

**ORGANIZATIONAL CONFIGURATION, STAGE OF  
DEVELOPMENT AND PERFORMANCE OF COMMERCIAL  
BANKS IN KENYA**

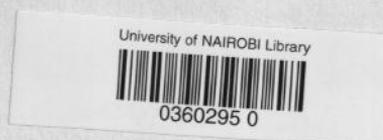
**By**

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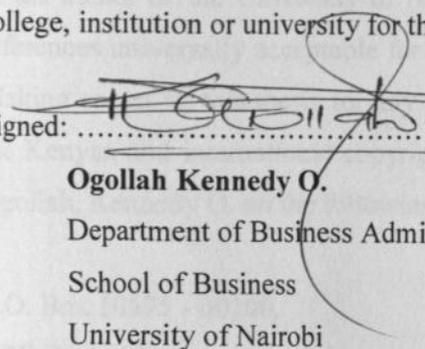
A Thesis Submitted in Partial Fulfillment of the Requirements for the  
Award of the Degree of Doctor of Philosophy (PhD) in Business  
Administration, School of Business,  
University of Nairobi

**NOVEMBER 2012**



## DECLARATION

I declare that this thesis is my original work and has not been presented to any other college, institution or university for the award of a degree.

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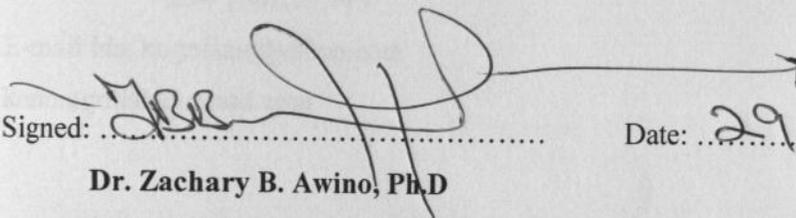
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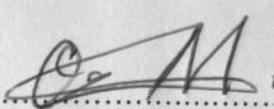
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## DEDICATION

*To my children Joy A. Ogollah and Wanda A. Ogollah, may this act as a source of purpose and inspiration in your lives as you search the beauty of hard work and the good of education.*

*To my dear wife Erina Faith Sanda Ogollah, this is to you for your inspiration and unwavering support.*

*To my parents – my late father J.X. Ogolla and my mother Pamella A. Ogolla for the unending strength that you passed on to me.*

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## CHAPTER ONE

### INTRODUCTION

This chapter presents the conceptual and contextual discussion of the study. It provides a brief background on the key study variables of organizational configuration, stage of development and performance taking into account their multidimensionality. It further explores the statement of the problem, the research objectives, justification and value of the study.

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

The challenge for organizations' management in today's era in their quest to improve their performance is how to deal with the business landscape which is characterized by the effects of globalization, technological advancements, speed, flexibility, innovation and corporate downsizing (Joyce, 2003; Yeh-Yun Lin & Zhang, 2005). These and many other factors have heightened the need for organizations to become more entrepreneurial in order to compete, survive and prosper (Dess, Lumpkin & McGee, 1999; Meyer, Neck & Meeks, 2002). Evolutionary economists (Nelson & Winter, 1982) advance this argument by asserting that to survive; organizations must develop some features to meet the new requirement of the changed environment.

This has led to the idea of conceptualizing organizational activities as systems of interdependent elements which has a relatively long tradition in organizational research finding a variety of valuable applications in the strategy field (Sheehan & Foss, 2007; Porter & Siggelkow, 2008). The various constructs which comprise the strategic nature of organizations follow on this conceptualization. An area that has been neglected within this body of research is the examination of the specific structural configurations implemented by firms, as well as how these structural configurations are related to strategy, environmental factors pertaining to the firm and performance. This is the crucial factor for survival, being able to adopt and adapt to the needs of the surroundings, without foregoing the basic structural beliefs of the concept or notion being uphold.

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ADB	Asian Development Bank	
ATM	Automated Teller Machines	
ASCAs	Accumulating Savings and Credit Associations	
CBE	Central Bank of Kenya	
CEO	Chief Executive Officers	
CMA	Capital Markets Authority	
CSR	Corporate Social Responsibility	
DTM	Deposit Taking Microfinance Institutions	
EC	European Commission	
EU	European Union	
ESG	Environmental, Social, Governance	
ICT	Information and Communications Technology	
KAMA	Kenya Association of Manufacturers	
KOOPB	Kenya Post Office Savings Bank	
MFRS	Malaysian Finance Reporting Standards	
MPA	Microfinance Promotion Authority	
MS	Microfinance Strategy	
NFIAs	Non-Financial Institutions	
NP	Non-Profit Organizations	
OSF	Operational Strategy Framework	
OSI	Operational Strategy Framework	
PEV	Perceived Value	
RFV	Relative Financial View	
R & D	Research and Development	
SAI	Service Access Index	
SACSCAs	Savings and Credit Societies	
SACCOs	Savings and Credit Co-operatives	
SCP	Strategy-Structure-Performance	
SA	Service Access Index	
SR	Strategy-Structure-Performance	
UNDP	United Nations Development Programme	
USA	United States of America	

## ABBREVIATIONS AND ACRONYMS

<b>AfDB</b>	: Africa Development Bank
<b>ATM</b>	: Automated Teller Machines
<b>ASCAs</b>	: Accumulating Savings and Credit Associations
<b>CBK</b>	: Central Bank of Kenya
<b>CEO</b>	: Chief Executive Officer
<b>CMA</b>	: Capital Markets Authority
<b>CSR</b>	: Corporate Social Responsibility
<b>DTM</b>	: Deposit Taking Microfinance Institutions
<b>EC</b>	: European Commission
<b>EU</b>	: European Union
<b>FSD</b>	: Financial Sector Deepening
<b>ICT</b>	: Information and Communication Technology
<b>KAM</b>	: Kenya Association of Manufacturers
<b>KPOSB</b>	: Kenya Post Office Savings Bank
<b>MFCs</b>	: Mortgage Finance Companies
<b>MFI</b>	: Micro Finance Institutions
<b>MS</b>	: Market Share
<b>NBFIs</b>	: Non-banking Financial Institutions
<b>NF</b>	: Non-financial indicators
<b>OESP</b>	: Organization Environment Strategy Performance
<b>OLC</b>	: Organization Life Cycle
<b>PEV</b>	: Post Election Violence
<b>RBV</b>	: Resource Based View
<b>R &amp; D</b>	: Research and Development
<b>RoA</b>	: Return on Assets
<b>ROSCAs</b>	: Rotating Savings and Credit Associations
<b>SACCOs</b>	: Savings and Credit Co-operatives
<b>SCP</b>	: Strategy-Conduct-Performance
<b>SSA</b>	: Sub-Sahara Africa
<b>SSP</b>	: Strategy-Structure-Performance
<b>UNDP</b>	: United Nations Development Programme
<b>USA</b>	: United States of America

## ABSTRACT

The concept of organizational configuration has been increasingly used in publications on performance of companies, gaining high recognition in organizational research but even more specific in strategic management. This link has become a central and somewhat controversial focus of research due to the mixed empirical findings with both support and failure. These conflicting results could be attributed to configuration theory tenet whereby organizations are viewed as complex and interdependent in nature such that fit and competitive advantage rest, not on a single attribute but instead on relationship and complementarity among multiple characteristics. The heightened debate on the relevance of organizational configuration theory development has resulted in two groups of scholars; those calling for its disbursement and the proponents. This study sought to contribute to knowledge by assessing the effect of organizational configuration on organizational performance. The study took into recognition that an organization's stage of development and the context have an effect on the outcomes of this relationship. The overall objective of the study was to determine the moderating role of organizational stage of development on the relationship between organizational configuration and organizational performance in commercial banks in Kenya. The specific objectives of this research were to determine the influence of strategy and structure linkage, explore the influence of structure and environmental linkage and establish the influence of strategy and environment linkage on three different performance measures. The other specific objective was to establish and assess the relationship between organizational configuration and organizational performance. The population of the study consisted of all the forty-three (43) banks licensed by Central Bank of Kenya as banking institutions as at 31<sup>st</sup> December, 2010. The study adopted a cross-sectional survey design whereby both primary and secondary data were collected from 30 banks out of the 43 targeted (represented 75% response rate) and subjected to statistical analysis. Organizational performance was measured using both the financial and non-financial indicators. Analytical and predictive models utilizing simple statistics descriptors, multivariate and classical regression analysis, correlation analysis, cross-tabulations and cluster analysis techniques were used to test the study hypotheses. The findings of the study partially supported three (3) of the hypotheses and rejected two (2). The study findings indicated that the influence of strategy-structure configuration on RoA was statistically not significant whereas the same influence was statistically significant for both market share and non-financial performance measures. The findings further showed that the influence of structure-environment configuration on RoA was also statistically not significant but same was statistically significant on market share and non-financial indicators. With respect to influence of strategy-environment configuration, both RoA and market share reported statistically not findings while that on non-financial indicators was statistically significant. Further results on the overall influence of organizational configuration (strategy-structure-environment) influence on RoA were also statistically not significant whereas the influence was statistically significant with respect to market share and non-financial indicators. Finally the study findings indicated that with respect to the influence of the moderating effect of organizational stage of development, their seemed to be an impact only on the non-financial indicators with RoA and market share statistically not significant results. Results on individual constructs exhibited mixed relationship in significance and direction with the three organizational performances. Both positive and negative associations were reported from the study findings. The study was able to draw an expression of inter-relationships between variables, offer generalization, understanding and the meaning of the relationships. It has therefore extended the understanding of configuration and performance on diversity of operationalization related to content or general characteristics of strategy, structure and external environment concentrating on the match or lack of it amongst these attributes. Major conclusions in this study were that top managers in the Kenyan banking industry did not perceive the environment which was one of the parameters constituting organizational configuration in this study as an important factor contributing to their banks' performance and that stage of development was not perceived to moderate the banks' configuration and performance relationship.

## CHAPTER ONE

### INTRODUCTION

This chapter presents the conceptual and contextual discussion of the study. It provides a brief background on the key study variables of organizational configuration, stage of development and performance taking into account their multidimensionality. It further explores the statement of the problem, the research objectives, justification and value of the study.

#### 1.1 Background of the Study

The challenge for organizations' management in today's era in their quest to improve their performance is how to deal with the business landscape which is characterized by the effects of globalization, technological advancements, speed, flexibility, innovation and corporate downsizing (Joyce, 2003; Yeh-Yun Lin & Zhang, 2005). These and many other factors have heightened the need for organizations to become more entrepreneurial in order to compete, survive and prosper (Dess, Lumpkin & McGee, 1999; Meyer, Neck & Meeks, 2002). Evolutionary economists (Nelson & Winter, 1982) advance this argument by asserting that to survive; organizations must develop some features to meet the new requirement of the changed environment.

This has led to the idea of conceptualizing organizational activities as systems of interdependent elements which has a relatively long tradition in organizational research finding a variety of valuable applications in the strategy field (Sheehan & Foss, 2007; Porter & Siggelkow, 2008). The various constructs which comprise the strategic nature of organizations follow on this conceptualization. An area that has been neglected within this body of research is the examination of the specific structural configurations implemented by firms, as well as how these structural configurations are related to strategy, environmental factors pertaining to the firm and performance. This is the crucial factor for survival, being able to adopt and adapt to the needs of the surroundings, without foregoing the basic structural beliefs of the concept or notion being uphold.

Some scholars have agreed that by applying theoretical directions to their research in their attempt to explain performance of organization, a systematic analysis is achieved that translates into improved practical application (Dubrin, 2006; Nham & Hoang, 2011). Arising from this proposition, this study just like for much of the scholarly investigations, set the starting point as an assumption indicating that organizations have a lifecycle, which cannot be avoided (Chaharbaghi, Adcroft & Willis, 2005). This necessitates employing a theoretical framework that incorporates ideas of the various theoretical streams including, lifecycle theory, configuration theory and behavioural theory so to gain insight into why some organizations achieve higher levels of performance than others.

Gresov (1989) pointed out that organization's performance is affected by the degree of fit between the business environment and organizational design. To support this, several theorists seeking to expose how these relationships hold have acknowledged that different approaches to analyze organization performance exist and they can be distinguished from each other based on the kind of relationship between the analyzed variables and performance (Michor, Harms, Schwarz & Breitenecker, 2010). The comparison of these approaches, show configuration as the most complete approach as it makes it possible to test interactions and dependencies of organizational attributes and also recognizes that different ways of success exist. The configuration approach focuses on identifying classifications of firms that resemble each other based on the degree of fit between certain vital internal factors (strategy and structure) and external demand (environment) aspects of an organization. Proponents of this approach have argued that a study of configurations leads to insights that would otherwise be unattainable or that would at least be out of the scope of research that focuses only on the effects of individual elements (Fiss, 2007).

Banks dominate the financial sector in Kenya and as such the process of financial intermediation in the country depends heavily on commercial banks (Kamau, 2009). Oloo (2009) describes the banking industry in Kenya as the bond that holds the country's economy together. Sectors such as the agricultural and manufacturing which are key drivers of the Kenyan economy depend on the banking industry for their very survival and growth. The performance of the banking industry in the Kenya

has improved over the last ten years (Mwega, 2009). This has been due to the many regulatory and financial reforms which have brought about many structural changes in the sector and have also encouraged foreign banks to enter and expand their operations in the country (Kamau, 2009). To gain insight on how organizational attributes influenced the good performance of the banks and close this gap in knowledge, this study sought to assess the effect of organizational configuration on performance of commercial banks in Kenya.

### **1.1.1 Organizational Configuration**

A long standing question in strategy and organization theory is how organization performance is shaped. Given the fundamental importance of this question, several scholars have sought answers through researches under different labels ranging from models, archetypes, typologies, strategic groups and gestalts (Miles & Snow, 1978; Miller, 1996; Harms et al., 2009). These literatures although fairly varied have formed the basis for studies of configuration which aims to bring up a meeting point. Although the term configuration lacks a common definition among researchers and scholars, Meyer, Tsui and Hinnings, (1993) description of configuration as any multidimensional grouping of conceptually distinctive characteristics that commonly occur together is probably the simplest. Ketchen et al., (1997) identified organizational configuration as a group of strategies associated with specific organization structures in particular environments.

Organizational configuration is conceptualized as coalescence of activities of strategy, structure and environment. These variables are contextually related and are internally consistent, complementary and mutually reinforcing within an organization. Organizational configuration is therefore, complex and depends on interactions between these variables. Strategy which is the first of organizational configuration characteristics is the most studied variable in strategic management studies. It is characterized by response to the constraints and opportunities to an organization. Miles and Snow (1978) posited that strategy is a way of adjusting the relationship between an organization and its environment, and that internal structure in turn must fit the strategy if this adjustment is to be successful.

Strategy research raises fundamental arguments about strategy. First is the debate on whether strategy should be viewed in terms of content or process with the former assuming decision-making process as a planned and rational linear model (Rumelt et al., 1994). Viewed that way strategy is assumed to be a posture consisting of either a position or scope focusing only on part of strategies rather than its whole perspective, it also emphasizes strategy elements rather than their relationship and interdependencies with other elements. The study of strategy process on the other hand complements the content approach by viewing strategy as a realized product and focuses on its formulation and implementation. The strategy formulation sub-process is concerned with analyses of the external and internal environment and the choice of strategy at the different levels. Strategy implementation comprises a series of primarily administrative activities and includes the design of organizational structure and processes. Though scholars may be divided on these approaches, they agree that a fit between strategy and other organizational elements will influence performance.

Organizational structure by definition implies a configuration of activities that include roles and procedures (Ranson, Hinings & Greenwood, 1980). Defined that way, structure can be viewed as a formal framework that aims to achieve better organizational performance. Fombrum (1986) suggested three perspectives of structure, namely; infrastructure, socio-structure and superstructure. Infrastructure refers to the underlying map of the interdependencies in the elements of structure, whereas socio-structure on the other hand encompasses both administrative aspects of the organization and its socio-architecture of exchange relationship between individuals and groups and finally, the power distribution. Superstructures include the emic (self-perceived) norms and value of the organization members and the etic (externally) observed and induced cultural practices or rituals of the organization. These three levels of structure progressively interrelate with each other giving rise to organizational life. Giddens (1979), recognized this evolutionary aspect and argued that convergence of the three levels tend to build up a social tension leading to periodic revolutions and ending up with a new configuration.

Organizations are environment dependent and must adapt to their environments. Environment is characterized by several dimensions which include dynamism, complexity and hostility (Charkravathy, 1997). Streams of research have pointed out that environment influences the relationship between the amount of structure and performance, also strategy literatures has shown that less structured emergent strategies to be higher performing in dynamic environments, whereas more structured deliberate strategies work better in stable ones (Mintzberg & McHugh, 1985). As such environment becomes the central imperative providing the link for other variables in organizational studies. Meier et al., (2007) in reinforcing the central position of environment argued that organizations must align their strategy with the environment and their internal “administrative system” in order to achieve high performance (p.5). This alignment of strategy and structure around the environment is what creates a fit for the organization thus leading to superior performances.

To explain this fit, several researches have focused on the relationship among strategy, structure and performance (Chandler, 1962; Farjoun, 2002), strategy, environment and performance (Venkatramann & Prescott, 1990) and structure, environment and performance (Davies, Einsenhardt & Bingham, 2009). To appreciate the complexity of the relationship between these three variables, an approach that yields a systematic, detailed and holistic image of reality, without attributing causation to any of the individual parts of the model which is the configuration approach is called for (Ward, Bickford & Leong, 1996). Ward et al., (1996) pointed out that strategy structure and environment are configured such that there is natural congruence between these elements. This can be due to the fact that strategy, structure and environment have some complementary aspects and what really guides firm success is an appropriate adjustment between this three (Miller et al., 2002; Snow et al., 2005).

The configuration approach regards an organization as a complex entity, whose success and development depends on the interaction between the domains of personal/leadership, structure, strategy, and external variables/environment (Harms et al., 2007). Domain can be understood as a general term that encompasses variables that contextually relate and are internally consistent, complementary, and mutually

reinforcing within an organization (Bowen, Siehl & Schneider, 1989). Generally, the configuration approach to the study of strategy involves identifying dominant gestalts/sets of observable characteristics or behaviours which appear to lead to a particular performance outcome (Zott & Amit, 2008). Gestalts are a set of things considered as a single system which is different from the individual thing. The approach analyzes more than two domains simultaneously resulting in the formation of more detailed models (Harms et al., 2009).

Configuration approach to research in strategic management offers much potential for solving some of the difficulties inherent in articulating multifaceted constructs and relationship among them. Although configurations allow people to create order and make sense out of their worlds by sorting things into discrete and relatively homogeneous groups, research about how organizations evolve towards such configurations of tightly reinforcing elements is still inadequate. Miller (1996) contended that no adequate vocabulary exists that would allow a consistent description of organizational developmental path towards configuration. This creates the need for research that would help in developing further theory that links organizational development and organizational performance. Indeed, Mintzberg (1990) pointed out that configuration theory emphasizes the fit between the organization and its dominant problem such as organizational, administrative, production and marketing issues and the environment. He further suggested that organization configuration includes the stage of development which is discussed in the next section.

### **1.1.2 Organizational Stage of Development**

The terms lifecycle stages, growth stages or developmental stages are used interchangeably in management literature with no effort to distinguish them (Quinn & Cameron, 1983). Consequently, the terms will be used in this study interchangeably. Life cycle construct is a multidimensional phenomenon with considerable variability between models. It includes dimensions related to organization context and others related to organizational structure. Common contextual dimensions include organizational age, size, growth rate and focal task or challenges faced by firm. Common structural dimensions include structural form, formalization, centralization and vertical differentiation, and number of organizational levels.

Organizational life cycle (OLC) is a model which proposes that over the course of time business firms move through a fairly predictable sequence of development stages (Van de Ven & Poole, 1995). This model is based on biological metaphor that business firms resemble living organism because they demonstrate a regular pattern of development process, impacted by external circumstances as well as internal factors (Gibson, Ivancevich & Donnelly, 1994). Empirical evidence demonstrates that firms are likely to progress in a specific sequence (Kazanjian & Drazin, 1989) and that change in organizational structure and processes reflect changes consistent with this sequence (Sarason & Tegarden, 2001). The OLC model assumes that there are regularities in organizational development and these occur in such a way that the organizations' development processes lend themselves to segmentation into stages or periods of time (Smith, Mitchell & Summer, 1985).

These stages are viewed as representing a linear progression, with each stage exhibiting different integral complementarities among variables such as strategy, structure, and decision-making methods (Miller & Friesen, 1984). Organizational lifecycle has been variously reported to consist of between three and ten stages (Dodge, Fullerton & Robbins, 1994). What is important is that, regardless of the numbers, these stages are sequential in nature, occur as a hierarchical progression that is not easily reversed and involve a broad range of organizational activities and structures (Hite & Hesterly, 2001). While a stage approach has clear limitations, this perspective is useful in framing the general processes of firm evolution and continuous change over time, particularly during the dynamic stages of the firm.

OLC is an important model because of its premise and prescriptions. The model's premise is that requirements, opportunities and threats both inside and outside the business firm will vary depending on the stage of development in which the firm finds itself (Baird & Meshoulam, 1988). Thus, different stages of the company lifecycle require alterations in the firm's objectives, strategies and managerial process, technology, culture and decision-making (Miller & Friesen, 1984). A valid lifecycle model therefore, provides a success road map, identifying critical organizational transitions as well as pitfalls the organization should seek to avoid as it grows in size and complexity (Hanks, Watson, Jansen & Chandler, 1993).

Sarason and Tegarden (2003) pointed out that strategic processes are not a predictor of organizational performance if organizational stage of development is not taken into consideration. Boyd (1991) had similar finding concluding that if the moderating variable (stage of development) is not included in further investigations then firm performance will be underestimated. It is upon this background that this study drawing on configuration theory, explores the moderating effect of development stage in understanding organizational configuration performance link. It will adopt a modified Hanks et al., (1993) taxonomical approach portraying four stages of lifecycle consisting of a unique configuration of variables related to organization context and structure.

The first stage is reflected as the start-up stage which includes firms that are generally young, small and highly centralized, are informal and focus more on development of their technology based products. The second is the expansion/growth stage consisting of slightly older firms having functional basis with additional organizational levels. Decision-making is centralized but systems are more formal and they are more involved in commercialization of their products through specialized functions. The third is the maturity stage whereby management levels have more functional structures and additional full-time specialists thus increased professionalism. Lastly is the early diversification stage which has older firms with regional structures, exhibiting low centralization and high formalization with more levels of management. Following Sharma (2004) observation that performance was the key dependent variable chosen for lifecycle studies, a review of organizational performance is presented in the next section.

### **1.1.3 Organizational Performance**

Organizational performance is probably the most widely used dependent variable, in fact it is the ultimate variable of interest to many researchers in the field of management yet it remains vague and loosely defined (Richard et al., 2009). The definition of organizational performance is an open question with few studies using consistent measures (Kirby, 2005). Hersey and Blanchard (1998) argued that performance has multiple meanings depending on the discipline and the context of the discussion.

Management scientists view performance as the degree to which actual results have met the expected standards and taking corrective measures if not. Marketers view performance in quantitative and qualitative terms. Sales revenue and inventory turnover are regarded as quantitative measures while qualitative measures include skills and perceived share markets. Accountants judge performance by how much well a firm is achieving set standards in terms of profitability. Economists on their part look at performance in terms of sufficiency. They regard sales growth, productivity, employment and capacity utilization and export performance as proxy for performance. Although performance plays a key role in strategic management research, there is considerable debate on appropriateness of various approaches to the utilization and measurement of performance. The complexity of performance is perhaps the major factor contributing to the debate (Hersey and Blanchard, 1998).

Out of literature are three common approaches to large organization performance measurement, namely; the objective measures that tend to be quantitative, the subjective measures that tend to be qualitative therefore, judgmental and usually based on perception of respondent, and triangulation. The objective and subjective approaches can also be differentiated in terms of ends and means. Objective measures focus on end results while subjective measures focus on the process or means by which ends results are achieved (Cohen, 1993). Perpetual measures such as profits and sales revenue can be used where there is difficulty in obtaining quantitative data. It is not unique, as this has been used in several studies and findings have shown little difference between objective and subjective data (Rodrigues & Ventura 2003).

There is the last approach which is the call for triangulation from multiple measures and the application of longitudinal analysis (Ailawadi et al., 2004, Postma & Zwart, 2001, Richard et al., 2009). Triangulation approach offers the advantage of simultaneously reducing error and improving construct validity on the conditional fact that the multiple measures are tapping the same theoretical domain (Venkatraman & Ramanujam, 1987). Triangulation also handles the challenge of cross-industry study where it is difficult to control for industry differences in both profitability and growth by allowing for perceptual measures and use of multiple measures to compensate for weaknesses in each of the performance measures individually (Tsai et al., 1991).

Any study that claims to address organizational performance must include a strong theory that addresses two key issues: the dimensionality of performance by establishing which measures are appropriate to the research context and the selection and combination of performance measures by establishing which measures can be usefully combined and the method of doing so. To be strong, the theoretical rationale for an approach to performance measurement must be both comprehensive in its assessment and rigorous in validation. As it is unlikely that objective measures alone will capture this, we require research on those combinations of subjective and objective measures that best capture performance, over what time period fluctuations in performance appear, and most important, a broader exploration of the paths that link heterogeneous environments, and firm characteristics, practices, and strategies, to overall organizational performance (Richard et al., 2009). The following contextual discussion provides that opportunity.

#### **1.1.4 The Banking Industry in Kenya**

The study was carried out in Kenya; a country situated on Africa's east coast and enjoys the largest and most diversified economy in the region. Kenya has a market-based economy with a strong liberalized trade policy. Like most developing economies especially Sub-Saharan Africa (SSA), the country economy has shown growth bouncing back from the post-election violence (PEV) in 2007. To sustain this growth, the financial sector which is a key catalyst for economic growth must be well-developed. The banking sector is an intermediary of the financial sector thus becomes an integral part of the economy for long-term stability.

In Kenya, the industry comprises the Central Bank of Kenya (CBK), Commercial Banks, Non-Bank Financial Institutions, Forex Bureaus and Deposit Taking Microfinance Institutions (DTMs) as the regulated entities. This sector is governed by the Companies Act (1978), the Banking Act (1991), the Microfinance Act (2006), the CBK Act, Cap 491 and a set of guidelines issued by the CBK. Prudential oversight is primarily conducted by the CBK, the Nairobi Stock Exchange and the Capital Markets Authority (CMA). As at 31st December 2010, the banking sector comprised 45 institutions: 44 commercial banks and 1 mortgage finance companies (MFCs). In addition, there were 5 licensed deposit taking microfinance institution, 126 foreign exchange bureaus and 2 foreign banks representative offices licensed in Kenya.

Commercial banks and mortgage finance companies are licensed and regulated under the Banking Act, Cap 488 as banking institutions. DTMs are licensed and regulated under the Microfinance Act. Foreign Exchange Bureaus are licensed and regulated under the Central Bank of Kenya Act, Cap 491. The microfinance sub-sector was, until recently, regulated under several different acts of Parliament which included the Non-Governmental Organizations Co-ordination Act (1990); the Building Societies Act (1989); the Trustee Act (1982); the Societies Act (1998); the Co-operative Societies Act; the Companies Act (1978); the Banking Act (1991); and the Kenya Post Office Savings Bank (KPOSB) Act (1962). The Microfinance Act (2006) has provided a much more comprehensive and consistent regulatory environment for deposit-taking MFIs (DTMs).

For the period ending 31st December 2010, the sector recorded an impressive 51.8% growth in pre-tax profits during the year. Total deposits and total assets held by financial institutions both recorded growth rates of 22.9% and 24.1% respectively. The sector was also characterized by strong capitalization levels as a result of retention of profits and capital injection. It is acknowledged that the commercial banks remain the dominant players in Kenya's financial sector (Kamau, 2009; Oloo, 2009). The commercial banks and their aspects of performance are reviewed in the following section.

### **1.1.5 Commercial Banks in Kenya**

This study was conducted among the commercial banks as licensed by CBK which is regulatory authority. According to the CBK Bank Supervision Annual Report (2010), the banks were classified into three peer groups which was a revision from the previous periods. The revised peer grouping is based on a weighted composite index comprising assets, deposits, capital size, number of deposit and loan accounts. Based on the weighted composite index, a large bank has a market share of 5% and above; medium bank between 1% and 5% and a small bank has less than 1% of the market share. Based on the revised peer grouping, there were 6 large banks, 15 medium banks and 22 small banks as at 31st December, 2010. Consequently, the large banks accounted for 56% of total assets, 55% of customer deposits, 57% of capital and reserves and 63% of the sector's profit before tax (CBK, 2010).

Commercial banks have also dominated the Kenya mortgage industry comprising 90% of the outstanding loan assets portfolio even though there are two large non-banking financial institutions (NBFIs) specifically licensed for mortgage activities. A survey of the mortgage finance in Kenya by CBK conducted in November 2010 indicated that Kenya's mortgage market has reported an annual average growth of 34% between 2006 and May 2010, indicating an exponential increase in mortgage loans. Mortgage business is characterized by barriers to entry or high risk for medium and smaller banks. The growth rates indicate that the small sized banks have the fastest average growth rate of 38% on average, followed by medium banks at 25% with large banks at 24% (CBK, 2010).

The five largest banks in Kenya have captured approximately 80 % of the retail market. The remaining banks exhibit varying degrees of technical sophistication, capital market expertise and technology innovation. Their corporate structure is typically dominated by controlling stakes held by families who in turn have varying degrees of banking expertise. This market structure is not tenable. It constricts the expansion of Kenya's banking sector as a whole and allows little scope for growth for each bank. The Finance Act (2009) requires banks and mortgage firms to hold a minimum core capital of KES 1 billion by December, 2012. This minimum capital requirement could place a number of the smaller banks in a precarious position, as they may not be able to grow their operations sufficiently by 2012 to comply.

The requirement should, therefore, compel substantial consolidation amongst the Kenyan banks themselves, but also act as the springboard for further foreign entrants both regional and global to take strategic positions in Kenya's banking industry. Other challenges for the industry are related to technological innovation which has transformed the landscape significantly. Automated teller machines (ATMs) numbers grew from 1,717 by December, 2009 to 1,979 by December, 2010 a 15.3% growth (CBK, 2010) and this excludes the 110 pesa points ATMs. Mobile telephone money transfer services such as M-PESA and ZAP which are convenient and available at low costs has also posed strong competition for the banks. The banks are, therefore, being forced to reconsider their service delivery cost, consider expansion to other East African regions and adopt use of ICT-Banking. Other options include credit reference

bureaus and agent banking to reduce non-performing loans and enhance financial inclusion. The developments are pushing the banks to realign their strategies, structures and processes so as to survive and remain competitive.

Despite all these challenges facing the commercial banks, they provide a rich pool of organizations that will assist the current study to offer insight into the organizational configuration and performance relationship at different stages of development. Besides the regulatory requirement to keep proper records through publicly published annual accounts will also provide accurate and consistent financial performance data that will enable study to conduct adequate comparison of the organizations.

## **1.2 The Research Problem**

Organization configuration can be viewed as the nature of the alignment in the elements of the organization's strategy, structure and environment. Strategy here is viewed as a realized product focusing on its formulation and implementation therefore, integrating the internal and/or external analyses and primary administrative activities making organizations whole. Structure is the formal framework ensuring better performance and includes interdependencies of individuals and groups, administrative rules and authority relations, information and control systems. Environment is viewed as the central position upon which organizations must align both their strategy and structure so as to achieve higher performance.

Configuration research aims to demonstrate that organizational performance hinges significantly upon matching characteristics of the internal organization elements and the external environmental demands forming a configuration. Review of literature found that studies on the relationship between organizational configurations and performance has frequently been a controversial subject of research in the field of strategic management due to the mixed empirical findings with both support and failure to find links (Ferguson & Ketchen, 1999; Mavondo, 2007). This has heightened debate on the relevance and development of configuration theory.

There are numerous studies available on configuration and performance relationship. However, these have been done in organizations mainly operating in either the developed economies or emerging economies. No specific study was found that had

been conducted in a developing country. Dutton (1989) pointed out that the context of a strategic issues processing describes the larger environment in which support and interest in strategic issues are facilitated, sustained or constrained. This study sought to vary the context by studying configuration in the banking sector and especially in Kenya which is a less developed economy than the others before. Further the environment in which banks operate in Kenya has been experiencing significant changes including rapid technological innovation creating pressure on service delivery cost, introduction of Finance Act (2009) setting minimum core capital requirements and increased competition from mobile money transfer, SACCOs, ROSCAs and ASCAs either as registered social welfare groups or as unregistered groups of friends/family (FSD, 2010).

Configuration research has been dogged by several related tendencies based on the diversity found in both conceptualization and operationalization of the constructs. They have often focused on the content or general characteristics of strategy, structure and external environment concentrating on the match or lack of it amongst these attributes. This tends to largely ignore the process side of how configurations are achieved or not achieved thus creating a gap in knowledge especially from a management perspective as knowing how success is achieved without knowing how to do it would be of less use. There was, therefore, need to carry out more rigorous studies in this area and build data supported justifications to support such assumptions.

Farjoun (2002) suggested that strategy should be viewed in terms of the process (formulation and implementation) rather than the content and shifting its focus from strategic choices to strategic change. This allows for construct coupling and assumption of time and flow, thus introduces the argument that realized strategies can also be a result of emergent streams of action recognized as a pattern after the fact. Pertusa-Ortega et al., (2009) and Meier et al., (2007) recommended that future studies incorporate the behavioural aspects of structure and allow for hybrid organizational forms incorporating both explicitly formal structures and emergent informal structures. Indeed Ogollah et al., (2011) and Sayer (1992) argued that previous studies have tended to concentrate on the formal circumscribed framework of structure

operating on a continuum of mechanistic or organic perspective and in that way structure has been criticized for being superficial as it lacks the interactive patterns of individual members. This study introduced the behavioural aspect by incorporating administrative procedures which are contextualized by social, political and cultural factors as developed by Lovas and Ghosal (2000).

#### Limitations of the Study

Literature on configuration and management research in general has had the tendency to rely on a single performance measure. As pointed out by Richard et al., (2009) in their review of performance measures in publications in top management journals from 2005 to 2007, this has created serious concerns and opened debate on the subject of performance measurement. The complexity of performance is perhaps the major factor contributing to the debate. Performance is viewed as multidimensional construct and therefore, requires to be viewed beyond the traditional objective/quantitative measures that focus only on end results.

#### Limitations of the Study: Subjective Views and Organizational Linkage on the

This study aims to address this research limitation acknowledging first the objective reality on organizations while incorporating the subjective views that influence organizations focusing on the process or means by which the end results are achieved. This was provided by adopting the triangulation approach which uses both subjective and objective measures together. The incremental benefits of using multiple measures have been shown to exist (Chen & Dodd, 1997).

Lastly, it is important to observe that virtually all economic models of business creation follow firm birth with firm growth (Aldrich & Reuf, 2006). Organizations gain their life through the progressive interrelation of the different levels of structure. Since structure is then related to a lifecycle (Scott, 1971), strategy is related to structure (Chandler, 1962) and environment is related to strategy (Miller & Friesen, 1983), then it is worthwhile to examine all these three concepts within the context of organizational development. Based on arguments that have been raised by earlier scholars (Miller, 1996; Sarason & Tegarden, 2003) that without incorporating stage of development in organizational studies then performance measurement will be underestimated, this study proposes to introduce organizational stage of development as a moderating variable. In so doing, the study aims to provide answer to the

following research questions. Is commercial bank performance in Kenya influence by organizational (strategy-structure-environment) configuration? To what extent does organizational stage of development moderate organizational configuration (strategy-structure- environment) and performance of the commercial banks in Kenya?

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

The overall objective of this study was to determine the moderating role of organizational stage of development on the relationship between organizational configuration and organizational performance of commercial banks in Kenya.

The specific objectives were to:

- i. Determine the influence of strategy and structure linkage on the performance of commercial banks in Kenya.
- ii. Explore the influence of structure and environment linkage on the performance of commercial banks in Kenya.
- iii. Establish the influence of strategy and environment linkage on the performance of commercial banks in Kenya.
- iv. Establish the relationship between organizational configuration and performance of commercial banks in Kenya.
- v. Assess the moderating effect of organization stage of development on the relationship between organizational configuration and performance of commercial banks in Kenya.

### **1.4 Value of the Study**

The banking sector is an integral part of the economy and as such plays a key role in the wellbeing of the economy of any country. A weak banking sector not only jeopardizes the long-term sustainability of an economy, it can also be a trigger for a financial crisis which can lead to economic crises. In a good number of these cases, the economic crisis have left an impact on the credit portfolios of the countries and caused a slowdown in their economic activities. Hence, it is crucial to identify the factors that determine the soundness of the financial sector.

This study is specifically designed to help unlock some of the key factors that contribute to the performance of these critical institutions by assessing complications surrounding organizational configuration theories and thus expand theoretical knowledge. This research is expected to advance theory in area of Kenyan banking industry management by discovering and empirically testing interrelationships among the components of strategic management, including the organizational strategy process, organizational structure, environment, stage of development and banks' performance. This study findings aim to bringing to light an additional facet that has been unexplored as relates to contingencies and complications surrounding organizational configuration theories, leading to significant implications for theory, practice and public policy in management.

This study will equip the managers of these institutions and other policy-makers with the knowledge of strategy and its applicability in managing softer issues within the organization, managing organizational structure and handling the complex and dynamic environmental aspects. This study will also provide practitioners of management with a road map for success, identifying critical organizational transitions and pitfalls that can be avoided during firm's growth and complexities especially in young economies thus providing their organizations with desired competitive advantage. Ideally, these results will guide managers as to what configuration to adopt under particular environmental conditions providing solution not only to what success is but how to achieve that success.

Finally, this study will enable the government and institutions, both public and private, to develop and implement strategic management policies that are tailor-made to enhance performance. This is to be achieved by including the moderating effect of organizational stage of development in extending previous research on configuration and performance relationship. An understanding of how these constructs and their correspondence contribute to a bank's performance is of benefit for practitioners in effective strategic planning and implementation. This study therefore aims to make a significant contribution to knowledge on organizational configuration and performance relationship by demonstrating how contextual differences impact differently on strategic analysis and behaviours.

### **1.5 Outline of the Thesis**

The thesis consists of six chapters. Chapter one presents the conceptual and contextual discussion of the study. It provides a brief background to all the key study variables. It further explores the statement of the research problem, outlines the study objectives and provides the justification and value of the study. Chapter two presents an in-depth theoretical and empirical literature review with an aim of creating a clear understanding of organizational configuration and performance. It starts by providing the strategic management orientation thus setting a foundation for the theoretical perspectives of research approaches in strategy. It further discusses theoretical literature related to each key variable of the study. This is followed by an empirical literature review on the concept of organizational configuration and its relationship with performance. The building blocks of organizational configuration being interactive are reviewed in details through a bi-variate relationships assessment. The chapter then introduces literature on stage of development and performance and finally ends with tabulated presentation of the knowledge gaps identified from the literature, the proposed conceptual framework and corresponding hypotheses.

Chapter three provides the methodology adopted for this research along with the research philosophy, design and population of the study. Other aspects include data collection methods, measurement of research variables studied and data analysis tools used. Chapter four gives the data analyzed regarding individual key variables (strategy, structure, and environment) that constitute organizational configuration in this study and performance. The chapter is divided into three parts: It starts by presenting the characteristics of the samples (banks) that were studied. It then describes the nature of strategy, structure, environment and organizational performance; offering descriptive analysis of each attributes. This is followed by hypothesis testing on the bi-variate relationship of strategy-structure, structure-environment and strategy-environment and how they relate to corporate performance. This also provides the description of organizational configuration and testing for operational hypotheses on their relationship with organizational performance.

Chapter five provides data analyzed and demonstrates how stage of development which is the moderating variable is developed. The descriptive analyses for stage of development are provided here. This was prompted by observations that different organizations are at different stages of development. The chapter further provides analysis of research data to establish the moderating effect of stage of development on the relationship between organizational configuration and organizational performance. Tests of hypothesis on the relationship are also provided. This chapter concludes by providing discussion on the results and conclusion drawn out of the discussions. Chapter six concludes the thesis by summarizing the main findings and the conclusions. The chapter also gives the implications of the study findings with regard to theoretical, practical and methodological underpinnings. The chapter concludes with discussions on the limitations of the study and provides suggestions for future research.

## CHAPTER TWO

### LITERATURE REVIEW

#### **2.1 Introduction**

This chapter reviews both theoretical and empirical literature with an aim of creating a clear understanding of organizational configuration and performance linkage. The chapter focuses on how configuration is jointly produced by organizational attributes (strategy, structure) and environmental attributes that are critical to an organization in an industry. Empirical studies evaluating the impact of configuration on performance are also presented in the chapter. The chapter concludes by providing related selected studies and the conceptual framework that the study used to address the knowledge gaps. Hypotheses that guided the study are outlined.

#### **2.2 Strategic Management Orientation**

Lamb (1984) describes strategic management as an ongoing process that evaluates and controls the business and the industries in which the company is involved; assesses its competitors and sets goals and strategies to meet all existing and potential competitors; and then reassesses each strategy periodically to determine how it has been implemented and whether it has succeeded or needs replacement by a new strategy to meet changed circumstances, new technology, new competitors, a new economic environment, or a new social, financial, or political environment.

In general terms, there are two main approaches to strategic management, which are opposite but complementary. The first is the industrial organizational approach based on economic theory and deals with issues like competitive rivalry, resource allocation and economies of scale. It premises on assumptions of rationality, self-discipline behaviour and maximization of profits. The second approach is sociological which primarily deals with human interactions and premises on assumptions of bounded rationality, satisfying behaviour and profit sub-optimality. This brings in the human and social aspects of strategy which is best demonstrated by Lovas and Ghosal (2000) in their paper strategy as a guided evolution. They emphasize incorporation of an important yet realistic role of top management in shaping the direction and outcomes of an evolutionary process within the firm having human and social capital as critical units of selection within the process.

### 2.3 Theoretical Approaches to Research in Strategic Management

Contributions from past researchers have molded the organizational system and culture, and managers can benefit from an awareness of these contributions. As such, scientific management can be seen as the starting point from where the managerial aspects of organizations are systematically being analyzed and improved for practical application in the day-to-day running of organizations (Cole, 2004; DuBrin, 2006). As with any modern theory, scientific management theory is also subject to criticism and has evolved with time to suit the needs of organizations and the environments they are operating in. This is the crucial factor for survival, being able to adopt and adapt to the needs of the surroundings, without foregoing the basic or fundamental structural beliefs of the concept or notion being upheld.

Owing to its roots as a more applied area, strategic management has traditionally focused on business concepts that affect firm performance. To explain performance of firm in their empirical researches, scholars have usually based their studies on above theoretical directions. However, those researches have often applied only one of the three main theories or two in rare cases (Nham & Hoang, 2011). In other words, there have been a very few comprehensive researches applying over two theories in one study to explain performance of a firm.

Strategic management research is mainly concerned with identifying differences among enterprises performance by examining their efforts to develop sustainable competitive advantages as determinants of their ability to create value (Ireland, Hitt, & Simon, 2003). However, a large number of questions in the social and economic sciences, including many questions regarding the strategic development are based on interrelationship and are not unidirectional. Indeed, most of the constructs used to describe strategy phenomena have multidimensionality and have often posed a challenge for researchers especially when trying to either make meaning out of them or testing for their relationships and wanting to maintain significant levels of validity and reliability.

This study employed a theoretical framework that incorporates ideas of the various theoretical streams. By integrating aspects of configuration theory, lifecycle theory and behavioural theory into the theoretical framework, the study enriches understanding of the three most powerful influences that shape an organization (strategy, structure and environment), their dependencies and interdependencies and finally, how they configure to influence organizational performance. This approach borrows from Andersen's (1997) argument that a theoretical framework can be based on more than one theory. In the next section, relevant theories that have been integrated in this study are reviewed.

### **2.3.1 Universal Effect Theory**

Different traditional approaches to research in strategic management have often been used in an attempt to find out the relationship between performance and success factors of organizations based on a unidirectional causality chain concept which was supposed to function in the direction - structure follows strategy, and performance follows structure (Chandler, 1962). The most basic of these approaches has been the universal effects perspective approach which assumes that linear relationships between mutually independent success factors and performance exist and hold under any circumstances (March & Sutton, 1997).

This perspective adopted the view that an organization is a system, or an entity of interrelated parts. The open systems perspective views the complex organization as a set of interdependent parts that, together, constitute a whole which, in turn, is interdependent with some larger environment. It is vital since the interaction and interlinking of internal resources, capabilities and systems very much explain the dynamism and adaptive nature of organization towards its environment. The perspective viewed strategy as an art and conducted in-depth case studies of individual firms, an approach which lacked generality, or sought universal law.

According to Dess et al., (1993) and Michor et al., (2010), this approach characteristically leads to artificial over-simplification of the phenomenon of interest making it rather a simplistic approach since it can hardly ever capture the complexity of social reality. The distinction between congruent and contingent propositions made

by Fry and Schellenberg (1984) clarifies the difference between the universal effects perspective and the contingency theory. In a congruent proposition a simple unconditional association is hypothesized to exist among variables in the model.

### **2.3.2 Structural Contingency Theory**

The term contingency theory was coined by Lawrence and Lorsch (1967) in an empirical study showing the effects from organizational structure on relative economic performance were contingent upon environmental attributes. Contingency theory thus offered a synthesis of two conflicting research paradigms in organization theory both claiming universal virtue. According to Lawrence and Lorsch (1967), organizations had to be both differentiated and integrated to an extent of optimality, which was contingent upon environmental uncertainty. A “contingent” proposition is one which hypothesizes a conditional association of two or more independent variables with a dependent outcome (Fry & Schellenberg, 1984).

Structural contingency theory has dominated the study of organizational design and performance during the past twenty years. It is a more complex and elaborated approach compared to the universal effects perspective since it assumes that the strength and direction of the performance impact on certain success factors are affected by the environment (Ferguson & Ketchen, 1999). Structural contingency theory argues that individual organizations adapt to their environment. The environment is seen as posing requirements for efficiency, innovation or whatever, which the organization must meet to survive and prosper (Hage & Aiken, 1970). Each of the main structural contingency theories identifies a contingency factor and delineates which organization structure is needed in order to operate effectively at each level of that factor. Thus, structural contingency theory posits that organizational performance is affected by the fit or misfit between the structure and the contingency.

Structural contingency theory informs the theory of organizational design by providing a comprehensive framework that relates variations in organizational design to variations in the situation of the organization. In theoretical terms, contingency theory is sociological functionalism, explaining the existence of fits between structure and contingencies by their beneficial effects on organizational performance.

Contingency theory is concerned with role of structure in organizational performance. In a normative perspective, the principal research problem becomes one of identifying structural designs which are efficient effective and viable under conditions of changing environment. Efficiency, effectiveness and viability become the criteria (Burton & Obel, 2004) against which different designs are validated.

The contingency theory approach has more recently been criticized as having major shortcomings (Harm et al., 2007). Miller (1981) point out that contingency theory approach makes no attempt to segment the sample to discover whether differences in the nature of relationships within the sample exist and assumes that only one way to succeed in a certain environment is relevant and searched. Likewise Harm et al., (2007) posit that contingency approach ignores changes in contingencies and is consequently not capable of illustrating organizational development. The major challenges to it are either theoretical, while some are empirical. However, some of these challenges have lead to innovations in theory. Other challenges are accompanied by innovations in method. Both these theoretical and methodological innovations constitute opportunities for the contingency. The contingency approach entails identifying commonly recurring settings and observing how different structures, strategies and behavioural processes fare in each setting.

### **2.3.3 Configuration Theory**

Traditional approaches are inadequate to model and consequently cannot explain the multiple and significantly interdependent contingencies such as strategy, leadership or technology, which most of the firms have to face (Burton & Obel, 2004). To support a shift from traditional administrative approaches, Kraus and Kauranen (2009) posit that strategic management become more entrepreneurial which would characterize a new management philosophy that promotes strategic agility, flexibility, creativity, and continuous innovation. Accordingly, a clear need is identified to move beyond simple contingency approaches towards that which better takes the mutuality of driving forces for the strategic development of a firm into account and that's the configuration approach. It is a modern variation of contingency theory and it states that the fit between contingency and structural (and other organizational) variables is limited to just a few configurations or gestalts, that is, fits (Miller, 1986).

The configuration approach was developed in the early nineteen-seventies and made a serious impact on business studies. Configurations can either be discovered via typologies, meaning theoretical reasoning, or via taxonomies, meaning qualitative and quantitative methods. Although originally developed for large organizations, this approach has been adapted for even smaller and entrepreneurial organizations (Mugler, 1994). This approach regards firms as complex entities, whose success and development depends on the interaction between personal, structural, strategic, and external variables. It is powerful in analyzing relationships of several domains simultaneously and building new conceptual models consisting of more than one domain (Harms et al., 2009). Therefore, not only dependencies but also interdependencies can be analyzed.

The configuration approach to research in strategic management offers much potential for solving some of the difficulties inherent in articulating multifaceted constructs and relationship among them. This approach yields a systematic, detailed and holistic image of reality, without attributing causation to any of the individual parts of the model (Dyck, 1997; Ward et al., 1996). It is an assertion that the parts of a social entity derive their meaning from the whole and cannot be understood in isolation (Meyer et al., 1993). As such, it explains how order emerges and how it is designed from interactions of organization parts as a whole.

Common agreement on what configurations are has been lacking (Sluisman, 2005). Lawrence and Lorsch (1967) came up with the differentiation and integration systems theory in which they argued that it is the dynamics of this two that gives rise to concept of configuration. They proposed typologies for economic and technical circumstances arguing that there are more effective organizations for certain economic circumstances. Meyer et al., (1993) proposed the equifinality principle with the fundamental characteristic being that patterns are discernable in features of organizations and that configurations are about social entities that derive meaning from the whole and cannot be understood separately. As such, there is no one single best way for organizations to be successful.

Miles and Snow (1978) on their part contended that configurations arise from organizational changes which occur in adaptive cycles determined by three independent problems, namely; the entrepreneurial, the administrative and the engineering problems. Miller (1996) referred to configuration as a complex system of interdependency which comes about as a result of a central orchestrating theme which he interchangeably used with imperatives. The imperatives include environment, structure of organization, leadership and strategy. These he describes as causes/orchestrations and configurations are the consequences. Mintzberg (2001) views configurations as the form or structure that organizations take during certain periods in time. Configurations are, therefore, periods of stability usually punctuated with periods of transformation (change) of which he developed seven typologies.

Lastly, Porter (1996, 2001) proposes configurations as mutual reinforcements. The argument is that strategy is the main tool to achieve or preserve competitive advantage. He calls for strategic positioning and operational effectiveness bringing the concepts of re-configuration or redesigning of organizations. He introduces "fit" arguing that the two activities must combine so as to mutually reinforce and achieve competitive advantage.

#### **2.4 Configuration Theory Approach to Strategic Management**

Configuration approach to strategic management, involves unique combination of different elements which must appear simultaneously. These elements must interact with each other, be interrelated and also be mutually dependent. A time dimension is involved thereby timing within the business cycle must be incorporated in configurations. It must be noted that a unique combination of the elements is possible since there are several internal and external contexts involved in configuration. Harms, Kraus and Reschke (2007) concluded that the interplay between personal, structural, strategic and environmental factors, the so-called configurations, is, therefore, a promising approach for conceptualizing strategic entrepreneurship. Accordingly, Kraus and Kauranen (2009) conclude that the configuration approach remains one of the most promising avenues for future research where valid questionnaires for quantitative empirical investigations can be developed.

McKelvey's (1982) conclusion that configuration allows for classification of organizations into sets of homogeneous groupings having similar characteristics and are able to significantly explain the variance among them ultimately remains very important. This contributes to organizational theory by offering explanations as to why some organizations are relatively unique and some have strong commonalities. This is a salient goal of strategic management (Schendel & Hofer, 1979).

#### **2.4.1 Organizational Strategy**

Strategy is the central concept in the field of strategic management though it has continued to elude a common definition and operationalization (Hambrick, 1980). Although strategy is one of the most studied and taught concept, it is paradoxically the least understood (Chaharbaghi, 2007). Despite the large amounts of research on this subject, no single definition has been agreed upon to date. Instead, a wide range of conceptual frameworks which cannot be regarded as mutually exclusive but rather mutually supportive exists for the formulation and implementation of strategies. All these frameworks have one thing in common that is, they all aim at maximizing organizational performance by improving its position in relation to other organizations operating in the same competitive environment (Feurer & Chaharbaghi, 1995).

A more vital way of viewing the concept of strategy is by reviewing two key broad fundamental progressions distinguished more by epistemological differences rather than by chronological order (Farjoun, 2002). The first is the mechanistic perspective which provides a set of conceptual, explanatory and prescriptive models unified by logic. They are based on disciplinary-based and stand alone theories mainly SCP (Strategy-Conduct-Performance), SSP (Strategy-Structure-Performance) and RBV (Resource-Based View). They are used to explain variations in strategy and performance and include the design model (Barney, 1997), and they view strategy as a relatively stable configuration between mutually supporting organizational elements. They have provided a unified view, but their tenets have been increasingly questioned as their assumptions suit a relatively stable and predictable world, are static, linear and fragmented thus narrow and increasingly less pertinent one (Rumelt et al., 1994).

The second is the organic perspective which includes strategy process research on formulation and implementation (Quin, 1980), evolutionary ideas and process models (Van de Van, 1992; Barnett & Burgelman, 1996) and interactive and integrative views that have provided richness and pertinence, but not a unified perspective. It introduces strategy concept as an adaptive coordination of goals and actions, and it has also shifted the focus of strategy from strategic choices to strategic change and gives more recognition to “soft” variables and messy side of reality (Farjoun, 2002). It allows for construct coupling, assumption of time and flow, thus introduces the argument that realized strategies can also be a result of emergent streams of action recognized as a pattern after the fact (Mintzberg & Waters, 1985).

Strategy in every organization comes to existence through two independent but simultaneous processes. The first is the conscious, analytical process which results into intended or deliberate strategy. The second process occurs in context where plans prove inadequate. This process results into emergent strategy and it offers a viable alternative (Mintzberg et al., 1998). The organic perspective makes use of the organization environment strategy performance (OESP) model of strategic management by incorporating the appreciation for interaction and reciprocal causation of key constructs, feedback loops, internal firm’s attributes, cultural, social and decision processes as important influences rather than derivatives of strategy formulation (Barney & Zajac, 1994).

#### **2.4.2 Organizational Structure**

The concept of structure is usually understood to imply a configuration of activities that is characteristically enduring and persistent; the dominant feature of organizational structure is its patterned regularity (Ranson et al., 1980). Yet descriptions of structure have typically focused on very different aspects of such patterned regularity. Some have sought to describe structure as a formal configuration of roles and procedures, the prescribed framework of the organization. Structure also is the patterned regularities and processes of interaction (Willmott, 1981). Following Weber (1946) theory of bureaucracies, structure can be defined as a formal dimension of framework depicted by precise and impersonal tasks, rules and authority relations. The explicit purpose of such formally circumscribed frameworks remains to achieve more calculable and predictable control of organizational performance (Child, 1977).

This forms the first major school of thought on structure. Out of this school was proposed a simple way of describing organizational structure as differentiating between organizations on dimension of centralization or decentralization depending on relationship with corporate head office (Ghoshal et al., 1994; Habib & Victor, 1991). Another popular approach to this school is the mechanistic-organic continuum of structures. Mechanistic model implies a hierarchical, rigid structure in which power and authority are centralized at the hands of the top management and the designers of work processes. Organic model, however, enjoys considerable autonomy and have a high degree of discriminality when making certain decisions (Barney, 2002; David et al., 2002).

There is the second school of thought. They break with the typical conception of structures as a formal framework counter posed to the interactive patterns of organizational members. Drawing upon Bourdieu (1971, 1977) and Giddens (1979, 1984), this school proposes that structure must incorporate not only relations of meaning and power but also the mediation of contingent size, technology, and environment. The above arguments ties up with the structuration theory's fundamentals whose premise is summed up in the famous process of "duality of structure" upon which action and structure cannot be analyzed separately as the connection between the two are a duality that cannot be conceived apart from one another (Giddens 1979: 254; 1984; Jarzabkowski, 2008).

Structuration theory provides many opportunities for a framework in which to consider the place within a wide ranging theoretical framework. It holds that all human action is performed within the context of a pre-existing social structure which is governed by a set of norms and/or laws which are distinct from those of other social structures (Frankel, 2001). The many elements brought together in the theory can be used to develop a rich picture of institutional dynamic and importantly, the relationship between the intersecting values, behaviour and use of resources in different sorts of organizations. The potential to use the structuration framework to document a rich picture of particular realities and not just abstraction is what makes it appealing. Giddens (1989) departed from the conceptualization of structure as some given or external form.

According to Delmas and Toffel (2009), organizational architecture can be divided into explicitly mandated formal structures (incentives, information processing structures and authority relationships) and emergent informal structures (culture, social networks and communities). Later process scholars have acknowledged that administrative procedures are contextualized by social, political and cultural factors (Lovas & Ghosal, 2000). From the above arguments and following the works of Rice and Mitchell (1973), there is an increase in need for a hybrid system of defining structure in research. Organizational structure, thus describes both the prescribed framework and realized configurations of interactions and the degree to which they are mutually constituted and constituting (Fombrun, 1986). This study adopted the hybrid approach of structure that involves both the framework and the design of structure.

### **2.4.3 Organizational Environment**

Environmental context of an organization represents an outer environment within which or to which influence, the elements of organizational strategy are blended. Organization theorists emphasize that organizations must adapt to their environment if they are to remain viable. As such, a greater need to clearly identify both the components and dimensions of the environment and clearly define them exists. However, one of the shortcomings of much of the theoretical and empirical research on organizational environments has been the failure to clearly conceptualize organizational environment or the elements comprising it (McKiernan, 2006).

Many scholars have offered definitions on environment, they include environment as elements not formally defined as belonging to the organization (Dill, 1962), the totality of physical and social factors that are taken directly into consideration in the decision-making behaviour of individuals in organizations (Duncan, 1972), environment as a multidimensional construct with several specific environmental dimensions, which include dynamism, complexity and hostility (Dess & Beard, 1984; Chakravarthy, 1997). Environmental dynamism has been closely linked to the information uncertainty and is characterized by rate of change and innovation in industry as well as unpredictability of competitors and customers (Thompson, 1967). Complexity is linked to heterogeneity and encompasses variations among firms

(Porter, 1979) while hostility has been tied to the resource dependence perspective representing the degree of threat to the firm by up and downswings of principal industry (Miller & Friesen, 1982).

Tan and Litschert (1994), concludes that organizational environments reflect two perspectives: the information uncertainty which is mainly perceived and the resource dependence which posits that the environment is a source of scarce resources which are sought after by competing organizations. As such, the environment becomes less munificent or more hostile, firms are subjected to greater uncertainty. Mason (2007) on his part describes the business environment as a complex adaptive system and thereby having an influence on the choice of strategic activities. It is these issues that led Hamel and Prahalad (1994) to conclude that the environment is changing faster than ever before with such change occurring in two major dimensions, the complexity and turbulence.

The biggest unresolved issue among researchers however, is on how environment can be analyzed. Some researchers have treated the environment as an objective fact independent of firms (Aldrich, 1979) while others have treated the construct as perceptually determined and enacted (Weick, 1969). Both are real and relevant from a strategic management standpoint. Objective environments are relevant to primary strategy making (domain selection), while perceived environments are a prime input to secondary strategy making (domain navigation) (Bourgeois, 1980).

Fahey and Narayan (1986) have proposed that the environment be decomposed into segments with the two conceptions widely used in organization environment being the task environment and the institutional environment. The task environment includes all aspects of the environment potentially relevant to goal setting and attainment. Institutional environment includes socio-political, demographic, economic, and international elements (Scott, 1987). Child (2000), identified both high and low context as approaches to environmental analysis, with the former occupied by economists and embracing economic universalism and technology theory and the latter occupied by socialists embracing cultural and institutional theory.

The most remarkable contribution to the analysis of environmental context in strategic management is in the works of strategist historicist McKiernan (2006) who recognizes, introduces and explains the influential issues in the environmental debate. He introduces the philosophical recognition of the environmental context through both the positivist and interpretive approaches. This study drew from the various views of business environment as described by various researchers and focused on the dimensions as opposed to specific environments.

#### **2.4.4 Organizational Performance**

There is considerable debate on the appropriateness of the various approaches to the utilization and measurement of organization performance. Earlier studies emphasized the use of objective financial measure for performance although more recently scholars are beginning to call for incorporation of the non-financial measures in organizational performance analysis. Tvorik and McGivern (1997) in their search on determinants of performance concluded that there are two areas of focus within the research stream of the business policy literature on organizational performance. An economic perspective which emphasizes the importance of external market factors and the organizational perspective that builds on behavioural and sociological paradigms and their fit with the environment. They found that organizational factors impact firm performance roughly twice as much as economic factors.

Richard et al., (2009) in their review of performance measures from articles published in management journals between 2005 and 2007 concluded that organizational performance encompasses three specific areas of firm outcomes, namely; financial performance, product market performance such as sales and market share, and shareholder return. They identified three common approaches to organizational performance measurement seen in the literature. The first is where a single measure is adopted based on the belief supported by theory and evidence in the relationship of that measure to performance (Roberts & Dowling, 2002). The second approach is where several different measures are used to compare analyses with different dependent but identical independent variables (Miller, 2004). The third approach is where dependent variables are aggregated, assuming convergent validity based on the correlation between the measures.

The banks' definition of performance is taken as the capacity to generate sustainable profitability. Profitability is essential for a bank to maintain ongoing activity and for its investors to obtain fair returns; but it is also crucial for supervisors, as it guarantees more resilient solvency ratios, even in the context of a riskier business environment. The main drivers of banks' profitability remain earnings, efficiency, risk-taking and leverage. Various stakeholders (depositors, debt or equity holders and managers) emphasize different aspects of profitability. These views need to be taken into account by market participants when looking at ways of measuring bank performance that meet their needs. For this, each different group of market participants has its own preferred set of indicators (ECB, 2010).

Baltazar, Kelloway and Chamard (2010) perceive organization performance as an important aspect in banking studies and it tends to seek organizational performance as relates to the formal mission, revenue, expense, profitability, and customer satisfaction targets in the preceding fiscal year. They posit that configuration research has sought to demonstrate that organization performance hinges significantly upon matching either the characteristics of the internal organization elements that make up configuration and/or the attributes of the configuration with the requirements of the external environment. The method of triangulation provides for multiple measures thus compensating for weakness on individual single set measures used widely before.

## **2.5 Strategy-Structure-Environment Configurations**

The major paradigms of organizational theory suggest that there are four imperatives or powerful influences, namely; environment, organizational structure, leadership, and strategy that help shape organizational configurations (Miller, 1987). These paradigms highlight the significance of factors complementary to strategy, such as organizational structure, the environment and firm performance. Originating in Chandler's (1962) classic study of the growth of large USA firms, the model proposes that different growth strategies are driven by the accumulation and deployment of internal resources, and are matched by different internal structural arrangements. This theoretical model particularly implied that the match between strategy and structure results in better performance.

Strategy-structure-environment performance configuration predicts that a firm's strategy, created in consideration of external environmental factors, drives the development of organizational structure, processes and performance (Galunic & Eisenhardt, 1994). The SSP paradigm has provided a theoretical basis for the formulation – implementation link in the design model (Farjoun, 2002). This study seeks to employ a theoretical framework that will incorporate ideas of the various theoretical streams. By integrating aspects of configuration theory, complexity theory, structuration theory, lifecycle theory and behavioural theory into the theoretical framework, the study will enrich understanding of the three most powerful influences that shape an organization (strategy, structure and environment), their dependencies and interdependencies and finally how they configure to influence organizational performance. This approach borrows from Andersen's (1997) argument that a theoretical framework can be based on more than one theory.

### **2.5.1 Strategy and Structure Configuration**

The true meaning of strategy and structure configuration is captured by the description given by Davies, Brady, and Hobday (2007) who describe it as the congruence between a specific strategy and a specific arrangement of organizational design factors. The sequence between corporate strategy and organizational structure is a very important topic in strategic management (Donaldson, 2001; Harris & Ruefli, 2000). Since Chandler's (1962) classic analysis indicated that strategy precedes structure because an increase in diversification requires a new and more decentralized structure, the relationship between strategy and structure has been subject to both empirical and conceptual studies with aim and intention to show the direct or indirect links.

Other theoretical perspectives exist that challenge the generalizability of Chandler's thesis that structure follows strategy. These perspectives have suggested different types of linkage between both variables (Fredrickson, 1986; Hall and Saias, 1980; Russo, 1991). Many researchers today think there has been a considerable change since Chandler's work and, therefore, it is possible that the sequential approach to strategy and structure he postulated may no longer be viable in this new environment. In all this cases, strategy was characterized mainly in terms of breath of markets either

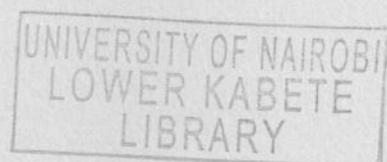
as diversified or not. Structure, on the other hand, was largely according to its divisionalized form and nature of controls. Both variables today have much broader conceptualizations.

Galan and Sanches – Bueno (2009) after reviewing 10 years data from 1993 to 2003 with context to Spanish organizations concluded that strategy leads structure and structure leads strategy. However, the former is stronger than the latter. They conclude that, the relationship between diversification strategy and multidimensional structure postulated by Chandler (1962) focusing on administrative efficiency remains applicable to today's market only that it requires broadening based on current circumstances. Gebauer et al., (2010) while analyzing strategy-structure linkage in European service industry of manufacturing companies conclude that their findings do not offer guidance on whether the service strategies are following the path of emerging or intended (deliberate) strategies, nor do they predict whether the linkage functions through strategy-follows-structure or structure-follows-strategy paradigms. They proposed that both questions remain to provide promising research prospects. Indeed, the frequency of the changes to the organizational structures indicates that robust strategy and structure linkages are still in need. Methodologically, Venkatraman (1989) concluded that in general, the identification of strategy-structure linkages requires the use of factor analyses and cluster analyses as analytical approaches

### **2.5.2 Structure and Environment Configuration**

Over the last decade, environmental issues have become increasingly significant to policy-makers in both the political and the business world (Avilla & Bradley, 1993; Ladd, 1994). Globally, governments and business community are increasingly seen to be adopting environmentally aware measures, to regulate the activity of corporations and consumers alike. A decision that ranges across a continuum is required as to the position a company adopts in relation to the environment (Ghobadian et al., 1995).

Literature on population ecology of organizations contends that the environment selects out various common organization forms. There are only a rather limited numbers of possible strategies and structures feasible in any type of environment.



Successful movement between organizational forms is considered rare (Miller & Friesen, 1984), due to the constraining forces of the environment and structural inertia of the form itself. Organizational forms possess distinct organizational competencies (Miles & Snow, 1978; Snow & Hrebiniak, 1980) which limit the range of choices available to an organization when faced with environmental change (Prahalad & Hamel, 1990).

Organizations with too little structure lack enough guidance to generate appropriate behaviours efficiently (Okhuysen & Eisenhardt, 2002; Baker & Nelson, 2005), while organizations with too much structure are too constrained and lack flexibility (Siggelkow, 2002). This tension produces a dilemma for organizations, as high performance in dynamic environments demands both efficiency and flexibility. Research shows that high-performing organizations cope with dynamic environments with less structure (Martin & Eisenhardt, 2000; Rowley et al., 2000). Conversely, less dynamic environments favour efficiency, and so high performing organizations have more structure in these environments (Rivkin & Siggelkow, 2003). Overall, this suggests that the optimal amount of structure decreases with increasing environmental dynamism, a consistent finding within multiple literatures.

This is found coherent to structure legitimization by Pavis et al., (2009) who elaborate that entrepreneurial organizations that have narrow structures find the challenge in any environment the same, they need to gain enough strength in the structure before failure ensues. For Lowell and Rumelt (2009), in this uncertainty, businesses have to do more of what is working out and less of what is not. It is foolhardy to think that one can see the future and design strategies for response. One reason why results from research regarding the interrelationships between organizational form, response to environmental change, and performance may be mixed is that prior research has had the tendency to focus on changes between organizational forms as opposed to also examining changes within organizational form (Fox-Wolfgramm, Boal & Hunt, 1998). Organizations can respond to emerging environmental conditions by making changes either within their current form or by changing to another form (Davis, Eisenhardt & Bingham, 2009).

One could also argue that organic, decentralized and differentiated structures and innovative strategies may lead to /cause an increase in executives' perception of environmental uncertainty. Such perceived uncertainty may be a result of the corresponding increase in boundary spanning activity and information processing that tends to be associated with such structures and strategies. Thus, structure and strategies may serve to influence environmental perceptions.

### **2.5.3 Strategy and Environment Configuration**

A consistent characteristic of the strategy paradigm, regardless of perspective is the assumption of a link between a firm's strategic profile and its external context (Venkatraman & Prescott, 1990). The strategic choice perspective asserts that this linkage has significant implications for performance (Miller & Friesen, 1983), yet empirical evidence is inconsistent and limited to results from market-driven economies.

The literature on organizational environments reflects two prominent perspectives. Based on the perspectives, it can be concluded that as the environment becomes less munificent or more hostile, firms are subjected to greater uncertainty (Tung, 1979). Equally, specific environmental dimensions such as complexity and dynamism have different impacts on the formulation of a firm's strategy. These dimensions affect top management's perception of uncertainty, which in turn influences such strategic decision characteristics as propensity for risk-taking, futurity, pro-activeness and defensiveness (Miller & Friesen, 1982). According to March and Simon (1958), organizations effectiveness gets affected as management tends to reduce the firm's dependence on or increase its control over its resources. Management must be able to scan and interpret the environment and make decisions appropriate for both internal arrangement and external alignment.

This strategic choice perspective proposes that strategy, structure and process must fit environmental circumstances and that these conditions may change over time (Child, 1972). The fit between environmental dimensions and strategic orientation will lead to better performance (Venkatraman & Prescott, 1990). Consistent with this perspective, Mintzberg (1973) defines strategy as a patterned stream of decisions, which focus on

a set of resource allocations that are employed in an attempt to reach a position consistent with a firm's environment. He emphasizes on decision-making process rather than context of strategies relating them to environmental context applied.

The evidence supporting a relationship between the environment-strategy co-alignment and performance is compelling, and empirical studies demonstrate that the pattern of strategic change following deregulation is associated with differences in performance (Smith & Grimm, 1987). Miller and Friesen (1983) summarized their findings by arguing that successful archetypes adopted differing strategies to cope with differing environments. Lenz (1980) found that the combination of environment, strategy, and organizational structure in high-performance firms differed significantly from that of low- performance firms. Similarly, Hambrick (1983) found that alternative strategies did not lead to equal success within an industry. Miles and Snow (1978) showed how prospectus, defenders, reactors and analyzers choose unique strategies to adapt to their environments and showed how they may influence organizations technology and its structures. They discussed strategic content but focused mostly on innovation and product line breadth.

Miller and Friesen (1978) came up with empirical taxonomy of organizations and examined adaptive strategies and their environmental correlates with concentration being on process of strategy making more than context. In particular for firms that operate in competitive environments, the strategy literature indicates that there is a need for a distinctive strategic orientation in order to exploit critical environmental resources and achieve a competitive advantage (Miller & Friesen, 1983). Strategic management theory and techniques have become standard materials in executive training programmes (Luo & Yu, 1991). These practices encourage managers to become more sensitive to the dictates of the external environment, and require managers to scan environmental conditions, evaluate strengths and weaknesses, and make informed strategic decisions.

## 2.6 Organizational Configuration and Performance Implications in their study

Any research domain that contains the study of firms from a strategic management perspective has firm strategy formulation and implementation decisions pointed out as the key in explaining superior performance. This leads to either the historically dominant approach which focuses on empirical classification of organizations in order to define inductively a set of configurations appropriate to a given context or the deductively derived configurations which apply broadly and are not dependent on particular industry contexts.

The concept of organizational configuration has been increasingly used in publications on performance of companies, gaining high recognition in organizational research specifically in strategic management. Fiss (2008) concluded that the study of organizational configuration which he defines as commonly occurring clusters of attributes of organizational strategies, structure and processes forms a central pillar of both organizational research and strategic management literature. Configuration approach or archetypes, gestalts, consistency or fit indicates that a firm's performance will depend on the degree of adjustment existing between organizational context and organization structure remembering that no single form of organization exists that is ideal for every situation (Donaldson, 2006; Zott & Amit, 2008). Likewise, continuing attention to configuration theories stem from their multidimensional nature, acknowledging the complexity and interdependent nature of organization, where fit and competitive advantage frequently rest not on a single attribute, instead on relationship between multiple characteristics (Burton & Obel, 2004; Siggelkow, 2002).

Bowen, Siehl, and Schneider (1989) described organization configuration as coalescence of the attributes of strategy, structure, and environment that are internally consistent, complementary, and mutually reinforcing. Miller et al., (2002) and Snow et al. (2005) furthering the argument pointed out that the three attributes have some complementary aspects and what really guides firm success is an appropriate adjustment between them. However, Pertusa-Ortega et al., (2009) in their study evaluating strategy, structure, environment and firm performance in Spanish firms noted a contradiction. To them even when both internal and external adjustments are combined, statistical analysis indicated a contradiction to the fact that completely

adjusted firms have a better performance. Grinyer et al., (1980) in their study analyzing the strategy, structure, environment and firm performance in 48 UK companies concluded that strategy–structure linkage is stable and positive and fit between strategy and structure was found to be negatively correlated with perceived environmental hostility but unrelated to financial performance. Meier et al., (2007) while testing this in several hundreds of public organizations over a period of six years concluded that at least for those organizations the contingency relationship proposed by Miles and Snow do not hold. Lenz (1980) found that the combination of environment, strategy, and organizational structure in high-performance firms differed significantly from that of low-performance firms.

Astley (1983) brought a new perspective by indicating that organizations tend to change their elements in a manner that either extends a given configuration or moves it quickly to a new configuration that is preserved for a long time. Piecemeal changes will often destroy the complementary among many elements of configurations and will thus be avoided. Only when change is absolutely necessary or extremely advantageous will organizations be tempted to move concertedly and rapidly from one configuration to another that is broadly different. Such changes, because they are expensive will not be undertaken very frequently. Consequently, organizations will adhere to their configurations for fairly long periods.

Organizations which are able to achieve a fit between their strategy and structure can create a significant competitive advantage, while firms that do not have a fit are left vulnerable to external changes and internal inefficiencies. As a result, firms with a fit between strategy and structure should perform better than those without such a fit. Organizations face not only an entrepreneurial problem (which strategy to adopt), but also an administrative problem (selection of structures that are consistent with strategy). Studies supporting the same include Jennings and Seaman (1994), Miller and Toulouse (1986), Slater, Olson and Hult (2006), Andrews et al., (2006) and Meier et al., (2007).

From the above arguments, both theoretical and empirical arguments have been deservedly influential, but more comprehensive and systematic tests are still required. Proper testing requires incorporating the interaction and doing so will serve to demonstrate further that the world of organizations and their strategies do not sort itself out quite as neatly as theory seems to suggest. According to Baker et al., (1997), the link between organizational configuration and performance has become a central and somewhat controversial focus of research in strategic management literature. Organizational performance is partially explained by its configuration contributions depending on the broad definitions of configuration, choice of industry analysis and longitudinal designs. Sluismans (2005) concludes that it is not only because of the increasing use of the concept of configuration, but mainly because of this apparent usability in getting closer to the truth as to how things in organizations happen that this concept deserves to be explored. Even with all these, common agreement on what configurations are and how they are used practically is still lacking.

## **2.7 Organizational Stage of Development**

A firm's stage of development has long been postulated as a contingency factor of major importance on formality and implementation of strategy (Robinson & Pearce, 1984; Vozikis & Glueck, 1980). Lifecycle theory contends that it is normal for an organization to form, grow, mature, decline, and die. Long-term survival, especially through multiple generations, would require renewal through innovation to avoid decay and death (Hoy, 2006). Organizational elements change with lifecycle stages, and firms tend to have different needs and resources at different stages of the lifecycle. The lifecycle construct is a multidimensional phenomenon with considerable variability between models. It includes some dimensions related to organizational context and structure. Common contextual dimensions include organizational age, size, growth rate and focal task or challenges faced by firm. Common structural dimensions include structural form, formalization, centralization and vertical differentiation, and number of organizational levels. The stages are distinguished one from another by differences in the pattern and magnitude of these dimensions (Baird & Meshoulam, 1988).

The OLC is a model which proposes that over the course of time business firms move through a fairly predictable sequence of development stages (Van de Ven & Poole, 1995). This model is based on biological metaphor that business firms resemble living organism because they demonstrate a regular pattern of development process, impacted by external circumstances as well as internal factors (Gibson, Ivancevich & Donnelly, 1994). Empirical evidence demonstrates that firms are likely to progress in a specific sequence (Kazanjian & Drazin, 1989) and that change in organizational structure and processes reflect changes consistent with this sequence (Sarason & Tegarden, 2001).

These stages are viewed as representing a linear progression, with each stage exhibiting different integral complementarities among variables such as strategy, structure, and decision-making methods (Miller & Friesen, 1984). Organizational lifecycle has been variously reported to consist of between three and ten stages (Dodge, Fullerton & Robbins, 1994). However, what is important is that, regardless of the numbers, these stages are sequential in nature, occur as a hierarchical progression that is not easily reversed and involve a broad range of organizational activities and structures (Hite & Hesterly, 2001). While a stage approach has clear limitations, this perspective is useful in framing the general processes of firm evolution and continuous change over time, particularly during the dynamic stages of the firm.

OLC is an important model because of its premise and prescriptions. The model's premise is that requirements, opportunities and threats both inside and outside the business firm will vary depending on the stage of development in which the firm finds itself (Baird & Meshoulam, 1988). OLC model's prescription is that firm managers must change the goals, strategies and strategic implementation devices of the business to fit the new set of issues. Thus, different stages of the company lifecycle require alterations in the firm's objectives, strategies and managerial process, technology, culture and decision-making (Miller & Friesen, 1984). A valid lifecycle model, therefore, provides a success road map, identifying critical organizational transitions as well as pitfalls the organization should seek to avoid as it grows in size and complexity (Hanks et al., 1993).

These stages are reflected as the start-up stage which includes firms that are generally young, small and highly centralized, are informal and focus more on development of their technology based products. The second is the expansion/growth stage consisting of slightly older firms having functional basis with additional organizational levels. Decision-making is centralized but systems are more formal and they are more involved in commercialization of their products through specialized functions. The third is the maturity stage whereby management levels are even more with functional structures and additional full-time specialists thus increased professionalism. Lastly is the early diversification stage which has older firms with regional structures, exhibiting low centralization and high formalization with more levels of management.

## **2.8 Organizational Configuration, Stage of Development and Performance**

According to a suggestion by Stubbart and Smalley (1999), lack of theoretically grounded research may be the reason for little cumulative body of knowledge on relationship between stage of development and strategic process. While the models suggest a fairly consistent pattern of organizational growth, there is a wide variance as to the specific number of stages which best depict the growth process. From extent literature these stages are either provided as typologies or empirically founded taxonomies.

Baker et al., (1997) acknowledged that the link between organizational configuration and performance has become a central and somewhat controversial focus of research in Strategic management literature especially in its attempts to explain the difference in performance among organizations. Indeed Baker et al., (1997) posited that organizational performance is partially explained by its configuration contributions depended on the broad definitions of configuration, choice of industry analysis and longitudinal designs.

This position gives credence to the works of Astley (1983) who indicated that organizations tend to change their elements in a manner that either extends a given configuration or moves it quickly to a new configuration that is preserved for a long time. Piecemeal changes will often destroy the complementary among many elements

of configurations and will thus be avoided. Only when change is absolutely necessary or extremely advantageous will organizations be tempted to move concertedly and rapidly from one configuration to another that is broadly different. Such changes, because they are expensive will not be undertaken very frequently. Consequently, organizations will adhere to their configurations for fairly long periods.

By introducing the elements of time passage through longitudinal assessment of organization Baker et al. (1997) then the assumption that organizations lend themselves to segmentation into periods of time comes to play. This is supported by Smith et al. (1985) who then suggest that the OLC model assumes that there are regularities in organizational development and these occur in such a way that the organizations' development processes lend themselves to segmentation into stages or periods of time. Sarason and Tegarden (2003) on their part pointed out that strategic process is not a predictor of organizational performance if organizational stage of development is not taken into consideration. This supports the postulation of a firm's stage of development as a contingency factor of major importance on strategy formulation and implementation.

Robinson et al. (1994) while studying the relationship between stage of development and small firms planning and performance in USA found that later stage firms had a stronger relationship between strategy intensity and performance. Lumpkin and Dess (1995) found that effectiveness of simple strategy is negatively moderated by stage of development. Sarason and Tegarden (2003) found partial positive relationship between strategic planning and performance and relationship is negatively moderated by organization stage of development. Boyd (1991) had similar finding concluding that if the moderating variable (stage of development) is not included in further investigations then firm performance will be underestimated. They concluded that organizational stage of development moderates other decision making performance relationships.

Although studies relating the three variables of organizational configuration, stage of development and performance were limited several scholarly works suggests that organizations that are able to achieve a fit between them can create competitive advantage. Indeed Aldrich & Reuf (2006) contended that all economic models of business creation follow firm birth with firm growth and as such organizations gain life through progressive interactions of different levels of structure. Structure is related to life cycle (Scott, 1971), strategy is related to structure (Chandler, 1962) and environment is related to strategy (Miller & Friesen, 1983). Then it is worthwhile to examine the three variables of strategy, structure and environment which constitute organization configuration within the context of organizational development. This study will draw upon configuration theory to explore the moderating effects of stage of development on the relationship between organizational configuration and organizational performance.

In order to highlight the research gaps that this study seeks to address, a summary of some of the empirical studies are provided in Table 2.1.

**Table 2.1: Summary of Previous Studies and Knowledge Gaps**

<b>Study</b>	<b>Focus of the Study</b>	<b>Main Findings</b>	<b>Knowledge Gaps</b>	<b>Focus of the Current study</b>
Lenz, R.T. (1980)	Empirical study of 50 USA savings and loans association. (Cross – sectional)	Performance stems from relationship among many different factors.  Neither environment, strategy, structure acting alone is sufficient to explain difference in performance	Study did not test for interactions of variables.  Ignored “sociological” or behavioural side of competition through human attributes	Test for dependency and interdependency through configuration approach.  Design component of structure introduced will capture behavioural aspects
Grinyer, P.H., Yasai-Ardekani, M. & Al-Bazzas, S. (1980)	Tested 48 large UK companies (Cross- sectional)	Confirmed positive relationship between strategy and structure and independent of other correlates of structure.  No match of strategy/structure and performance	Focused only on financial measures of performance which were not fully obtained.  Study concentrated on the match of strategy and structure and the impact on performance failing to link environmental factors.	Study will rely on triangulation approach to performance measure  Configuration will provide means to test the linkage of the three variables.
Miller, D. (1987)	Empirical analysis of 97 SMEs in Quebec. (Cross – sectional)	Reinforced findings that emphasized configuration or gestalts.  Aspects of strategy, structure, environment configure to form integrated whole with crucial impact on performance.	Focused on individual match of strategy and structure and its impact on performance.  Failed to test strategy making behaviour influences on linkage of variables.	Study will test joint impacts of linkage between strategy and structure on performance.  Study introduces the human and behavioural aspects of structure not tested.
Habib, M.M. & Victor, B. (1991)	Evaluated relationship of 144 US Manufacturing and Services MNCs (Cross – sectional)	Supported the strategy-structure fit.  Provide empirical evidence effect of matrix structure.	Failed to configure the contextual, environment and market variable like technology, market concentration into their model.	Study proposes to test for contextual and structural factors by incorporating Firm’s stage of Development and configuration.

Jennings, D, F. & Seaman, S.L. (1994)	Empirical study on 270 USA companies in savings and loans industry. (Cross-sectional)	Provide empirical evidence regarding impact of strategy/ structure alignment on performance.  Introduced concept of equifinality	Failed to determine the factors that are driving force behind an organizations adaptation/change  Did not demonstrate how equifinality is arrived at.	Study will test strategy process rather than content.  FSD to highlight different configurations at different periods.
Meier, K.J., O' Toole Jr., J.L., Boyne, G.A, Walker, R.M & Andrews, R. (2007)	Studied 700 Public organizations in UK to test Miles and Snow Model (Longitudinal)	Found mixed feedback on how the three strategies impact on environment.  Impact on performance governed by how structure and environment are aligned and how strategy is employed thereafter.	Study ignored organizational strategy process in the linkage.  Study failed to test for contingencies and complications in the individual interactions.	Study will incorporate both strategy process and content.  Study will check for linkages on variables
Fiss, P.C (2008)	Empirically tested configuration on 205 high technology firms in UK	Demonstrated existence of several equifinal configurations around grouped samples.  Found that pure systems of strategy gave high performance as opposed to hybrid types.	Focused only environmental uncertainty ignoring other characteristics.  Study did not factor structural variations of organizations.	Environmental dimensions will all be included in this study.  Study will use a hybrid approach to structure.
Pertusa – Ortega, E.M., Claver-Cortes, E. & Molina-Azorin, J.F. (2008)	Analyzed 91 SMEs in Spain (Cross – sectional)	Traditional theoretical models are not exactly applicable in context of European- Mediterranean SME's.  Cost leadership is not associated with a favourable environment.  Innovation differentiation strategy is not associated with organic structures.  The relationship between adjustment and performance is partially confirmed.	Concentrated only on subjective performance measure (opinion scale).  Focused only on generic strategies(strategy content)  Did not link structure to other organizational elements.  Focused only on framework of structure ignoring the design elements of structure.	Study will adopt triangulation performance measure.  Study will cover strategy process  Structural design to capture social networks.

The studies reviewed report mixed findings regarding the relationship between organizational configuration and firm performance. Both positive and negative relationships between organizational configuration and performance have been noted which could be attributed to several explanations. First is related to the vast variety of methodologies and the conceptualization and operationalization of variables. Second, the study contextual factors were not captured by the models employed. Third, most of these studies were carried out in different countries and different managerial regimes depicting varied environmental contexts. Lastly, the mixed results/findings could be out of ignoring the human elemental factors such as cultural, social, political and behavioural aspects that impact on strategic decision making process.

## **2.9 Conceptual Framework and Hypotheses**

The conceptual framework presented here has been developed from the literature review and contains the conceptual model and research hypotheses. This section examines the variables of interest in the proposed study and the expected relationships among the variables. The dependent variable is firm performance while the independent variable is organizational configuration which is a constellation/grouping of three of variables (strategy, structure and environment) mutually influencing each other. This relationship is expected to be moderated by the firm's stage of development.

### **2.9.1 Conceptual Framework**

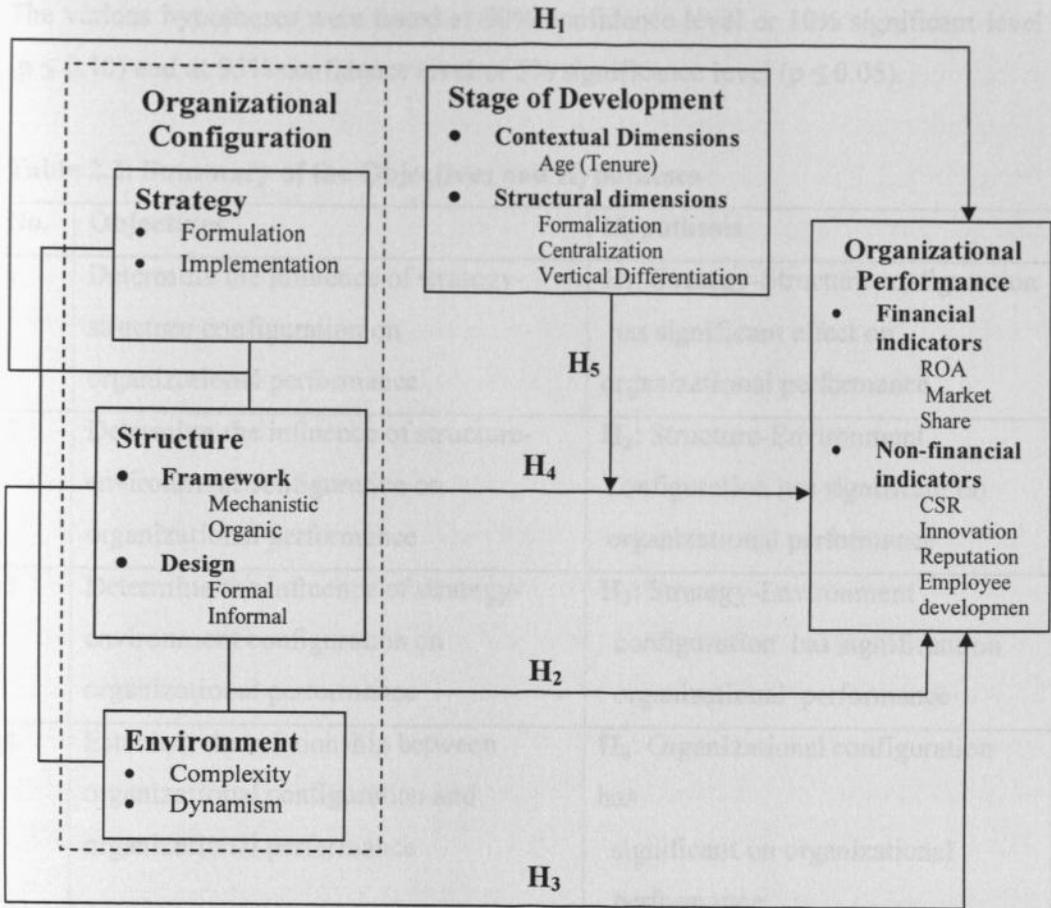
The conceptual model presented in Figure 2.1 captures the relationships between and among the study variables underpinning organizational configuration, stage of development and performance. The schematic diagram presents linkage between sets of variables and their influence on organization performance. It also presents the joint relationship of these linkages (organizational configuration) and organization performance. Also demonstrated is the moderating relationship of development stage in understanding organizational configuration and the performance linkage. The conceptual framework of the study is based on the integration of several organizational theories that influence strategic decision making process. The theories that include configuration theory, structural contingency theory, lifecycle theory and behavioural theory all which have been presented in the literature review.

Organizational configuration which is the independent variable of this study is proposed to influence performance. In the current study organizational configuration was considered as a coalescence of strategy, structure and environment. It is treated as a complex and multidimensional variable that depends on the interactions of these variables. The variables of strategy, structure and environment by themselves are also considered to be multidimensional. In this study, strategy has been viewed in terms of its process which involves strategy formulation and strategy implementation. Structure is related to both the prescribed framework which is, either, mechanical or organic, and the realized configuration of interactions in an organization and their mutual constitution. This brings about the behavioural aspects of an organization resulting into either formal or informal structures.

The operating environment characteristics that were studied were based on the perception on basis of the dimensions. The dimension include complexity and dynamism or simple and stable environments. Only one dimension was used which was that environment is complex and dynamic with the opposite applying in retrospective. We assumed that through a bi-variate association the three domains; strategy-structure, structure-environment and strategy-environment configurations which in overall constitutes organizational configuration also influences performance. Organizational performance is the dependent variable and was measured both financial and non-financial terms, Financial terms included return on asset, market share while non-financials measure included CSR, innovation, reputation and responsiveness.

The variables that had been identified and described in the literature review highlighting the relationships among them were incorporated in formulating the conceptual framework. The conceptual framework is presented diagrammatically in Figure 2.1.

**Figure 2.1: Conceptual Model**



### 2.9.2 Conceptual Hypotheses

From the above conceptual model, the following hypotheses were derived:

- H1:** Strategy-structure configuration has an effect on organizational performance.
- H2:** Structure-environment configuration has an effect on organizational performance.
- H3:** Strategy-environment configuration has an effect on organizational performance.
- H4:** Organizational configuration has an effect on organizational performance.
- H5:** Organizational stage of development has significant moderating effect on organizational configuration and performance relationship.

A summary of the hypotheses and corresponding objectives is provided in Table 2.2. The various hypotheses were tested at 90% confidence level or 10% significant level ( $p \leq 0.10$ ) and at 95% confidence level or 5% significance level ( $p \leq 0.05$ ).

**Table 2.2: Summary of the Objectives and Hypotheses**

No.	Objectives	Hypothesis
1	Determine the influence of strategy-structure configuration on organizational performance	<b>H<sub>1</sub></b> : Strategy-Structure configuration has significant effect on organizational performance
2	Determine the influence of structure-environment configuration on organizational performance	<b>H<sub>2</sub></b> : Structure-Environment configuration has significant on organizational performance
3	Determine the influence of strategy-environment configuration on organizational performance	<b>H<sub>3</sub></b> : Strategy-Environment configuration has significant on organizational performance
4	Establish the relationship between organizational configuration and organizational performance	<b>H<sub>4</sub></b> : Organizational configuration has significant on organizational performance
5	Assess the moderating effect of organizational stage of development on the relationship between organizational configuration and organizational performance	<b>H<sub>5</sub></b> : Organizational stage of development has significant moderating effect on organizational configuration and performance relationship
<b>Note:</b> $p < 0.05$ ; $p < 0.01$ .		

## 2.10 Chapter Summary

This chapter has reviewed the approaches that are available to test questions regarding strategic management development. They include traditional administrative approaches like universal effect approach and structural contingency theory approach. The other is the configuration approach. This chapter also reviewed literature that relates to the constructs of the model guiding this research. These include organizational strategy, organizational structure, business environment, organizational performance and stage of development. In this chapter, each construct in the model was defined and discussed in terms of the factors measured in this research.

According to previous research, the constructs of the model developed for this study are interrelated and interactive. This chapter presented a review of the literature pertaining to the relationships among these constructs. Some of the studies reviewed have linked two, three, or four of the constructs, but no studies to date have linked all five of the constructs. Indeed, most studies have called for the incorporation of development stage to help address the differences in performance among organizations. Recognizing that measurement of organizational performance has been difficult because performance is a multidimensional construct, the chapter also discussed subjective and objective performance measures. The review of the literature revealed that several studies have shown a positive correlation between objective and subjective measures and that several good reasons exist for using subjective measures.

By reviewing relevant selected empirical studies on organizational configuration, stage of development and appropriate organizational performance, knowledge gaps that the study sought to address were tabulated and presented. The chapter concludes by providing the conceptual framework, which defined the relationships among the variables of study and a summary of the study hypotheses. This was followed by a table summarizing the study objectives and the corresponding hypotheses.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter presents the research methodology employed in this thesis. It first outlines the philosophical foundation that underpins the approach taken with this research, discussing the researcher's positivistic stance to research and the consequent choice of a quantitative approach. It also provides an overview of the data collection methods used for the thesis, as well as the operationalization of the research variables and concludes with the means used to analyze the data.

#### 3.2 Research Philosophy

Discussions on the philosophical underpinnings of strategy research have always found great prominence in strategic management (Nonaka, 1998). Research philosophy relates to the foundation of knowledge upon which important assumptions and predispositions of a study or research are based. A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. The term epistemology (what is known to be true) as opposed to doxology (what is believed to be true) encompasses the various philosophies of research approach. The purpose of science, then, is the process of transforming things *believed* into things *known* as doxa to episteme.

In social sciences, there are two main research philosophies, namely; the positivism (scientific) and phenomenology (interpretivism) which may also be viewed in terms of two perspectives, namely; quantitative and qualitative approaches (Coopers & Schindler, 2004). There are, however, other philosophers who have greatly contributed to the understanding of how knowledge develops. Key among them is, Sir Karl Popper and Thomas Kuhn. Popper is known for his inductivist form of scientific method that accounts for logical asymmetry between verification and falsifiability. Kuhn on his part introduced the "paradigm shift" in which scientific inquiry do not follow a linear accumulation of knowledge but rather undergoes periodic revolutions.

Positivist philosophy premises that knowledge is based on facts and that no abstractions or subjective status of individuals is considered. Positivism thus derives a quantitative perspective which holds that there is an objective reality that can be expressed numerically, with explanatory and predictive power (Neuman, 2006; Furrer, Thomas & Goussevkaia, 2008). Positivism argues for continued use of the most logical, dominant, or relevant framework (Pfeffer, 1993). Research on a positivist philosophy tends to be based on deductive theorizing, where a number of propositions are generated for testing, with empirical verification then sought (Babbie, 2005). Considerable data are often required as a positivist study would favour the use of quantitative methods to analyze large-scale phenomena (Travers, 2001).

Phenomenology on the other hand premises that knowledge is based on experience from perspectives of the individual and thus is subjective. It focuses on immediate experience, personal knowledge and individual interpretations (Saunders, Lewis & Thornhill, 2007) and starts from a premise of the coexistence and compatibility of alternative frameworks (Grandori, 2001). Phenomenology is a philosophical school of thought arguing that research is fundamentally theory-dependent and that the theoretical position held by researchers not only guides their basic position, but also determines what gets construed as a research problem, what theoretical procedures are used, and what constitutes observations and evidence (Spender, 1996; Mir & Watson, 2000).

The current study on organizational configuration, stage of development and organizational performance was set out to establish possible relationships that existed among the identified variables and was also to determine the strength of that relationship. Researchers observe that objective reality that can be expressed numerically, with explanatory and predictive power and this forms the foundation for positivism philosophy (Neuman, 2006; Furrer, Thomas & Goussevkaia, 2008). The study thus adopted the positivistic philosophy since it looked at what caused a particular relationship and what were the effects of this relationship. The study also involves hypothesis testing based on facts obtained from data collected from both primary and secondary sources in a survey of commercial banks in Kenya. This is used to draw plausible conclusions.

### 3.3 Research Design

The research design is the overall configuration of the research and it provides two fundamental sets of action to the research process. First, it provides answers as to what kind of evidence needs to be gathered and from where and how such evidence is interpreted in order to provide good answers to the research questions. Second, it helps the researcher to think about the research approaches that will work for the study. In view of the philosophical approach of positivism taken in the current study, a cross-sectional survey was used. It enables the researcher to obtain data about practices, situations or views at one point in time through questionnaires or interviews. The use of a cross sectional survey also permits a researcher to study more variables at one time.

The purpose of this study was to examine the relationship between organizational configuration and firm performance and assess how the stage of development influenced this relationship. As such, a cross-sectional survey provided the opportunity for this study to collect data from different firms and test the relationship. Through this, the researcher was able to draw an expression of inter-relationships between variables, offer generalization to a larger group of organizations than those who actually participate in the investigation, understanding their behaviour and the meaning of their behaviour in a specific environmental context and provide a temporal appreciation of observed phenomena and their interconnections.

The proposed study used the descriptive cross-sectional survey to determine the relationship between the independent, dependent and moderating variables which involved testing of hypotheses quantitatively through the population characteristics. A descriptive survey is concerned with questions on the what, when and how of a phenomena (Cooper & Schindler, 2003). Since the study was able to track the organizations only for a specific point of time, the researcher's intention to control variables in a sense of manipulating them was therefore removed. The data collected were subjected to statistical manipulations that enhanced understanding of the relationship that existed among the variables.

This study also adopted the descriptive research design by subjecting the data collected to statistical analysis that allowed for hypothesis testing. This was achieved through the use of analytical and predictive models while utilizing simple statistics descriptors, multivariate methods and classical regression. According to Cooper and Schindler (2003), this approach was appropriate as it allowed for objective conclusions to be drawn. A descriptive analysis of the variables, namely; strategy, structure, environment, and organizational performance was conducted. This allowed the study to enrich its value as it was able to derive composite indices out of the descriptive indicators for organizational configuration and stage of development. The descriptive research design has been used invariably in similar studies by Machuki (2011), Awino (2010), Chiyoge (2009), Pertusa-Ortega (2009) and Lenz (1980) and has been found robust for cause and effects of relationship studies enabling quantifiable and generalizable conclusion.

### **3.4 Study Population**

The population of the study consisted of all the commercial banks licensed by Central Bank of Kenya (CBK) as at 31st December, 2010 (Appendix iii). According to the Banking Act (Cap 488), banking institution means a company which carries on, or proposes to carry on, banking business in Kenya but does not include the Central Bank. Their business includes accepting from members of the public of money on deposit repayable on demand or at the expiry of a fixed period or after notice; accepting money from members of the public on current account and payment acceptance of cheques; and employing of money held on deposit or on current account, or any part of the money, by lending, investment or in any other manner for the account and at the risk of the person so employing the money.

Banking is a very old institution that contributes toward the development of any economy and it's treated as an important service industry in modern world. Most studies have argued that the financial sector is vital for the socio-economic development of a country (Beck et.al., 2000; Levine, 2003). These authors argued that economic growth can be sustained only if scarce resources are mobilized efficiently and transformed effectively into productive investments and this function is efficiently conducted by the financial intermediaries.

The total number of commercial banks listed and operating as at 31st December, 2010 by CBK were 43. The banks were categorized into peer groups based on a weighted composite index. Six (6) were classified as large, fifteen (15) were classified as medium and twenty two (22) were classified as small. Several scholars used similar populations to conduct studies on performance of commercial banks in various countries (Olweny & Shipho, 2011; Kosmidou & Zopounidis, 2008).

### **3.5 Data Collection**

The study was undertaken on the basis of the researcher collecting facts and then studying the relationship of one set of facts to another. The aim was to analyze quantitative data using statistically valid techniques to produce quantifiable and generalizable conclusions. To achieve that, the study divided its data source into two main categories based on the source of the data which resulted into primary data and secondary data. Primary data were collected through a semi - structured questionnaire adopted from strategic management studies that have studied similar variables with modifications aimed at addressing the specific objectives (Appendix 3). Data collected through primary sources addressed the constructs of strategy, structure, environment, firm's stage of development and non-financial performance. These primary sources were also able to provide other softer issues of qualitative nature related to this study.

To capture the primary data, the target respondents were senior managers in areas of strategy and business development, operations, marketing and corporate affairs in each of the selected banks as they were assumed to be responsible for formulation and implementation of organizational strategies. They were also deemed be the most knowledgeable about issues under investigation and could provide more reliable information. Through the corporate affairs office, each organization was allowed to pick one senior manager from the areas enumerated to respond to the questionnaire. To enhance the support from the organizations, the researcher presented a letter of introduction to each organization assuring them of confidentiality along with a summary of the study intent stipulating the objectives of the study.

The data collection tool was subjected to a pilot test to managers in three banks to establish validity and reliability. The result was particularly significant in the construction of the final sample questionnaire for this study. The pre-testing of the questionnaire reduced the banks eligible for the study to 40 out of which 30 banks completed the questionnaire while 8 declined and 2 returned incomplete questionnaires. The results presented in this study thus represent 75% response rate. The questionnaire was divided into seven parts that allowed collection of relevant data. Part I: Organizational data, Part II: Respondents Information, Part III: Strategy, Part IV: Structure, Part V: Environment, Part VI: Organizational Stage of Development, Part VII: Organizational Performance.

The different sections of the data tool were adopted and contextualized from different studies that were related. Zikmund (2003) points out that secondary data can be gathered by various sources including books, periodicals, government sources, regional publications, companies' annual reports, media and commercial sources. This study collected secondary data related to financial performance disclosures as published in financial statements of the banks, CBK economic reviews, CMA reports, audit firms analysis reports and published banking surveys reports. The data included the total net assets, return on assets, profit/loss per year, gross sales (revenue), shareholders equity, return on equity, liquidity ratios and market share growth. Non-financial data was solicited through the primary sourcing and included business confidence outlook, talent management policies, corporate social responsibility and innovation. This aspect provided a mixture of intrinsic value indicators on the financial data.

### **3.6 Operationalization of Variables**

This section describes the operationalization of the research variables as depicted in the conceptual model (Figure 2.1). These variables were operationalized and measured using multi items/indicators with the help of a five-point Likert type scale which is psychometric scale often used in research employing questionnaires as contained in Table 3.1.

To operationalize these five constructs, the current study measured either the extent/degree of agreement or disagreement with the statements provided related to several areas of interest on strategy, structure, environment, stage of development, and performance of the commercial banks in Kenya. Performance operationalization in this study also included the financial indicators which was available as secondary data.

The Likert scale is used invariable in nearly all fields of scholarly and business research so much so that it is used in a wide variety of circumstances (Chimi & Russel, 2009). They include when value sought is a belief, opinion or effect; when value sought cannot be asked or answered definitively and with precision; and when value sought is considered to be of such a sensitive nature that respondents would not answer except categorically in large range. The type and nature of data collected and measure in this study exhibited most of these factors since we were dealing with information from commercial banks, and the Likert type scale was largely appropriate.

Although the five-point Likert type scale questionnaire was used to collect data, it has been observed to have both inherent advantages and disadvantages. The advantage with Likert type questionnaire is that questions used are usually easy to understand and so may lead to consistent answers. It also offers a pleasingly simple way of gauging specific opinions. However, the disadvantages with this measurement are that only a few (up to five) options were offered, with which respondents may not fully agree or people may become influenced by the way they have answered previous questions with a given pattern. Second, there is a likelihood of generating responses of the "neutral option" as this is the easiest option to take when a respondent is unsure. Lastly, as pointed out by Carifio and Rocco (2007), all Likert items are subject to the tendency to agree with declarative statements irrespective of their contents leading to "acquiescence bias". The scale properties were nominal, ordinal, interval or ratio. Table 3.1 gives definitions of the various constructs and variables used in the study.

**Table 3.1: Operationalization of Key Variables of the Study**

Construct	Indicators	Operationalization of the construct	Questionnaire Item
<b>Independent Variable (Organizational Configuration)</b>			
<b>Strategy</b>	Formulation	Recognition for strategic need Sources of strategic planning information Level of participation on decision-making	5-point Likert Type Scale <b>Q:4(a)</b>
	Implementation	Level of preparedness to change Communication and support building	5-point Likert Type Scale <b>Q:4(b),4(c) 4(d)</b>
<b>Structure</b>	Framework	<b>Mechanistic:</b> High level of operation complexity Centralization of activities Specialization of labour divisions Limited participation in decisions	Direct Measure & 5-point Likert Type Scale <b>Q:5(a)</b>
		<b>Organic:</b> Informal structure Simple hierarchy Decentralization of activities Greater discretion in decision-making.	Direct Measure & 5-point Likert Type Scale <b>Q:5(a)</b>
	Design	<b>Formal:</b> Clearly defined administrative systems related to incentives, employee relationships, rewards and philosophy Formal controls	5-point Likert Type Scale <b>Q:5(b).a, 5(b).b 5(b).c, 5(b).d</b>
		<b>Informal:</b> Loose administrative systems related to incentives, employee relationships, rewards and philosophy Informal controls	5-point Likert Type Scale <b>Q:5(b).a, 5(b).b 5(b).c, 5(b).d</b>
<b>Environment</b>	Dimensions (State)	<b>Complex:</b> High heterogeneity in range of customers, products and competitors' profiles.	5-point Likert Type Scale <b>Q:6</b>
		<b>Dynamism:</b> High degree of instability, changeability and variability of customers, products and competitors.	5-point Likert Type Scale <b>Q:6</b>

<b>Moderating Variable (Stage of Development)</b>			
<b>Stage of Development</b>	Contextual Dimensions	Age (Tenure)	Direct Measure <b>Q:7(a)</b>
	Structural Dimensions	Vertical Differentiation Formalization Centralization Decision-making process	5-point Likert Type Scale <b>Q:7(b1), 7(b2), 7(b3), 7(c), 7(d)</b>
<b>Organizational Performance</b>	Financial Indicators	ROA Market share	Direct Measure
	Non-financial Indicators	Composite measure of reputation, CSR, innovation, responsiveness and employee development	5-point Likert Type Scale <b>Q:8</b>

The independent variable for the current study was organizational configuration which was measured as a composite score from the interactions of strategy, structure and environment variables. Proponents of the approach have argued that a study of configurations leads to insights that would otherwise be unattainable or that would at least be out of the scope of research that focuses only on the effects of individual elements (Miller, 1981). In this case, data reduction method (cluster analysis) was used to construct organization configuration score from components of strategy, structure and environment as defined in Table 3.1.

The dependent variable of the current study was organizational performance reported for the year 2010 according to the banks published financial statements. A lot has been written about the need for accurate measurement of multi-dimensional performance measures and indeed there is plenty of research concerning performance measurement. Comparatively though very little is known about performance measurement systems in the services industry and especially the banking sector in developing countries. Previous studies show that there is no standard measure of the firm's performance (Droge et al., 1994; Li, 2000; Sharma & Fisher, 1997).

Performance variables in this study considered both the financial and non-financial measures. Financial performance measurement is necessary for both strategic and diagnostic purposes. The financial measures used in this study included return on assets (RoA) and market share index (MSI). RoA is the net income for the year

divided by total assets and is usually presented as the average value over the year whereas market share index is the composite of net assets, total deposits, shareholders' funds, number of loan accounts and number of deposit accounts.

Kaplan and Norton (2001) and Banker et al., (2000) concluded that financial measures have limitations as they are too financially oriented, internal looking, historical and focusing on inputs not outputs, and are short-term oriented. Indeed, Kaplan and Norton (1996) argue that measurement using only financial measures can damage an organization's capacities and they recommend that a combination of financial and non-financial measures are better suited for evaluating performance. Hussain and Gunasekaran, (2002) stress that the nature of the banking industry is considered to be one of the motives for using a range of performance measures as mentioned by their study's conclusion. The banking industry is service-oriented depending on human resources and as such forces banks management to be sensitive about achieving high reputation, CSR, innovation, customer satisfaction and loyalty, responsiveness and employee development in change of business environment. The study adopted use of non-financial measurements of performance along similar arguments.

Moderating variables for this study was the organization's stage of development. This forms part of the extraneous factors that may have significant effect on the relationship between organizational configuration and organizational performance. Stage of development was considered in terms of the contextual dimensions composed of age (tenure) size and growth rate. The second part comprised the structural dimensions constituting of the structural form, vertical differentiation, decision-making process, formalization and centralization.

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

Reliability and validity are important issues in the measurement of research variables. Neuman (2003) explains that both issues concern the accuracy of measures or indicators. They are the key indicators of the quality of the data collection instrument. However, it is virtually impossible to achieve perfect reliability and validity.

### 3.7.1 Reliability Tests

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability deals with how consistently similar measures produce similar results (Crano & Brewer, 2002). A dependable indicator provides information that does not vary as a result of the characteristics of the indicator, instrument, or measurement design itself. Neuman (1994) identified three types of reliability: stability, representative, and equivalence. Stability reliability addresses the question of whether or not a measure delivers the same answer across different time periods. This is examined by the test-retest method. Representative reliability concerns sub-populations. It addresses the question of whether a measure delivers the same answer across different sub-populations. Finally, equivalence reliability concerns multiple indicators, that is, the question of whether different indicators yield consistent results.

This study addressed equivalence reliability by using Cronbach's alpha statistical test. The study drew from literature those items that had been tested for reliability by other researchers and adopt them. The Cronbach alpha coefficient normally range from 0 to 1 and the higher the coefficient, the more reliable the scale. This study used the cut-off point coefficient of 0.7 and above as a strong measure of reliability which agrees with Nunnaly's (1978) recommendation.

### 3.7.2 Validity Tests

The validity of an instrument relates to its ability to measure the constructs as purported. Validity concerns the accuracy and meaningfulness of inferences which are based on the research results (Bryman & Cramer, 2005). There are several types of validity test that can be conducted on an instrument. In this study, face validity was treated as judgemental through a pilot study. It was done to test whether the indicators in the questionnaires really measured the constructs they were intended to measure.

The current study ensured construct validity for the questionnaire since it was developed based on similar prior studies and also the development of a logical conceptual framework based on empirical literature review. Content validity was ensured by the questionnaire getting tested by subjecting it to double check. This also

ensured that the questionnaire covered all the three main areas of the study which include organization configuration, organization stage of development and performance. Finally, expert judgement was also employed to confirm if theoretical dimensions emerge as conceptualized. However, face validity was assumed whereas the predictive validity dimension was demonstrated by the results of hypothesis testing.

### **3.8 Data Analysis**

The purpose of this study was to determine the moderating role of stage of development on organizational configuration and performance relationship. To establish the nature and magnitude of the relationships between the constructs of firm's level of development, organizational configuration and performance and to test the hypothesized relationships, the researcher used inferential statistics. As pointed out by Dess et al., (1993) and further supported by Michor et al., (2010), there is a need to move from the linear bi-variate or "pair-wise" relationship approach which leads to over-simplification of the organization to a more holistic or "multidimensional" perspective of configurations. This allows for probe into why and how organizational elements interrelate and compete with each other to produce the driving character for an organization.

So as to develop thematic and systematic content analysis, the current study utilized data reduction technique (cluster analysis) to classify the variables into identifiable relatively homogeneous groups of cases based on selected attributes. This ensured that the study was able to identify the relevant dimensions of the major constructs and establish their discriminant validity. The current study utilized descriptive analysis technique to provide a deeper insight into the characteristics of these variables. Descriptive analysis consists of frequency tables, measures of central tendency including arithmetic mean, median, and mode, and also measures of dispersion.

To examine the relationships between variables and to provide description of the direction and degree of association between these variables, correlation analysis was conducted. According to Pedhazur (1982), multi co-linearity is a threat to the interpretation of the influence of independent variables on the dependent variable in a

regression. There are several options available for statistical diagnostics tools that can be used to test for multicollinearity. Pearson product-moment correlation coefficient was used in order to examine the strength of a correlation and whether it was appropriate to proceed toward subsequent analysis. Where bi-variate relationships were involved such as the cases of strategy-structure configuration and performance, strategy-environment configuration and performance, structure-environment configuration and performance, the current study used regression analysis to determine the relationships. Similar studies have used the same approach to establish co-alignment variables and organizational performance (Machuki, 2011; Chiyonge, 2009).

Multivariate statistical analyses were used to determine the relationship between organizational configuration (strategy, structure and environment), organization stage of development and performance. This included use of multiple regression analysis and correlation analysis. Finally, to provide insight into multivariate relationships characterized by simultaneity and feedback causal modelling techniques were used. This was to allow for control of random and systematic measurement error (Newport, 1990).

It is important to define and measure the variables properly to have reliable and valid results. Table 3.2 provides the various descriptions of the study variables utilized in this study. Efforts were made to define and describe the variables in accordance with previous research and arrive at appropriate measurement methods.

**Table 3.2: Study Variables Description**

<b>Full variable label</b>	<b>Description/measurement</b>
<b>Strategy Formulation</b>	Composite index of analyses of internal/external environment and choice of strategy
<b>Strategy Implementation</b>	Composite index for primary administrative activities including level of preparedness for change, communication and support building
<b>Structure Framework</b>	Dimensions of organizational structure – centralization, complexity, specialization and decision-making were used to cluster structure either as organic or mechanistic
<b>Structure Design</b>	Dimensions of organizational structure – administrative activities related to incentives, relationships, rewards, philosophy and controls used to cluster structure either as formal or informal
<b>Environment</b>	Composite index of related responses based on control of regulatory agency, customer demands, competition and business environment pressures to classify as complex and dynamic or simple and stable
<b>Age/ Tenure</b>	Natural log of the years of existence
<b>Vertical Differentiation</b>	Number of levels between the CEO and lowest employee (including both counts)
<b>Formalization</b>	Composite index of the extent to which rules, procedures, communication methods, and regulations are written and made available
<b>Centralization</b>	Composite index of locus of decision-making participation
<b>Financial Measure</b>	Market share which is a composite of net assets, total deposits, shareholders’ funds, number of loan accounts and number of deposit accounts
	Return on Assets is the net income for the year divided by total assets (average for the year)
<b>Non-financial Measure</b>	Composite index of reputation, CSR, innovation, responsiveness and employee development

Table 3.2 provides a list of current study variables and the way they were operationalized. For the purpose of this study, four dimensions of organizational structure, namely; centralization, specialization, operational complexity and decision-making were used as the indicators of the degree to which a firm has a mechanistic versus organic structure. Those three dimensions of organizational structure are among the ones that researchers have most commonly examined. Centralization is defined as the locus of decisions about structure (Pugh, Hichson, Hinings, & Turner, 1969). A measure of the degree of centralization is the degree of participation in decision-making at lower

organizational levels (Aiken & Hage, 1968). Formalization can be characterized as the degree to which norms, rules, and regulations are explicit to an organization's members (Hage & Aiken, 1970). It can be measured by the extent to which rules, procedures, communication methods, and regulations are written and made available (Pugh et al., 1968). A number of researchers have examined the three dimensions of structure mentioned above (Cunningham & Rivera, 2001; Miller & Dröge, 1986; Vasiu & Vasiu, 2004).

Review of literature indicated that there exists considerable variability between lifecycle models however all included some dimensions related to organization context and organization structure. Some of the common contextual dimensions included organization age, size, growth rate, and focal tasks or challenges faced by the firm. Common structural dimensions included structural form, formalization, centralization, and vertical differentiation, the number of organization levels. Within models, stages are distinguished one from another by differences in the pattern and magnitude of these dimensions. Following from this arguments, stage of development (SOD) which is the moderating variable of the current study was computed. Cluster analysis was used as it is a statistical exploratory technique which group's observations in a manner that maximizes between group variance, and minimizes within group variance. It therefore, allows for identification of underlying relationships. The banks were classified into four stages in line with organizational lifecycle theory and as adopted by the taxonomical approach of Hanks et al., (1993). A one-way analysis of variance was conducted to test for differences in cluster means for each of the structural dimension variable.

Generally, the choice of firm performance measures depends on the purpose and context of the research. Performance has been conceptualized and measured under various schemes, depending on such factors as the research questions, disciplinary focus, and data availability. In the current study, the financial performance of the bank is measured according to several performance measures that were discussed in the previous chapter. It is important to note that organizational performance is a multidimensional construct and may be characterized in a number of ways, including effectiveness, efficiency and adaptability. Further, performance on one dimension

may run counter to performance on another dimension. Therefore, in this study, different measures were used to obtain a comprehensive view of the performance of the organizations while reducing the impact of individual bias of any particular dimension (Shoham & Ross, 1993).

The relationship in all hypotheses will be determined using the following regression model.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p + \varepsilon_i$$

Where Y= Dependent variable

$\beta_0$ = constant (intercept)

$\beta_i$ =Parameter estimates.

$X_i$ = independent variables  $\varepsilon_i$ = Error/disturbance (Where  $i=1, 2, \dots, p$ )

The research questions were set to investigate the extent to which one set of two or more variables (Organizational performance indicators) can be predicted by another set of two or more variables (Organizational configuration). Multiple linear regressions were used to analyze the relationship between strategy-structure; structure-environment and strategy-environment with performance. This method has been used by other researchers in similar studies involving multivariate relationships (Tan & Litchert, 1994; Machuki, 2011). In order to predict performance implication of organizational configuration (strategy-structure-environment) and further predict the moderating effects of stage of development on the hypothesized relationship between organizational configuration and performance it was prudent to introduce multiple correlation models. Correlation analysis has been used as a statistical tool with intent to identifying existing statistical significant relationships and nature of inherent relationships between variables. The general form of models and analysis plan of this study is summarized in the Table 3.3.

**Table 3.3: Analytical Models of the Study Objectives and Hypotheses**

Objective	Hypothesis	Analytical Model
<p><b>Objective 1</b> Determine the influence of strategy-structure configuration on organizational performance</p>	<p><b>H<sub>1</sub></b>:Strategy-Structure configuration has significant on organizational performance</p>	<p><b>Multiple Linear Regression Models</b> Firm Performance = <math>f</math> (Strategy-Structure Linkage) <math>P_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon</math> Where P<sub>1</sub>= firm performance <math>\beta_1, \beta_2, \dots, \beta_4</math>, are regression coefficients X<sub>1</sub>= Strategy formulation, X<sub>2</sub>= Strategy implementation, X<sub>3</sub>= Structural framework , X<sub>4</sub>= Structural design , <math>\varepsilon</math>= Error term</p>
<p><b>Objective 2</b> Determine the influence of structure-environment configuration on organizational performance</p>	<p><b>H<sub>2</sub></b>:Structure-Environment configuration has significant effect on organizational performance</p>	<p><b>Multiple Linear Regression Models</b> Firm Performance = <math>f</math> (Structure-Environment Linkage) <math>P_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon</math> Where P<sub>1</sub>= firm performance <math>\beta_1, \beta_2</math> and <math>\beta_3</math> are regression coefficients X<sub>1</sub>= Structural framework, X<sub>2</sub>= Structural design , X<sub>3</sub>= Environment Composite, <math>\varepsilon</math>= Error term</p>
<p><b>Objective 3</b> Determine the influence of strategy-environment configuration on organizational performance</p>	<p><b>H<sub>3</sub></b>:Strategy-Environment configuration has significant effect on organizational performance</p>	<p><b>Multiple Linear Regression Models</b> Firm Performance = <math>f</math> (Strategy-Environment Linkage) <math>P_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon</math> Where P<sub>1</sub> = firm performance <math>\beta_1, \beta_2</math> and <math>\beta_3</math> are regression coefficients X<sub>1</sub>= Strategy formulation, X<sub>2</sub>= Strategy implementation, X<sub>3</sub>= Environment Composite, <math>\varepsilon</math>= Error term</p>

<p><b>Objective 4</b> Establish the relationship between organizational configuration and organizational performance</p>	<p><b>H<sub>4</sub>:</b> Organizational configuration has significant effect on organizational performance</p>	<p><b>Correlation Models</b></p> <p><b>Multiple Linear Regression models</b> Firm Performance = <math>f</math> (Organizational Configuration)  <math display="block">P_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon</math> Where  <math>P_1</math> = firm performance  <math>\beta_1, \beta_2, \dots, \beta_5</math> are regression coefficients  <math>X_1</math>= Strategy formulation, <math>X_2</math>= Strategy implementation, <math>X_3</math>= Structural framework ,  <math>X_4</math>= Structural design , <math>X_5</math>= Environment Composite, <math>\varepsilon</math>= Error term</p>
<p><b>Objective 5</b> Assess the moderating effect of organizational stage of development on the relationship between organizational configuration and organizational performance</p>	<p><b>H<sub>5</sub>:</b>Organizational stage of development has significant moderating effect on organizational configuration and performance relationship.</p>	<p><b>Correlation Models</b></p> <p><b>Multiple Linear Regression Models</b> Firm Performance = <math>f</math> (Organizational Configuration + Firm's Stage of Development)  <math display="block">P_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \varepsilon</math> Where <math>P_1</math> = firm performance  <math>\beta_1, \beta_2, \dots, \beta_7</math> are regression coefficients  <math>X_1</math>= Strategy formulation, <math>X_2</math>= Strategy implementation, <math>X_3</math>= Structural framework ,  <math>X_4</math>= Structural design , <math>X_5</math>= Environment Composite, <math>X_6</math>= Centralization Composite,  <math>X_7</math>= Formalization Composite, <math>\varepsilon</math> = Error term</p>

Source: Researcher (2012)

### 3.9 Chapter Summary

The preceding chapter presented the research methodology used in the current study. Two research philosophies were discussed in details and the choice of the philosophy that guided this study is provided along with the justification for the research design adopted. In this case, the adopted research design was a cross sectional survey. Following this was a discussion of how the constructs and variables were selected and operationalized for the investigation of the relationships among the constructs. Then, the data collection procedures, study variables as well as the survey instrument were described.

Finally, this chapter indicated the statistical techniques used in the study which included descriptive statistics, data reduction techniques, correlation and regression analysis. The analytical models used for the preliminary data analysis and for testing the hypotheses were also provided in this chapter. Highlights of the statistical analysis and hypotheses testing for this study are presented in the next chapter.

## CHAPTER FOUR

### ORGANIZATIONAL CONFIGURATION AND PERFORMANCE OF COMMERCIAL BANKS IN KENYA

#### 4.1 Introduction

The overall objective of this study was to determine the moderating role of organization stage of development on the relationship between organizational configuration and organizational performance of commercial banks in Kenya. Out of the broad objective, the focus of the current chapter is first to determine the influence of organizational configuration on the performance of the studied organizations. This combines specific objectives one to four of the study. The research findings of this study were thematically presented according to the objectives, the stated hypotheses and subsequent interpretations provided.

The chapter is divided into two parts: Part one describes the nature of strategy, structure, environment and organizational performance; offering descriptive analysis of each attributes. Part two presents results of test of hypothesis on the relationship of strategy-structure, structure-environment and strategy-environment on organizational performance. This corresponds to hypotheses H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub> and H<sub>4</sub> of the study. The analysis provides a richer understanding of organizational configuration concluding by providing the descriptive of organizational configuration. The current chapter also presents the response rate and the demographic characteristics of the studied commercial banks.

#### 4.2 Response Rate

There is increasingly a debate among scholars as to what response rate is statistically representative of the sample. According to Partin (1996), a response rate of 60% is statistically representative. Mangione (1995) on the other hand provides a classification of response rate running through a continuum as follows: over 85% excellent, 70-85% very good, and 60-70% acceptable and below 50% not acceptable. The data analyzed in this study were obtained from 30 (75%) out of the targeted 40 of the 43 commercial banks listed by Central Bank of Kenya (CBK) as commercial banks as at 31st December, 2010 hence becoming an effective sample size.

This is typical for research using senior managers as respondents and is not uncommon when sampling banks. It therefore, allows for adequate statistical power for generalization. Geletkanycz (1997) points out that it is typical in the United States to get response rates of 10-12% for surveys that are mailed to CEO. Indeed, the attained response rate represented not only a better response than that suggested by Geletkanycz (1997) but it was also a better result compared to similar studies that have used smaller samples to draw conclusions on strategic processes, structure and environment attributes. Pertusa-Ortega et al., (2008) and Fiss (2008) attained responses of 55.8% and 14% respectively. Similarly, other studies have used smaller samples to draw conclusions on configuration and organizational performance (Machuki, 2011; Chiyonge, 2009).

### 4.3 Reliability Tests

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability deals with how consistently similar measures produce similar results (Crano & Brewer, 2002). This study addressed equivalence reliability by using Cronbach’s alpha statistical test. The study drew from literature those items that had been tested for reliability by other researchers and adopt them..

### 4.4 Organizational Characteristics

Organizational characteristics in this study consisted of the organizations tenure (age), the peer grouping, the market share, the market coverage (focus) and the branch network. Study results on the responding bank’s age are presented in Table 4.1.

**Table 4.1: Statistics on Organizational Tenure, Market Share and Branch Networks**

Variables	Details	N	Minimum	Maximum	Mean	Std. Deviation
Organizational tenure (Age)	Years	30	4	116	36.47	26.066
Market Share	percentage	30	0.14	13.98	2.4110	3.27092
No of Branches (Networks)	Number	30	3	149	22.83	32.552

From Table 4.1, the responding banks have on average been in existence for 36 years (mean score = 36.47), with the oldest bank being 116 years and the youngest being 4 years old. This means that the organizations have survived lifecycles of their businesses. The age of an organization (organization tenure) has been used in many studies as a measure of organizational maturity or level of structure stability/ establishment. As such, the banking industry in Kenya can be said to be relatively well-established hence suitable for empirical study in strategic management development.

Further description from Table 4.1, reveals that the banks command market share of between 0.14% and 13.98% (mean 2.14%) thereby indicates a relatively competitive context. From Table 4.1 there is a high variability from the reported standard deviation of 3.27 which is higher than the mean. This implies that in terms of market share, the banks exhibit a relatively wide dispersion. Also as shown in Table 4.1, the respondent banks indicated networks of between a minimum of 3 branches and a maximum of 149 banks. The mean score was 22.8 and a standard deviation of 32.55. The standard deviation is higher than the mean implying a relatively wide dispersion on networks and thus a high variability among the banks networks.

The Central Bank of Kenya which is the regulatory agency overseeing all banking activities in Kenya has developed a categorization criteria for all the commercial banks in the country which is based on a weighted composite index comprising their assets, deposits, capital size, number of deposit and loan accounts. Based on this categorization, the banks are classified as small, medium or large. This categorization is termed as peer grouping. Table 4.2 shows the results based on categorization of the banks based on peer group.

**Table 4.2: Classification of Banks by Peer group**

Classification	Achieved Frequency	Population size	% of population in attained sample
Large	4 (13.3%)	6	66.7%
Medium	12 (40.0%)	15	80.0%
Small	14 (46.7%)	22	63.6%
Total	30 (100%)	43	75%

From Table 4.2, results show that the large banks that responded were four (4) representing 13.3%, the medium banks are twelve (12) representing 40% and the small banks are fourteen (14) representing 46.7% of the respondent banks respectively. Indeed, the large proportions of banks (86.7%) are in the medium and small peer groups which confirm that Kenya has an emerging economy.

The study further analyzed the respondent organization results so as to offer a brief description of the markets focus within which the banks operate. The banking sector is characterized by rapid restructuring, radical technology transformation, and an important ongoing internationalization process. As such, the distribution of the banks market coverage becomes an attractive attribute of the sector. These results are provided in Table 4.3

**Table 4.3: Distribution of Banks by Market Coverage**

Market Coverage	Frequency	Percentage (%)
National (Kenya only)	11	36.7
Regional (Within East Africa)	9	30.0
Continental (Within Africa)	3	10.0
International (Africa and beyond)	7	23.3
Total	30	100.0

Table 4.3 shows 36.7% (11) of the banks are operating in Kenya only (National), 30% (9) within E. Africa (Regional), 10% (3) continental and 23.3% (7) are international in operation. The results show that 66.7% (20) are focused on the region and national coverage confirming the focus of the market as an emerging economy and thus responsive to environmental attributes.

It has been argued that strategy is largely a function of context. An evaluation of the banks in light of market coverage show that 67% of the responding banks operate within the country or the East Africa region which can be said to be homogenous hence one can easily assert that largely the banks have similar contextual circumstances as far as strategy, management and choices are concerned.

#### 4.5 Respondents' Characteristics

The target respondents for this study in each organization were senior managers in any of the three functional departments; strategy and business development or marketing, corporate affairs and human resources irrespective of the function. Out of the respondent organization's data, the respondent's characteristics in this study were identified. They consisted of the period of service in the respondent's organization and the level of education of the respondent. The tenure is deemed a critical aspect in evaluating a manager's suitability as a respondent. As such, managers with a relatively longer tenure have a better understanding of organizational management. Distribution of managers' tenure is represented in Table 4.4.

**Table 4.4: Years Worked in Current Organization**

Number of Years	Frequency	Percentage (%)
Less than 1 year	1	3.4
1-3 years	10	34.5
4-9 years	12	41.4
10-15 years	5	17.2
16-19 years	1	3.4
Total	29	100.0

As shown in Table 4.4, 62% of the respondents had worked in the responding banks for over four years while only less than 5% had worked for less than one year. Thus, the study respondents can be deemed to have a clear understanding thus reliable and valid response to the study objectives. One can, therefore, conclude that respondents understand their organizations' structures and operations well hence find being relevant and reliable with respect to the study objectives.

From Table 4.4, it is also evident that most of the respondents have been able to witness a cycle of strategic formulation and implementation within the organizations. Most of the respondents have been working within their respective banks for a period between 4 to 9 years (41.4%). The general management in the banking sector reflects young management team that is quite aggressive and vibrant.

In terms of the level of education, the results show that the majority of the respondents 62.1% have postgraduate degree, 31% have bachelors and 6.9% Diploma. These results are presented in Table 4.5. As shown in Table 4.5, 93.1% of the respondents have either a bachelor's degree and/or a postgraduate degree. This means that the respondents are considered relatively knowledgeable in their areas of operations within the banks.

**Table 4.5: Respondents 'Level of Education**

<b>Respondents Level of Education</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Diploma	2	6.9
Bachelors degree	9	31.0
Postgraduate degree	18	62.1
Total	29	100.0

#### **4.6 Preliminary Findings**

The overall of the study was to determine the moderating effect of organizational stage of development on the relationship between organizational configuration and organizational performance. The first four specific objectives of this study were addressed in this section. They were to determine the influence of strategy-structure linkage, assess the influence of structure-environment linkage, establish the influence of strategy-environment and finally establish the relationship between organizational configuration and performance of commercial banks in Kenya.

Strategy, structure and environment are assumed to coalesce around each other to form organizational configuration that influences organization performance. The variables of strategy, structure, environment and non-financial indicators were obtained through the administration of a semi-structure questionnaire, while the financial performance variables were largely computed based on the secondary data collected on banks performance for year 2010. Organizational configuration variable was obtained through a composite index of strategy, structure and environment variables.

#### **4.6.1 Manifestation of Organizational Strategy**

Strategy is a unifying theme that gives coherence and direction to the actions and decisions of an individual or organization. Strategy formulation (creation) and implementation are recognized as key aspects of management in all organizations whether they are large or small, profit-making or not for profit-making organizations. Strategy formulation and implementation play an important role in the survival and continued development of an organization. Two key progressions have previously been used to address the models of strategy, strategic management and choices. The first of this progressions view strategy as a conscious, analytical process which results to intended or deliberate strategy thus a planned posture. The second takes an organic development progression resulting with emergent strategy. It views strategy as an evolutionary process, interactive and integrative.

Despite the varying views on strategy, there has been general consensus that strategy is a result of planned activities hence strategy formulation. Some authors have argued that the execution of strategy is seamless with respect to formulation and implementation. However, other dominant findings report that strategy execution fails because of poor implementation thus separating formulation and implementation as two separate aspects in the execution of strategy. This section presents results on strategy formulation practices in the Kenyan banking sector followed by evaluation of strategy implementation and lastly evaluation as to whether strategy implementation and formulation are related and thus a seamless function with one leading to the other or they are not related at all thus are separate functions.

##### **4.6.1.1 The State of Strategy Formulation in Kenyan Banks**

The current study sought to establish the level of appreciation of strategy formulation in the Kenyan commercial banks. The respondents were asked to indicate the extent to which they agreed or disagreed with the statements representing strategy formulation activities in the bank. A five-point Likert scale was used (strongly agreed=5, agree=4, neither agree nor disagree=3, disagree=2 and strongly disagree=1). A summary of results on attributes of strategy formulation among the Kenyan banks is presented in Table 4.6.

**Table 4.6: Attributes of Strategy Formulation**

Attributes of Strategy Formulation	N	Minimum	Maximum	Mean	Std. Deviation
Choice of strategy is done at corporate level	30	3	5	4.43	0.626
Recognition of strategic need is proactive rather than reactive	30	2	5	4.17	0.699
Business objectives reflect environmental requirements & gaps	30	2	5	4.13	0.681
Decision making process is influenced by key stakeholders	30	1	5	4.00	1.083
Strategy formulation takes into consideration contextual factors; age, religion culture	29	2	5	4.00	0.756
Strategic planning information is based on owner/managers personal/internal source	30	1	5	3.40	1.221
Strategic planning information is based on external/indirect channels	30	1	4	3.37	0.964
Decision-making process relies on owner managers own experience and knowledge	30	1	5	3.33	1.184

Note: Ranking was on 5-point scale: 5-strongly agree; 4-agree; 3-neutral; 2-disagree; 1-strongly disagree

From Table 4.6, there is a general positive appreciation of strategy formulation in organization (highest mean score = 4.43 whereas least mean score = 3.33). Respondents did not disagree with any of the aspect of formulation. It is evident that there was general agreement that choice of strategy is done at corporate level (mean = 4.43) and that recognition of strategic need is proactive rather than reactive (mean = 4.17). There is, however, indifference when it comes to strategic planning information based on external/indirect channels (mean = 3.37) and the reliance on owner managers own experience and knowledge (mean = 3.33).

A composite index on appreciation of strategy formulation was computed for each bank as shown in Table 4.7. This was computed on a percentage of the total cumulative score on formulation attributes as a ratio of the cumulative maximum score. The banks scored composites between 52.5% and 87.5% with up to 47% of the respondents scoring 80% and above on formulation. As such one can conclude that the banks generally have established patterns with respect to formulation of strategy.

**Table 4.7: Composite for Strategy Formulation (%)**

Composite Scores	Frequency	Percentage
52.50	1	3.3
60.00	2	6.7
67.50	1	3.3
70.00	4	13.3
75.00	3	10.0
77.50	5	16.7
80.00	2	6.7
82.50	7	23.3
85.00	2	6.7
87.50	3	10.0
Total	30	100.0

#### 4.6.1.2 The State of Strategy Realization in Kenyan Banks

This study sought to establish the state of strategy implementation within the Kenyan commercial banks through a review of two key aspects that were deemed necessary in implementation process. They are the organization's level of readiness and execution of strategy (Table 4.8) and secondly the level of support provided in an organization for implementation through the communication channels (Table 4.9). A composite index was computed for each of the studied banks from these two aspects to describe their state of strategy implementation. Level of readiness was evaluated through a 5 point Likert type scale driven query on readiness and execution. The results are summarized in Table 4.8.

**Table 4.8: Attributes of Readiness and Execution**

Attributes of Readiness and Execution	N	Minimum	Maximum	Mean	Std. Deviation
Level of preparedness when implementing strategies is high	30	1	5	3.73	0.907
Average level of strategy implementation achieved is high	30	2	5	3.70	0.702
Effectiveness in implementing new strategies is high	30	3	5	3.70	0.651
Level of resistance to change experienced is low	30	2	5	3.33	0.884
Time between initiation of new strategy implementation and completion is short	30	1	5	2.80	0.997

Note: Ranking was on 5-point scale.

5-very great extent; 4-great extent; 3-moderate extent; 2-less extent; 1-very less extent

As indicated in Table 4.8, the mean score for the questions asked with respect to the level of readiness to strategy implementation was between 3.73 and 2.80. Since all the questions received a response mean above the average it implied that generally the banks were ready for strategy implementation. The respondents agreed that the level of preparedness during implementation was high with a high rate of achievement. There was, however, indifference as to the time taken between initiation of strategy implementation process and its completion.

Another key element in the implementation of strategy process is communication and support building. Respondents were asked to evaluate their organization with respect to openness of communication channels, feedback along communication channels and timeliness of disseminating information within the banking institutions. Results are tabulated in Table 4.9.

**Table 4.9: Attributes of Communication and Support Building**

Attributes of Communication and Support Building	N	Minimum	Maximum	Mean	Std. Deviation
Firm's communication channels are open	30	2	5	3.87	1.074
Communication channels allow feedback	29	1	5	3.59	1.119
Time taken to disseminate information is short	30	2	5	3.57	0.817

Note: Ranking was on 5-point scale.

5-very great extent; 4-great extent; 3-moderate extent; 2-less extent; 1-very less extent

Generally, the aspects in Table 4.9 ranked above average (mean is above 3.5) though with slightly higher variation (standard deviation is moderately high). Specifically, open communication (mean = 3.87) was rated better than allowance for feedback (mean = 3.59) and the least ranked was time taken to disseminate information (mean = 3.57). Despite the low average score on time taken, the respondents seemed more certain relatively to openness and feedback.

The scores from the attributes of readiness and execution of strategy and that of communication and support building aspects were combined to derive a composite for each bank's strategic implementation. This was computed on a percentage of the total cumulative score on two aspects as a ratio of the cumulative maximum score. The

banks scored composites between 42.5% and 97.5%. Only 33% of the respondents scored highly with the remainder scoring less than 80%. This was lower relative to 47% of the banks that scored above 80% in strategy formulation. Therefore, we can conclude that there is a big variance in strategic implementation process across the commercial banks in Kenya.

The composite score formulated for strategic implementation of each bank is presented in Table 4.10. This was computed on a percentage of the total cumulative score on strategic implementation attributes (readiness and execution, and communication and support building) as a ratio of the cumulative maximum score. The banks scored composites between 42.5% and 97.5%.

**Table 4.10: Strategy Implementation Composite**

Composite Scores	Frequency	Percentage
42.50	1	3.3
52.50	1	3.3
55.00	1	3.3
57.50	1	3.3
60.00	4	13.3
62.50	4	13.3
67.50	1	3.3
70.00	2	6.7
72.50	3	10.0
75.00	1	3.3
77.50	1	3.3
80.00	5	16.7
82.50	2	6.7
87.50	2	6.7
97.50	1	3.3
Total	30	100.0

#### **4.6.1.3 Correlation between Strategy Formulation and Strategy Implementation**

As mentioned earlier on, the view of strategy execution as a seamless function (of formulation and implementation) has been a focus of study and the current study sought to contribute to the debate. To determine the degree of relationship between strategic formulation and strategy implementation, correlation analysis was carried out between strategy formulation (appreciation composite) and strategy implementation (readiness and communication support building composite).

The resultant Pearson Correlation Coefficient was used as a measure of the strength/degree of the relationship. The correlation coefficient measures the strength of linear relationship between 2 variables. The closer the coefficients are to +/- 1, the closer to a perfect linear relationship and therefore a higher degree of relationship. In this study the correlations between strategy formulation and strategy implementation composite indices were interpreted based on Cohen (1988) guidelines as follows;

**Table 4.11: Interpretation of the Size of a Correlation**

Correlation Coefficient (-/+)	Interpretation of Correlation
0.00 to 0.01	No Correlation
0.02 to 0.09	Very Weak Correlation
0.10 to 0.29	Weak Correlation
0.30 to 0.49	Moderately Weak Correlation
0.50 to 0.69	Moderately Strong Correlation
0.70 to 0.89	Strong Correlation
0.90 to 0.98	Very Strong Correlation
0.99 to 1.00	Almost Perfect Correlation

**Source:** Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Ed.). Hillsdale, NJ: Lawrence Erlbaum.

Each commercial bank's composite index for strategy formulation (appreciation composite) was correlated with the strategy implementation index (readiness and execution, and communication support building composite). The correlation results are tabulated in Table 4.12.

**Table 4.12: Correlation Matrix for Strategy Formulation and Implementation**

Correlation Matrix for Strategy Formulation and Implementation		Composite for strategy formulation (%)	Implementation composite (Imp + Comm.)
Composite for strategy formulation (%)	Pearson Correlation	1	0.127
	Sig. (2-tailed)	.	0.503
	N	30	30
Implementation composite (Imp + Comm.)	Pearson Correlation	0.127	1
	Sig. (2-tailed)	0.503	.
	N	30	30

A significant pattern is expected on the relationship between formulation and implementation (thus a seamless function). The current study findings from Table 4.12 show a positive small correlation which can be interpreted as a weak relationship (Pearson correlation coefficient = 0.127). The correlation is also statistically not significant ( $p > 0.05$ ). As such, the current study shows there is no relationship between the bank's strategic formulation and implementation and therefore, supports the view of strategic formulation and implementation as separate function in any organization.

#### **4.6.2 Manifestation of Organizational Structure**

In this section, we address the concept of structure. Structure should accommodate emergent and realized patterns of interaction within organizations, describing how actors actually transact their work, formulate policy, and allocate resources. Organization structure has been defined as patterned regularity (Ransom et al., 1980) which has been broadly categorized into design and framework. The notion of organizational framework focuses on the differentiation of positions, formulation of rules and procedures, and prescriptions of authority. On the other hand, organizational design focuses on administrative procedures and either signifies formal or informal patterned interactions. As such, organizational structure designed can either be formal or informal in nature. This study adopted a hybrid approach of identifying organizational structure within the Kenyan commercial banks. This is crafted from Delmas and Toffel (2009) categorization of structural design as formal or informal and mechanistic – organic continuum approach (Barney 2002; David et al., 2002). Current study findings are presented in this section.

##### **4.6.2.1 Organizational Structure Framework**

The current study sought to determine the banks organizational structure based on framework as either mechanistic or organic pattern. The respondents were asked to rank presence of structural patterns as either present or absent in their firms using a five-point Likert scale (5 = very great extent, 4 = great extent, 3 = neither great nor low extent, 2 = low extent and 1 = very low extent). The questions were posed from a mechanistic perspective thus high scores meant organizations were dominantly mechanistic. Results on the structural pattern characteristics are summarized in Table 4.13.

**Table 4.13: Organizational Structure Framework**

Attributes of Organizational Structure Framework	N	Min.	Max.	Mean	Std. Deviation
Organization's rules and procedures are carefully defined	30	3	5	4.30	0.702
Organizational structure is highly formal	29	2	5	4.14	1.026
Division of labour is subdivided into many specialized groups	30	2	5	3.93	0.944
Decision making process is usually from the top down to the lower levels	30	1	5	3.87	0.860
Decision making is centered at the top level management	30	1	5	3.50	1.196
Firm is characterized by high level of centralization of activities	30	1	5	3.43	1.073
Organizational structure is highly centralized	30	1	5	3.20	1.157
Employees have limited discretion in decision making	30	1	5	3.07	1.081
Employees are granted limited participation in decision making	30	1	5	2.97	1.033
Workers are granted limited discretion in performing their tasks	30	1	5	2.87	1.167
Firm is characterized by high level of complexity in operations	30	1	5	2.67	1.028
Organizational structure is complex in hierarchy	30	1	4	2.43	0.858

Note: Ranking was on 5-point scale.

5-very great extent; 4-great extent; 3-moderate extent; 2-less extent; 1-very less extent

From Table 4.13, the study results indicated that overall, the respondents highly scored their firms in terms of rules and procedures being carefully defined (mean = 4.30, SD = 0.70) followed by their structures being highly formal (mean = 4.14, SD = 1.026). High centralization and limited employee's participation in decision-making were scored on moderate (mean = 3.20 and 3.07 respectively), but high variation in individual respondents scores (SD = 1.157 and 1.081 respectively), implying differing opinion/pattern for individual banks. Similarly, all the respondents least ranked the complexity of structure in terms of hierarchy (mean = 2.43, SD = 0.851).

Using the various characteristics depicting organizational structure as framework from the above, a composite score was computed for each commercial bank. The computed composite for organizational structure in terms of framework for each of the commercial bank is shown in Table 4.14.

**Table 4.14: Composite for Structure Framework**

Composite Scores	Frequency	Percentage
45.00	1	3.3
55.00	1	3.3
58.33	2	6.7
60.00	1	3.3
61.67	4	13.3
63.33	4	13.3
65.00	2	6.7
66.67	1	3.3
68.33	1	3.3
69.09	1	3.3
70.00	2	6.7
71.67	2	6.7
73.33	3	10.0
75.00	1	3.3
76.67	2	6.7
78.33	1	3.3
96.67	1	3.3
Total	30	100.0

As shown in Table 4.14 the composite was computed on a percentage of the total cumulative score on framework attributes as a ratio of the cumulative maximum score. The organization with the highest score attained 96.67% whereas the least score was 45%. High score meant the organizations were highly mechanistic whereas low composite score meant were highly organic.

To be able to identify exactly which category of the two aspects of framework, the individual banks belonging to cluster analysis was applied. Cluster analysis is a statistical exploratory technique which group's observations in a manner that maximizes between group variance, and minimizes within group variance. Results obtained are presented in Table 4.15.

**Table 4.15: Cluster Analysis Summary for Structure Framework**

Final Cluster Centers		
	Cluster	
	1	2
Composite: Framework	75.06	61.27
Number of Cases in each Cluster	13	17

As indicated in Table 4.15, cluster center points were 75.06 % and 61.27 % for organic and mechanistic with seventeen (17) banks classified as being dominantly mechanistic and the rest thirteen (13) classified as having organistic framework. Conclusively, one can infer that banks in Kenya are fairly mechanistic exhibiting complex nature, high centralization, clearly defined rules and with limited discretion for employees on task and participation on decision-making.

#### **4.6.2.2 Organizational Structure Design**

A more fundamental understanding of organization structure can be arrived at by examining not only the prescribed framework but also the patterned regularities of interactions, the “informal structures” or “substructures” (Ranson, Hinings & Greenwood, 1980). The argument is founded by organizational members having ability to displace goals, subvert roles and amplify rules in an organization. In line with existing arguments, organizational structure can also be viewed from a design perspective, and as such be classified as either formal or informal. The current study focused on four attributes: incentives, relationships, rewards and philosophy to classify the organization as either formal or informal. Respondents were to indicate the extent to which they agreed with attribute statements (5 = very great extent, 4 = great extent, 3 = moderate extent, 2 = less extent and 1 = very less extent). A high score represented formality of structure whereas a low score represented informality of structure. Results are presented in this section.

The first section looked at formality from the incentive systems and practices within the organization. The study sought to establish the incentive approaches adopted by banks in Kenya. Results which were obtained out of a 5-point scale on the extent of agreement with provided statements are tabulated in Table 4.16.

Results from Table 4.16 indicate that overall responses obtained seemed to favour formality on incentives (most attributes scored a mean score above 3.5). Specifically, opportunity for growth and development was rated highest (mean = 4.0, SD = 0.788) followed by grooming for succession (mean score = 3.95, SD = 0.64) However, filling of vacant positions exclusively from within was least scored (mean = 3.03) though there seemed to be a high disparity from one organization to another (SD = 1.189).

**Table 4.16: Formal Structure Designs**

Formal Structure Designs (Incentives)	N	Min	Max	Mean	Std. Deviation
Opportunities for growth and development exist	30	2	5	4.00	0.788
Management development is aimed at managerial succession	30	3	5	3.93	0.640
Career development is highly supported	30	2	5	3.87	0.900
Job security is assured	30	1	5	3.70	0.915
Incentive systems emphasize on corporate rather than divisional performance	30	1	5	3.60	1.003
Incentive scheme is based on divisional performance	30	2	5	3.40	1.037
Vacancies in high positions are exclusively filled from within	30	1	5	3.03	1.189

Note: Ranking was on 5-point scale.

5-very great extent; 4-great extent; 3-moderate extent; 2-less extent; 1-very less extent

Organizational structure is indeed a complex medium of control which is continually produced and recreated in interaction and yet shapes those very interactions. Based on this argument, the second section looked at interactions and relationships in an organization which have been used as a proxy for dominant cultural patterns. The mutual interactions have been used to define an organization's level of formality or informality. The overall ratings on relationship in this study are summarized in Table 4.17.

**Table 4.17: Formal Structure Designs**

Formal Structure Designs (Relationship)	N	Min	Max	Mean	Std. Deviation
Induction of new employees is formal	30	3	5	4.27	0.691
Leadership style is people oriented	30	2	5	4.00	0.947
Communication is open and transparent	30	2	5	3.83	0.913
Feedback is mainly for development purpose	30	2	5	3.77	0.935
Management style is participatory/consultative	30	2	5	3.63	0.890
Great amount of informal meetings exist	30	1	5	2.33	1.155

Note: Ranking was on 5-point scale.

5-very great extent; 4-great extent; 3-moderate extent; 2-less extent; 1-very less extent

From Table 4.17 on relationships, the formality of inducting new employees was rated highly (mean = 4.27, SD = 0.691) followed by peoples' orientation of leadership style (mean = 4.00, SD = 0.947). Amount of informal meetings amongst employees was least scored (mean = 2.33) implying respondents disagreed (thus informal meetings rarely existed). However, the response was not uniform as the attribute has a relatively high standard deviation hence high level of variation in the responses obtained.

Structure has also been viewed as a property of social systems that are reproduced through societal interactions. This process over time supports stability and changes in social relationships within an organization. Since social structures are constituted by human agencies, the resultant exchange relationship among the human agencies tends to generate and modify distribution of power between individuals and groups. To evaluate this concern of structural design, the third section reviewed the level of formality/ informality of the organizations rewards systems. Results are presented in Table 4.18.

**Table 4.18: Formal Structure Designs**

Formal Structure Designs (Rewards)	N	Min	Max	Mean	Std. Deviation
Reward systems are considerate of employees efforts	30	2	5	3.90	0.960
Pay practice is based on ability and performance	30	2	5	3.83	0.913
There is offer for non cash incentives	28	2	5	3.54	0.922
Bank conducts salary surveys and implements findings	30	2	5	3.43	0.774

Note: Ranking was on 5-point scale.  
 5-very great extent; 4-great extent; 3-moderate extent; 2-less extent; 1-very less extent

Results in Table 4.18 show that the overall results indicate a uniform and indifferent outcome for aspects of formality in rewards, as all four aspects scored a mean score of 3 and the standard deviations are relatively uniform. Nonetheless, respondents agreed that reward systems are considerate of employees' efforts and that pay practices are based on ability and performance (mean = 3.83, SD = 0.913). They were largely indifferent on issues of conducting salary surveys (mean = 3.54, SD = 0.922) and implementation of findings (mean = 3.43, SD = 0.774).

The fourth aspect of evaluation focused on organizational management philosophy, which is captured by levels of formality based on communication, management practices, job description and controls. Results are presented in Table 4.19.

**Table 4.19: Formal Structure Designs**

<b>Formal Structure Designs (Management Philosophy)</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Highly structured communication channels & highly restricted access to important financial/operating information	30	1	5	3.00	1.232
Strong emphasis on holding fast to well-established management practices despite changes in business conditions	30	1	5	2.80	1.186
Strong emphasis on ensuring that employees adhere closely to their formal job description	30	1	5	2.63	1.273
Tight formal control of most operations by means of sophisticated control and information systems	30	1	5	2.47	1.196

**Note: Ranking was on 5-point scale.**

**5-very great extent; 4-great extent; 3-moderate extent; 2-less extent; 1-very less extent**

Results in Table 4.19 show that overall results indicate a level of indifference and/or disagreement with philosophy attributes from a formal perspective (average scores range between 3 and 2.47); though with high deviation to individual organizations' responses (the standard deviations are reasonably high). High structure of communication channels and restricting of information access of information access was ranked highest (mean = 3.00, SD = 1.232) whereas existence of formal control for operation and information system was least scored (mean = 2.47, SD = 1.196).

The results in Table 4.20 show how the four aspects of structure design, namely' incentives, relationships, rewards and management philosophy were used to create a composite score. The composite was used to classify structural design of individual banks as either formal or informal. Highest score in the composite meant organizations are highly formal whereas low composite score reflected high level of informality in the organizational structure based on design. The composite was computed on a percentage of the total cumulative score on the four aspects that characterize design attributes as a ratio of the cumulative maximum score. The organization with the highest score attained 88% whereas the least score was 52.38%.

**Table 4.20: Composite for Structure Design**

Composite Scores	Frequency	Percentage	Cumulative Percentage
52.38	2	6.7	6.7
53.33	1	3.3	10.0
57.14	1	3.3	13.3
61.90	2	6.7	20.0
62.86	1	3.3	23.3
66.67	2	6.7	30.0
67.62	3	10.0	40.0
69.52	2	6.7	46.7
70.48	2	6.7	53.3
71.43	1	3.3	56.7
72.38	2	6.7	63.3
73.33	3	10.0	73.3
75.24	2	6.7	80.0
77.14	1	3.3	83.3
78.10	2	6.7	90.0
80.00	2	6.7	96.7
88.00	1	3.3	100.0
Total	30	100.0	

To be able to identify exactly which category of the two aspects of design the individual banks belonged to, cluster analysis was applied. Classification into either formal or informal was done with results summarized in Table 4.21.

**Table 4.21: Cluster Analysis Summary for Design**

Final Cluster Centers		
	Cluster	
	1	2
Composite: design%	74.89	61.51
Number of Cases in each Cluster	18	12

*Source: Research Data*

As indicated in Table 4.21 cluster analysis showed the centre points as 74.89 % and 61.51 % for formal and informal designs. The results further showed that eighteen (18) banks being classified as formal with the remaining twelve (12) being classified as informal thus suggesting that banks in Kenya are relatively formal outfits. The banks thus present a picture of clearly defined administrative systems and formal controls.

According to Fombrun (1986), organizational structure describes both the prescribed framework and realized configurations of interactions and the degree to which they are mutually constituted and constituting. This depicts structure as a hybrid involving both the framework and design aspects of structure. The current study went further on to cross-tabulate the responding banks into a framework-design matrix, thus providing a synchronized approach to describe organizational structure. This was in line with the study's aim of adopting the hybrid approach of structure that involves both the framework and the design of structure. The results for cross-tabulation are presented in Table 4.22.

Cross-tabulation is a bi-variate technique used to analyze relationship between two variables allowing researcher to explore the relationship between these two variables. Cross-tabulation examines the intersections of categories for each of the variables involved. In this study cross tabulation was done to determine if there was any relationship between structure framework and structure design perceptive of the structure variable which is one of the organizational configuration domain.

**Table 4.22: Organization Structure Framework - Structure Design matrix**

Cluster : Framework * Cluster : Design Cross - Tabulation		Cluster : Design (formal or Informal)		Total
		Informal	Formal	
Cluster : Framework (Organic and Mechanistic)	Organic	6 (20.0%)	11 (36.7%)	17 (56.7%)
	Mechanistic	6 (20.0%)	7 (23.3%)	13 (43.3%)
Total		12 (40.0%)	18 (60.0%)	30 (100%)

*Source: Research Data*

Results from Table 4.22 indicate that through the cross-tabulation of organic/mechanic framework and formal/ informal design four configurations emerged out of the structure of the Kenyan banks. They were Organic–Informal: Organic–Formal: Mechanic– Informal and Mechanic–Formal. The results indicated that the banks received equal membership across these configurations although Organic–Formal configuration was predominant with 36.7 % representation.

### 4.6.3 Manifestation of Organizational Context

Environment has been deemed significant in both strategic management and organizational performance. The current study therefore sought to establish the operating context with a view to analyzing configuration and performance relationship. Respondents were, therefore, asked to respond to various attributes of the environment by agreeing to the context in which these attributes manifested themselves. The questions were framed such that high scores implied complexity and dynamism in the context forces whereas low scores implied a simple and stable context. Results are presented in Table 4.23.

**Table 4.23: Statistics on Operating Environment**

Operating Environment Attributes	N	Min	Max	Mean	Std Dev
Regulatory agencies have significant control on operations	30	1	5	4.10	1.029
Demand for products and services witnessed from customers who never bought them before	30	2	5	3.60	0.932
Anything offered by one competitor can readily be matched by others	30	1	5	3.40	1.221
New competitive moves are frequent in the industry	30	1	5	3.30	1.119
Promotion wars occur in the industry	28	1	5	3.25	1.295
Product related needs for new customers different from those of existing ones	30	1	5	3.23	1.073
Customers tend to look for new products all the time	28	1	5	3.00	1.018
Current business environment threatening survival	30	1	5	2.23	1.165
Tough price competition threatening the bank	30	1	4	2.07	0.828
Competitors' product quality threatening bank	30	1	4	1.93	0.785

Note: Ranking was on 5-point scale.

5-very great extent; 4-great extent; 3-moderate extent; 2-less extent; 1-very less extent

Overall results from Table 4.23 indicate moderate scores for environmental attributes (most attributes scored mean of 3 point). Specifically, findings show that there seems to be general agreement that regulatory agencies have significant control on operations of the organizations (mean = 4.10, SD = 1.029) though there was high variation in individual responses (standard deviation is relatively high). Least of the worries in the banking industry context is business environment's threat to organization's survival (mean = 2.23, SD = 1.165), price competition (mean = 2.07, SD = 0.828) and lastly product quality related threat (mean = 1.93, SD = 0.785).

The various attributes scores were aggregated into a composite score thus high scores representing complexity and dynamism of operating context are shown in Table 4.24.

**Table 4.24: Composite for Operating Environment**

Composite Scores	Frequency	Percentage	Cumulative Percentage
32.00	1	3.3	3.3
38.00	1	3.3	6.7
42.00	2	6.7	13.3
44.00	1	3.3	16.7
48.00	1	3.3	20.0
53.33	1	3.3	23.3
54.00	2	6.7	30.0
55.56	1	3.3	33.3
56.00	2	6.7	40.0
58.00	2	6.7	46.7
62.00	3	10.0	56.7
64.00	2	6.7	63.3
64.44	1	3.3	66.7
66.00	1	3.3	70.0
66.67	1	3.3	73.3
68.00	1	3.3	76.7
70.00	1	3.3	80.0
72.00	2	6.7	86.7
74.00	1	3.3	90.0
78.00	1	3.3	93.3
84.00	1	3.3	96.7
86.00	1	3.3	100.0
Total	30	100.0	

From Table 4.24, the highest score obtained was 86% and least score 32%. Further the results indicated that 20% of the banks had a composite score below 50% with 60% obtaining moderate composite score (50-70%) and the remainder (20%) having relatively high composite score (60-70%). From the results in Table 4.23, one can deduce that the overall business context for the Kenyan banks is moderate with respect to dynamism and complexity.

#### 4.6.4 Manifestation of Organizational Performance

Measurement of performance has been widely debated with different proposals and arguments. This study did not attempt to contribute to the debate but nonetheless took

cognizance of ensuing arguments resulting from the use of financial indicators (which have been widely used and considered more objective) as well making an attempt to use non-financial measurement (considered subjective). The process of using both measures has been referred to by recent scholars as triangulation. The method has been taunted to provide for multiple measures and as such compensates for weakness on individual single set measures that have been used widely before.

This study follows the position of Baltazar et al., (2010) on performance measures in banks that relate it to the bank’s formal mission, revenue, expenses, profitability and customer satisfaction in the preceding fiscal year and thus the adoption of triangulation approach. The financial indicators used in this study included profit, return on equity (RoE), return on assets (RoA) and market share. This data were selected due to availability and the statistical analysis choice. The basis of the analysis was on financial information for the year 2010 which was obtained from the individual banks financial reports 2010, CBK Supervision annual reports, 2010 and reports from Capital Market Authority (CMA).

Table 4.25 presents the performance measures used in computing the financial and non-financial indicators for the commercial banks in Kenya. It also details what consists of the selected dependent variables used in the current study. They included return on assets, return on equity, profit, market share and non-financials.

**Table 4.25: Description of Dependent Variables**

Abbreviation of variable	Definition	Measurement
ROA	Return on Assets	Measured as the net income for the year divided by total assets (average for the year)
ROE	Return on Equity	Measured as the net income for the year divided by common equity (average for the year)
P	Profit	Measured as the net income for the year after tax
MS	Market Share	Measured as a composite of net assets, total deposits, shareholders’ funds, number of loan accounts and number of deposit accounts
NF	Non-financial	Measured as a composite of reputation, CSR, innovation, responsiveness and employee development

Table 4.26 above provides the summary of the banks' financial performance for the period 2010. The results in Table 4.26 indicate varied performances across the various financial indicators. For instance, in respect to profit as a measure, the average profit for the banks was approximately KES 2 million. However, some banks made losses (KES -106,786) while others made relatively high profit (KES 18.2 million). Similar observation was seen with respect to RoE, RoA and market share as measures of performance.

**Table 4.26: Statistics on Organizational Performance**

<b>Financial indicators</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Profit	30	-106,786.00	18,228,000.00	1,998,722.58	3,971,398.06
Return on Equity	30	-28.24	47.35	21.52	17.03
Return on Asset	30	-2.50	6.43	3.16	2.25
Market Share	30	0.14	13.98	2.41	3.27

The non-financial performance measure in this study was captured as a composite score. A composite index was computed for each commercial bank using the various aspects of non-financial nature that were considered reasonable indicators of business excellence. These included reputation, CSR, timeliness of response to customer complaints, innovation amongst others. The composite index was computed on a percentage of the total cumulative score on non-financial attributes as a ratio of the cumulative maximum score. From the analysis, composite score ranged from 62.22% to 100% with a mean score of 81.11%. 43% of the banks had a composite score above the mean. The results are presented in Table 4.27.

**Table 4.27 Composite for Non-financial Performance**

Composite Scores	Frequency	Percentage	Cumulative Percentage
62.22	1	3.3	3.3
64.00	1	3.3	6.7
66.00	3	10.0	16.7
68.00	1	3.3	20.0
70.00	1	3.3	23.3
72.00	2	6.7	30.0
74.00	1	3.3	33.3
76.00	1	3.3	36.7
77.78	1	3.3	40.0
80.00	5	16.7	56.7
82.00	2	6.7	63.3
86.00	1	3.3	66.7
88.00	2	6.7	73.3
92.00	2	6.7	80.0
96.00	4	13.3	93.3
98.00	1	3.3	96.7
100.00	1	3.3	100.0
Total	30	100.0	

To determine the degree of relationship between the financial and the non-financial performance indicators, correlation analysis was carried out. This provided for the identification of the existing statistical significant relationships and nature of relationships between these variables. The resultant Pearson Correlation Coefficient was used as a measure of the strength/degree of the relationship. The correlation coefficient measures the strength of linear relationship between 2 variables. The closer the coefficients are to +/- 1, the closer to a perfect linear relationship and therefore a higher degree of relationship. Results for the correlation analysis of profit, RoA, RoE, market share and non-financial performance composite index are presented in Table 4.28.

**Table 4.28: Correlation Matrix for Organizational Performance**

Correlation Matrix for Organizational Performance		Profit	Return on Asset	Return on Equity	Market Share	Composite for non-financial performance
Profit	Pearson Correlation	1	.485(**)	.377(*)	.582(**)	-.242
	Sig. (2-tailed)	.	.007	.040	.001	.197
	N	30	30	30	30	30
Return on Asset	Pearson Correlation	.485(**)	1	.919(**)	.440(*)	-.107
	Sig. (2-tailed)	.007	.	.000	.015	.573
	N	30	30	30	30	30
Return on Equity	Pearson Correlation	.377(*)	.919(**)	1	.322	-.056
	Sig. (2-tailed)	.040	.000	.	.083	.770
	N	30	30	30	30	30
Market Share	Pearson Correlation	.582(**)	.440(*)	.322	1	.158
	Sig. (2-tailed)	.001	.015	.083	.	.403
	N	30	30	30	30	30
Composite for non-financial performance	Pearson Correlation	-.242	-.107	-.056	.158	1
	Sig. (2-tailed)	.197	.573	.770	.403	.
	N	30	30	30	30	30
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						
* p < 0.05; ** p < 0.01.						

The correlation analysis result in Table 4.28 suggests existence of significant and positive relationship for various combinations of financial indicators. The correlation coefficient for profit and RoA was 0.485, whereas that for profit and RoE was 0.377 and that for profit and market share was 0.582. All this correlation coefficients were statistically significant at 5 percent significance level ( $p < 0.05$ ). The correlations however range between moderately weak and moderately strong correlation based on the interpretation adopted from Cohen (1988). The correlation between profit and the other three financial indicators of performance namely RoA, RoE and market share

can be attributed to the fact that all these financial measures are computed using the net income which is the key component of profit calculation. The four indicators therefore tend towards being equal.

The correlation coefficient for RoA and RoE was found to be 0.919, which was statistically significant at 5 percent significance level ( $p < 0.05$ ). This indicates a very strong positive correlation between RoA and RoE. Given that, both ratios use the same numerator and that the only difference between the two is only that RoA measures profitability in terms of efficiency performance by adjusting for the leverage effect ( $\text{RoA} = \text{RoE}/\text{Leverage}$ ) then the relationship between the two was expected to be strong. From the result the correlation coefficients for RoA and market share (MS) was found to be 0.440, which was statistically significant at 5 percent significance level ( $p < 0.05$ ). Although the correlation is moderately weak, the two share common measures related to net asset. RoA however uses net assets as a denominator.

From the correlation analysis results in Table 4.28, it is also evident that the financial measures are correlated at 5 percent significance level ( $p < 0.05$ ) and as such any of the variables can be considered as an adequate proxy for performance. However the significance of this correlation analysis was to confirm that the tests were consistent and did not as such influence the choice of the measure to be used in the current study. Based on other parameters the current study however opted to use market share and RoA as the choice of financial measures. Market share was highly favoured as it was provided as a robust measure by CBK. Market share is calculated as a weighted composite index comprising assets, deposits, capital size, number of deposit and loan accounts (CBK, 2010). RoA was deemed a better proxy for organization performance than RoE in the banking sector as it is a more reliable profitability indicator in terms of efficiency performance as it adjusts for leverage effect. Such that  $\text{RoA} = \text{RoE}/\text{Leverage}$  (ECB, 2010). RoE and profit were therefore dropped as financial measure from this study with RoE being viewed more as a communication tool with an incentive of describing the relationship between banks and markets as opposed to a performance benchmark. Profit on the other hand has been found to be dependent on the size of the bank and thus forms a critical input in computing return on assets.

The results in Table 4.28 further show that no statistically significant relationship exists between the non-financial performance and the financial indicators. However, it is worth noting that a negative relationship is reported for the association between non-financial composite score and profit, RoA and RoE whereas a positive association is reported for non-financial performance and market share.

From arguments that the banking sector is a knowledge intensive industry, then it is right to point out that financial knowledge, intellectual resources and other intangible assets are also relevant performance drivers and will need to be incorporated in organizational performance as traditional measures of performance have become inadequate. More so, the banks' complexity has increased considerably, and intangible assets have become an important driver of performance. Several scholars have advanced this discussion by pointing out that merely analyzing financial indicator does not constitute an effective strategy for credit institutions, since their performance interlinks financial indicators with non-financial indicators (Sagar & Rajesh, 2008; Zhang & Longyi, 2009). On this basis, the current study therefore also used non-financial composite score as a proxy for performance measurement in hypothesis testing.

#### 4.7 Results of Test of Hypotheses

The current study sought to establish the influence of organizational configuration on organizational performance. This relationship was conceptualized to be moderated by organizational stage of development. Most of the variables in the study were multidimensional in nature and therefore, their operationalization was very instrumental for the study. Organizational configuration in this study has been conceptualized as a composite of interactions between organizational strategy formulation and strategy implementation; Organizational structure framework and design; and finally environment. Organization performance was captured from both financial perspective (RoA and market share) and non-financial perspective (a composite index) for each bank.

This section presents the overall scores and descriptive on the individual variables, constructs and concepts with the data presented as average score for each bank. In total, thirty (30) banks were identified and statistical analyses carried out. The various hypotheses were tested at 90% confidence level or 10% significant level ( $p \leq 0.10$ ) and at 95% confidence level or 5% significance level ( $p \leq 0.05$ ) on the basis of the sample size being used was statistically borderline.

#### 4.7.1 Strategy-Structure Configuration and Organizational Performance

The first objective of this study was to determine strategy and structure linkage and test its influence on performance of organizations. For the purpose of this study, return on assets (RoA), market share (MS) and non-financial indicators (NF) were used. These measures have been advanced for use in credit institutions to measure performance (Sagar & Rajesh, 2008; Zhang & Longyi, 2009). To establish the influence of strategy-structure configuration on performance the study tested the hypothesis below.

**Hypothesis H<sub>1</sub>:** Strategy–Structure configuration has significant effect on organizational performance.

Strategy in the current study was measured in terms of the process and therefore, the test of strategy formulation and implementation. Structure was measured in terms of the framework and design. The four variables were captured as composite scores from various attributes of each of the individual variables for the commercial banks in Kenya. High scores in strategy formulation and strategy implementation implied that the banks have high appreciation for strategy formulation as well as enjoying high levels of preparedness (readiness) and efficiency in strategy execution. Treated this way, strategy is observed more as a realized product rather than as content and this raises the debates as to whether strategy formulation and implementation are a seamless process or they are independent.

Structure on the other hand in the current study has been viewed in terms of framework or its design. Analysis viewing it as framework focuses on the differentiation of positions, formulation of rules and procedures and prescription of

authority. Such that high composite score in prescribed structural framework implies that the structure is highly mechanistic, while low score implies that it is organic. Design on the contrary reviews the administrative procedures. Therefore, high scores in structure design signify formal patterned interactions while low scores represent informality of the organization's structural design.

To further investigate the influence of strategy-structure configuration on organizational performance, the study used multiple/multivariate linear regression models for a sample of 30 commercial banks in Kenya. The regression analysis was initially conducted by estimating the four parameters of strategy-structure configuration variables as identified in the study. The four parameters were estimated against the three organizational performance variables that were adopted for this study as the response variables namely RoA, market share and non-financial indicators respectively. The results of these models were significant at 5 and 10 percent significance levels ( $p \leq 0.05$  and  $p \leq 0.10$ ). Relevant results from the analysis are summarized in Table 4.29.

**Table 4.29: Strategy-Structure Configuration Effect on Organization Performance**

Model	Response variable	Coefficient of multiple correlation (R)	Explanatory power of the model (R <sup>2</sup> )	Model F statistic	Significance Level
<b>Overall model:</b> $Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$ <b>RoA</b> = $9.792 - 0.019X_1 + 0.007X_2 + 0.026X_3 - 0.107X_4$ <b>MS</b> = $-7.710 - 0.037X_1 + 0.065X_2 + 0.183X_3 - 0.056X_4$ <b>NF</b> = $-15.805 - 0.404X_1 + 0.353X_2 + 0.588X_3 + 0.919X_4$	Return on Assets	0.454	0.206	1.620	0.200
	Market share	0.544	0.296	2.623	0.059*
	Non-financials	0.770	0.592	9.082	0.000*
<b>Strategy:</b> Formulation , implementation; <b>Structure:</b> Structure( framework), Structure (design); <b>Y:</b> ROA, MS, NF <b>X<sub>1</sub></b> = Strategy Formulation (composite); <b>X<sub>2</sub></b> = Strategy Implementation (composite); <b>X<sub>3</sub></b> = Structure ( framework); <b>X<sub>4</sub></b> = Structure (design); <b>Y=Organizational performance</b> * = statistically significant ( $p \leq 0.05$ ) ; ** =statistically significant ( $p \leq 0.10$ )					

Study results for test of hypothesis  $H_1$  as shown in Table 4.29 indicated mixed findings for different measures of organizational performance using RoA, market share and non-financial indicators. The relationship between the three different response variables of organizational performance used in this study and the independent variable (strategy-structure configuration) shows a moderately weak correlation with respect to RoA ( $R = 0.454$ ) which becomes moderately strong as independent variables changes to market share ( $R = 0.544$ ) and then turns to a strong correlation for non-financial composite ( $R = 0.770$ ). Similarly models explanatory power ( $R^2$ ) changes from 20.6% for RoA to 29.6% for market share whereas for the non-financial performance 59.2% of the changes is explained by strategy-structure configuration with the remaining variations for each model being unexplained and is therefore absorbed by the error terms.

From Table 4.29, the overall statistical significance for the resulting models provides empirical support for the effect of strategy-structure configuration on non-financial performance ( $F = 9.082$ ,  $p < 0.05$ ) and market share ( $F = 2.623$ ,  $p < 0.10$ ). However study results failed to provide statistically significant support for effect of strategy - structure configuration on RoA ( $F = 1.620$ ,  $p > 0.10$ ).

Appendices 4a, 4b and 4c indicate the model summary, the ANOVA analysis and significance coefficient for strategy-structure configuration and performance based on RoA respectively. Further, appendices 5a, 5b and 5c indicate the model summary for strategy-structure configuration, the ANOVA analysis and significance coefficient and performance based on market share whereas appendices 6a, 6b and 6c indicate the model summary for strategy-structure configuration, the ANOVA analysis and significance coefficient and organizational based on the non-financial composite.

Evaluation of the direction of the regression coefficients between the independent variable and the statistical significance of individual model parameters (variables) was conducted. A positive correlation implies that increase in value of independent variable results in increases in value of the dependent variable by same proportion whereas a negative correlation implies that an increase in value of independent variables results to a decrease of same proportion by dependent variable. Results are summarized in Table 4.30.

**Table 4.30: Overall Coefficients Estimate for Strategy-Structure configuration and Organizational Performance**

Independent Variable	Dependent variable					
	RoA		Market Share		Non-financial	
	Beta (β)	p-value	Beta (β)	p-value	Beta (β)	p-value
Constant	9.792	0.185	-7.710	0.441	-15.805	0.551
Strategy formulation	-0.019	0.697	-0.037	0.571	-0.404	0.026*
Strategy implementation	0.007	0.847	0.065	0.198	0.353	0.012*
Structure (framework)	0.026	0.609	0.183	0.014*	0.588	0.004*
Structure (design)	-0.107	0.048*	-0.056	0.433	0.919	0.000*
R-Squared	0.206		0.296		0.592	
F-ratio	1.620		2.623		9.082	
<b>Key: * = statistically significant (p ≤ 0.05) ; ** =statistically significant (p ≤ 0.10)</b>						

As shown in Table 4.30, the four individual predictor variables had different interactions with the three measures of organization performance in this study. Whereas the overall model for the effect of strategy-structure configuration on RoA was not statistically significant ( $p > 0.10$ ), the design of the structure (formality/informality) had a statistical significance and negative influence on RoA ( $p < 0.05$ ). As such, this implies that the higher the formality of structure design, the poor the organization performance results observed with respect to RoA. In other words, informality of structure design tends to favour RoA. On the contrary, high scores in strategy implementation and high scores in structural framework (mechanistic) has a positive influence on RoA though the influence is not statistically significant ( $p > 0.10$ ). High scores in strategy formulation (appreciation and planning) have a negative effect on RoA and the influence is not statistically significant ( $p > 0.10$ ).

The study reports statistically significant findings and a positive effect of the structure framework influence ( $t = 2.64, p < 0.05$ ) on market share measure of organization performance. Thus, a mechanistic framework is favourable for high organization

performance in respect to market share. Other variables, namely; strategy formulation, implementation and the structural design are statistically not significant on market share ( $p > 0.10$ ).

The study results also indicate that strategy implementation has a positive effect on market share whereas structural design and strategy formulation have negative effect on market share. Contrary to the findings on individual predictable variables influence on financial indicators namely RoA and market share, the same predictor variables were found to be statistically significant on non-financial performance. Strategy implementation ( $t = 2.71, p < 0.05$ ), structure framework ( $t = 3.20, p < 0.05$ ) and structure design ( $t = 4.85, p < 0.05$ ) reported a positive effect whereas strategy formulation ( $t = 2.37, p < 0.05$ ) reported a negative influence with respect to non-financial performance measure within the Kenyan commercial banks. Overall there is relatively a higher negative impact reported for structure design than for strategy formulation for RoA (Beta = -0.107). The same is observed that the impact reported for negative effect of structure design is relatively higher than for strategy formulation for market share (Beta = - 0.56).

Appendices 4a, 4b, 4c, 5a, 5b, 5c, 6a, 6b and 6c on model summary, ANOVA and coefficients estimates for the three performance indicators used in the current study namely RoA, market share and non-financial indicators respectively provide more details on the relevant statistical relationships between strategy-structure configuration and organizational performance.

#### 4.7.2 Structure-Environment Configuration and Organization Performance

The current study also sought to statistically determine the influence of structure-environment configuration on organizational performance indicators (Return on asset, market share and non-financial indicators). To assess this relationship, the study tested the hypothesis stated below.

**Hypothesis H<sub>2</sub>:** Structure-Environment configuration has significant effect on organizational performance.

Structural aspects were captured in this study based on two dimensions namely; as prescribed framework and patterned interactions (designs). Environment score was computed as a composite index of the various elements constituting environmental dimensions of dynamism and complexity for each of the commercial bank in Kenya. High scores for the environmental dimensions composite implied a highly dynamic and complex context whereas low scores for the composite depict a simple and stable environment. The hypothesis was tested using RoA, market share and non-financial score as the measures of organization performance.

To investigate the influence of structure-environment configuration on organizational performance, the study used multiple/multivariate linear regression models for a sample of 30 commercial banks in Kenya. The regression analysis was initially conducted by estimating the three parameters of structure-environment configuration variables as identified in the study. The three parameters were estimated against the three organizational performance variables that were adopted for this study as the response variables namely RoA, market share and non-financial indicators respectively. The results of these models were significant at 5 and 10 per cent significance levels ( $p \leq 0.05$  and  $p \leq 0.10$ ). The relevant results with respect to the three organizational performance indicators, the model summaries and overall statistical significance are summarized in Table 4.31.

**Table 4.31: Structure-Environment Configuration Effect on Organization Performance**

Model	Response variable	Coefficient of multiple correlation (R)	Explanatory power of the model (R <sup>2</sup> )	Model F statistic	Significance Level
$Y = f(\text{structure- environment configuration})$ Overall model: $Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e$ $RoA = 9.015 + 0.030X_1 - 0.193X_2 - 0.011X_3$ $MS = -4.282 + 0.155X_1 - 0.049X_2 - 0.005X_3$ $NF = -9.44 + 0.266X_1 + 0.868X_2 + 0.200 X_3$	Return on Assets	0.451	0.204	2.218	0.110
	Market share	0.493	0.243	2.776	0.061*
	Non-financials	0.670	0.440	7.066	0.001*
Structure: Structure( framework), Structure (design); Environment: Dimensions; Y: ROA, MS, NF $X_1 = \text{Structure ( framework)}$ ; $X_2 = \text{Structure (design)}$ ; $X_3 = \text{Environment}$ ; $Y = \text{Organizational performance}$ * = statistically significant ( $p \leq 0.05$ ) ; ** =statistically significant ( $p \leq 0.10$ )					

Overall results as shown in Table 4.31 indicate existence of a moderate association between organizational performance and predictable variables (structure and environment). A moderately weak association is reported for RoA followed by MS whereas there is evidence of a moderately strong association for NF (R = 0.451, 0.493 and 0.67 respectively). Indeed, the explanatory power of the variables (structure and environment) on organizational performance ranges between 20% for RoA, 24% for MS and 44% for NF. This indicates that the models derived are reasonably weak to accounting for the changes in organizational performance of the commercial banks in Kenya. The hypothesis proposed a significant relationship between organizational performance and structure-environment configuration. Using the study's three measures of organizational performance, statistical significance is reported for the influence on MS (F = 2.776, p < 0.10) and non-financial performance indicators (F = 7.066, p < 0.05) whereas no statistical significance is reported for RoA as a measure of organizational performance (F = 2.218, p > 0.10). Thus, current study provides partial and inconclusive evidence for an overall acceptance/rejection of study hypothesis concerned.

Appendices 7a, 7b and 7c provide the model summary, ANOVA analysis and coefficients estimates for structure-environment configuration and RoA. Appendices 8a, 8b and 8c provide the model summary, ANOVA analysis and coefficients estimates for structure-environment configuration and market share while appendices 9a, 9b and 9c provide model summary, ANOVA analysis and coefficients estimates for non-financial performance indicators. The appendices provide more details on the relevant statistical relationships between structure-environment configuration and performance of the commercial banks in Kenya.

Further analysis was carried out to determine the significance of individual predictor parameters of structure-environment configuration as well as the direction of the regression coefficients of these predictors with organizational performance. Results are summarized in Table 4.32.

**Table 4.32: Overall Coefficients Estimate for Structure-Environment configuration and Organizational Performance**

Independent Variable	Dependent variable					
	RoA		MS		NF	
	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value
Constant	9.015	0.119	-4.282	0.594	-9.444	0.692
Structure (framework)	0.030	0.570	0.155	0.047*	0.266	0.240
Structure (design)	-0.103	0.057*	-0.049	0.511	0.868	0.001*
Environment	-0.011	0.741	-0.005	0.912	0.200	0.177
R-Squared	0.204		0.243		0.449	
F-ratio	2.218		2.776		7.066	

**Key:** \* = statistically significant ( $p \leq 0.05$ ) ; \*\* =statistically significant ( $p \leq 0.10$ )

As shown in Table 4.32, the three individual predictor variables had different interactions with the three measures of organizational performance used in this study namely RoA, MS ad NF. The results indicated that organizational structure framework had a positive influence on all the three measures of performance (RoA,

MF and NF), although the influence was only statistically significant with respect to market share ( $t = 2.08, p < 0.05$ ). This implies that a mechanistic structure had a positive and statistically significant influence on a banks' market share. However, organization structure design posted mixed influence on organizational performance measures. The structural design had a negative and statistically significant influence on RoA ( $t = 2.00, p < 0.10$ ) implying that the more formal the structural design, the higher the negative impact on RoA.

On the contrary, structure design reports a positive and significant influence on non-financial performance ( $t = 3.97, p < 0.05$ ) implying that the more formal the structure design of the bank, the higher the non-financial performance for commercial banks in Kenya. However, structure design had a negative effect on MS (Beta = -0.049). This effect was not statistically significant in all the three cases using (RoA, MS and NF composite). The results on the effect environment effect indicate a negative influence on RoA and MS (thus high level of complexity and dynamism in the environment affects performance negatively) while a positive influence is reported with respect to non-financial measures.

Appendices 7a, 7b and 7c on model summary, ANOVA and coefficients estimates for structure-environment configuration and RoA, 8a, 8b and 8c on model summary, ANOVA and coefficients estimates for structure-environment configuration and market share and 9a, 9b and 9c on model summary, ANOVA and coefficients estimates for non-financial performance indicators provide more details on the relevant statistical relationships.

#### **4.7.3 Strategy-Environment Configuration and Organization Performance**

Following the conceptual framework model, this study posited that strategy-environment configuration has an influence on organizational performance. To statistically determine strategy-environment configuration's influence on organization performance the study tested the following hypothesis in a similar approach as the earlier ones.

**Hypothesis H<sub>3</sub>:** Strategy-Environment configuration has significant effect on organizational performance.

The predictor variables, namely; strategy formulation, strategy implementation and environment were computed as composite indices of various elements as contained in the questionnaire (Appendix 3). The results were obtained by calculating the average of the total sums of each response over the scales for measuring the variables making them more representative. As such, high environment composite scores implied a highly dynamic and complex context for environment. High composite scores for strategy formulation and implementation implied existence of high appreciation for strategy process. In other words, the high score in strategy formulation composite implied that the commercial banks in Kenya had a high appreciation for strategy formulation while the high score in strategy implementation composite implied that they enjoyed high levels of preparedness and efficiency in strategy execution.

To facilitate the investigation of strategy-environment configuration influence on organizational performance, the study used multiple/multivariate linear regression models for a sample of 30 commercial banks in Kenya. Regression analysis was conducted by estimating the three parameters of strategy-environment configuration variables as identified in the study. The three parameters (strategy formulation composite, strategy implementation composite and environment composite) were estimated against the three organizational performance variables that were adopted for this study as the response variables namely RoA, market share and non-financial indicators respectively. The results of these models were significant at 5 and 10 percent significance levels ( $p \leq 0.05$  and  $p \leq 0.10$ ). The relevant results with respect to RoA, MS and NF indicators, the model summaries and overall statistical significance for strategy-environment configuration on performance of the 30 commercial banks in Kenya are summarized in 4.33.

**Table 4.33: Strategy-Environment Configuration Effect on Organization Performance**

Model	Response variable	Coefficient of multiple correlation (R)	Explanatory power of the model (R <sup>2</sup> )	Model F statistic	Significance Level
$Y = f(\text{strategy-environment configuration})$ Overall model: $Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e$ $ROA = 6.959 - 0.013X_1 - 0.018X_2 - 0.023X_3$ $MS = -0.943 + 0.042X_1 - 0.009X_2 - 0.003X_3$ $NF = 52.834 + 0.296X_1 + 0.356X_2 - 0.193X_3$	Return on Assets	0.132	0.017	0.153	0.927
	Market share	0.160	0.026	0.228	0.876
	Non-financials	0.510	0.260	3.042	0.047*
Strategy: Formulation , implementation; Environment: Dimensions; Y: ROA, MS, NF X <sub>1</sub> = Environment; X <sub>2</sub> = Strategy Implementation (composite); X <sub>3</sub> = Strategy Formulation (composite) ; Y=Organizational performance * = statistically significant (p ≤ 0.05) ; ** =statistically significant (p ≤ 0.10)					

Results from Table 4.33 show a very weak association between strategy-environment configuration and RoA. The association for market share was reported as weak while that with NF was reported as moderate strong following the interpretations of Cohen (1988). The correlation coefficients (multiple R) between strategy-environment configuration and performance for the commercial banks in Kenya were 0.132, 0.160 and 0.510 for RoA, MS and NF indicators respectively. As shown the explanatory power of strategy-environment configuration on organization performance measures were generally weak; the highest score was for non-financial indicator at 26%. RoA and market share both had less than 5% explaining the model (R<sup>2</sup> = 0.017 and 0.026 respectively). This indicates that the models derived for RoA and MS are reasonably very weak to account for the changes in these performances for the commercial banks in Kenya.

The hypothesis had proposed a statistically significant relationship between organizational performance and the predictor (strategy-environment configuration). No statistical significance was reported for the influence on RoA ( $F = 0.153, p > 0.10$ ) and market share ( $F = 0.228, p > 0.10$ ). The only statistically significant relationship was with non-financial indicator ( $F = 3.042, p < 0.05$ ) which was reported as significant. The current study having found only a statistically significant relationship with one out of the three performance measure does not provide sufficient evidence and as such the overall hypothesis as stated is rejected.

Details of the comparison between the effects of strategy-environment configuration on organizational performance indicators are captured in the appendices. Appendices 10a, 10b and 10c indicate the model summary, the ANOVA analysis and significance coefficient for strategy-environment configuration and organizational performance based on the RoA. Appendices 11a, 11b and 11c indicate the model summary, the ANOVA analysis and significance coefficient for strategy-environment configuration and organizational performance based on market share. Appendices 12a, 12b and 12c indicate the model summary, the ANOVA analysis and significance coefficient for strategy-environment configuration and organizational performance based on non-financial performance.

Further analysis was carried out to determine the significance of individual predictor parameters (formulation, implementation and environment) as well as the direction of the regression coefficients of the three predictor's elements with organizational performance. The results yielded from the analysis of strategy and environment individual predictors were summarized in Table 4.34.

The results in Table 4.34 showed that the three individual predictor parameters had different interactions with the three measures of organizational performance used in this study namely RoA, MS and NF. The study results in Table 4.32 indicate that environment had negative influence on RoA but positive on both market share and non-financial indicator. The influence was statistically significant with respect to non-financial indicator ( $t = 1.086, p < 0.10$ ). This implies that environment has a statistically significant and positive influence on non-financial indicator.

**Table 4.34: Overall Coefficients Estimate for Strategy-Environment configuration and Organizational Performance**

Independent Variable	Dependent variable					
	RoA		MS		NF	
	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value
Constant	6.959	0.265	-0.943	0.916	52.834	0.060*
Environment	-0.013	0.734	0.042	0.445	0.296	0.083*
Strategy implementation	-0.018	0.620	0.009	0.867	0.356	0.035*
Strategy formulation	-0.023	0.686	0.003	0.972	-0.193	0.434
R-Squared	0.017		0.026		0.260	
F-ratio	0.153		0.228		3.042	
<b>Key: * = statistically significant (<math>p \leq 0.05</math>) ; ** =statistically significant (<math>p \leq 0.10</math>)</b>						

Further, from Table 4.34, the results of the tests of hypothesis H<sub>3</sub>, show that strategy implementation exhibited mixed influence on organization performance. The influence was negative with respect to RoA but was positive with respect to market share. In both cases the influence was not statistically significant. A statistically significant and positive influence was however reported for strategy implementation with respect to non-financial indicator ( $t = 2.226, p < 0.05$ ). This implies that the higher the strategy implementation composite the higher is the positive influence on non-financial indicator. Strategy formulation had mixed influence on organizational performance but the influence was not statistically significant for the three aspects of performance, namely; RoA, market share and non-financial indicator.

Appendices 10a, 10b and 10c on model summary, ANOVA and coefficients estimates for strategy-environment configuration and RoA, 11a, 11b and 11c on model summary, ANOVA and coefficients estimates for strategy-environment configuration and market share and 12a, 12b and 12c on model summary, ANOVA and coefficients estimates for non-financial performance indicators provide more details on the relevant statistical relationships.

#### 4.7.4 Organizational Configuration and Organization Performance

The study had set one of its specific objectives as establishing the relationship between organizational configuration (strategy-structure-environment) and performance of commercial banks in Kenya. Configuration theory states that organization attributes will contribute to performance if strategic attributes and processes are in congruence with organizational dominant problem which is the environment (Miller, 1996). To further investigate this relationship the current study tested the following hypothesis.

**Hypothesis H<sub>4</sub>:** Organizational configuration has significant effect on organizational performance.

Organizational configuration was formulated as an aggregate composite index from the interactions of strategy, structure and environment variables for each of the 30 commercial banks in Kenya. Each of the variables was measured quantitatively and their composite indices computed as follows; composite for strategy formulation, composite for strategy implementation, composite for structure framework, composite for structure design and composite for (operating) environment. These were subjected to correlation analysis to determine for existence of relationship and also measure the degree/strength of relationship if any. The results allowed for decision to proceed to subsequent analysis.

Configuration is a complex system of interdependency which comes about as a result of a central theme of imperatives which in the current study comprised strategy (formulation and implementation), structure (design and framework) and environment. To statistically determine the influence of organizational configuration on organizational performance, the current study used multivariate linear regression analysis and correlation analysis. Regression analysis was conducted by estimating the five parameters identified in this study (strategy formulation composite, strategy implementation composite, structure framework composite, structure design composite and environment composite) on the three organizational performance variables (RoA, MS and NF). The hypothesis was statistically tested using RoA, market share and non-financial indicator and the results of these models were significant at 5 and 10 percent significance level ( $p \leq 0.05$  and  $p \leq 0.10$ ).

The relevant results, model summaries and overall statistical significance for organizational configuration on performance of the 30 banks are summarized as shown in Table 4.35.

**Table 4.35: Organizational Configuration Effect on Organization Performance**

Model	Response variable	Coefficient of multiple correlation (R)	Explanatory power of the model (R <sup>2</sup> )	Model F statistic	Significance Level
$Y=f(\text{Organizational configuration})$ Overall model: $Y=b_0+b_1X_1+b_2X_2+b_3X_3+ b_4X_4 + b_5X_5+e$ $ROA = 8.710 - 0.120X_1 + 0.004X_2 + 0.033X_3 - 0.103X_4 - 0.013X_5$ $MS = -8.722 - 1.366X_1 + 0.053X_2 + 0.188X_3 - 0.044X_4 - 0.018X_5$ $NF = -34.156 - 5.458X_1 + 0.284X_2 + 0.429X_3 + 0.877X_4 + 0.152X_5$	Return on Assets	0.453	0.205	1.236	0.323
	Market share	0.564	0.318	2.237	0.083**
	Non-financials	0.767	0.589	6.866	0.000*
<b>Organizational configuration = strategy-structure-environment configuration</b> <b>Strategy:</b> Formulation , implementation; <b>Structure:</b> Structure( framework), Structure (design); <b>Environment:</b> Dimensions; Y: ROA, MS, NF $X_1 = \text{Strategy Formulation (composite)}$ ; $X_2 = \text{Strategy Implementation (composite)}$ ; $X_3= \text{Structure (framework)}$ ; $X_4= \text{Structure (design)}$ ; $X_5= \text{Environment}$ ; $Y=\text{Organizational performance}$ * = statistically significant ( $p \leq 0.05$ ) ; ** =statistically significant ( $p \leq 0.10$ )					

From Table 4.35, the study results reports a moderately weak association between organizational configuration and RoA, that with market share is moderately strong and finally the association with non-financial indicator was reported as a strong correlation( $R = 0.453, 0.564$  and  $0.767$  respectively). The explanatory power for organizational configuration was weak for RoA and market share with both being less than 35% ( $R^2 = 0.205$  and  $0.318$  respectively) while it was reported as moderate for non-financial indicator ( $R^2 = 0.589$ ). The models proposed a statistically not significant relationship between RoA and organization configuration ( $F = 1.236, sig =$

0.323) while the relationship with market share and non-financial indicator was reported as significant ( $F = 2.237, p < 0.10$  and  $F = 6.866, p < 0.05$  respectively). This means the models for MS and NF are reasonably strong enough to account for the changes in these performances for commercial banks in Kenya.

The hypothesis proposed a significant relationship between organizational performance and organizational configuration (strategy-structure-environment configuration). Using the study's three measures of organizational performance, statistical significance is reported for the influence on MS ( $F = 2.237, p < 0.10$ ) and non-financial performance indicators ( $F = 6.866, p < 0.05$ ) whereas no statistical significance is reported for RoA as a measure of organizational performance ( $F = 1.236, p > 0.10$ ). Thus current study provides partial and inconclusive evidence for an overall acceptance/rejection of study hypothesis concerned.

Further analysis carried out to determine the significance of individual predictor parameters (strategy formulation, strategy implementation, structure design, structure framework and environment) as well as the direction of the regression coefficients of these five predictor elements with organizational performance. The yielded results from the analysis of organizational configuration's individual parameters were summarized in Table 4.36.

**Table 4.36: Overall Coefficients Estimate for Organizational configuration and Organizational Performance**

Independent Variable	Dependent variable					
	RoA		Market Share		Non-financial	
	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value
Constant	8.710	0.212	-8.722	0.350	-34.156	0.181
Strategy formulation	-0.120	0.902	-1.366	0.303	-5.458	0.134
Strategy implementation	0.004	0.920	0.053	0.298	0.284	0.044*
Structure (framework)	0.033	0.572	0.188	0.022*	0.429	0.050*
Structure (design)	-0.103	0.072**	-0.044	0.552	0.877	0.000*
Environment	-0.013	0.738	-0.018	0.720	0.152	0.272
R-Squared	0.205		0.318		0.589	
F-ratio	1.236		2.237		6.866	

**Key: \* = statistically significant ( $p \leq 0.05$ ) ; \*\* =statistically significant ( $p \leq 0.10$ )**

The results as shown in Table 4.36 on the test of hypothesis H<sub>4</sub>, indicate that strategy formulation had negative influence on organization performance that was however statistically not significant (RoA  $t = -0.125$ ,  $p > 0.10$ ; market share  $t = -1.053$ ,  $p > 0.10$ ; non-financial indicator  $t = -1.553$ ,  $p > 0.10$ ). Strategy implementation had positive influence on organization performance though statistically not significant for RoA ( $t = 0.101$ ,  $P > 0.10$ ) and MS ( $t = 1.063$ ,  $P > 0.10$ ). Strategy implementation was only reported as significant for NF ( $t$ -statistic = 2.122,  $p < 0.05$ ) implying that the higher the implementation composite, the higher is the positive influence on non-financial indicator.

Structure framework had positive influence on performance that was statistically not significant for RoA ( $t = 0.572$ ,  $p > 0.10$ ) but significant for MS ( $t = 2.443$ ,  $P < 0.05$ ) and NF ( $t = 2.063$ ,  $p < 0.05$ ) implying that higher composite scores for structure framework had higher positive influence on performance. Design had mixed influence on organization performance. It was reported as having negative influence for RoA

and MS but a positive influence for NF. The influence was reported as statistically significant for RoA ( $t = -1.881, P < 0.10$ ) implying that there is a higher negative influence on RoA performance for high design composite score on structure design. The influence of structure design was also negative for market share but was statistically not significant ( $t = -0.603, p > 0.10$ ). Results from Table 4.35 further report a positive and statistically significant influence of structure design on non-financial indicator performance measure ( $t = 4.398, p < 0.05$ ) implying a higher positive influence for a high composite score.

Environment reported mixed influence on the organizational performance measures. It had negative influence on RoA and market share but a positive effect on non-financial indicator. The influence was statistically insignificant with respect to the response variables (RoA t-statistic = -0.338, sig = 0.738; market share t-statistic = -0.362, sig = 0.720; non-financial indicator t-statistic = 1.123, sig = 0.272). More details on relevant statistical relationships between organizational configuration and organizational performance are summarized in the appendices.

Details of the comparison between the effects of organizational configuration on organizational performance indicators are captured in the appendices. Appendices 13a, 13b and 13c indicate the model summary, the ANOVA analysis and significance coefficient for organizational configuration and organizational performance based on the RoA. Appendices 14a, 14b and 14c indicate the model summary, the ANOVA analysis and significance coefficient for organizational configuration and organizational performance based on market share. Appendix 15a, 15b and 15c indicate the model summary, the ANOVA analysis and significance coefficient for organizational configuration and organizational performance based on non-financial performance.

## 4.8 Discussion

The discussion following here relates to the findings of the current study based on testing of the first four hypotheses (Hypothesis 1-4). The findings are reviewed to reveal if they conform to existing theoretical and empirical reports. Subsequently each hypothesis test results are discussed separately so as to reveal the relationship with other related empirical study's findings.

### 4.8.1 Strategy-Structure Configuration and Organizational Performance

Hypothesis one reviewed the relationship between strategy-structures and organizational performance. Indeed, strategy-structure-performance (S-S-P) assumption has received much empirical attention (Davis, Brannon, Zinn, & Mor, 2001; Pierce, 2003; Puerto, 1999). The key argument of these studies is that the most favourable strategy-structure matches produce superior performances. Theorists have tried to provide insights that also explain why performance differences would occur between organizations with an optimal strategy-structure and those without. Chakravarthy (1982) noted that the level of the strategy-structure match depends on the resources available to the organization and the adaptive ability of its managers.

Later scholars have enhanced these arguments by pointing out that management theories do not agree on the direction of influence of these variables (Pelham & Wilson, 1999; Park & Mason, 1990). Indeed, this explains why previous studies have reported mixed empirical findings on strategy-structure configuration effects on organizational performance. Some of the plausible explanations exist for the weak fit of existing models of performance to observed relationships among organizational strategy, organizational structure, and firm performance. Among them is that the models do not all take into account some influences on these three variables and lack of comprehensive view of performance by extending beyond the financial measures.

The current study extends the scope of strategy-structure configuration and performance research by expanding on conventional management theory on firm performance taking a more comprehensive view that incorporates introducing the non-financial measures/indicators. The study also introduces a model which incorporates firm-structure variables allowing for structure to be viewed both as a

framework and as a design. Likewise, the current study also explored strategy in the context of the process which involves both the formulation and implementation aspects as opposed to merely addressing the contents.

As noted previously, the results in the present study reported mixed findings for the hypothesized relationships in the case of Kenyan commercial banks. Whereas the overall model for the effect of strategy-structure configuration on RoA was statistically not significant, the finding of a statistically significant and negative influence of the design of the structure (formality/informality) on RoA implies that top managers in Kenyan commercial banks are increasingly or decreasingly driven to alter their organization structures and strategies based on their performance desires. This result makes sense in that the top managers would seek to adjust their bank structures and strategies so as remain competitive and ensure optimal returns on assets (RoA). In other words, for commercial banks to have higher scores for RoA, managers' action will encompass cross functional coordination. Such that adoption of highly formal organizational structure design and high appreciation for strategic planning will lead to lower returns on assets (RoA). On the contrary, for a positive influence on RoA, managers will require to have high focus for strategy implementation and maintain highly mechanistic bank structures.

The results for hypothesis one (1) also indicate that there is a positive and statistically significant finding on structure framework influence on market share for commercial banks in Kenya. Other variables, namely; strategy formulation, implementation and the structural design are statistically not significant on market share. The results indicate that in order to survive and prosper in the competitive Kenyan banking industry, top managers may need to act decisively and adopt a mechanistic structure. Since market share is the index that is used by the regulatory agency in Kenya (Central Bank of Kenya, CBK) to rate banks, then it is not surprising that the most of the banks in Kenya have employed a reasonably mechanistic structure with very stringent systems while exercising lots of liberty on the strategy and structural design aspects.

Contrary to the findings on individual predictable variables influence on financial indicators, namely; RoA and market share, the same predictor variables were found to be statistically significant on non-financial performance. This goes further to open the debate on use of the non-financial measures of organizational performance in research. Literature shows that it has been previously argued that the concept of using non-financial measure for judging organizational performance introduces increased error by allowing the imperfections of human recognition to play a greater role (Gilovich, Griffin & Kahneman, 2002; Kahneman & Trevisky, 2002). However, subjective measures have received increased interest as measures of performance in recent years in line with the trend of assessing performance against a triple bottom-line of economics, social and environmental performance (Kaplan & Norton, 1996).

Indeed, Richard et al., (2009) and Postma and Zwart (2001) conclude that in order to measure the multidimensional performance constructs, both objective and subjective measure need to be included in measurement instruments. This study, therefore, opted to enhance the scope of assessing organizational performance by using both the financial and non-financial measures as this offers the advantage of simultaneously reducing error and improving construct validity on the conditional fact that the multiple measures are tapping the same theoretical domain (Gilovich et al., 2002; Kahneman & Trevisky, 2002). The study hypothesis (H<sub>1</sub>) as currently stated therefore, offers only partial support.

The findings of this study therefore, agree with other existing theoretical and empirical reports. It confirms the finding by that of Gilovich et al., (2002) and Kahneman and Trevisky (2002) that as long as the theoretical domain of the study is the same use of either objective or subjective measure of performance should provide similar results (enhance construct validity). This evident from the findings of this study where statistical significance has been observed for both market share and non-financial measures. The current study also confirms Pelham and Wilson's (1999) and Park and Mason (1990) that indeed the direction of relationship between strategy-structure configuration and performance hold the key to the adjustment for success of an organization.

#### 4.8.2 Structure-Environment Configuration and Organizational Performance

The discussion following here relates the findings of the current study to existing theory and tests whether the results conformed to other related empirical studies. Many studies have related the strategy-making process to environment and structure (Grinyer, Yasai-Ardekani & Al-Bazzaz, 1980; Okumus, 2003, Anderson, 2004). The evidence supporting a relationship between the environment-strategy configuration and performance is compelling (Smith & Grimm, 1987; Miller & Friesen 1983) but few have addressed the relationship between the environment and structure (Child, 1972, Miles & Snow, 1978). Studies on relationship between environment and structure have typically focused on the effects of environmental uncertainty on the structures of organizations. On the basis of the literature, it was hypothesized in the current study that structure-environment configuration had an influence on organizational performance.

The current study provides inconclusive evidence for an overall acceptance/rejection of study hypothesis concerned ( $H_2$ ). The overall effect for the effect of structure and environment configuration on RoA was reported as moderate with fairly low explanatory power. Indeed, the finding was not statistically significant for RoA. A review of the individual attributes on RoA reported that structure viewed as a framework had a positive influence on RoA but the relationship was statistically insignificant. Structure viewed in terms on design had a negative influence on RoA but this relationship was statistically significant implying that in the Kenyan banks, the top managers in order to keep with the good performance will be forced to adjust their structures by adopting less formal organizations that incorporate shifting of some decision making powers to middle level management. Environment on the other hand exhibited a negative influence on RoA but this effect is statistically not significant.

With respect to market share as the measure for organizational performance within the Kenyan banks, only structure framework reported a statistically significant result which is positive. This implies that the top managers in the banks are inclined to adopt more mechanistic organizations to ensure high performance with respect to market share. As such, decision-making will be increasingly centralized to respond quickly to increased competitive challenges. This may be achieved through delegating more

authority to employees in certain specialized functional areas of the banks to respond quickly to changing consumer preferences without overseeing every single decision of those employees. However, the influence of both structure design and environment was reported as negative and statistically insignificant. In respect to the non-financial indicators all the three attributes of the key variables of the model, namely; structure framework, structure design and environment reported a positive relationship. Of the three variables, only structure design variable reported a statistically significant finding. This implied that Kenyan banks tend to support more formal settings in decision-making based on their structure to ensure high performance.

From the findings of this study, it is evident that conditions in the business environment may be of little importance to top managers in Kenyan bank stores when it comes to their banks organizational structures and therefore, their overall performance. This could be attributed to the fact that the environment in the banking sector has generally been accepted as competitive, dynamic and complex and that the frequent changes are acceptable as managers have learned to live with it. Consequently, irrespective of how the banks perceive environment, we can point out that the Kenyan banks prefer more mechanistic units where decision-making is centralized with formal processes where senior level approvals are required.

These results of this study were a sharp contrast with the findings of Child (1972) and Miles and Snow (1978) by indicating that it is actually structure and not environmental uncertainty that governs the shifts in strategic decision making power and thus controls performance of an organization. Contrary to expectations though banks appear to favour more centralized and formal set ups as structure, both framework and design had statically significant influence on ROA, MS and NF. In this context, we could presume that in the wake of increased competition, rapid expansions and increased customers expectations the banks would adopt a more informal and decentralized decision-making process to enhance firm performance.

### 4.8.3 Strategy-Environment Configuration and Organizational Performance

The discussion following here relates the findings of the current study to existing theory and tests whether the results conformed to other related empirical studies. Empirical studies in strategic management have examined organizational strategy performance relationship with many of them investigating the role played by environment in the strategy-performance relationship (Jennings, Rajaratnam, & Lawrence, 2003; Sharma, 2004; Sinkovits & RoAth, 2004). They have postulated the effects of environment on that relationship pointing out that in certain environments, certain strategies would lead to significantly higher performance than other strategies (Belderbos & Sleuwaegen, 2005).

The current study had hypothesized that strategy-environment configuration had an influence on corporate performance. The results do not support hypothesis three (H<sub>3</sub>) as stated as the correlation coefficients shows a weak association reported for both RoA and market share while the association with non-financial indicator was reported as moderate. Likewise, the explanatory power of the variables, namely; strategy formulation, strategy implementation and environment composite on organizational performance were generally weak from the report. The hypothesis proposed a statistically insignificant relationship between organization performance and the predictors in question. Indeed, the findings report only statistical significance for the influence on non-financial indicators.

Traditional contingency literature and many management researchers have found that strategy and environment have a strong relationship and that they can and should influence each other (Hambrick, 1985, Miller & Friesen, 1984). However, Anderson and Paine (1975) noted that both strategy and environment have been explored as determinants of a third variable, organizational structure and that they have rarely been studied together, a stance which Porter (1980) also agrees with. The finding of this study thus reinforce this findings that strategy and environment on their own do not influence organizational performance and that there are other “environmental moderators” which must be in play before this is determined.

Following Kohli and Jaworski (1990) assertions, the testing of hypothesis three (H<sub>3</sub>) showed that environment had negative influence on RoA but a positive influence on both market share and non-financial indicator. The influence was statistically significant with respect to non-financial indicator. This implies that environment has a statistically significant and positive influence on non-financial indicator. Therefore, among the Kenyan banks, any changes in the environment resulting to a dynamic and complex orientation will lead top managers to consider a large number of factors from various strategies in their decision-making. High novelty and visibility is, therefore, called for by the banks to ensure that they maintain market positions, avoid declining profits and out-right business failures. Strategy implementation showed mixed influence on organization performance. The influence was negative with respect to RoA but was positive with respect to market share. In both cases, the influence was not statistically significant.

A statistically significant and positive influence was, however, reported for strategy implementation with respect to non-financial indicator. This implies that the higher the strategy implementation composite, the higher is the positive influence on non-financial indicator. Therefore, to maintain their positions, Kenyan bank managers require enhancing participation of all members in the implementation process. That means that strategic decision-making process needs to be more consultative and participatory. Strategy formulation had mixed influence on organization performance but the influence for the three aspects of performance, namely; RoA, market share and non-financial indicator. The influence was reported as positive only for market share but negative for both RoA and non-financial indicators. However, the effects were not statistically significant.

The results of the current are fairly comparable to other empirical studies that have considered the effect of strategy-environment configuration on organizational performance. Indeed the results confirm the findings of Porter (1980) and Machuki (2011) that strategy-environment co-alignment do not influence organizational performance. Machuki (2011) found a weak strategy- environment coalignment effect on performance of 23 publicly quoted companies in Kenya.

#### 4.8.4 Organizational Configuration and Organizational Performance

According to Baker et al., (1997), the link between organizational configuration and performance has become a central and somewhat controversial focus of research in strategic management literature. Organizational performance is partially explained by its configuration contributions depended on the broad definitions of configuration, choice of a single - industry analysis and longitudinal designs. Sluismans (2005) concludes that it is not only because of the increasing use of the concept of configuration, but mainly because of this apparent usability in getting closer to the truth as to how things in organizations happen that this concept deserves to be explored.

The following discussion relates the findings of the current study to existing theory and reports whether the results support results of other related empirical studies. We had hypothesized that organizational configuration had a relationship with organizational performance (H<sub>4</sub>). The current study findings reported a moderate association for RoA and market share while the association with non-financial indicator was reported as strong. The explanatory power was reported as weak for RoA and market share whereas it was reported as moderate for non-financial indicator. Indeed the model proposed a statistically insignificant relationship between RoA and organization configuration while the relationship with market share and non-financial indicator was reported as significant. As such, the results only partially support the hypothesis (H<sub>4</sub>) as stated.

This study finding in relation to the overall explanatory power of organizational configuration on performance outcomes confirms Ketchen et al., (1997) and McNamara, Deephouse & Luce (2003). The results indicate that the performance variations explained organizational configuration was way above 8% that had been reported by Ketchen et al., (1997). The explanatory power was 20.5%, 31.8% and 58.9% respectively for RoA, MS and NF. This enhances the role of organizational configuration in performance studies. McNamara, Deephouse & Luce (2003) also out that performance differences were larger within strategic groups of the banks than between this strategic groups. They concluded that performance is invariable spread across strategic groups.

These results seem to agree with that of Pertusa-Ortega et al., (2009) who concluded in their study evaluating strategy, structure, environment and firm performance in Spanish firms that even when both internal and external adjustments are combined, statistical analysis indicated a contradiction to the fact that completely adjusted firms have a better performance. The testing of the hypothesis (H<sub>4</sub>) showed that of the five attributes used for organizational configuration, only three of them had statistically significant influence/ effect on organizational performance measures. With relations to RoA, only structure design exhibited a negative but significant effect. This implies that the more(less) the level of formality in the Kenyan banks, the more (less) the outcomes of RoA. Kenyan bank managers are, therefore, likely to adopt less formal structures to enhance higher RoA.

In the case of market share, only structure framework was reported as significant with a positive influence. This implies that in terms of markets share as the measure of performance in Kenyan banks, then the more mechanistic they are, the higher the market share they will report. This is different from the non-financial indicators of performance where strategy implementation, structure design and structure framework were all reported as being statistically significant and had a positive influence. This brings into light the debate on use of organizational performance by actual financial figures and that of satisfaction with performance.

Grinyer et al., (1980) in their study analyzing the strategy, structure, environment and firm performance in 48 UK companies concluded that strategy–structure linkage is stable and positive and fit between strategy and structure was found to be negatively correlated with perceived environmental hostility but unrelated to financial performance. Meier et al., (2007) while testing this in several hundreds public organization over a period of six years concluded that at least for those organizations, the contingency relationship proposed by Miles and Snow do not hold. Lenz (1980) found that the combination of environment, strategy, and organizational structure in high-performance firms differed significantly from that of low-performance firms.

The current study reported that strategy formulation and environment were statistically insignificant in respect to all the three-performance measures. This finding differs with Miller and Tolouse (1986) who suggested that environment is the main variable among several contextual variables that measure the appropriateness of strategies and structure. This finding can be attributed to the fact that all the banks are in one industry sector operating under a single regulatory agency and therefore, the challenges are uniform across the Kenyan banking sector. Indeed, this is confirmed by the moderate scores in environmental attribute. The challenge for organizations is not the strategy formulation but strategy implementation. As such, the findings of the current study give further credence to their earlier findings that the challenge for organizations remains not only an entrepreneurial problem (which strategy to adopt), but also an administrative problem (selection of structures consistent with strategy).

#### **4.9 Chapter Summary**

The chapter then discussed the results of the statistical analysis performed on the data provided by top managers of the Kenyan commercial banks and offered description of each of the key variables that influenced the four hypotheses (H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub> and H<sub>4</sub>). From this interpretation, the chapter was able to provide the clear nature of strategy, structure, environment and organizational performance which are all multidimensional and complex exhibiting multiple linkages. As such, this chapter focused on the multiple linkages between the exploratory and the predictor variables.

Several statistical analyses were also conducted in this chapter that served several purposes. Using correlation matrix analysis, the obtained Pearson correlation coefficients between the variables were calculated to test the validity and reliability of each indicator and construct. Cluster analysis which is an exploratory technique was also employed to help group the variable observations in a manner that maximizes between group variance, and minimizes within group variance. That way, identification of underlying relationships was made possible. This chapter further provided the hypothesis testing and interpretation of the hypothesis outcomes. To test the hypotheses, multiple regression analysis and correlation analysis were conducted. Finally, the chapter ended with a discussion on the underlying issues arising out of the test of hypotheses.

## CHAPTER FIVE

# ORGANIZATIONAL CONFIGURATION, STAGE OF DEVELOPMENT AND ORGANIZATIONAL PERFORMANCE

### 5.1 Introduction

This chapter provides research findings and discussions on the moderating effect of the stage of development on the relationship between organizational configuration and organizational performance. Prompted by the observations that different organizations are at different stages of development, this chapter sets out to outline the process by which the different stages of development are identified. Based on the research data provided, the current study analyzed the relationship between stage of development and organizational performance and the interpretation of the results based on the analysis is also provided. The stage of development on theoretical discussions has been predicted as a moderating variable between strategic processes and organizational performance. The chapter provides analysis of research data to establish this relationship. Results of tests of corresponding hypothesis are also provided.

### 5.2 Stage of Development

The terms stage of development, lifecycle stages and developmental stages are used interchangeably. It is a multidimensional phenomenon with considerable variability between models. Lifecycle theory contends that it is normal for an organization to form, grow, mature, decline and die. The developmental stages include dimensions related to organization context and others related to organizational structure and assume that there are regularities in organizational development.

The current study adopted the taxonomical approach of Hanks et al., (1993) portraying four stages of development reflecting the start-up stage, the expansion or growth stage, the maturity stage and finally the diversification stage. The current study also closely followed Hite and Hesterly's (2001) approach in the analysis of the stage of development.

The model used in the current study is of the following form;

$$Y = \alpha + \beta_1 \text{ organizational configuration} + \beta_2 \text{ stage of development} + \varepsilon$$

Where;

Y = Organizational performance

Organizational configuration = Strategy formulation + strategy implementation + structure framework + structure design + environment + error.

Stage of Development = Vertical differentiation + formalization + decision making process + centralization + dummy variables + error

The study classified the variables into the contextual dimensions which included the organizational age (tenure) and the size (number of branches). The structural dimension variables included the vertical differentiation (number of administrative levels within the organization), formalization, strategic decision-making process and centralization.

### 5.2.1 Contextual Variables for Stage of Development

From the earlier discussion in chapter four of this study, the responding banks have been in existence for an average of 36 years, with the oldest bank being 116 years and the youngest being 4 years old (Table 4.1). This, therefore, means that the organizations have survived lifecycles of their businesses. Also as shown in Table 4.4, the respondent banks indicated networks of between a minimum of 3 branches and a maximum of 149 banks (mean = 22.8, SD = 32.55). The standard deviation is higher than the mean implying a relatively wide dispersion on networks. From the results in Table 4.4, we can conclude that there is a high variability among the banks networks.

The two indicators of the contextual dimensions were subjected to correlation analysis with the intent of identifying existing statistical significant relationships and nature of relationships between these variables. Results for the correlation analysis of the banks' age (tenure) and the number of branches (networks) are presented in Table 5.1.

**Table 5.1: Correlation Matrix for SOD Contextual Dimension Variables**

Correlation Matrix for SoD Contextual Dimension Variables		Cluster: Stage of Dvt.	No of Branches	Organizational tenure
Cluster: Stage of Dvt.	Pearson Correlation	1	0.188	0.479
	Sig. (2-tailed)	.	0.319	0.007
	N	30	30	30
No of Branches	Pearson Correlation	0.188	1	0.619
	Sig. (2-tailed)	0.319	.	0.000
	N	30	30	30
Organizational tenure	Pearson Correlation	0.479	0.619	1
	Sig. (2-tailed)	0.007	0.000	.
	N	30	30	30

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

The correlation result in Table 5.1 suggests existence of significant and positive relationship for the organizational tenure and number of branches with the correlation coefficient (R) = 0.619, sig = 0.000. From the correlation analysis results, any of the variables can be considered as an adequate proxy for contextual dimension of stage of development. The current study opted to adopt the use of age (tenure) as a more reliable measure of the contextual dimension of stage of development as opposed to use of the number of branches as this is influenced by other factors not considered for the study.

### 5.2.2 Structural Dimension Variables for Stage of Development

The other measure of stage of development in the current study constituted the structural dimension variables. Data were collected on vertical differentiation (number of administrative levels between the lowest cadre employ and the CEO within the organization), formalization whereby a composite index was composed, strategic decision making process rated as either an entrepreneurial or professional approach and lastly, the level of centralization which was composed as a composite index. Structural form of the organization was used in this study as a dummy variable.

Each of these aspects (centralization, decision-making process, formalization, vertical differentiation and tenure) was measured quantitatively, and subjected to correlation analysis to determine the existence of relationship. The results were tabulated in Table 5.2.

**Table 5.2: Correlation Matrix for SoD Structural Dimension Variables**

Correlation Matrix for SoD Structural Dimension Variables		Composite for centralization	Strategic decision process used by top management	Composite for formalization	Vertical Differentiation	Organizational tenure
Composite for centralization	Pearson Correlation	1	.083	-.005	.059	.009
	Sig. (2-tailed)	.	.663	.980	.757	.963
	N	30	30	30	30	30
Strategic decision process used by top management	Pearson Correlation	.083	1	.000	-.073	-.137
	Sig. (2-tailed)	.663	.	1.000	.703	.471
	N	30	30	30	30	30
Composite for formalization	Pearson Correlation	-.005	.000	1	.530(*)	.365(*)
	Sig. (2-tailed)	.980	1.000	.	.003	.047
	N	30	30	30	30	30
Vertical differentiation	Pearson Correlation	.059	-.073	.530(*)	1	.303
	Sig. (2-tailed)	.757	.703	.003	.	.104
	N	30	30	30	30	30
Organizational tenure	Pearson Correlation	.009	-.137	.365(*)	.303	1
	Sig. (2-tailed)	.963	.471	.047	.104	.
	N	30	30	30	30	30
** Correlation is significant at the 0.10 level (2 tailed). * Correlation is significant at the 0.05 level (2tailed).						

The results as shown in Table 5.2 indicated a moderate strong relationship between composite for formalization and vertical differentiation ( $R = 0.530, p < 0.05$ ). Also reported from results above is a moderate weak relation between composite for formalization and organizational tenure/age ( $R = 0.365, p < 0.05$ ).

Review of literature indicated that there exists considerable variability between lifecycle models however all included some dimensions related to organization context and organization structure. Some of the common contextual dimensions

included organization age, size, growth rate, and focal tasks or challenges faced by the firm. Common structural dimensions included structural form, formalization, centralization, and vertical differentiation, the number of organization levels. Within models, stages are distinguished by differences in the pattern and magnitude of these dimensions.

Following from these arguments, stage of development (SoD) which is the moderating variable of the current study was computed. Cluster analysis a statistical exploratory technique was used. It groups observations in a manner that maximizes between group variance, and minimizes within group variance thereby allowing for identification of underlying relationships. The banks were classified into four stages in line with organizational lifecycle theory as adopted from the taxonomical approach of Hanks et al., (1993). A one-way analysis of variance was conducted to test for differences in cluster means for each of the structural dimension variable. Mean values for each variable, by cluster, and corresponding F statistics are reported in Table 5.3.

**Table 5.3: ANOVA for Stage of Development**

Structural Dimension Variables	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Centralization Composite	1,814.089	3	68.754	26	26.385	0.000
Strategic decision process used by top management	1.175	3	0.864	26	1.359	0.277
Formalization Composite	728.800	3	30.785	26	23.674	0.000
Vertical differentiation	15.506	3	5.206	26	2.979	0.050

Results indicated variables contributing to the cluster classification as composite for centralization (F = 26.385) and composite for formalization (F = 23.785). For this study, vertical differentiation although having a low F-statistics value of 2.979 was adopted as it is statistically significant ( $p < 0.05$ ), however, strategic decision-making process by top management was dropped (F = 1.359,  $p > 0.10$ ).

The final cluster centres were computed as the means for each variable within each final cluster reflecting the characteristics of the typical case for each cluster. Thus, banks in cluster one were presented as decentralized, informal and low in differentiation while those in cluster two were presented as centralized, informal and low in differentiation. The ones in cluster three were presented as decentralized, formal and low in differentiation while cluster four represented banks that were decentralized, formal and high in differentiation. Results of the final cluster classification are presented in Table 5.4.

**Table 5.4: Cluster Classification for Stage of Development**

Number of Cases in each Cluster		
<b>Cluster</b>	1	4.000
	2	8.000
	3	8.000
	4	10.000
<b>Total</b>		<b>30.000</b>

The results in Table 5.4 consequently indicate that 4 banks, 8 banks, 8 banks and 10 banks were classified into stage I, II, III and IV respectively. The stage of development was, therefore, captured as a dummy variable using composites for centralization and formalization. This decision was taken based on results from Table 5.3 where the F statistics indicated that the only significant differences existing for the mean values of the variable was for centralization and formalization. These results were used in the subsequent analysis that sought to establish the overall objective and hypothesis testing of the study. This process is discussed in the next section of this chapter.

### 5.3 Results of Tests of Hypothesis

The current study sought to establish the moderating effect of stage of development on the relationship between organizational configuration and organizational performance. We conducted hypotheses testing to establish this relationship using hypothesis below.

**Hypothesis H<sub>5</sub>:** Organizational stage of development has significant moderating effect on organizational configuration and performance relationship.

The variables used in testing this hypothesis were all multidimensional in nature. Organizational configuration, the independent variable is a complex system of interdependency which comes about as a result of a central theme of imperatives which in the current study comprised strategy (formulation and implementation), structure (design and framework) and environment. Organizational configuration was formulated as an aggregate composite index from the interactions of strategy, structure and environment variables for each of the 30 commercial banks in Kenya. Each of the variables was measured quantitatively and their composite indices computed as follows; composite for strategy formulation, composite for strategy implementation, composite for structure framework, composite for structure design and composite for (operating) environment. These were subjected to correlation analysis to determine for existence of relationship and also measure the degree/strength of relationship if any. The results allowed for decision to proceed to subsequent analysis.

In the analysis that follows the moderating variable (stage of development) has been generated using cluster analysis on a combinational of the structural dimensional attributes and contextual dimensional attributes. The dependent variable organizational performance is viewed with specific reference to return on asset (RoA), market share and non-financial indicators.

Hypothesis five proposed that organizational performance is influenced by organizational configuration (strategy-structure-environment), and that the influence is moderated by the organization's stage of development. This section outlined the results derived from the analysis. The hypothesis was statistically tested using RoA, market share and non-financial indicator as the measures of organizational performance.

To statistically determine the moderating role of stage of development on the relationship between organizational configuration and performance of commercial banks in Kenya, the current study used correlation and multiple linear regression

models. Regression analysis was conducted by estimating the seven parameters identified in this study (strategy implementation composite, strategy formulation composite, environment composite, structure design composite, structure framework composite, centralization and formalization) on the three organizational performance variables (RoA, MS and NF). The hypothesis was statistically tested using RoA, market share and non-financial indicator and the results of these models were significant at 5 and 10 percent significance level ( $p \leq 0.05$  and  $p \leq 0.10$ ). The relevant results with respect to the model summaries and overall statistical significance for moderating role of stage of development on organizational configuration and performance relationship of the 30 commercial banks are summarized as shown in 5.5.

**Table 5.5: Organizational Configuration, Stage of Development and Organization Performance**

Model	Response variable	Coefficient of multiple correlation (R)	Explanatory power of the model ( $R^2$ )	Model F statistic	Significance Level
$Y = f(\text{Organizational configuration} + \text{Stage of development})$  <b>Overall model:</b> $Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e$  $ROA = 7.010 - 0.011X_1 - 0.096X_2 - 0.015X_3 - 0.105X_4 + 0.020X_5 - 0.006X_6 + 0.049X_7$ $MS = -12.983 + 0.029X_1 - 1.306X_2 - 0.026X_3 - 0.051X_4 + 0.169X_5 + 0.008X_6 + 0.086X_7$ $NF = -45.892 + 0.194X_1 - 5.290X_2 + 0.132X_3 + 0.860X_4 + 0.354X_5 - 0.019X_6 + 0.301X_7$	Return on Assets	0.498	0.248	1.039	0.433
	Market share	0.617	0.381	1.935	0.112
	Non-financials	0.807	0.651	5.873	0.001*
<b>Organizational configuration = strategy-structure-environment configuration</b> <b>Strategy:</b> Formulation, implementation; <b>Structure:</b> Structure (framework), Structure (design); <b>Environment:</b> Dimensions; <b>Stage of development:</b> Centralization, formalization; <b>Y:</b> ROA, MS, NF $X_1 = \text{Strategy Implementation (composite)}$ ; $X_2 = \text{Strategy Formulation (composite)}$ ; $X_3 = \text{S Environment}$ ; ; $X_4 = \text{Structure (design)}$ ; $X_5 = \text{Structure (framework)}$ ; $X_6 = \text{Centralization}$ ; $X_7 = \text{Formalization}$ <b>Y = Organizational performance</b> * = statistically significant ( $p \leq 0.05$ ); ** = statistically significant ( $p \leq 0.10$ )					

The results in Table 5.5 show that organizational configuration together with stage of development reports a moderately strong association for RoA ( $R = 0.498$ ) while the association with market share and non-financial indicator was reported as moderately strong and strong respectively ( $R = 0.617$  and  $0.807$  respectively). The explanatory power of organizational configuration together with stage of development on organizational performance was weak. RoA only explained 24.8% of the model while market share explained 38.1%. The explanatory power for this two was therefore weak. Non-financial indicators reported a moderately strong explanatory power of the model at 65.1%. Indeed, the coefficients of determination ( $R^2$ ) are reported as 0.248, 0.381 and 0.651 respectively for RoA, market share and non-financial indicators. Using the current study's three measures of performance, the model reports a statistically not significant relationship for organizational configuration and stage of development on RoA ( $F=1.039$ ,  $p > 0.10$ ), and market share ( $F=1.935$ ,  $p > 0.10$ ) but a statistically significant relationship on non-financial indicator ( $F=5.873$ ,  $p < 0.05$ ). The current study having found only statistical significant relationship with only one out of the three performance measures provides insufficient evidence and as such the overall hypothesis as stated is rejected.

Further analysis carried out to determine the significance of individual predictor parameters (Strategy implementation, strategy formulation, environment, structure design, structure framework, centralization, formalization and stage of development) as well as the direction of the regression coefficients of these seven predictor parameters with performance. The yielded results from the analysis of organizational configuration, stage of development and performance were summarized in Table 5.6.

**Table 5.6: Overall Coefficients Estimate for Organizational Configuration, Stage of Development and Organizational Performance**

Independent Variable	Dependent variable					
	ROA		Market Share		Non-financial	
	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value
Constant	7.010	0.353	-12.983	0.196	-45.892	0.086**
Strategy implementation	-0.011	0.777	0.029	0.586	0.194	0.170
Strategy formulation	-0.096	0.923	-1.306	0.323	-5.290	0.132
Environment	-0.015	0.689	-0.026	0.609	0.132	0.328
Structure (design)	-0.105	0.072*	-0.051	0.498	0.860	0.000*
Structure (framework)	0.020	0.738	0.169	0.041*	0.354	0.096**
Centralization	-0.006	0.822	0.008	0.825	-0.019	0.836
Formalization	0.049	0.278	0.086	0.154	0.301	0.060**
R-Squared	0.248		0.381		0.651	
F-ratio	1.039		1.935		5.873	

**Key:** \* = statistically significant ( $p \leq 0.05$ ) ; \*\* =statistically significant ( $p \leq 0.10$ )

From Table 5.6, the results on the test of hypothesis H<sub>5</sub> indicated that strategy (both implementation and formulation) had negative influence on RoA. The results, however, indicated mixed findings for the influence of both the market share and non-financial indicator whereby strategy implementation had positive influence on both market share and non-financial indicator while strategy formulation had negative influence on both market share and non-financial indicator.

The influence of both strategy implementation and strategy formulation was, however, statistically not significant with respect to all the three response variables of organizational performance in the current study. The results are reported as follows; Strategy implementation ( $t = -0.287, p > 0.10$  on RoA;  $t = 0.553, p > 0.10$  on MS and  $t = 1.419, P > 0.10$  on NF). Strategy formulation reported ( $t = -0.098, p > 0.10$  on RoA;  $t = -1.011, p > 0.10$  on MS and  $t = -1.565, p > 0.10$  on NF). We also establish

from Table 5.6 that environment had a negative influence on RoA and market share while the influence was reported as positive for the non-financial indicator. The influence was, however, reported as statistically not significant with respect to all the three response variables of organizational performance used in the current study. Indeed, the  $t = -0.405$ ,  $p > 0.10$  on RoA;  $t = -0.519$ ,  $p > 0.10$  on MS and  $t = 1.000$ ,  $P > 0.10$  on NF.

Structure attributes reported mixed influence on organizational performance. Organization structure design had mixed influence on organization performance with a negative but statistically significant influence on RoA ( $t = -1.893$ ,  $p < 0.10$ ) implying that the more formal the structural design the higher the negative impact on RoA, thus the more informal the structural design the more favourable is its influence on RoA. Organization structure design also reported a negative influence on market share but this influence was statistically not significant ( $t = -0.689$ ,  $p > 0.10$ ). On the contrary the influence of structure design on non-financial indicator was positive and statistically significant ( $t = 4.476$ ,  $p < 0.50$ ) implying that the more formal the structural design the higher the positive impact on RoA, thus the more formal the structural design the more favourable is its influence on RoA. Organizational structure framework reported a positive influence across all the three response variables on organizational performance used in the current study. The influence was statistically not significant for RoA ( $t = 0.338$ ,  $p > 0.10$ ) but was statistically significant for both the market share ( $t = 2.167$ ,  $p < 0.50$ ) and the non-financial indicator ( $t = 1.737$ ,  $p < 0.10$ ). This implied that the more mechanical the structural framework the higher the positive impact on market share and non-financial indicator, thus the more mechanical the structural framework the more favourable is its influence on both performance outcomes.

From Table 5.6 the moderating variable the stage of development reported mixed influence on organizational performance. Level of centralization reported a negative influence on RoA and non-financial indicator but a positive one for market share. The influence was however reported as statistically not significant for the response variables (RoA;  $t = -0.228$ ,  $p > 0.10$ , market share;  $t = 0.224$ ,  $p > 0.10$ ) and for non-financial indicator:  $t = -0.209$ ,  $p > 0.10$ ). Level of formalization on the other hand reported a positive influence on all the three performance indicators of the current

study. The influence was however reported as statistically insignificant for RoA ( $t = 1.112, p > 0.10$ ) and market share ( $t = 1.478, p > 0.10$ ). The influence was though statistically significant for non-financial indicator ( $t = 1.984, p < 0.10$ ) implying the higher the level of formality the more positive the impact on non-financial indicator.

More details on relevant statistical relationships showing the moderating effect of stage of development on the relationship between organizational configuration and organizational performance are summarized in the appendices. Details of the moderating effect of stage of development on the relationship between organizational configuration and performance based on RoA are contained in appendices 17a, 17b and 17c. They indicate the model summary, the ANOVA analysis and significance coefficient for the moderating effect of stage of development on the relationship between organizational configuration and performance based on the RoA. Appendices 18a, 18b and 18c indicate the model summary, the ANOVA analysis and significance coefficient for the moderating effect of stage of development on the relationship between organizational configuration and performance based on market share. Appendices 19a, 19b and 19c indicate the model summary, the ANOVA analysis and significance coefficient for the moderating effect of stage of development on the relationship between organizational configuration and organizational performance based on non-financial performance.

In the current study, we proposed that stage of development has a moderating effect on the relationship between organizational configuration and organizational performance. To explain this effect, focus was placed on the change in the correlation coefficient  $R$ , the explanatory power  $R^2$ , or, due to the moderating effect of stage of development which should result into higher  $F$  values and increased statistically significant upon which the decision to confirm or not confirm hypothesis 5 was made.

A summary of the comparison between the effect of the relationship between organizational configuration and organizational performance without and with the moderating variables stage of development with respect to the model summaries and overall statistical significance is presented in Table 5.7.

**Table 5.7: Organizational Configuration and Moderating effect of Stage of Development on Performance**

Model	Response variable	Coefficient of multiple correlation (R)	Explanatory power of the model (R <sup>2</sup> )	Model F statistic	Significance Level
$Y = f(\text{Organizational configuration})$ <b>Overall model:</b> $Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$ <b>RoA</b> = $8.710 - 0.120X_1 + 0.004X_2 + 0.033X_3 - 0.103X_4 - 0.013X_5$ <b>MS</b> = $-8.722 - 1.366X_1 + 0.053X_2 + 0.188X_3 - 0.044X_4 - 0.018X_5$ <b>NF</b> = $-34.156 - 5.458X_1 + 0.284X_2 + 0.429X_3 + 0.877X_4 + 0.152X_5$	Return on Assets	0.453	0.205	1.236	0.323
	Market share	0.564	0.318	2.237	0.083**
	Non-financials	0.767	0.589	6.866	0.000*
$Y = f(\text{Organizational configuration} + \text{Stage of development})$  <b>Overall model:</b> $Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e$  <b>RoA</b> = $7.010 - 0.011X_1 - 0.096X_2 - 0.015X_3 - 0.105X_4 + 0.020X_5 - 0.006X_6 + 0.049X_7$ <b>MS</b> = $-12.983 + 0.029X_1 - 1.306X_2 - 0.026X_3 - 0.051X_4 + 0.169X_5 + 0.008X_6 + 0.086X_7$ <b>NF</b> = $-45.892 + 0.194X_1 - 5.290X_2 + 0.132X_3 + 0.860X_4 + 0.354X_5 - 0.019X_6 + 0.301X_7$	Return on Assets	0.498	0.248	1.039	0.433
	Market share	0.617	0.381	1.935	0.112
	Non-financials	0.807	0.651	5.873	0.001*
<b>Organizational configuration = strategy-structure-environment configuration</b> <b>Strategy:</b> Formulation , implementation; <b>Structure:</b> Structure( framework), Structure (design); <b>Environment:</b> Dimensions; <b>Stage of development:</b> Centralization, formalization; <b>Y:</b> RoA, MS, NF <b>X<sub>1</sub></b> = Strategy Implementation (composite); <b>X<sub>2</sub></b> = Strategy Formulation (composite); <b>X<sub>3</sub></b> = S Environment ;; <b>X<sub>4</sub></b> = Structure (design); <b>X<sub>5</sub></b> = Structure ( framework); <b>X<sub>6</sub></b> = Centralization; <b>X<sub>7</sub></b> = Formalization <b>Y</b> =Organizational performance * = statistically significant (p ≤ 0.05) ; ** =statistically significant (p ≤ 0.10)					

The results from Table 5.7 revealed that the moderating effect of stage of development increases the relationship (Multiple R) between organizational configuration as well as the explanatory power (R<sup>2</sup>) over three measures of performance used in the current study. On the contrary, the results show a reduction in the F-values thus influencing a low increase of insignificance on the relationship.

**Table 5.8: Overall Coefficients Estimate for Organizational configuration, stage of Development and Organizational Performance**

Independent Variable	Dependent variable					
$Y = f(\text{Organizational configuration})$						
<b>Overall model:</b> $Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$						
$X_1 = \text{Strategy Formulation (composite)}; X_2 = \text{Strategy Implementation (composite)}; X_3 = \text{Structure (framework)}; X_4 = \text{Structure (design)}; X_5 = \text{Environment}; Y = \text{Organizational performance}$						
	ROA		Market Share		Non-financial	
	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value
Constant	8.710	0.212	-8.722	0.350	-34.156	0.181
Strategy formulation	-0.120	0.902	-1.366	0.303	-5.458	0.134
Strategy implementation	0.004	0.920	0.053	0.298	0.284	0.044*
Structure (framework)	0.033	0.572	0.188	0.022*	0.429	0.050*
Structure (design)	-0.103	0.072**	-0.044	0.552	0.877	0.000*
Environment	-0.013	0.738	-0.018	0.720	0.152	0.272
R-Squared	0.205		0.318		0.589	
F-ratio	1.236		2.237		6.866	
Independent Variable	Dependent variable					
$Y = f(\text{Organizational configuration} + \text{Stage of development})$						
<b>Overall model:</b> $Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e$						
$X_1 = \text{Strategy Implementation (composite)}; X_2 = \text{Strategy Formulation (composite)}; X_3 = \text{S Environment}; X_4 = \text{Structure (design)}; X_5 = \text{Structure (framework)}; X_6 = \text{Centralization}; X_7 = \text{Formalization}; Y = \text{Organizational performance}$						
	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value	Beta ( $\beta$ )	p-value
Constant	7.010	0.353	-12.983	0.196	-45.892	0.086**
Strategy implementation	-0.011	0.777	0.029	0.586	0.194	0.170
Strategy formulation	-0.096	0.923	-1.306	0.323	-5.290	0.132
Environment	-0.015	0.689	-0.026	0.609	0.132	0.328
Structure (design)	-0.105	0.072*	-0.051	0.498	0.860	0.000*
Structure (framework)	0.020	0.738	0.169	0.041*	0.354	0.096**
Centralization	-0.006	0.822	0.008	0.825	-0.019	0.836
Formalization	0.049	0.278	0.086	0.154	0.301	0.060**
R-Squared	0.248		0.381		0.651	
F-ratio	1.039		1.935		5.873	
<b>Key:</b> * = statistically significant ( $p \leq 0.05$ ); ** = statistically significant ( $p \leq 0.10$ )						

From Table 5.8, the results revealed that the moderating effect of stage of development did not have any major effect on the nature and significance of the relationship between organizational configuration and the three measures of performance study (RoA, market share and non-financial indicators) used in the current study. Indeed, the effect is only on strategy implementation where it changes the direction from positive to negative over RoA. Strategy implementation is also rendered insignificant over non-financial indicators upon introduction of the moderating variable stage of development. However mixed results were reported for the t-statistics with that for ROA increasing and that for the non-financial indicators decreasing.

#### 5.4 Discussion

The discussion following here is relevant to the findings of the current study. The current study had on the basis of its overall objective taken an interest in the role of stage of development in understanding the link between organizational configuration and organizational performance. The findings of this study were tested to reveal if they had any relationship with existing theoretical and empirical reports. Before testing for the moderating effect of stage of development the study conducted preliminary analysis to identify the stages and come up with the operationalization of the variable.

Literature in management journals has large-scale and multi-study empirical evidence suggests that a growing business displays distinguishable stages or configurations at different times in its history (Van de Ven & Poole, 1995). Organizational stage of development has been found to moderate strategic decision-making process – performance relationship however the nature of this relationship has been mixed. Robinson, Pearce, Vozikis and Mescon (1984) found a strong relationship; Lumpkin and Dess (1995) found a negative moderating effect whereas Sarason and Tergarden (2003) found a positive relationship. Increasingly, the stages approach has been criticized in the literature (Phelps, Adams, & Bessant, 2007; Stubbart & Smalley, 1999) with some scholars even suggesting a shift from it to the dynamic state approach (Levie & Lichtenstein, 2010).

The results in the current study indicate a lack of support for hypothesis five (H<sub>5</sub>). These results differ with the findings of Robinson et.al., (1984) who found a strong relationship on the moderating effect of stage of development and Sarason and Tergarden (2003) who found a positive relationship. However, some significant relationships were found when individual parameters were tested against the three performance measures. The significant relationships are the structure design, the structure framework and formalization parameters. All these parameters are closely related to the structural dimension variable and this finding is comparable to other empirical studies. Sarason and Tergarden (2001) found evidence of a fit between stage of development and organizational structure.

This finding offer credence to the arguments of Bowen (2008) that findings and value or significance of a moderating effect can arise from either its inherent structural characteristics or from an interaction variable in the model. As observed, effects of the stage of the development appear to be from the structural interaction arising out of the inherent non-linearity of the dependent variable as it is also composed of structural attributes rather from secondary interactions. Apparently, that it is other factors probably competition and not stage of development that are responsible for the performance changes.

The testing of hypothesis five (H<sub>5</sub>) showed that structure design had negative influence on RoA but a positive influence on non-financial indicator. The influence was statistically significant in both cases. This implies that choice of formality or informality of bank structures in Kenya have significant effect on performance outcomes. This means that top managers have to keenly watch for the balance between the degree of freedom in structure and the softer issues touching on rewards and behavioural aspects to enhance performance. Structure framework influence was both positive and significant for market share and non-financial indicator. This implies that the higher the structure composite the higher is the positive influence on both market share and non-financial indicator. Therefore, to maintain their positions Kenyan bank managers require enhancing the banks to adopt more mechanistic structures which means decision-making has to remain centralized and formal so that the top management designs the works if higher performance are to be maintained.

On formalization, it has a positive and significant influence over the non-financial indicators. The reason for this is that banks are becoming increasingly sensitive to customer and competitor trends, and their awareness of actions taken by other banks in Kenya is increasing. This has forced banks to become more sensitive to the needs of their customers. The findings of the current study differs from the others since it has looked both at the financial and the non-financial performance measures, however, the findings do not support the hypothesis fully as stated as it provided mixed intrinsic results.

The variables used in testing this hypothesis were all multidimensional in nature. Organizational configuration, the independent variable is a complex system of interdependency which comes about as a result of a central theme of imperatives which in the current study comprised of strategy (formulation and implementation), structure (design and framework) and environment. This is supported by Fiss (2008) who defined organizational configuration as commonly occurring clusters of attributes of organizational strategies, structure and processes. Organizational configuration was generated through use of correlation analysis, cluster analysis and computation of composites of the various elements constituting the dimensions of the variables. Indeed Burton and Obel (2004) and Siggelkow (2002) confirm that configuration rests not on a single attribute but instead on relationship and complimentary between multiple characteristics. In the analysis that follows the moderating variable (stage of development) has been generated using cluster analysis on a combinational of the structural dimensional attributes and contextual dimensional attributes. The dependent variable organizational performance is viewed with specific reference to return on asset (ROA), market share and non-financial indicators.

### **5.5 Chapter Summary**

This chapter presented the descriptive on stage of development which was the moderating variable of the current study. The chapter reviewed both the contextual and structural dimensions of stage of development. From the data provided by the respondents from the Kenyan banks cluster analysis was performed which resulted into categorization of the individual banks into different stages of development. This chapter further provided the hypothesis tests for the moderating effect of stage of

development, interpretation of the hypothesis outcomes and discussion on the hypothesis testing. To test the hypothesis, multiple regression analysis and correlation analysis were conducted. Finally, the chapter ends with a summary of the results of the five hypotheses tested and reviewed in the study.

In conclusion, this chapter brings out the conclusions and the implications of the study. It also highlights the limitations of the study and outlines proposed areas of future research.

### 5.3 Summary of the Findings

The current study was an investigation on the moderating effects of development stage on the relationship between organizational configuration and performance with respect to the commercial banks in Kenya. There is no study as far that has examined the relationship between organizational configuration attributes and organizational performance of the Kenyan banks. More so, no known study has looked at the effect of stage of development on their strategic management and organizational performance. The specific objectives of this research were to determine the effect of strategy and structure linkage, the effect of structure and environment linkage and the effect of strategy and environment linkage on the performance of commercial banks in Kenya. The other specific objective was to establish the relationship between organizational configuration and performance of commercial banks in Kenya.

Building on theoretical and empirical literature review, a strategic management model was developed which acted as the conceptual model and framework upon which this study was guided. The model linked organizational configuration variables (structure) to organizational performance. Hypotheses were formulated concerning the relationships between these variables with specific reference to the Kenyan commercial banks and a questionnaire was developed to measure the variables. Of the targeted 43 commercial banks that are registered and operating in Kenya, 39 of them completed and returned the questionnaires representing a 73% response rate. The data collected were used to test the hypotheses through several statistical approaches which included among others, correlation analysis, multivariate regression analysis and cluster analysis.

## CHAPTER SIX

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 6.1 Introduction

This chapter summarizes answers to the research questions, findings on the objectives, brings out the conclusions and the implications of the study. It also highlights the limitations of the study and outlines proposed areas of future research.

#### 6.2 Summary of the Findings

The current study was an investigation on the moderating effects of development stage on the relationship between organizational configuration and performance with respect to the commercial banks in Kenya. There is no study so far that has examined the relationship between organizational configuration attributes and organizational performance of the Kenyan banks. More so, no known study has looked at the effect of stage of development on their strategic management and organizational performance. The specific objective of this research were to determine the effect of strategy and structure linkage, the effect of structure and environment linkage and the effect of strategy and environment linkage on the performance of commercial banks in Kenya. The other specific objective was to establish the relationship between organizational configuration and performance of commercial banks in Kenya.

Following on theoretical and empirical literature review a strategic management model was developed which acted as the conceptual model and framework upon which this study was guided. The model linked organizational configuration variables (constructs) to organizational performance. Hypotheses were formulated concerning the relationships between these variables with specific reference to the Kenyan commercial banks and a questionnaire was developed to measure the variables. Of the targeted 43 commercial banks that are registered and operating in Kenya, 30 of them completed and returned the questionnaires representing a 75% response rate. The data collected were used to test the hypotheses through several statistical approaches which included among others, correlation analysis, multivariate regression analysis and cluster analysis.

The analysis involved building up in-depth operationalization of the individual organizational configuration constructs then testing their bi-variate effects of these variables on organizational performance. Organizational strategy was viewed in terms of the process and thus focus was on the final product (formulation and implementation), organizational structure was viewed in terms of structure framework (mechanic or organic) and structure design (formal or informal). Environment was treated in terms of perceived complexity and dynamism. Four structural dimension components that predicted stage of development were also used (centralization, formalization, vertical differentiation and decision-making process by top management) and finally performance was viewed both in financial and non-financial measures.

The results from the analysis do not support two of the five hypotheses as stated in the current study but they reveal that causality existed between some variables in the model. Indeed, the results confirmed that organizational configuration has an effect on performance although stage of development did not appear to moderate this relationship within the Kenyan commercial banks' context. From the findings in chapters four and five, there are a number of management and organizational theories that have informed the theoretical perspective of this study, namely; configurational theory, behavioural theory, structural contingency theory and lifecycle theory. A comprehensive summary of the research objectives, hypotheses and findings from the statistical analysis of the study is presented in Table 6.1. Table 6.1 informs the empirical findings that have been derived from descriptive statistics, regression analysis, correlation analysis and cluster analysis throughout chapters four and five of the current study.

**Table 6.1: Summary of Objectives, Hypotheses and Findings**

<b>Objective</b>	<b>Hypothesis</b>	<b>Findings with significant relationship</b>	<b>Hypothesis conclusion</b>
<b>Objective One</b> Determine the influence of strategy-structure configuration on organizational performance	<b>H<sub>1</sub>:</b> Strategy-structure configuration has significant on organizational performance	MS with strategy-structure configuration  NF with strategy-structure configuration	Partially supported
<b>Objective Two</b> Determine the influence of structure-environment configuration on performance	<b>H<sub>2</sub>:</b> Structure-environment configuration has significant effect on organizational performance	MS with structure-environment configuration  NF with structure-environment configuration	Partially supported
<b>Objective Three</b> Determine the influence of strategy-environment configuration on organizational performance	<b>H<sub>3</sub>:</b> Strategy-environment configuration has significant effect on organizational performance	Non-financials with strategy-environment configuration	Rejected
<b>Objective Four</b> Establish the relationship between organizational configuration and performance	<b>H<sub>4</sub>:</b> Organizational configuration has significant effect on organizational performance	MS with organizational configuration  NF with organizational configuration	Partially supported
<b>Objective Five</b> Assess the moderating role of organizational stage of development on the relationship between organizational configuration and performance	<b>H<sub>5</sub>:</b> Organizational stage of development has significant moderating effect on organizational configuration and performance relationship.	Stage of development used as a moderating variable for organizational configuration and NF	Rejected

Decision on partial support of hypothesis is based on number of significant relationship outcomes in three performance measures used. A return on significant influence for 2 out of 3 of the measures implied there exists partial support.

The finding of this study from Table 6.1 contributes to a better understanding of the strategic management process in the Kenyan commercial banks as it revealed various relationships among strategic management constructs. In summary, we concluded that organizational configuration has significant influence on a banks' performance. This relationship was, however, not moderated by the organizations stage of development. A major conclusion is that top managers in the Kenyan banking industry did not perceive the environment as an important factor contributing to their banks' performance. This brings about discussion on the role of a firm's context in determining its performance. The top managers of the Kenyan banks viewed environmental conditions with reference to the general control by regulatory agency the product quality variations and threats from the business environment. The top managers, therefore, responded to these sensitive issues not from an environmental approach but rather through strategic process approaches and structural controls.

A review of the results of statistical analysis conducted in the current study involved evaluation of five hypotheses. Casual relationships were found between some of the organizational configuration constructs which included strategy (strategy formulation; strategy implementation), structure (structure framework; structure design), environment, and organizational performance irrespective of the measure that was chosen (RoA, market share and non-financial indicators).

In the current study organizational configuration was considered as a coalescence of strategy, structure and environment. Organizational configuration is concluded in his study as a complex and multidimensional variable that depends on the interactions of these variables. For the present study, therefore, an integrative theoretical model was developed by combining the effects of strategy, structure and the operating environment for the commercial banks in Kenya. The moderating effect of the banks' development stage on organizational configuration and the banks' performance were analyzed and reported.

From the results of the present study, there is clear demonstration that a high appreciation for strategy formulation existed with corporate levels making the choices of strategy to be followed by the bank. However, the issue of implementation was

more critical to the success of these banks. Openness to communication and readiness to accept feedback contributed most to performance outcomes. The results showed statistically significant relationship between implementation with market share and non-financial performance indicators. Above that, it had a positive effect almost entirely through the performance measure including RoA. Therefore the performances of the Kenyan banks are significantly governed by the leadership of the top management within the bank. The results imply that top managers in Kenyan bank that outperform the others are increasingly driven to employ leaders exhibiting need for market intelligence generation, intelligence dissemination, and response implementation based on their perception of competitive intensity.

From the results of the current study, Kenyan banks have been found to be complex in nature, highly centralized with clearly defined rules limiting discretion of employees on task and participation in decision-making. Majority of the banks are more mechanical than organic and also are more formal than informal in terms of structural attributes. This structural attributes of the Kenyan banks fit well with the environment as moderate in complexity and dynamism and therefore, a more mechanical and formal structure is suited. The results of the present study thus suggest that top managers in Kenyan commercial banks require only minor structural changes mainly related to social fabric of the banks even in competitive expansion of their bank portfolios and mandates, increasing customer numbers and coming up with innovative products.

The results showed statically significant relationships between the components of structure both in framework and design with market share and non-financial performance measure. The results were however mixed with respect to the direction of the relationship. From the results of the current study on Kenyan commercial banks, a clear understanding of the relationship between organizational configuration and performance is derived. The results have shown that study of configurations leads to insights that would otherwise be unattainable or that would at least be out of the scope of research that focuses only on the effects of individual elements. By reviewing the effects of configuration beyond the content or general characteristics of strategy, structure and environment, concentrating on the match or lack of it amongst

the attributes, this study has also demonstrated that knowing the process side of how success is achieved adds more value to knowing what success is for organizations. Indeed, the results of the current study have confirmed that organizational configuration studies remain relevant to understanding the differences in organizational performance.

In the current study, we analyzed and reported the moderating effect of stage of development on the relationship between organizational configuration and organizational performance. Stage of development was constructed through a taxonomical adoption with dimensions related to the organization context and others to organization structure and with an assumption that there are regularities in organizational development. The study findings indicated that there was no statistically significant variation of the performance output for the banks even when stage of development was incorporated in the model. The influence was only significant with respect to non-financials. This raises questions on the exact role of stage of development in organizational studies.

### 6.3 Conclusions

The current study had set to draw upon configuration theory its overall objective. As such, the objective was to assess the moderating role of organizational stage of development on the relationship between organizational configuration and performance of the commercial banks in Kenya. Organizational configuration is a multidimensional phenomenon and therefore to achieve this several bi-variate linkages were developed out of it and their effects on performance tested before a multi-variate analysis was conducted.

Out of the multi step approach of building organizational configuration, assessing its influence on organizational performance and later determining the moderating effect of stage of development, the following conclusions are drawn from this study. With respect to the strategy-structure configuration, there was statistically significant influence on market share and non-financial performance. However, the influence with RoA was statistically insignificant. Further, the study concluded that strategy formulation and structure design had negative statistical significant relation with non-

financial performance and RoA respectively. On the contrary, strategy implementation, structure framework and structure design had positive significant relation with non-financial performance. Structure framework also exhibited a significant positive influence on market share.

With respect to structure-environment configuration, we concluded that the results were same as that for strategy-structure configuration. There was statistically significant relationship with market share and non-financial performance but no statistical significance with RoA. The individual constructs, however, showed mixed results for nature of relationship. Structure framework and structure design had positive significant influence on market share and non-financial performance indicators respectively. The study also concluded that structure design had negative significant influence on RoA. Strategy-environment configuration supported only statistically significant influence on non-financial performance. As such the study concluded that the influence of strategy and environment co-alignment within the commercial banks in Kenya was statistically insignificant in determining the organization performance measured in respect of RoA and market share where both are objective measures. Indeed, of the individual constructs there existed only a positive significant influence for environment and strategy implementation on non-financial performance measure.

While reviewing the influence of organizational configuration on organizational performance, the current study concluded that indeed organizational configuration is a complex and multidimensional variable. From the findings, mixed conclusions were drawn. There was a statistically significant relationship between organizational configuration and performance measured in terms of market share and non-financial indicators whereas no statistically significant relation was found for RoA. There was a statistically significant positive influence of structure framework on market share. Likewise, the study concluded that strategy implementation, structure framework and structure design had statistically significant positive relations with non-financial performance whereas structure design reported statistically significant but negative relations with RoA.

Although the study findings showed statistically significant influence of the moderating effect of stage of development on non-financial measures, it also indicated that no statistically significant influence was reported for organizational performance with respect to financial measures (ROA and market share). Even though the individual constructs reported mixed but significant influences on the measures of performance the changes in the model summaries were not significant. The study concluded that moderating effect of stage of development on the relationship between organizational configuration and organizational performance was relatively weak. It is readily apparent that it is competition and not stage of development that is responsible for performance changes.

From the findings of the current study and following the models analyzed, scholars and researchers in strategy and especially those with interest in configuration studies, organizational development and organizational performance will need to consider each of these variables from a multidimensional characteristic view rather than a simplistic perspective. It remains important that strategy is viewed in terms of the process and the content, structure in terms of the design and framework and performance be triangulated into both objective and subjective measures. All this need to be done so that organizations can develop internal systems that can meet the demands of the changing external environment while keeping in mind that different requirements exist for organizations at different stages of the organization's lifecycle.

#### **6.4 Implication of the Study**

The research findings on organizational configuration and organizational performance within the Kenyan commercial banking sector suggest several important implications for the practice of strategic management in the industry. These implications are practical, theoretical and methodological. The discussions in the following sections highlight the specific implications that were found in this study.

##### **6.4.1 Theoretical Implications**

The current study supports conceptualization of organizational activities as systems of interdependent elements. However, an area that has been neglected within this body of research is the examination of the specific structural configurations implemented

by organizations, as well as how these structural configurations are related to strategy, performance, and environmental factors pertaining to the organization. This study provides more insight into the complexity of organizational configuration, providing review of the multi-dimensional attributes of the predictor variables and highlighting the causality of configuration and different measures of performance.

Among the major implications on the theoretical perspective is the relative effect of environment and stage of development on the different measures of performance. Although both variables have been addressed in research, the current study findings contradicted their position from earlier scholars' findings. The top managers who participated in the present study did not appear to perceive the environment as having an important influence on their bank's performance. This top-management perception of the environment may endanger business performance in the long run because of possible discrepancies between customers' desires and new products introduction/innovation and services offered to customers. Top managers in Kenyan commercial banks may need to increase their sensitivity to environmental changes by systematically monitoring the environment considering that up to 23% of the respondent banks have operations at both continental and international levels and therefore cascading effects cannot be ignored. Increased environmental knowledge will help with mitigation of resultant implications and facilitate proper planning.

Likewise, the results of the current study did not support moderating effect of stage of development on configuration and performance relationship. Lifecycle construct is a multidimensional phenomenon with considerable variability between models. It includes dimensions related to organization context and others related to organizational structure. Common contextual dimensions include organizational age, size, growth rate and focal task while common structural dimensions include structural form, formalization, centralization and vertical differentiation, and number of organizational levels. The result of the statistical analysis indicated only structural dimension on stage of development.

The results revealed that although top managers seemed to realize the growing importance of changing their strategies and administrative processes within their stage of development, there appears to be a conflict between this need and interfering with the organizational structure. Furthermore, it is not certain that a changed structure would yield better efficiency and performance. In addition, top management within the banking industry have always had their interest in short-term profitability, whereas changing an organization's structure is generally a long-term task that may not pay off in the short run. Even though top managers in Kenyan banks might know that the modern business environment calls for a less formalized structure, with less centralized decision-making and more specialization of functions among different departments, they have stuck to a traditional management systems of a deliberate balance between mechanistic framework and formal design within the banking sector in Kenya.

The present study is the first to examine relationships between organizational configuration attribute, stage of development and performance of the Kenyan commercial banks. An open question is the extent to which an organic framework structure and informal design would work well in Kenya's increasingly unstable environmental conditions. This may call for the banking sector to allow employees greater participation in decision-making process and more opportunities to share their ideas through a less formalized structure than has been customary, allowing for continuous evolving and semi-autonomous business lines, independent product lines and independent products, customers and geographical mandates.

#### **6.4.2 Methodological Implications**

The individual constructs of the study have multi-dimensional characteristics and therefore from the results have demonstrated different effects on organizational performance. With respect therefore to the Kenyan commercial banks the study findings have an implication on the choice of the organizational performance measure. This study supports the call for other measures of performance for the banking institutions other than the objective measures as banks are high risk businesses that need to respond to changes more appropriately. The results indeed showed significant differences in use of financial and non-financial measures.

By applying use on more comprehensive operationalization of the variables, more elaborate descriptive analysis was conducted. This was achieved through the use of analytical and predictive models while utilizing simple statistics descriptors, multivariate methods and classical regression, correlation analysis and cluster analysis techniques. The purpose of this study was to examine the relationship between organizational configuration and firm performance and assess how the stage of development influenced this relationship. The study was able to draw an expression of inter-relationships between variables, offer generalization, understanding and the meaning of the relationships. The statistical approaches therefore impacted greatly on the level of significance and appreciation of observed phenomena and their interconnections. The current study on organizational configuration in Kenyan commercial banks therefore adds to knowledge, furthers research and theory development in organizations and emphasizes on need for more subjective measures of performance.

#### **6.4.3 Policy Implications**

This study will enable the government and institutions, both public and private, to develop and implement strategic management policies that are tailor-made to enhance performance. The results indicate that different variables have different effects on performance based on industry and institutional attributes. Therefore, each industry requires having policies that are specific to their needs and that no blanket policy can be applied across all industries.

#### **6.4.4 Managerial Implications**

The research findings on the Kenyan banks suggest several important implications of the practice of strategic management in the industry. One implication involves the relatively limited effect of the environment on the strategic management process. Whereas many researchers have addressed the importance of business environments to firms (Jaworski & Kohli, 1993; Tay & Morgan, 2002), the top bank managers who participated in the present study did not appear to perceive the environment as having an important influence on their bank's performance. This top-management perception of the environment may endanger its business performance in the long run because of possible discrepancies between customers' desires and the banks products and

services offered to customers. An action that may help resolve this dilemma is to invest in strategic processes that enable top managers to become more and continuously informed about the internal and external environments. There is, therefore, need to increase their sensitivity to environmental changes by systematically monitoring the environment.

The other implication of these study findings relates to the issue of implementation of strategy which was more critical to the success of these banks. From the results, openness to communication and readiness to accept feedback contributed most to performance outcomes. Since the performances of the Kenyan banks are significantly governed by the leadership of the top management within the bank, the results imply that top managers in Kenyan banks that outperform the others are increasingly driven to employ leaders exhibiting need for market intelligence generation, intelligence dissemination, and response implementation based on their perception of competitive intensity.

This study will equip the managers of these institutions and other policy-makers with the knowledge of strategy and its applicability in managing softer issues within the organization, managing organizational structure and handling the complex and dynamic environmental aspects. This study will also provide practitioners of management with a road map for success, identifying critical organizational transitions and pitfalls that can be avoided during firm's growth and complexities especially in young economies thus providing their organizations with desired competitive advantage.

### **6.5 Limitations of the Study**

The study of organizational configurations is complex and depends on the interaction between variables that contextually relate and are internally consistent, complementary, and mutually reinforcing within an organization. Therefore, this study like every other study has inherent limitations. The limitations of the present study are discussed here. The first limitation of this study is that it was specific to the banking industry and therefore, results obtained may not allow for generalizability.

A second limitation of this study was that the data used in the analysis were collected from the top managers of the banks and in this case from only one senior respondent of the bank. This subjective nature of data is particularly worsened by the fact that they were measured by top management's satisfaction level. This means that the results may have weaknesses or biases in opinion as the respondents are the "bus drivers" being asked to assess how good their driving is.

The third limitation of this study was the absence of longitudinal characteristics, which made it impossible to analyze the effects of time lags on organizational performance, environmental changes especially on regulatory aspect, strategy implementation processes, organizational structure changes, and effects of the different stages of development. A longitudinal study might capture ongoing transformations that could influence the relationships among the constructs.

The last limitation to this study was based on choice of regression and correlation models in analysis. The assumption made on this study was that the relations between the data variables were linear. Given that the interactions and dependencies of these relations are causal, it could be possible that it is non-linear and, therefore, use of non-linear models could have lead to different findings.

In spite of its limitations, this current study remained rigorous in its analysis and quality of reporting. It contributes to the understanding of the strategic management process and especially on the relationships among the key constructs of strategy, structure, environment and performance. The findings of this study will be of great benefit in planning and implementing of strategy, structuring of organizations, assessing impacts of environmental changes and factoring in development stage to determine performance by practitioners in Kenya commercial banks.

### **6.6 Suggestions for Further Research**

Following the preceding discussion on the limitations of this study, this section sets to provide several recommendations for further research. First, it appears that other important variables like leadership and information technology may have an impact on modern strategies, organizational structure and management practices. Including

these variables in future research could achieve a better understanding of the organizational configuration and performance relationship and indeed overall understanding of strategic management processes.

Second, generalizability can be achieved by repeating measures across different contexts. Thus, it is recommended that the model developed in this study be applied in future studies in which efforts are made to use truly representative samples and in which data are collected from various Kenyan industries. Along with this, further recommendation would be to extend the respondent to beyond top management as there are several key personalities involved in decision-making process in the organizations. This approach will increase the membership of respondents such that the passengers are actually able to evaluate whether the “bus” is being driven well as opposed to the “bus driver” rating themselves.

Lastly, the moderating variable stage of development needs to be evaluated further and its operationalization separated from organizational structure. As such future studies will contribute further knowledge if they incorporate longitudinal study approaches as opposed to cross-sectional study approach as was used in this study. Further since the study findings only partially support relationship between organizational configuration and organizational performance, there is a possibility that some complexities may have been missed and future researches can help unlock some of the omissions.

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COMMERCIAL BANKS

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Bank Name	Assets %	Year	Size	Count
Bank of America	0.2%	11/1/1986	Small	3
Citibank (USA)	1.3%	4/1/1994	Medium	13
Citibank N.A. Korea	3.84%	7/1/1974	Medium	4
Citi Finance Bank Ltd	0.21%	9/19/1984	Small	1
Commercial Bank of Africa Ltd	3.9%	3/1/1967	Medium	19
Commercial Bank of Kenya Ltd	0.61%	12/19/1980	Small	13
Commercial Bank of Kenya Ltd	8.93%	1/1/1965	Large	83
Credit Bank Ltd	0.29%	5/14/1986	Small	5
Development Bank of Kenya Ltd	0.50%	1/1/1973	Small	3
Diamond Trust Bank Ltd	3.36%	6/1/1946	Medium	12
Equity Bank Ltd	0.74%	1/1/1982	Small	4
Equity Bank Kenya Ltd	1.59%	01/1/2005	Medium	20
Experimental Commercial Bank Ltd	0.57%	12/20/1995	Small	3
First Bank Ltd	9.39%	29/12/2004	Large	110
Family Bank Ltd	1.26%	1984	Medium	30
Family Commercial Bank Ltd	0.45%	6/1/1992	Small	7
First Bank Ltd	0.76%	1/1/1986	Small	15
First Commercial Bank Ltd	0.13%	29/04/2008	Small	18
Geo-Commercial Bank Ltd	0.19%	12/17/1992	Small	8
Guardian Bank Ltd	0.46%	12/17/1992	Small	7
Guinness Bank Ltd	0.36%	1/11/2007	Small	14
Health Bank A.S. Serbia	0.48%	1/7/1978	Small	5

## APPENDIX 1: LIST OF COMMERCIAL BANKS IN KENYA

### COMMERCIAL BANKS

No.	Name of Bank	Market Share	Date Licensed	Peer Group	No. of Branches
1.	African Banking Corporation Ltd	0.63%	5/1/1984	Small	10
2.	Bank of Africa Kenya Ltd	1.42%	1980	Medium	10
3.	Bank of Baroda Ltd	1.91%	7/1/1953	Medium	9
4.	Bank of India	1.16%	6/5/1953	Medium	5
5.	Barclays Bank of Kenya Ltd	10.72%	6/5/1953	Large	119
6.	CFC - Stanbic Bank Ltd	5.31%	5/14/1955	Large	17
7.	Charterhouse Bank Ltd **	0.0%	11/11/1996	Small	8
8.	Chase Bank (K) Ltd	1.10%	4/1/1991	Medium	13
9.	Citibank N.A Kenya	3.84%	7/1/1974	Medium	4
10.	City Finance Bank Ltd	0.21%	9/10/1984	Small	1
11.	Commercial Bank of Africa Ltd	3.60%	1/1/1967	Medium	19
12.	Consolidated Bank of Kenya Ltd	0.61%	12/18/1989	Small	13
13.	Co-operative Bank of Kenya Ltd	8.95%	1/1/1965	Large	83
14.	Credit Bank Ltd	0.29%	5/14/1986	Small	5
15.	Development Bank of Kenya Ltd	0.50%	1/1/1973	Small	3
16.	Diamond Trust Bank Ltd	3.36%	1/1/1946	Medium	32
17.	Dubai Bank Ltd	0.14%	1/1/1982	Small	4
18.	Ecobank Kenya Ltd	1.59%	01/11/2005	Medium	20
19.	Equatorial Commercial Bank Ltd	0.53%	12/20/1995	Small	5
20.	Equity Bank Ltd	9.09%	28/12/2004	Large	110
21.	Family Bank Ltd	1.26%	1984	Medium	50
22.	Fidelity Commercial Bank Ltd	0.45%	6/1/1992	Small	7
23.	Fina Bank Ltd	0.76%	1/1/1986	Small	15
24.	First Community Bank Ltd	0.35%	29.04.2008	Small	18
25.	Giro Commercial Bank Ltd	0.59%	12/17/1992	Small	8
26.	Guardian Bank Ltd	0.46%	12/17/1992	Small	7
27.	Gulf African Bank Ltd	0.56%	1/11/2007	Small	14
28.	Habib Bank A.G Zurich	0.48%	1/7/1978	Small	5

29.	Habib Bank Ltd	0.32%	2/3/1956	Small	4
30.	Housing Finance Company of Kenya Ltd	1.54%	5/7/1965	Medium	11
31.	Imperial Bank Ltd	1.13%	1/11/1992	Medium	12
32.	I & M Bank Ltd	4.07%	1/1/1974	Medium	16
33.	Kenya Commercial Bank Ltd	13.98%	1/1/1896	Large	149
34.	K-Rep Bank Ltd	0.45%	3/25/1999	Small	30
35.	Middle East Bank Ltd	0.27%	10/1/1980	Small	3
36.	National Bank of Kenya Ltd	3.72%	1/1/1968	Medium	44
37.	NIC Bank Ltd	3.27%	9/17/1959	Medium	16
38.	Oriental Commercial Bank Ltd	0.32%	8/2/1991	Small	6
39.	Paramount Universal Bank Ltd	0.28%	10/1/1993	Small	6
40.	Prime Bank Ltd	1.80%	3/1/1992	Medium	14
41.	Standard Chartered Bank Ltd	8.02%	10/1/1910	Large	34
42.	Trans-National Bank Ltd	0.37%	8/1/1985	Small	13
43.	UBA Kenya Bank Ltd	0.19%	24/09/2009	Small	4
44.	Victoria Commercial Bank Ltd	0.39%	6/1/1987	Small	1

**\*\* (UNDER STATUTORY MANAGEMENT)**

Market Share Index is the composite of net assets, total deposits, shareholders' funds, number of loan accounts and number of deposit accounts

Large=Market Share Index>5%: Medium=Market Share Index>1%and <5%: Small=Market Share Index<1%

**Source: Central Bank of Kenya-Bank Supervision Annual Report 2010**

APPENDIX 2(A): COVER LETTER OF INTRODUCTION FROM  
UNIVERSITY OF NAIROBI



UNIVERSITY OF NAIROBI  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES  
SCHOOL OF BUSINESS  
DOCTORAL STUDIES PROGRAMME

Telephone: 4184160/1-5 Ext. 225  
Email: [dsp@uonbi.ca.ke](mailto:dsp@uonbi.ca.ke)

P.O. Box 30197  
Nairobi, Kenya

23<sup>rd</sup> January, 2012

TO WHOM IT MAY CONCERN

RE: OGOLLAH KENNEDY O. – D80/80361/2009

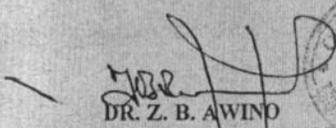
This is to certify that Ogollah Kennedy O. – D80/80361/2009 is a Ph.D. candidate at the School of Business, University of Nairobi. The title of his study is “**Organizational Configuration, Stage of Development and Performance of Commercial Banks in Kenya**”

The purpose of this letter therefore, is to kindly request you to assist and facilitate him in carrying out the survey in your organization. A questionnaire is herewith attached for your kind consideration and necessary action.

Data and information obtained through this exercise will be used for academic purposes only. Hence, the respondents are requested not to indicate their names anywhere on the questionnaire.

We look forward to your cooperation.

Thank you.

  
DR. Z. B. AWINO  
PH.D. COORDINATOR  
SCHOOL OF BUSINESS



## APPENDIX 2(B): RESEARCHER'S INTRODUCTORY COVER LETTER

To Whom It May Concern

Dear Sir/Madam,

**RE: Organizational Configuration, Stage of Development and  
Performance of Commercial Banks in Kenya.**

I am a Doctor of Philosophy (Ph.D) candidate in the Department of Business Administration, School of Business - University of Nairobi. As part of the requirement for the award of the degree, I am expected to undertake a research study on the above topic whose purpose is to assess how stage of development of an organization influences the relationship between organization configuration (strategy-structure and environment) and organizational performance. Both the financial and non-financial indicators will be reviewed.

To facilitate the completion of this thesis, I wish to humbly request for your assistance with certain qualitative data from your bank. I have attached a copy of the questionnaire and introduction letter from the University for your quick reference on the matter. Kindly answer all the questions as completely as possible. The research results are intended for academic purposes only and will be treated with utmost confidentiality. No specific reference will be made on your bank and only the summary results will be made public.

I look forward to your utmost support and remain grateful.

With regards,

Kennedy Ogollah

**P.O. Box 10575 - 00100,**

**GPO, Nairobi.**

**Telephone: + 254 722 323 485; + 254 736 259 743**

E-mail: kogollah@yahoo.com; kenn.ogollah@gmail.com

**APPENDIX 3: RESEARCH QUESTIONNAIRE**

This questionnaire is designed to collect data from companies listed by Central Bank of Kenya in its Annual Supervision Report 2010, which will be analyzed to establish the relationship of *Organizational configuration, stage of development and performance of commercial banks in Kenya*. The data shall be used for academic purposes only, and will be treated with strict confidence. Only academic researchers involved in this study will access the data. Your participation in facilitating the study is highly appreciated.

**Part I: ORGANIZATIONAL DATA**

1. Name of Bank.....
  
2. Physical Location and Address of Bank  
 .....  
 .....
  
3. What is the market coverage of your organization?
  - i. National (Kenya Only)           [     ]
  - ii. Regional (within East Africa)   [     ]
  - iii. Continental (Within Africa)   [     ]
  - iv. International (Africa and Beyond)[     ]

**Part II: RESPONDENT'S INFORMATION**

1. Please state your position/title .....
  
2. How long have you worked in the current organization
 

Less than 1	[     ]	1- 3	[     ]	4 - 9	[     ]
10 -15	[     ]	16-19	[     ]	Over 20	[     ]
  
3. Highest level of education attained
 

Secondary level	[     ]	Advanced level	[     ]
Diploma	[     ]	Bachelors degree	[     ]
Postgraduate degree	[     ]		

Other (specify) .....

### Part III: STRATEGY

#### 4 (a) Strategy Formulation

To what extent do you agree with the following statements relating to your bank's strategy formulation? Use the keys provided to **TICK**:

Strategy Formulation Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The business objectives reflect the environmental requirements and gaps					
Recognition of strategic need is proactive rather than reactive					
Sources of strategic planning information is based on owner/ manager's personal/ internal source					
Source of strategic planning information is based on external/ indirect channels					
Decision making process relies on owner/ manager's own experience and knowledge					
Decision making process is influenced by key stake holders					
Choice of strategy is done at corporate level					
Strategy formulation takes into consideration contextual factors such as age, religion, culture etc.					

#### 4 (b) Strategy Realization/Implementation

##### Managing real time change

Please, indicate the extent to which you believe that your bank operates under change.

Use the keys provided to **TICK**:

Real Time Change Management Statements	Very Less extent	Less extent	moderate extent	great extent	Very great extent
Firms level of preparedness when implementing strategies is high					
Firm's effectiveness in implementing new strategies is high					
Level of resistance to change experienced is low.					
The time between initiation of new strategy implementation and completion is short.					
The average level of strategy implementation achieved is high					

#### 4 (c) Communication and Support building Statements

Communication and Support building Statements	Very Less extent	Less extent	moderate extent	great extent	Very great extent
Firm's communication channel are open					
Time taken to disseminate information is short					
Communication channels allows for feedback					

#### Part IV: STRUCTURE

##### 5 (a) Framework

To what extent do you agree with the following statements relating to your bank's structure? Use the keys provided to **TICK**:

Structure Statements	Very Less extent	Less extent	moderate extent	great extent	Very great extent
The firm is characterized by high level of Complexity in operations.					
The firm is characterized by high level of centralization of activities					
Workers in the firm are granted limited discretion in performing their tasks					
The division of labour in the firm is subdivided into many specialized groups.					
The organization's rules and procedures are carefully defined					
The employees are granted limited participation in decision making					
The decision making process is centered at the top level management					
The organizational structure is highly informal					
The organizational structure is simple in hierarchy					
The employees have greater discretion in decision making					
The decision making process is usually from the top down to the lower levels					
The organizational structure is highly decentralized					

### 5 (b) Designs

To what extent do you agree with the following statements relating to your bank? Use the keys provided to **TICK**:

Formal Design Statements	Very Less extent	Less extent	moderate extent	great extent	Very great extent
<b>(a) Incentives</b>					
<input type="checkbox"/> Vacancies in high positions are exclusively filled from within.					
<input type="checkbox"/> Career development is highly supported					
<input type="checkbox"/> Job security is assured					
<input type="checkbox"/> Management development is aimed at managerial succession					
<input type="checkbox"/> Opportunities for growth and development exists					
<input type="checkbox"/> Incentive systems emphasizes on corporation performance rather than performance of each division					
<input type="checkbox"/> Incentive scheme is based on divisional performance					
<b>(b) Relationship</b>					
<input type="checkbox"/> Leadership style is people oriented					
<input type="checkbox"/> Great amount of informal meetings exist for employees					
<input type="checkbox"/> Induction of new employees is formal					
<input type="checkbox"/> Feedback is mainly for development purpose					
<input type="checkbox"/> Communication is open and transparent					
<input type="checkbox"/> Management style is participatory and consultative					
<b>(c) Rewards</b>					
<input type="checkbox"/> Pay practice is based on ability and performance					
<input type="checkbox"/> Bank conduct salary surveys & implements findings					
<input type="checkbox"/> There is offer of non cash incentives					
<input type="checkbox"/> Rewards systems are considerate of employees efforts					

To what extent do you agree with the following statements in describing the banks management philosophy? Use the keys provided to **TICK**:

(d) Philosophy	Very Less extent	Less extent	moderate extent	great extent	Very great extent
Highly structured communication channels & highly restricted access to important financial and/or operating information					
A strong emphasis on holding fast to well established management practices, despite changes in business conditions					
Tight formal control of most operations by means of sophisticated control and information systems.					
A strong emphasis on ensuring that employees adhere closely to their formal job descriptions.					

**5 (c) Culture/Social Networks (behavioural)**

To what extent do you agree with the following statements relating to your bank's culture/social behaviour? Use the keys provided to **TICK**:

Culture/Social Networks Statements	Very Less extent	Less extent	moderate extent	great extent	Very great extent
Organization values its employees welfare					
Organization culture is unique and imitable					
High level of customer service quality					
Continuous learning on how to do things better					
Highly charged, motivated and loyal employees					

**Part V: ENVIRONMENT**

**6. Dimensions (Complexity vs. Dynamism)**

To what extent do you agree with the following statements relating to your bank's operating environment? Use the keys provided to **TICK**:

<b>Operating Environment Statements</b>	<b>Very Less extent</b>	<b>Less extent</b>	<b>moderate extent</b>	<b>great extent</b>	<b>Very great extent</b>
We are witnessing demand for our products and services from customers who never bought them before.					
New customers tend to have product-related needs that are different from those of our existing customers.					
Our customers tend to look for new products all the time.					
Many promotion wars occur in our industry.					
For anything that one competitor in our industry can offer, others can match readily					
One hears of new competitive moves in our industry almost every day.					
The current business environment is threatening the survival of our company.					
Tough price competition is threatening our bank.					
Competitors' product quality or novelty is threatening our bank.					
The regulatory agencies have significant control on our operations					

**Part VI: ORGANIZATIONAL STAGE OF DEVELOPMENT**

**7(a) Contextual Dimensions**

1. What year was the firm founded? .....
2. What was the market share of your bank as at end of year 2010? .....
3. What was the market share of your bank as at end of year 2009? .....

**7(b) Structural Dimensions**

(b1). Basis of Organization (Structure)

How is your company organized? (Tick one as appropriate)

- Simple Structure:** Owner/Manager assisted by individuals with varying responsibilities. No divisions or functional departments.
- By Functions:** Separate departments or functions (operations, marketing, personnel).
- By Divisions:** Separate groups for similar products, markets, or geographic regions.

(b2). Focusing on the bank's organizational structure, how many levels exist between the lowest cadre employee and the CEO/MD? (**NOTE: Include both worker and CEO in count**).....

(b3). Formalization

Please **TICK** the number best describing the strategic decision process in your firm.

Use the keys provided to **TICK**:

**Key: 1- Strongly Disagree; 2- Disagree; 3-Indifferent; 4-Agree; 5-Strongly Agree**

Strategic Decision Statements	Strongly Disagree	Disagree	Indifferent	Agree	Strongly Agree
<input type="checkbox"/> Formal policies and procedures guide most decisions.					
<input type="checkbox"/> Important communications between departments are documented by memo.					
<input type="checkbox"/> Formal job descriptions are maintained for each position					
<input type="checkbox"/> The top management team is comprised of specialists from each functional area (e.g., marketing, operations, and personnel).					
<input type="checkbox"/> Reporting relationships are formally defined.					
<input type="checkbox"/> Lines of authority are specified in a formal organization chart.					
<input type="checkbox"/> Rewards and incentives are administered by objective and systematic criteria.					
<input type="checkbox"/> Capital expenditures are planned well in advance.					
<input type="checkbox"/> Plans tend to be formal and written.					
<input type="checkbox"/> Formal operating budgets guide day-to-day decisions.					

### 7 (c) Decision Making Process

Please TICK the number best describing the strategic decision process used by top management in your bank.

(Where *Entrepreneurial* is where one individual makes decisions based on personal judgment and

*Professional* is where functional specialists make decisions based on expertise and analytical tools)

- |  |       |
|--|-------|
| i. Always entrepreneurial                  | [ 1 ] |
| ii. Frequently entrepreneurial             | [ 2 ] |
| iii. 50% entrepreneurial, 50% professional | [ 3 ] |
| iv. Frequently professional                | [ 4 ] |
| v. Always professional                     | [ 5 ] |

### 7(d) Centralization

Who is the last person whose permission must be obtained before legitimate actions can

be taken in the following areas? (Tick the number of the appropriate approval level)

**Where:** 0 = Direct Worker 1 = First line supervisor 2 = Department head

3 = Division head (over several functions) 4 = chief executive officer

5 = Board of directors

- |  |                         |
|--|-------------------------|
| i. Promotion of a direct worker                      | [0] [1] [2] [3] [4] [5] |
| ii. Addition of a new product or service             | [0] [1] [2] [3] [4] [5] |
| iii. Unbudgeted expenditures<br>(KES 50,000-100,000) | [0] [1] [2] [3] [4] [5] |
| iv. Selection of type or brand of new equipment      | [0] [1] [2] [3] [4] [5] |
| v. Dismissal, or firing of a direct worker           | [0] [1] [2] [3] [4] [5] |

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY

**Part VII: ORGANIZATIONAL PERFORMANCE**

**8. Non-financial indicators**

To what extent do you agree with the following statements relating to your bank's non-financial performance? Use the keys provided to **TICK**:

<b>Non-financial Statements</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
<input type="checkbox"/> Has a good reputation					
<input type="checkbox"/> Distinctive different from others					
<input type="checkbox"/> Socially responsible(CSR)					
<input type="checkbox"/> Collaboration-supports non banking activities					
<input type="checkbox"/> Supports innovation					
<input type="checkbox"/> Firm protects the business domain aggressively					
<input type="checkbox"/> Responds to customers complains in timely manner					
<input type="checkbox"/> Conducts training for employees					
<input type="checkbox"/> Aggressively introduces new products					
<input type="checkbox"/> Reacts to competitor threats immediately					

If you would like to make any other comments regarding any of the items included in the questionnaire, please write them in the space provided below.

.....

.....

.....

.....

.....

**THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY**

**Appendix 4a: Model Summary for Strategy-Structure Configuration on RoA**

Model Summary(b)					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.454 <sup>a</sup>	0.206	0.079	2.15970	1.554
a. Predictors: (Constant), Composite: design, Composite for strategy formulation (%), Implementation composite (imp + Comm.), Composite: Framework					
b. Dependent Variable: Return on Asset					

**Appendix 4b: Analysis of Variance (ANOVA) for Strategy-Structure Configuration on RoA**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.230	4	7.558	1.620	0.200 <sup>a</sup>
	Residual	116.607	25	4.664		
	Total	146.838	29			
a. Predictors: (Constant), Composite: design, Composite for strategy formulation (%), Implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Return on Asset						

**Appendix 4c: Significance Coefficients for Strategy-Structure Configuration on RoA**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.792	7.192		1.362	0.185
	Composite for strategy formulation (%)	-0.019	0.047	-0.071	-0.394	0.697
	Implementation composite (imp + Comm.)	0.007	0.036	0.038	0.194	0.847
	Composite: Framework	0.026	0.051	0.107	0.518	0.609
	Composite: design	-0.107	0.052	-0.404	-2.075	0.048
a. Dependent Variable: Return on Asset						

**Appendix 5a: Model Summary for Strategy-Structure Configuration on Market Share**

Model Summary(b)					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.544 <sup>a</sup>	0.296	0.183	2.95670	2.127
a. Predictors: (Constant), Composite: design, Composite for strategy formulation (%), Implementation composite (imp + Comm.), Composite: Framework					
b. Dependent Variable: Market Share					

**Appendix 5b: Analysis of Variance (ANOVA) for Strategy-Structure Configuration on Market Share**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	91.717	4	22.929	2.623	0.059 <sup>a</sup>
	Residual	218.552	25	8.742		
	Total	310.269	29			
a. Predictors: (Constant), Composite: design, Composite for strategy formulation (%), Implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Market Share						

**Appendix 5c: Significance Coefficients for Strategy-Structure Configuration on Market Share**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-7.710	9.846		-0.783	0.441
	Composite for strategy formulation (%)	-0.037	0.064	-0.098	-0.574	0.571
	Implementation composite (imp + Comm.)	0.065	0.049	0.243	1.321	0.198
	Composite: Framework	0.183	0.069	0.514	2.644	0.014
	Composite: design	-0.056	0.071	-0.146	-0.796	0.433
a. Dependent Variable: Market Share						

**Appendix 6a: Model Summary for Strategy-Structure Configuration on Non-financial Performance**

Model Summary(b)						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	0.770 <sup>a</sup>	0.592	0.527	7.84508	1.609	
a. Predictors: (Constant), Composite: design, Composite for strategy formulation (%), Implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Q8 Composite for non-financial performance						

**Appendix 6b: Analysis of Variance (ANOVA) for Strategy-Structure Configuration on Non-financial Performance**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,235.823	4	558.956	9.082	0.000 <sup>a</sup>
	Residual	1,538.631	25	61.545		
	Total	3,774.454	29			
a. Predictors: (Constant), Composite: design, Composite for strategy formulation (%), Implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Q8 Composite for non-financial performance						

**Appendix 6c: Significance Coefficients for Strategy-Structure Configuration on Non-financial Performance**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-15.805	26.125		-0.605	0.551
	Composite for strategy formulation (%)	-0.404	0.171	-0.306	-2.366	0.026
	Implementation composite (imp + Comm.)	0.353	0.130	0.379	2.709	0.012
	Composite: Framework	0.588	0.184	0.473	3.200	0.004
	Composite: design	0.910	0.188	0.677	4.851	0.000
a. Dependent Variable: Q8 Composite for non-financial performance						

**Appendix 7a: Model Summary for Structure-Environment Configuration on RoA**

Model Summary(b)						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	0.451 <sup>a</sup>	0.204	0.112	2.12058	1.351	
a. Predictors: (Constant), Q6 Environment composite score, Composite: design, Composite: Framework						
b. Dependent Variable: Return on Asset						

**Appendix 7b: Analysis of Variance (ANOVA) for Structure-Environment Configuration on RoA**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.919	3	9.973	2.218	0.110 <sup>a</sup>
	Residual	116.919	26	4.497		
	Total	146.838	29			
a. Predictors: (Constant), Q6 Environment composite score, Composite: design, Composite: Framework						
b. Dependent Variable: Return on Asset						

**Appendix 7c: Significance Coefficients for Structure-Environment Configuration on RoA**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.015	5.592		1.612	0.119
	Composite: Framework	0.030	0.053	0.123	0.575	0.570
	Composite: design	-0.103	0.052	-0.390	-1.995	0.057
	Environment composite	-0.011	0.034	-0.066	-0.334	0.741
a. Dependent Variable: Return on Asset						

**Appendix 8a: Model Summary for Structure-Environment Configuration on Market Share**

Model Summary(b)					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.493 <sup>a</sup>	0.243	0.155	3.00634	2.034
a. Predictors: (Constant), Environment composite, Composite: design, Composite: Framework					
b. Dependent Variable: Market Share					

**Appendix 8b: Analysis of Variance (ANOVA) for Structure-Environment Configuration on Market Share**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.279	3	25.093	2.776	0.061 <sup>a</sup>
	Residual	234.990	26	9.038		
	Total	310.269	29			
a. Predictors: (Constant), Environment composite, Composite: design, Composite: Framework						
b. Dependent Variable: Market Share						

**Appendix 8c: Significance Coefficients for Structure-Environment Configuration on Market Share**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.282	7.928		-0.540	0.594
	Composite: Framework	0.155	0.074	0.435	2.082	0.047
	Composite: design	-0.049	0.073	-0.127	-0.667	0.511
	Environment composite	-0.005	0.048	-0.021	-0.111	0.912
a. Dependent Variable: Market Share						

**Appendix 9a: Model Summary for Structure-Environment Configuration on Non-financial Performance**

Model Summary(b)					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.670 <sup>a</sup>	0.449	0.386	8.94274	1.478
a. Predictors: (Constant), Environment composite, Composite: design, Composite: Framework					
b. Dependent Variable: Composite for non-financial performance					

**Appendix 9b: Analysis of Variance (ANOVA) for Structure-Environment Configuration on Non-financial Performance**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,695.167	3	565.056	7.066	0.001 <sup>a</sup>
	Residual	2,079.287	26	79.973		
	Total	3,774.454	29			
a. Predictors: (Constant), Environment composite , Composite: design, Composite: Framework						
b. Dependent Variable: Composite for non-financial performance						

**Appendix 9c: Significance Coefficients for Structure-Environment Configuration on Non-financial Performance**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-9.444	23.584		-0.400	0.692
	Composite: Framework	0.266	0.221	0.215	1.203	0.240
	Composite: design	0.868	0.218	0.645	3.972	0.001
	Environment composite	0.200	0.144	0.227	1.388	0.177
a. Dependent Variable: Composite for non-financial performance						

**Appendix 10a: Model Summary for Strategy-Environment Configuration on RoA**

Model Summary(b)					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.132 <sup>a</sup>	0.017	-0.096	2.35580	1.257
a. Predictors: (Constant), Composite for strategy formulation (%), Implementation composite (imp + Comm.), Q6 Environment composite score					
b. Dependent Variable: Return on Asset					

**Appendix 10b: Analysis of Variance (ANOVA) for Strategy-Environment Configuration on RoA**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.543	3	0.848	0.153	0.927 <sup>a</sup>
	Residual	144.295	26	5.550		
	Total	146.838	29			
a. Predictors: (Constant), Composite for strategy formulation (%), Implementation composite (imp + Comm.), Q6 Environment composite score						
b. Dependent Variable: Return on Asset						

**Appendix 10c: Significance Coefficients for Strategy-Environment Configuration on RoA**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.959	6.112		1.139	0.265
	Environment composite	-0.013	0.037	-0.073	-0.343	0.734
	Implementation composite (imp + Comm.)	-0.018	0.036	-0.099	-0.501	0.620
	Composite for strategy formulation (%)	-0.023	0.055	-0.087	-0.409	0.686
a. Dependent Variable: Return on Asset						

**Appendix 11a: Model Summary for Strategy-Environment Configuration on Market Share**

Model Summary(b)						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	0.160 <sup>a</sup>	0.026	-0.087	3.40997	2.002	
a. Predictors: (Constant), Composite for strategy formulation (%), Implementation composite (imp + Comm.), Q6 Environment composite score						
b. Dependent Variable: Market Share						

**Appendix 11b: Analysis of Variance (ANOVA) for Strategy-Environment Configuration on Market Share**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.944	3	2.648	0.228	0.876 <sup>a</sup>
	Residual	302.326	26	11.628		
	Total	310.269	29			
a. Predictors: (Constant), Composite for strategy formulation (%), Implementation composite (imp + Comm.), Q6 Environment composite score						
b. Dependent Variable: Market Share						

**Appendix 11c: Significance Coefficients for Strategy-Environment Configuration on Market Share**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.943	8.847		-0.107	0.916
	Environment composite	0.042	0.054	0.165	0.775	0.445
	Implementation composite (imp + Comm.)	0.009	0.053	0.033	0.169	0.867
	Composite for strategy formulation (%)	0.003	0.080	0.007	0.035	0.972
a. Dependent Variable: Market Share						

**Appendix 12a: Model Summary for Strategy-Environment Configuration on Non-financial Performance**

Model Summary(b)						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	0.510 <sup>a</sup>	0.260	0.174	10.36588	1.465	
a. Predictors: (Constant), Composite for strategy formulation (%), Implementation composite (imp + Comm.), Environment composite						
b. Dependent Variable: Composite for non-financial performance						

**Appendix 12b: Analysis of Variance (ANOVA) for Strategy-Environment Configuration on Non-financial Performance**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	980.715	3	326.905	3.042	0.047 <sup>a</sup>
	Residual	2,793.739	26	107.452		
	Total	3,774.454	29			
a. Predictors: (Constant), Composite for strategy formulation (%), Implementation composite (imp + Comm.), Environment composite						
b. Dependent Variable: Composite for non-financial performance						

**Appendix 12c: Significance Coefficients for Strategy-Environment Configuration on Non-financial Performance**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	52.834	26.893		1.965	0.060
	Environment composite	0.296	0.164	0.336	1.806	0.083
	Implementation composite (imp + Comm.)	0.356	0.160	0.382	2.226	0.035
	Composite for strategy formulation (%)	-0.193	0.243	-0.146	-0.795	0.434
a. Dependent Variable: Composite for non-financial performance						

**Appendix 13a: Model Summary for Organizational Configuration on RoA**

Model Summary(b)						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	0.453 <sup>a</sup>	0.205	0.039	2.20578	1.370	
a. Predictors: (Constant), Environment composite, Composite: design, Composite for strategy formulation, Implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Return on Asset						

**Appendix 13b: Analysis of Variance (ANOVA) for Organizational Configuration on RoA**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.067	5	6.013	1.236	0.323 <sup>a</sup>
	Residual	116.771	24	4.865		
	Total	146.838	29			
a. Predictors: (Constant), Environment composite, Composite: design, Composite for strategy formulation, Implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Return on Asset						

**Appendix 13c: Significance Coefficients for Organizational Configuration on RoA**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.710	6.800		1.281	0.212
	Composite for strategy formulation	-0.120	0.964	-0.024	-0.125	0.902
	Implementation composite (imp + Comm.)	0.004	0.037	0.020	0.101	0.920
	Composite: Framework	0.033	0.057	0.133	0.572	0.572
	Composite: design	-0.103	0.055	-0.388	-1.881	0.072
	Environment composite	-0.013	0.037	-0.072	-0.338	0.738
a. Dependent Variable: Return on Asset						

**Appendix 14a: Model Summary for Organizational Configuration on Market Share**

Model Summary(b)					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.564 <sup>a</sup>	0.318	0.176	2.96948	2.012
a. Predictors: (Constant), Environment composite, Composite: design, Composite for strategy formulation, Implementation composite (imp + Comm.), Composite: Framework					
b. Dependent Variable: Market Share					

**Appendix 14b: Analysis of Variance (ANOVA) for Organizational Configuration on Market Share**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	98.642	5	19.728	2.237	0.083 <sup>a</sup>
	Residual	211.627	24	8.818		
	Total	310.269	29			
a. Predictors: (Constant), Environment composite, Composite: design, Composite for strategy formulation, Implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Market Share						

**Appendix 14c: Significance Coefficients for Organizational Configuration on Market Share**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-8.722	9.154		-0.953	0.350
	Composite for strategy formulation	-1.366	1.297	-0.188	-1.053	0.303
	Implementation composite (imp + Comm.)	0.053	0.049	0.197	1.063	0.298
	Composite: Framework	0.188	0.077	0.527	2.443	0.022
	Composite: design	-0.044	0.074	-0.115	-0.603	0.552
	Environment composite	-0.018	0.050	-0.072	-0.362	0.720
a. Dependent Variable: Market Share						

**Appendix 15a: Model Summary for Organizational Configuration on Non-financial Performance**

Model Summary(b)						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	0.767 <sup>a</sup>	0.589	0.503	8.04411	1.746	
a. Predictors: (Constant), Environment composite, Composite: design, Composite for strategy formulation, Implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Composite for non-financial performance						

**Appendix 15b: Analysis of Variance (ANOVA) for Organizational Configuration on Non-financial Performance**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,221.468	5	444.294	6.866	0.000 <sup>a</sup>
	Residual	1,552.986	24	64.708		
	Total	3,774.454	29			
a. Predictors: (Constant), Environment composite, Composite: design, Composite for strategy formulation, Implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Composite for non-financial performance						

**Appendix 15c: Significance Coefficients for Organizational Configuration on Non-financial Performance**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-34.156	24.798		-1.377	0.181
	Composite formulation	-5.458	3.515	-0.215	-1.553	0.134
	Implementation composite (imp + Comm.)	0.284	0.134	0.305	2.122	0.044
	Composite: Framework	0.429	0.208	0.346	2.063	0.050
	Composite: design	0.877	0.199	0.652	4.398	0.000
	Environment composite	0.152	0.136	0.173	1.123	0.272
a. Dependent Variable: Composite for non-financial performance						

**Appendix 16a: Initial Cluster Centers**

	Cluster			
	1	2	3	4
Centralization Composite	52.00	84.00	32.00	64.00
Strategic decision process used by top management	3	4	4	3
Formalization Composite	66.00	68.00	88.00	100.00
Vertical Differentiation	4	3	8	5

**Appendix 16b: Final Cluster Centers**

	Cluster			
	1	2	3	4
Centralization Composite	53.00	78.50	43.00	64.80
Strategic decision process used by top management	4	4	4	4
Formalization Composite	74.50	81.25	89.25	98.40
Vertical Differentiation	4	6	6	8

**Appendix 17a: Model Summary for the Moderating effect of Stage of Development on the Relationship between Organizational Configuration and RoA**

Model Summary(b)						
Model	R	R Square	Adjusted R Square	R	Std. Error of the Estimate	Durbin-Watson
1	0.498 <sup>a</sup>	0.248	0.009		2.23966	1.545
a. Predictors: (Constant), Formalization Composite, Centralization Composite, Composite: design, Classification: Composite for strategy formulation, Environment composite: Strategy implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Return on Asset						

**Appendix 17b: Analysis of Variance (ANOVA) for the Moderating effect of Stage of Development on the Relationship between Organizational Configuration and RoA**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.484	7	5.212	1.039	0.433 <sup>a</sup>
	Residual	110.354	22	5.016		
	Total	146.838	29			

a. Predictors: (Constant), Formalization Composite, Centralization Composite, Composite: design, Classification: Composite for strategy formulation, Environment composite: Strategy implementation composite (imp + Comm.), Composite: Framework

b. Dependent Variable: Return on Asset

**Appendix 17c: Significance Coefficients for the Moderating effect of Stage of Development on the Relationship between Organizational Configuration and RoA**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.010	7.387		0.949	0.353
	Strategy implementation composite (imp + Comm.)	-0.011	0.040	-0.062	-0.287	0.777
	Strategy formulation	-0.096	0.979	-0.019	-0.098	0.923
	Environment composite	-0.015	0.038	-0.089	-0.405	0.689
	Composite: design	-0.105	0.056	-0.397	-1.893	0.072
	Composite: Framework	0.020	0.059	0.082	0.338	0.738
	Centralization Composite	-0.006	0.027	-0.043	-0.228	0.822
	Formalization Composite	0.049	0.044	0.221	1.112	0.278

a. Dependent Variable: Return on Asset

**Appendix 18a: Model Summary for the Moderating effect of Stage of Development on the Relationship between Organizational Configuration and Market Share**

Model Summary(b)						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	0.617 <sup>a</sup>	0.381	0.184	2.95437	2.087	
a. Predictors: (Constant), Formalization Composite, Centralization Composite, Composite: design, Classification: Composite for strategy formulation, Environment composite: Strategy implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Market Share						

**Appendix 18b: Analysis of Variance (ANOVA) for the Moderating effect of Stage of Development on the Relationship between Organizational Configuration and Market Share**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	118.247	7	16.892	1.935	0.112 <sup>a</sup>
	Residual	192.022	22	8.728		
	Total	310.269	29			
a. Predictors: (Constant), Formalization Composite, Centralization Composite, Composite: design, Classification: Composite for strategy formulation, Environment composite: Strategy implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Market Share						

**Appendix 18c: Significance Coefficients for the Moderating effect of Stage of Development on the Relationship between Organizational Configuration and Market Share**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-12.983	9.745		-1.332	0.196
	Strategy implementation composite (imp + Comm.)	0.029	0.052	0.108	0.553	0.586
	Strategy formulation	-1.306	1.292	-0.180	-1.011	0.323
	Environment composite	-0.026	0.050	-0.103	-0.519	0.609
	Composite: design	-0.051	0.073	-0.131	-0.689	0.498
	Composite: Framework	0.169	0.078	0.474	2.167	0.041
	Centralization Composite	0.008	0.035	0.038	0.224	0.825
	Formalization Composite	0.086	0.058	0.266	1.478	0.154
a. Dependent Variable: Market Share						

**Appendix 19a: Model Summary for the Moderating effect of Stage of Development on the Relationship between Organizational Configuration and Non-financial Performance**

Model Summary(b)						
Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	0.807 <sup>a</sup>	0.651	0.540		7.73348	2.103
a. Predictors: (Constant), Formalization Composite, Centralization Composite, Composite: design, Classification: Composite for strategy formulation, Environment composite: Strategy implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Composite for non-financial performance						

**Appendix 19b: Analysis of Variance (ANOVA) for the Moderating effect of Stage of Development on the Relationship between Organizational Configuration and Non-financial Performance**

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,458.706	7	351.244	5.873	0.001 <sup>a</sup>
	Residual	1,315.748	22	59.807		
	Total	3,774.454	29			
a. Predictors: (Constant), Formalization Composite, Centralization Composite, Composite: design, Classification: Composite for strategy formulation, Environment composite: Strategy implementation composite (imp + Comm.), Composite: Framework						
b. Dependent Variable: Composite for non-financial performance						

**Appendix 19c: Significance Coefficients for the Moderating effect of Stage of Development on the Relationship between Organizational Configuration and Non-financial Performance**

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-45.892	25.508		-1.799	0.086
	Strategy implementation composite (imp + Comm.)	0.194	0.137	0.208	1.419	0.170
	Strategy formulation	-5.290	3.381	-0.209	-1.565	0.132
	Environment composite	0.132	0.132	0.149	1.000	0.328
	Composite: design	0.860	0.192	0.640	4.476	0.000
	Composite: Framework	0.354	0.204	0.285	1.737	0.096
	Centralization Composite	-0.019	0.092	-0.027	-0.209	0.836
Formalization Composite	0.301	0.152	0.268	1.984	0.060	
a. Dependent Variable: Composite for non-financial performance						