.05$ for average growth in sales, $r=0.195$ $p<0.05$ for ROA for the joint effect. However, the total sum of the correlation coefficients of individual ca-alignment variables was greater that their joint coefficients ($r=0.433$ $p<0.05$ for average growth in sales, $r=0.4660$ $p<0.05$ for ROA for the total sum of the individual variables). This may be attributed to the fact that the co-alignment variables of the Kenyan parastatals are not optimally aligned as implied by the results of the tests of hypothesis one and three. This leads to the conclusion that Kenyan parastatals need to do more to achieve greater realignment among their environment, strategy, and structure to realize maximum synergies.

The results reported in Table 23 show that there is a positive relationship between strategy and performance of the Kenyan parastatals. This may be attributed to the strategic planning exercise that the Kenyan government and parastatals embarked on since the late 1990 and the subsequent introduction of performance contracts. These changes have partly led to the improved performance of the parastatals.

There is a positive relationship between environment and performance of the Kenyan parastatals as shown in Table 23. This may be due to the fact that the parastatals operate in similar environment largely dictated by government. However, since the environment is changing, the government relationship with its parastatals should also be changed to accommodate the new order that is, liberalization of the economy with less government intervention. It seems that the Kenyan government is doing that through its strategic planning exercise that it embarked on since the late 1990, which has been translated into improved performance of parastatals.

The results presented in Table 23 further show a positive relationship between structure and performance. This could be explained by the fact that all the Kenyan parastatals had almost similar structures defined by the Act of parliament. However, the average growth has been of 0.55 % for total sales and 1% for return on assets per year, which is

still very minimal, calling for more action from the government in terms of restructuring and re-engineering of the parastatals to ensure greater performance.

The results presented earlier showed that core-competencies moderate the relationship between co-alignment variables and firm performance. That is, the stronger the core-competencies, the stronger the relationship between the co-alignment variables and firm performance. This may be explained by the fact the Kenyan government embarked on strategic planning since the late 1990, which has been translated into increased core-competencies by the parastatals. One such major change involves competitive recruitment of CEOs and senior managers where jobs are advertised and requirements are clearly specified. Another one is employment of CEOs on contract, which ensures that only those who are competent have a chance of having their contracts renewed or extended. In other word, competitive hiring ensures that the best or the one with the greatest potential in terms of competence is hired.

5.3 Implications of the study

There is a positive, though weak relationship between environment and strategy (see Table 21). The implication is that Kenyan parastatals will not achieve great performance unless they aligned their strategies to the environment. Furthermore, results of the correlation analysis (see Table 21) show a positive, though weak, relationship between environment and structure. The same can be said, unless the parastatals can align their environment strategy and structure, then they will not enjoy the full benefit of their effor This requires further studies to better understand the phenomenon

The results from the multiple regression analysis show that though the co-alignment variables explained a good portion of variation in performance for the joint effect. However, the total sum of the correlation coefficients of individual ca-alignment variables was greater that their joint coefficients. This requires further studies to better understand the phenomenon

Hypothesis six which was core to the study stated that the relationship between the core-alignment variables and firm performance depends on core-competencies was substantiated. It thus contributes to the body of Knowledge in the field of Strategic

Management by demonstrating that core-competencies moderate the relationship between environment, strategy, and structure individually or jointly and performance. This is a key finding as it showed the importance of core-competencies for all the co-alignment variables, either used individually or jointly. The effect of core-competencies is significant in as much as it shows that core-competencies can help organizations in achieving their missions and objectives and enhance corporate strategies and structures since there are indications that this can create synergy and add value leading to greater corporate performance. To make the organization more vibrant and to improve its performance, proper organization strategy, and structure re-aligned with environment need to be put in place.

However, this study has also shown the importance of core-competencies and its influence on the relationship between co-alignment variables and firm performance, in that, the higher the core-competencies the stronger the relationship between the co-alignment variables and firm performance. This could lead and explain the slit improvement in the socio-economic development in Kenya and economic growth of the parastatals experienced in the last your years under study.

5.4 Recommendation for Management Policy and Practice

The senior managers in both parastatals and private organizations can benefit from the study's findings to restructure and re-engineer their organizations in order to improve their performance by focus more on increasing their firms' core-competencies and re-aligning them with other co-alignment variables in their firm to improve their firms' performance. The core-competencies are paramount in improving organization performance. This conforms to another study by Prahalad and Hammel (1993). However, to succeed, the core-competencies are to be increased and used concurrently with other co-alignment variables, so that better results can be achieved in order to improve corporate performance.

There is empirical evidence that what the parastatals and other organizations need not to use aggressive strategies and structures when the environment is not highly turbulent as this will waste their resources and have limited impact to their performance.

Parastatals should match the level of turbulent of their environments with their corresponding strategies and structures according to Ansoff (1990) success formulae. Although there is an improvement in the performance of Kenyan parastatals (see Figure 2 and 3) there is still however need to re-align the structures to the changing environment for better performance.

Parastatals and other organizations need to consider co-alignment variables (environment, strategy, and structure) in their policy formulation and their practice of management, as there is more empirical evidence that these variables improve performance.

There is further empirical evidence that what parastatals and other organizations need is the modified co-alignment model where firms increase their core-competencies and re-aligning them with other co-alignment variables to improve their performance.

Moreover, that what the public enterprise need is not necessarily privatization but rather the use of the modified co-alignment model and other private sector management models and practices to improve their performance.

5.5 Limitations of the study

A good number of parastatals did not provide the researcher with information on questions 102, 104,105, 106, 107, and 108 from the appendix 2 questionnaire forcing the researcher to drop other question on qualitative measures of performance, therefore using only the annual rate of returns on assets and growth sales rate as indicators of performance. Performance was therefore measured using quantitative information only.

Though the descriptive statistics were sought in the study and their findings presented, however, their use in interpreting the results for hypotheses testing was limited because of the low response rate from the surveyed parastatals, which led to small subsamples that were unable to give meaning full analysis.

The Parastatals though from the same industry, are not identical to one another. Therefore, the major source of variability is the individual differences in the behaviour of different parastatals. Also, the measurement cannot be taken as accurately as one would like for the attributes or behaviour of each research Parastatals. Organisations do not respond exactly the same way on two different occasions. This brings about the problem of reliability. However, we used triangulation method to minimise the effects of these problems.

It is ambitious to say that one study can bridge the gap of the methodological problem experienced in correlation studies. There is the issue of the direction of the relationship, which is difficult to discern when using correlation analysis, and the third variable effect, which also affects the interpretation of the results.however, the present study endeavoured to minimise this problem by using largely quantitative analysis together with some qualitative analysis. There is still need to carry out more research and explore the possibilities of using quasi-experimental design in studying these relationships. There is also need to determine whether one can isolate factors affecting performance other than environment, strategy and structure and the effect of core-competencies.

5.6 Direction for Future Research

The results obtained from the analyses show that there are weak relationships between environment and structure; and between environment and strategy among parastatals in Kenya. There is therefore need for further research on the subject.

The relationship between co-alignment variables and firm performance explains the positive variation in firm performance however; there is still need for further research to validate these findings. The variation was not high (25.6% of sales growth and 19.5% for ROA), lower that Chathoth's (2002) return on equity (59%) suggesting that using different financial measures of firm performance can have greater variation calling more research.

Core-competencies moderate the relationship between environment, strategy, and structure individually or jointly and performance and the higher the level of core-competencies the stronger the relationship between co-alignment variables and or-

ganization performance. This is a key finding which need validation from other researches.

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APPENDIX 1: INTRODUCTION LETTER

Dear Respondent,

You have been selected to take part in a nationwide study on the Influence of Core-Competencies on the relationship between Co-Alignment Variables and Performance in Profit-Oriented Parastatals in Kenya. Please take a few minutes to answer the following questions. Your support will assist in attaining two very important goals: (1) inform national policymaking in public sector; and (2) help towards researchers in achieving academic Excellency. Your answers will remain strictly confidential.

Yours faithfully,

Chiyoge B. Sifa
University of Nairobi
P.O.Box 4891-00506
Nairobi
Tel: 0733689023
Email:neuillychiyoge@yahoo.com

APPENDIX 2: QUESTIONNAIRE

Section A: Bio Data

1. Name of the organization			
2. Type of Organization		Industrial	1
		Service	2
		Agricultural	3
		Financial/Commercial	4
3. How many employees does your organization have?			
4. What position do you occupy in your organization (designation)?			
5. For how long have you been in your current position?		In Years	
		In Months (if less than 1 yr)	
6. In what position were you serving before your current position?			

Section B: Environment

The following statements describe the nature of the environment in which your organization operates. Rate each statement on the scale adjacent to it.

	To very small extent (1)	To a small extent (2)	To a moderate extent (3)	To a great extent (4)	To a very great extent (5)
7. The competitive rivalry in the industry has intensified over the years					
8. The number of new firms entering the industry has increased over the years					
9. The number of new similar products being introduced into market has increased over the years					
10. The needs and influence of the buyers of the industry's products has increased over the years					
11. The influence of the suppliers of the industry's inputs has increased over the years.					

Section C: Strategy

The following statements describe the nature of the strategy your organization is pursuing. Rate each statement on the scale adjacent to it.

	To very small extent (1)	To a small extent (2)	To a moderate extent (3)	To a great extent (4)	To a very great extent (5)
12. Maintain prominence within its chosen market segment					
13. Involve developments outside your market domain					
14. Penetrate into current markets					
15. Growth occurs cautiously and incrementally					
16. Monitor a wide range of environmental conditions, trends, and events					
17. Create change in your industry					
18. Grow primarily from new markets and new products					
19. Have uneven, spurt-like growth					
20. Have single core technology, vertically integrated, updates current technology to maintain efficiency					
21. Stable structure and process					
22. Dominant functions are finance and production					
23. Planning is intensive not extensive					
24. Promotion is from within					
25. Use functional structure					

26. Extensive division of labour and high degree of formalisation					
27. Have centralised control					
28. Have vertical information flows					
29. Have simple and inexpensive coordination					
30. Managers are evaluated on efficiency versus the past					
31. Our organization is efficient					
32. Our structure and technology change					
33. Use frequent prototype production and multiple technologies					
34. Have technologies in people not machines					
35. Dominant functions are marketing and research and development					
36. Key executives come from outside the organization					
37. Executive tenure is short					
38. Planning is broad, not intensive					
39. Have a product based structure					
40. Use division of labour and formalization					
41. Control is results-oriented					
42. Information flow to decentralised decision-makers					
43. Coordination is complex and expensive					
44. Conflict in the organization is directly confronted and resolved					
45. Managerial appraisal is versus similar organisations					
46. Use dual technology core					
47. Planning is both intensive and comprehensive					
48. Structure is matrix, functional and product					
49. Control is difficult					
50. Coordination is both simple and complex					
51. Managerial is dual efficiency versus past, effectiveness versus similar organizations					
52. Management articulates an appropriate strategy, but technology, structure, and process are not linked to strategy appropriately.					
53. Management adheres to a particular strategy-structure relationship that is not relevant to the environment.					

Section D: Structure

The following statements describe the structure your organization has. Rate each statement on the scale adjacent to it.

	To very small extent (1)	To a small extent (2)	To a moderate extent (3)	To a great extent (4)	To a very great extent (5)
54. The total activities of the organization are broken down into specialized jobs for individuals e.g., roles and functions					
55. The conduct of employment activities to achieve the organization's goals are controlled and coordinated by standard, written rules					
56. The conduct of activities to achieve the organization's goals are controlled and coordinated by standard, written rules					
57. Use of written rules and procedures					
58. Our organisation operate on hierarchical structure with specialized functions/ tasks/skill departments					
59. Our organisation operate on hierarchical structure with product/customer/ geographical based divisions					
60. Our organisation operate on matrix structure with a combination of function/ tasks and divisions					

Section E: Core competencies

The following statements describe core competencies your organization has. Rate each statement on the scale adjacent to it.

	To very small extent (1)	To a small extent (2)	To a moderate extent (3)	To a great extent (4)	To a very great extent (5)
61. Our organization has the best customer service in the market					
62. Our organization has an excellent sales force in the market					
63. Our organization has an excellent technical support in the market					
64. Our organization has the best quality products in the market					
65. Our organization is the most innovative in the market					
66. Our organization has state of the art technology appropriate for our operations.					
67. Our employees are the most competent in the market					
68. Our organization has the best management team in the market					
69. Our organization has good quality product compare to similar organisations in the market					
70. Our organization has product that is completely unique from all the other products in the market					
71. Our organization has a strong position in its industry					
72. Our competitors have difficulty in imitating what is unique to our organization					
73. Our organization' s core competencies improve all the time					
74. I Gather different kinds of information from a wide variety of sources to build a rich informational base for decision making					
75. I connect ideas on the basis of information given to understand their causes and effects					
76. I Identify feasible alternatives or multiple options in planning and decision making					
77. I hold different options in focus simultaneously					
78. I evaluate the pros and cons for each alternative					
79. I use paraphrasing to understand the ideas of another person					
80. I use summaries to understand the concepts of another people					
81. I use open and probing questions to understand the feelings of another person					
82. I can comprehend events, issues, problems, opportunities from the viewpoint of others					
83. I Involve others and am able to build cooperative teams in which group members feel valued and empowered and have shared goals					
84. I Create a positive climate in which staff increases the accuracy of their self awareness of their strengths and limitations					
85. I provide coaching, training, and developmental resources to improve my staff 's performance					
86. I use a variety of methods (e.g., persuasive arguments, modeling behavior, inventing symbols, forming alliances, and appealing to the interest of others) to gain support for ideas, strategies and values					
87. I state own "stand" or position on issues					
88. I unhesitatingly takes decisions when required					
89. I commit self and others accordingly					
90. I express confidence in the future success of the actions to be taken					
91. I Present ideas clearly with ease and interest so that the other person (or audience) understands what is being communicated					
92. I use technical, symbolic, nonverbal, and visual aids effectively when communicating with other person (or audience)					
93. I Structure the task for my staff					
94. I implement plans and ideas					

95. I take responsibility for all aspects of the situation even beyond ordinary boundaries and for the success and failure of the group					
96. I have high internal work standards					
97. I set ambitious, risky, and yet attainable goals					
98. I want to do things better, to improve, to be more effective and efficient					
99. I measure progress against targets					

Section F: Performance		
100. What was your annual growth rate (%) in total sales for the last five years?	Year 2001	
	Year 2002	
	Year 2003	
	Year 2004	
	Year 2005	
101. What was your annual rate of returns on Assets (%) for the last five years?	Year 2001	
	Year 2002	
	Year 2003	
	Year 2004	
	Year 2005	
102. What was the number of the new products developed in the last five years?	Year 2001	
	Year 2002	
	Year 2003	
	Year 2004	
	Year 2005	
103. What was your net profit/loss	Year 2001	
	Year 2002	
	Year 2003	
	Year 2004	
	Year 2005	
104. What have your total budget allocations from your parent ministry been over the last 5 years?	Year 2001	
	Year 2002	
	Year 2003	
	Year 2004	
	Year 2005	
105. What is your current market share in the industry? (%)	Year 2001	
	Year 2002	
	Year 2003	
	Year 2004	
	Year 2005	
106. What has your market share growth rate in the industry been over the last five years? (%)	Year 2001	
	Year 2002	
	Year 2003	
	Year 2004	
	Year 2005	
107. What has your sales growth rate been over the last 5 years?	Year 2001	
	Year 2002	
	Year 2003	
	Year 2004	
	Year 2005	
108. What has your growth in return on assets been over the last five years?	Year 2001	
	Year 2002	
	Year 2003	
	Year 2004	
	Year 2005	

APPENDIX 3: SCHEDULE OF ACTIVITIES

Activity	Time Schedule 2007-2008-2009											
	J	F	M	A	M	J	J	A	S	O	N	D
Modification of Proposal	x	x										
Survey		x	x	x								
Coding and data entry					x							
Data analysis					x							
Writing of thesis						x	x					
Oral presentation							X					
Correction and submis-sion								x	x	x		x

APPENDIX 4: BUDGET

Items	Amounts in Kenyan Shillings (KSh)
Developing the Research Proposal: Journals and other material	90,000
Preliminary test: 1 @ 3,000 for 2 days	6,000
Research Assistants: 4 @ 2,000 per day for 14 days	112,000
Data entry person 1 @ 3,000 for 7 days	21,000
Compiling the Report	75,000
Photocopying 10 copies	15,000
Binding 10 copies @ 200	2,000
Travelling	25,000
Accommodation	25,000
Total	371,000
Miscellaneous (10% of the total)	37,100
Total	408,100

APPENDIX 5: LIST OF PARASTATALS IN KENYA

No.	Name	Parent ministry
A	**Commercial State Corporations**	
1 *	**Agricultural Development Corporation**	Agriculture
2 *	**Agricultural Finance Corporation**	Agriculture
3 *	**Agro-chemical and Food Company**	Agriculture
4 *	**Bomas of Kenya Ltd**	Tourism
5 *	**Chemelil Sugar Company**	Agriculture
6 *	**Consolidated Bank of Kenya**	Finance
7 *	**Development Bank of Kenya**	Finance
8 *	**East African Portland Cement**	Trade
9 *	**Gilgil Telecommunication Industry**	Information
10 *	**Industrial and Commercial Development Corporation**	Trade
11 *	**Industrial Development Bank**	Trade
12 *	**Jomo Kenyatta Foundation**	
13 *	**Kenya Airports Authority**	Transport
14 *	**Kenya Broadcasting Corporation**	Information
15 *	**Kenya Electricity Generating Company**	Energy
16	Kenya Ferry Services	Transport
17	Kenya Film Commission	Information
18 *	**Kenya Industrial Estates**	Trade
19	Kenya Literature Bureau	Education
20 *	**Kenya Meat Commission**	Livestock
21	Kenya National Assurance (2001)	Finance
22	Kenya National Shipping Line	Transport
23 *	**Kenya National Trading Corporation (UR)**	Trade
24 *	**Kenya Ordinance Factories Corporation**	OOP
25 *	**Kenya Petroleum Refineries Ltd**	Energy
26 *	**Kenya Pipeline Company**	Energy
27 *	**Kenya Ports Authority**	Transport
28 *	**Kenya Post Office Savings Bank**	Finance
29 *	**Kenya Power and Lighting Company Ltd**	Energy
30 *	**Kenya Railways Corporations**	Transport
31 *	**Kenya Re-insurance Corporation**	Finance
32 *	**Kenya Tea and Conservation Corporation**	Agriculture
33	Kenya Tourist Development Corporation	Tourism
34 *	**Kenya Wine Agencies**	Trade
35 *	**Kenya Seed Company**	Agriculture
36 *	**Kenyatta International Conference Cen**	Tourism
37 *	**Kisumu Water & Sewerage Co. Ltd**	Local Authorities
38 *	**Muhoroni Sugar Company (UR)**	Agriculture
39 *	**National Bank of Kenya**	Finance
40 *	**National Housing Corporation**	
41 *	**National Oil Corporation of Kenya**	Energy
42 *	**National Water Conservation and Pipeline Corporation**	Water
43 *	**New KCC**	Cooperative
44 *	**Nyahururu Water and San. Co.**	Local Authorities
45 *	**Nyeri Water & Sewerage Co. Ltd.**	Local Authorities
46 *	**Nzoia Sugar Company**	Agriculture
47 *	**Postal Corporation of Kenya**	Information
48 *	**Rift Valley Textiles Ltd. (UR)**	Trade
49 *	**Safaricom Limited**	Information
50 *	**School Equipment Production Unit**	Education
51 *	**South Nyanza Sugar Company**	Agriculture
52 *	**Telkom Kenya Ltd**	Information & Communication
B	**Regulatory State Corporations**	

53	Capital Markets Authority	
54	Coast Water Services Board	
55	Central Water Services Board	
56	Coffee Board of Kenya	
57	Communications Commission of Kenya	
58	Commission for Higher Education	
59	Cotton Board of Kenya	
60	Eastern Water Services Board	
61	Electricity Regulatory Board	
62	Film Censorship Board	
63	Horticultural Crops Development Authority	
64	Hotels and Restaurants Authority	
65	Kenya Anti-Corruption Authority	
66	Kenya Bureau of Standards	
67	Kenya Civil Aviation Authority	
68	Kenya Dairy Board	
69	Kenya Intellectual Property Institute	
70	Kenya Maritime Authority	
71	Kenya Plant Health Inspectorate Services	
72	Kenya Sisal Board	
73	Kenya Sugar Board	
74	Kenya Tourism Board	
75	Kenya Wildlife Service	
76	Lake Victoria North Region Water Services Board	
77	Lake Victoria South Region Water Services Board	
78	National Cereals and Produce Board	
79	National Council for Science & Technology	
80	National Environmental Management Authority	
81	National Irrigation Board	
82	Nairobi Health Management Service Board	
83	Nairobi Water Services Board	
84	Northern Water Services Board	
85	Ol Kallou Water Services Board	
86	Sports Stadia Management Board	
87	NGO Coordination Bureau	
88	Pests Products Control Board	
89	Pharmacy and Poisons Board	
90	Pyrethrum Board of Kenya	
91	Radiation Protection Board	
92	Registration of Accountants Board	
93	Registration of Certified Public Secretaries	
94	Rift Valley Water Services Board	
95	Sugar Development Fund	
96	Tea Board of Kenya	
97	Water Services Regulatory Board	
C	**Facilitating Agents**	
98	Export Processing Zones Authority	
99	Export Promotion Council	
100	Kenya Investment Authority	
101	National Irrigation Board	
102	Water Service Trust Fund	
D	**Government Revenue Collecting Agent**	
103	Kenya Revenue Authority	
104	Catering Levy Trustees	
105	Higher Education Loans Board	
E	**Appeals Board**	
106	Coffee Research Foundation	
107	Kenya Agricultural Research Institute	

108	Kenya Forestry Research Institute	
109	Kenya Industrial and Research Development Institute	
110	Kenya Institute of Public Policy Research and Analysis	
111	Kenya Marine and Fisheries Research Institute	
112	Kenya Medical Research Institute	
113	Kenya Sugar Research Foundation	
114	Kenya Trypanosomiasis Research Institute	
115	Kenya Veterinary Vaccines Production and Development	
116	Tea Research Foundation of Kenya	
F	**Educational and Training**	
117	Cooperative College of Kenya	
118	Council for Legal Education	
119	Egerton University	
120	Jomo Kenyatta Universtiy of Agriculture and Technology	
121	Kenya College of Communication Technology	
122	Kenya Institute of Administration	
123	Kenya Medical Training College	
124	Kenya National Examination Council	
125	Kenya Utalii College	
126	Kenya Water Institute	
127	Kenyatta University	
128	Maseno University	
129	Moi University	
130	University of Nairobi	
131	**University of Nairobi Ente rise**	
132	National Council for Law R orting	
133	Western University College f Technology	
G	**Regional Development Authorities**	
134	Coast Development Authority	
135	Ewaso – Ng'iro North Development Authority	
136	Ewaso – Ng'iro South Development Authority	
137	Kerio Valley Development Authority	
138	Lake Basin Development Authority	
139	Tana and Athi Rivers Development Authority	
H	**Social and Health Service**	
140	Kenya National Library Services	
141 *	**Kenyatta National Hospital**	
142	Local Authorities Provident Fund	
143 *	**Moi Referral and Teachi Hospital**	
144	National Aids Control Council	
145	National Commission on G der and Development	
146	National Coordinating Ag y for Population and Development	
147	National Council for People with Disabilities	
148	National Hospital Insurance Fund	
149	National Museums of Kenya	
150	National Social Security Fund	
I	**Commissions**	
151	Commission for Gender and Development	
152	Judicial Service Commission	
153	Parliament Service Commission	
154	Presidential Music Commission	
155	Public Service Commission	
156	Teachers Service Commission	

Source: Kenya Bureau of Statistics

Note: The highlighted parastatals with an asterisk on the list are the profit-oriented and object of the study.