

**RESOURCES, EXTERNAL ENVIRONMENT,
INNOVATION AND PERFORMANCE OF INSURANCE
COMPANIES IN KENYA**

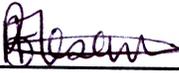
Beatrice Elesani Ombaka

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE AWARD OF THE
DEGREE OF DOCTOR OF PHILOSOPHY IN BUSINESS
ADMINISTRATION, SCHOOL OF BUSINESS,
UNIVERSITY OF NAIROBI**

2014

DECLARATION

I hereby declare that this thesis is my original work. No part of this research has been submitted to any other university or institution for a degree. The works of other scholars cited in this study have been dully referenced.

Signed 
Beatrice Elesani Ombaka
D80/72718/2012

Date 27/11/2014

This PhD thesis has been developed under our guidance as university supervisors.

Signed 
Dr. Vincent N. Machuki, PhD.,
Lecturer, Department of Business Administration
School of Business, University of Nairobi

Date 27/11/2014

Signed 
Dr. Zachary B. Awino, PhD.,
Senior Lecturer, Department of Business Administration
School of Business, University of Nairobi

Date 27/11/2014

Signed 
Prof. Gituro Wainaina, PhD.,
Associate Professor, Department of Management Science
School of Business, University of Nairobi

Date November 27, 2014

COPYRIGHT

All rights reserved. No part of this thesis may be reproduced either in part or whole without prior written permission from the author or the University of Nairobi except in the case of brief quotations embodied in review articles and research papers. Making copies of any part of this thesis for any purpose other than personal use is a violation of the Kenyan and international copyright laws. For information, contact Beatrice Elesani Ombaka at the following address:

P.O. Box 3863-00200

Nairobi-Kenya

Telephone: +254721336288

E-mail: beatrice.ombaka@yahoo.com

DEDICATION

This thesis is dedicated to my children, Collins Alvin Khavaya, Calvin Alvis Onjala and Sabrina Cheryl Nyarotso. May this thesis spur you to work harder and attain your academic dreams. To my spouse Franklin Ombaka for being my pillar and to my parents, brothers and sisters for always being there for me.

ACKNOWLEDGEMENTS

First and foremost, I thank the Lord Almighty for this far He has brought me. His Grace has been sufficient throughout this journey. As I started this academic journey, like Moses in the bible, I told the Lord that if His presence does not go with me, He should not send me from here. He has walked with me till the end. He is a faithful God.

The completion of this thesis has been made possible through the support of many individuals. I would like to express special gratitude to my supervisors, Dr. Vincent N. Machuki, Dr. Zachary B. Awino and Professor Gituro Wainaina for their tremendous support, guidance and many hours of consultation that enabled the completion of this work possible. The time spent in critiquing, correcting and their insights have gone a long way to shape this thesis.

I thank Professor Martin Ogutu, Professor G. Pokhariyal and Dr. P. Magutu who chaired the various presentations for their insights and support. I thank Professor Aosa, who from the early stages of the PhD program encouraged the 2012 class to be focused and decide how long we wanted to stay at the university. It is this challenge that has seen me complete the PhD program in three years. Further, I thank the entire university fraternity for their support in one way or the other. Specifically, I would like to mention Dr. Justus Munyoki and Lydia of School of Business, Department of Business Administration, Regina and Macharia of the Jomo Kenyatta Library among others for always being eager to help.

I sincerely thank my PhD colleagues of the 2012 class who have been a source of inspiration. I would like to single out John Mahasi for peer review and critique, Hannah Waciira and Olivia Odongo, for their moral support during departmental and open forum presentations. I thank Ann Kariuki for her role in data coding and entry in the SPSS. Special gratitude goes to David Kinuu for guidance during data analysis and editing the document despite his busy schedule. I am greatly indebted to you for the role you played in shaping my presentation skills. I thank Walter Ongeti for the moral support throughout this journey. Indeed, Walter was a voice of hope and encouragement when the journey proved to be tough. May God bless you.

I thank my colleagues at Heritage Insurance Company for their support especially Anne Njiru for giving me contacts in the industry. I thank Terry Ndungu, Pritpal Sheikh and Ann Gatete for formatting, photocopying and binding copies of proposals for the various presentations. I thank Geoffrey Thande for editing the document.

Special thanks go to all the respondents who took time off their busy schedules to fill the questionnaires and avail themselves for the interviews. Without their cooperation, there would have been no study. This is consistent with Prof. Nzomo's advice that without data, there is no research. Thank you and May God richly bless you.

Last but not least, special gratitude goes to my spouse Franklin Ombaka and children Collins, Calvin and Sabrina for their patience, encouragement and prayers. I thank Frank for being there for me and the kids throughout the entire period I was engrossed in this

process. They endured many hours of my absence while I pursued the doctoral program. Frank, you became the mother of the children and lessened the burden of parenting. I am forever indebted to you. Thank you for the material and emotional support. Without your unwavering support, it would have been difficult to complete this journey. I thank my parents, brothers and sisters for their prayers and support.

To all those who assisted in one way or the other, please accept my sincere gratitude.

May God bless you all!

TABLE OF CONTENTS

DECLARATION.....	ii
COPYRIGHT	iii
DEDICATION.....	iv
ACKNOWLEDGEMENTS	v
LIST OF TABLES	xiv
LIST OF FIGURES	xviii
ABBREVIATIONS AND ACRONYMS.....	xix
ABSTRACT	xxi
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study	1
1.1.1 Firm Performance	3
1.1.2 Organizational Resources	6
1.1.3 External Environment	8
1.1.4 Innovation in Organizations.....	11
1.1.5 Insurance Companies in Kenya	14
1.2 Research Problem	17
1.3 Research Objectives.....	21
1.4 Value of the Study	22
1.5 Structure of the Thesis	24
1.6 Chapter Summary	25

CHAPTER TWO: LITERATURE REVIEW	27
2.1 Introduction.....	27
2.2 Theoretical Perspectives	27
2.2.1 Resource Based Theory	28
2.2.2 Dynamic Capabilities Theory	30
2.2.3 Open Systems Theory	31
2.3 Organizational Resources	33
2.3.1 Intangible Resources	38
2.3.2 Tangible Resources	43
2.3.3 Organizational Capabilities.....	44
2.4 Dimensions of Organizations' External Environment	47
2.4.1 Environmental Munificence.....	49
2.4.2 Environmental Dynamism	50
2.4.3 Environmental Complexity	52
2.5 Innovation in Organizations.....	53
2.6 Firm Performance and Measurement.....	55
2.7 Organizational Resources and Firm Performance	59
2.8 Organizational Resources and Innovation	60
2.9 Organizational Resources, Innovation and Firm Performance	61
2.10 Organizational Resources, Innovation and External Environment.....	62
2.11 Organizational Resources, External Environment, Innovation and Firm Performance.....	63
2.12 Summary of Previous Studies and Knowledge Gaps	65
2.13 Conceptual Model.....	68

2.14 Conceptual Hypotheses.....	70
2.15 Chapter Summary	71
CHAPTER THREE: RESEARCH METHODOLOGY	72
3.1 Introduction.....	72
3.2 Research Philosophy.....	72
3.3 Research Design.....	74
3.4 Population	75
3.5 Data Collection	75
3.6 Reliability Tests	78
3.7 Validity Tests	80
3.8 Operationalisation of Study Variables	81
3.9 Data Analysis	86
3.10 Chapter Summary	91
CHAPTER FOUR: DATA ANALYSIS AND FINDINGS.....	92
4.1 Introduction.....	92
4.2 Statistical Assumptions	92
4.2.1 Linearity.....	93
4.2.2 Multicollinearity	94
4.2.3 Normality	95
4.2.4 Heteroscedasticity	95
4.3 Response Rate.....	96
4.4 Respondents' Demographic Profiles	97

4.5 Company Profile	100
4.6 Assessment of Organizational Resources	104
4.7 External Environment	110
4.7.1 Environmental Munificence.....	110
4.7.2 Environmental Dynamism	114
4.7.3 Environmental Complexity.....	119
4.8 Organizational Innovation	123
4.9 Firm Performance	128
4.9.1 Non-Financial Firm Performance	128
4.9.2 Financial Firm Performance	131
4.10 Chapter Summary	133
CHAPTER FIVE: TESTS OF HYPOTHESES AND DISCUSSION.....	134
5.1 Introduction.....	134
5.2 Organizational Resources and Firm Performance	135
5.3 Organizational Resources and Innovation	162
5.4 Organizational Resources, Innovation and Firm Performance	169
5.5 Relationship Between Organizational Resources, External Environment and Innovation	175
5.6 Organizational Resources, External Environment and Non Financial Performance	181
5.7 Joint Effect of External Environment, Innovation on the Relationship Between Organizational Resources and Firm Performance	186
5.8 Chapter Summary	195

CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS	196
6.1 Introduction.....	196
6.2 Summary of Findings.....	196
6.3 Conclusion	204
6.4 Implications of the Study	207
6.4.1 Theoretical Implications	208
6.4.2 Implications on Policy	208
6.4.3 Implications on Practice.....	209
6.4.4 Implications for Methodology	212
6.5 Limitations of the Study.....	213
6.6 Suggestions for Further Research	214
6.7 Contribution to Knowledge	214
6.8 Chapter Summary	216
REFERENCES.....	217
APPENDICES	240
Appendix I: Letter of Introduction from University of Nairobi	240
Appendix II: Letter of Introduction from National Commission for Science,	
Technology and Innovation.....	241
Appendix III: Researcher's Letter of Introduction	242
Appendix IV: Research Questionnaire	243
Appendix V: Interview Guide.....	255
Appendix VI: List of Insurance Companies in Kenya.....	256
Appendix VII: Histogram for Non-Financial Performance	258

Appendix VIII: P-P Plot for Non-Financial Performance	259
Appendix IX: Scatter Plot for Non-Financial Performance.....	260
Appendix X: Variance Inflation Factor for Non-Financial Performance	261

LIST OF TABLES

Table 2.1: Various Studies and Knowledge Gaps	66
Table 3.1: Reliability Test Results.....	79
Table 3.2: Operationalisation of Study Variables.....	85
Table 3.3: Summary of Research Objectives, Hypotheses and Statistical Tests	89
Table 4.1: Number of Years Worked in the Current Position	97
Table 4.2: Length of Service in the Firm.....	98
Table 4.3: Highest Level of Education	99
Table 4.4: Age of the Company	100
Table 4.5: Category of the Insurance Business.....	101
Table 4.6: Size of the Firm (Number of Employees).....	102
Table 4.7: Ownership Structure	102
Table 4.8: Scope of Operation	103
Table 4.9: State of Tangible Resources	105
Table 4.10: State of Intangible Resources	107
Table 4.11: Munificence External Environment.....	111
Table 4.12: Predictability of Environmental Factors.....	115
Table 4.13: Changeability of Environmental Factors.....	117
Table 4.14: Frequency of Conducting Surveys on the External Environment	118
Table 4.15: Issues the Firms Have to Deal With	120
Table 4.16: Whether Issues Were Different or Similar	122
Table 4.17: Organizational Innovation	124
Table 4.18: Investment in Research and Development	126

Table 4.19: Expenditure on Research and Development.....	127
Table 4.20: Number of New Products Introduced in the Last Three Years	128
Table 4.21: Non-Financial Firm Performance Measurement	129
Table 4.22: Premium Growth Achieved	131
Table 4.23: Profit Growth Achieved.....	132
Table 5.1: Influence of Tangible Resources on Premium.....	137
Table 5.2: Influence of Tangible Resources on Average Profit.....	138
Table 5.3: Influence of Tangible Resources on Customer Perspective	139
Table 5.4: Influence of Tangible Resources on Internal Business Processes	140
Table 5.5: Influence of Tangible Resources on Learning and Growth.....	141
Table 5.6: Influence of Tangible Resources on Environment Aspect	142
Table 5.7: Influence of Tangible Resources on Corporate Social Responsibility	144
Table 5.8: Influence of Tangible Resources on Non-Financial Firm Performance	145
Table 5.9: Influence of Intangible Resources on Average Profit.....	147
Table 5.10: Influence of Intangible Resources on Premium.....	148
Table 5.11: Influence of Intangible Resources on Customer Perspective	149
Table 5.12: Influence of Intangible Resources on Internal Business Processes	150
Table 5.13: Influence of Intangible Resources on Learning and Growth.....	151
Table 5.14: Influence of Intangible Resources on Environment Perspective	152
Table 5.15: Influence of Intangible Resources on Corporate Social Responsibility	153
Table 5.16: Influence of Intangible Resources on Non-Financial Performance.....	154
Table 5.17: Influence of Organization Resources on Non-Financial Firm Performance	156

Table 5.18: Relationship Between Tangible Resources, Intangible Resources, Research and Development and Process Improvements	163
Table 5.19: Relationship Between Resources and Innovation.....	165
Table 5.20: Organizational Resources and Innovation on Non-Financial Performance	169
Table 5.21: Analysis of Variance of the Influence of Organizational Resources and Innovation on Non-Financial Performance.....	170
Table 5.22: Coefficients of Organizational Resources and Innovation on Non-Financial Performance	171
Table 5.23: Organizational Resources and Innovation on Premium	172
Table 5.24: Analysis of Variance of the Influence of Organizational Resources and Innovation on Premium.....	172
Table 5.25: Organizational Resources and Innovation on Profit.....	173
Table 5.26: Analysis of Variance of the Influence of Organizational Resources and Innovation on Profit	174
Table 5.27: Relationship Between Tangible Resources, Intangible Resources, Research and Development, External Environment and Innovation.....	177
Table 5.28: Relationship Between Organizational Resources, Innovation and External Environment.....	178
Table 5.29 Moderating Effect of External Environment on the Relationship Between Resources and Non-Financial Performance.....	183
Table 5.30: Organizational Resources, Innovation and External Environment on Non-Financial Performance	187

Table 5.31: Analysis of Variance of the Joint Influence of Organizational Resources, External Environment and Innovation on Non-Financial Performance.	188
Table 5.32: Coefficients of Organizational Resources, Innovation and External Environment on Non-Financial Performance	189
Table 5.33: Organizational Resources, Innovation and External Environment on Premium.	190
Table 5.34: Analysis of Variance of the Joint Influence of Organizational Resources, External Environment and Innovation on Premium.	191
Table 5.35: Organizational Resources, Innovation and External Environment on Profit	192
Table 5.36: Analysis of Variance of the Joint Influence of Organizational Resources, External Environment and Innovation on Profit.	193
Table 6.1 Summary of Findings.....	197

LIST OF FIGURES

Figure 2.1: Resource Based View Model	35
Figure 2.2: Brush Framework for Classification of Resources.....	38
Figure 2.3: Conceptual Model	69
Figure 5.1: Moderator Model.....	181

ABBREVIATIONS AND ACRONYMS

AKI:	Association of Kenya Insurers
BMI:	Business Monitor International
BP:	Business Policy
BSC:	Balanced Scorecard
CA:	Competitive Advantage
CBK:	Central Bank of Kenya
CSR:	Corporate Social Responsibility
DCT:	Dynamic Capabilities Theory
GDP:	Gross Domestic Product
HMOS:	Health Management Organizations
IC:	Intellectual Capital
ICT:	Information and Communication Technology
IO:	Industrial Organization
IRA:	Insurance Regulatory Authority
KBT:	Knowledge-Based Theory
OECD:	Organization of European Commission for Development
OP:	Organizational Performance
OST:	Open Systems Theory
OT:	Organization Theory
PESTEL:	Political, Economical, Sociological, Technological, Ecological and Legal
PIMS:	Profit Impact of Marketing Strategy
R&D:	Research and Development

RBT:	Resource Based Theory
RBV:	Resource Based View
ROA:	Return on Assets
ROE:	Return on Equity
SBSC:	Sustainable Balanced Scorecard
SCA:	Sustainable Competitive Advantage
SCP:	Structure Conduct Performance
SPSS:	Statistical Package for Social Sciences
SRI:	Socially Responsible Investment
TBL:	Triple Bottom Line
US:	United States
USD:	United States Dollar
VIF:	Variance Inflation Factors
VRIN:	Valuable, Rare, Inimitable and Non-Substitutable

ABSTRACT

In spite of a growing body of literature on firm performance, explaining why firms in the same industry and markets differ in their performance remains a fundamental question within strategic management field. Researchers have attributed differences in firm performance to resources owned by a firm. However, other researchers have argued that resources alone cannot be a source of competitive advantage. Therefore, the debate is still open. This study sought to contribute to knowledge and was premised on the view that resources influence performance both directly and indirectly through intervening effect of innovation and moderating effect of external environment. The study was anchored on the resource based theory, dynamic capabilities theory, knowledge based theory and the open systems theory. The main objective of the study was to establish the influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya. The study employed a positivist research paradigm and a cross-sectional survey design. Both primary and secondary data were collected from 46 insurance companies. Primary data was collected using a 5 point Likert type questionnaire and an interview guide. Secondary data on financial performance was collected from Association of Kenya Insurers annual report of 2011 and 2012. The study was guided by six specific objectives. To achieve these objectives, eight hypotheses were formulated and tested. Descriptive statistics, correlation and multiple regression analysis were used to analyze data. The findings established that both tangible and intangible resources had a statistically significant influence on non-financial performance of insurance companies in Kenya. However, there were mixed findings as regards the individual influence of resources on various firm performance indicators. Intangible resources evidenced statistically not significant results individually but when combined, they had a statistically significant influence on non-financial performance. The study also revealed that intangible resources had a statistically significant positive moderate correlation with innovation. Tangible resources evidenced a weak positive correlation with innovation that was not statistically significant. Innovation had a statistically significant intervening influence on the relationship between resources and non-financial performance. There was a statistically not significant relationship between organizational resources, external environment and innovation. The external environment did not have a statistically significant moderating effect on the relationship between organizational resources and performance of insurance companies in Kenya. Finally, the joint effect of organizational resources, innovation and the external environment on non-financial performance was found to be greater than that of the individual variables. In the joint influence, innovation had the highest contribution followed by organizational resources. The contribution of the external environment was statistically not significant. The findings of this study lend partial support to previous studies. The results support the resource based view which proposes that resources are a source of a sustainable competitive advantage for the firm. The results of the study are significant for theory, policy and practice. The findings adds to the knowledge in the field of strategic management by establishing that organizational resources influence firm performance both directly and indirectly through intervening effect of innovation. The moderating effect of the external environment was statistically not significant.

Managers will use the findings of this study to identify performance drivers in their respective organizations. More importantly, they should establish which resource combinations will lead to a sustainable competitive advantage. Policy makers should encourage research and development of new products which will enhance insurance penetration and performance of insurance companies in Kenya. Future research could be carried out using other variables to test for intervening effect and moderating effect. They could also carry out a longitudinal study to establish variation in performance in these companies over time.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Strategic management scholars and practitioners have over the past two decades explained why firms in the same industry differ in performance. This has inconclusively been attributed to resources (Barney, 1986; Barney, 1991; Amit and Schoemaker, 1993; Kraatz and Zajac, 2001). Amit and Schoemaker (1993) propose that firms in the same industry perform differently because they differ in terms of the resources and capabilities they control even in equilibrium. Johnson, Scholes and Whittington (2008) argue that the external environment within which firms operates changes continuously presenting firms with challenges and opportunities. To bridge the gap between the challenges, opportunities and the desired level of performance, firms adapt to the external environment through innovation (Leonard-Barton, 1995). For firms to achieve a competitive advantage, they should create more value than their competitors (Porter, 1985; Brandenburger and Stuart, 1996). Empirical research has sought to explain the relationship between resources and performance but the results are fragmented and no consensus has yet emerged (Barney, 1991; Amit and Schoemaker, 1993).

The study is anchored in various theories. Resources are underpinned by the Resource Based Theory (RBT) (Barney, 1991) and the Dynamic Capabilities Theory (DCT) (Teece, Pisano and Shuen, 1997). The key postulation of the RBT is that the unique configuration and bundling of resources in competitive markets leads to Competitive Advantage (CA) and improved firm performance (Barney, 1991).

The DCT postulates that an organization's ability to achieve innovative forms of competitive advantage depends on path dependencies and market positions (Leonard-Barton, 1992 in Teece et al., 1997). The external environment is anchored in the environment dependence framework. The key proposition is that organisations are environment dependent and environment serving. Therefore, firms should adapt to the external environment or be selected out (Ansoff, 1987). This framework is premised on the open systems theory (Burnes, 1996) and the Industrial Organization (IO) economics theory whose key paradigm is the Structure Conduct Performance (SCP) (Mason, 1939; Bain, 1951).

The SCP paradigm postulates that industry structure influences the conduct of firms which in turn determine their performance (Mason, 1939). Innovation is anchored in entrepreneurial theory (Stevenson and Jarillo, 1990) and Knowledge-Based Theory (KBT) (Michailova and Hutchings, 2006). Entrepreneurship theory proposes that the opportunity seeking behaviour of firms will lead to the discovery of new products and processes which in turn enhance firm performance (Stevenson and Jarillo, 1990). The KBT views knowledge transfer and sharing as core to innovation (Michailova and Hutchings, 2006).

The insurance industry in Kenya plays the financial intermediary role that contributes significantly to the realization of the Kenya Vision 2030. Kenya Vision 2030 aims to achieve an average Gross Domestic Product (GDP) growth rate of 10 percent per annum (Kenya Vision 2030 Report, 2007).

The insurance industry falls in the financial services sector, which is among the priority sectors that are expected to spur the country's economic growth. This study therefore focuses on insurance companies because their performance will impact on the achievement of the Vision 2030.

Insurance provides indemnity and risk pooling which facilitate commercial transactions and mitigates losses by providing credit (Association of Kenya Insurers (AKI), 2011). The insurance industry has undergone a number of changes that have impacted on its performance. The insurance industry was liberalized in the 1980s, and since then these companies have been operating in a competitive environment. Increased competition and lack of an effective regulatory framework saw a number of insurance companies such as Strategies Health, Mediplus Health and Kenya National Assurance go under (AKI, 2011).

The external environment has presented both challenges and opportunities for the industry (Business Monitor International (BMI), 2011). The Insurance Regulatory Authority (IRA), advocates for product simplification and innovation activities to promote the image of the industry, enhance customer education and improved processes and systems of member companies to enhance performance (AKI, 2011).

1.1.1 Firm Performance

Performance is widely researched in strategic management field. This is consistent with Porter (1991) who opines that firm performance has been central in strategy research for decades and the central tenet has been why firms differ in performance. March and

Sutton (1997) proposed that most studies of organizational performance define performance as a dependent variable and seek to identify variables that explain variation in performance. McCann (2004) views firm performance as relating to the efficiency and effectiveness of the firm while Hofer (1983) contends that performance is a contextual concept associated with the phenomenon being studied. For the purposes of this study, Daft's (1991) definition of performance as the organization's ability to attain its goals by using resources in an efficient and effective manner is used.

Historically, firm performance was seen to be a function of factors outside the organization. More recently there has been a paradigm shift with scholars arguing that firm performance is affected by organizational factors. Zott (2003) proposed that firm performance is affected by its ability to integrate, build and reconfigure capabilities and competencies. Soh (2003) posits that firms with a more efficient networking strategy will acquire more competitive information about other firms. This information advantage in turn leads to better new product performance and improved overall performance of the firm (Soh, 2003).

Ford and Schellenberge (1982) proposed three frameworks that can be used to measure Organizational Performance (OP). The goal approach, the systems resource approach and the constituency approach. According to Etzioni (1964), goal approach is based on goals which can be implied from the behaviour of organizational members. According to Yutchman and Seashore (1967), the systems resource approach provides a framework to assess OP in terms of key internal and external factors upon which the organization depends for survival.

The constituency approach views the organization as existing to benefit numerous constituents both internal and external to the organization. Its focus is to fulfill constituents needs (Thompson, 1967). Dess and Robinson (1984) propose that regardless of the framework chosen to conceptualize OP, they argue that OP is a complex and multidimensional phenomenon difficult to measure. Historically, financial measures have been used to measure firm performance. These include profit, return on investment, earnings per share, market share, revenue growth and current ratio (Pandey, 1999; Neely, 2003).

Ansoff (1965) posits that return on investment is a commonly and widely acceptable yardstick for measuring business success. However, Hofer and Schendel (1978) argue that growth in sales indicates how well an organization relates to their environment by successfully expanding their product and market scope.

Critics have expressed dissatisfaction with exclusive use of financial data to measure performance. They argue that use of financial data encourages short term and local optimization thus overlooking the long term improvement strategy and ignoring competitor information (Kaplan and Norton, 1992). Due to the inefficiencies of financial measures of performance, the Balanced Scorecard (BSC) (Kaplan and Norton, 1992) which has a more stakeholder-based view was developed. The BSC evaluates corporate performance from four perspectives namely financial, internal business processes, customers and learning and growth. The firm is seen as having responsibilities to a wider set of groups than simply shareholders (Freeman, 1984; Steurer, 2006).

Over the years, performance has evolved to encompass wider definitions and philosophies such as Profit Impact of Marketing Strategy (PIMS). This is grounded on the premise that firms are responsible for more than just creating economic value. In 1997, the Triple Bottom Line (TBL) was developed as a tool for measuring organizational performance (Elkington, 1997). The TBL considers excellence along all the three lines of sustainable reporting (economic, social and environmental) (Hubbard, 2009). The TBL adds social and environmental measures of performance to the economic measures used in organizations.

Environmental performance refers to the amount of resources a firm uses in its operations such as energy, land, water and the by-products from its activities such as waste, air emissions and chemical residues. Social performance refers to the impact a firm has on the communities in which it operates (Hubbard, 2009). Contemporary performance measurement takes cognizance of the BSC and the TBL leading to the Sustainable Balanced Scorecard (SBSC). This study advances an argument that performance is influenced by a host of factors key among them organizational resources, but this influence could be affected by a firm's external environment and innovation.

1.1.2 Organizational Resources

Resources a firm owns and controls are considered as determinants of superior firm performance. Strategic management scholars (Barney, 1991; Marino, 1996) have defined organizational resources as assets, knowledge, capabilities and organizational processes. These resources enable the firm to visualize and implement strategic decisions. Resources are input into the production process and can be tangible or intangible.

Tangible resources include the financial and physical assets that are identified and valued in a firm's financial statements. This includes capital, factories, machines, raw materials and land (Itami, 1987). Intangible resources are more difficult to measure, evaluate and transfer and include employee's knowledge, experiences and skills, firm's reputation, brand name and organizational procedures (Johnson et al., 2008). These attributes of intangible resources make them firm specific thus difficult to imitate. It is thus plausible to argue that they confer to the firm superior performance as compared to tangible resources.

Pioneering the work on resources was Penrose (1959) who posited that firms performed differently because of the way they deployed their bundle of resources. Rubin (1973) contends that resources are not of much use on their own and that firms must process raw resources to make them useful. Building on the work of earlier researchers, Barney (1991) proposed that resources and capabilities should be heterogeneous and imperfectly mobile, valuable and rare to be a source of Sustainable Competitive Advantage (SCA).

According to Grant (1991), resources and capabilities are a source of competitive advantage for the firm. Firms seeking to gain competitive advantage should possess strategic and rare resources as compared to competitors. In addition, they should defend these resources against inimitability in order to achieve SCA. However, resources alone cannot be a source of CA. Teece et al. (1997) argue that a firm's competitive advantage rests on distinctive processes shaped by the firm's specific asset positions and evolution path(s) it has adopted or inherited.

They posit that a firm needs dynamic capabilities to enable them to configure internal and external competencies in addressing rapidly changing environments (Teece et al., 1997). If insurance companies have to improve their performance, they should focus on their capabilities for a SCA.

Their propositions were echoed by Learned, Christensen, Andrews and Guth (1969) who proposed that a firm's success lies in its ability to find or create a distinctive competence. Prahalad and Hamel (1990) posit that core competencies are dependent on identifying organizational resources offering the greatest strategic value. According to Learned et al. (1969) firms seeking to gain a SCA should acquire a stock of assets that offer benefits to customers, be difficult to imitate and should provide access to a variety of markets. The core competence notion (Prahalad and Hamel, 1990) proposes that learning and knowledge creation of firms will lead to cumulative and path-dependency. They posit that firms should not only possess resources but build capabilities and competencies if they are to earn a competitive edge over their competitors (Prahalad and Hamel, 1990).

1.1.3 External Environment

The external environment is one of the key determinants of organizational outcomes. Today's firms are faced with a dynamic and unpredictable environment where technology and rapidly changing competitive approaches impact on the overall performance (Asch and Salaman, 2002). Hence, superior firm performance requires strategic fit with the environment. Those organizations that will excel should continually adapt to the external environment; those which remain rigid will soon be selected out.

Duncan (1972a) defines the environment as the physical and social factors that are considered in the decision-making of individuals in the organization. The external environment is made up of the following sectors; the macro-environment which consists of Political, Economic, Social, Technological, Ecological and Legal (PESTEL) elements. The micro-environment includes labour markets, customers, suppliers, creditors and trade unions. On the other hand, industry environment includes threat of new entrants, bargaining power of suppliers, bargaining power of buyers, threat of substitute products and services and rivalry among firms (Porter, 1980).

Johnson et al. (2008) posit that since firms cannot control factors in the external environment, they have to adapt to them in the most efficient way possible in order to achieve a competitive advantage. Ansoff and Sullivan (1993) posit that organizations are environmental dependent and serving and as such they depend on the environment for inputs which should efficiently be converted to outputs. The outputs should in turn be attracted to the external environment. If the environment rejects the outputs, the firms' survival is not guaranteed. Duncan (1972a) argues that organizations should adapt to their environment in order to remain viable. Dess and Beard (1984) proposed that the environment is a multidimensional construct with three specific dimensions which include munificence, dynamism and complexity.

Munificence refers to the availability of resources with which the environment can support sustained growth and provide organizational slack. According to Boyne and Meier (2009), environment munificence is the potential for organizational growth and

development usually interpreted as the availability of economic resources. They argue that a firm that operates in a given region or sector in which resources are plentiful is in a munificent environment. On the other hand, a firm that operates in a poor region is cursed by a hostile environment. Boyne (2003), established that availability of resources positively affects performance of the firm.

Dess and Beard (1984) argue that dynamism is the extent of unpredictability and change in environmental elements. Thus, environment dynamism is the change over time in munificence and complexity. According to Dess and Beard (1984), there are three elements of environmental change namely the frequency of change, which may vary from seldom to too often. The second element of environmental change is the number of shifts in munificence or complexity. Managers need to be aware of the frequency of change in order to plan ahead.

The third element is turbulence interpreted as the unpredictability of change (Milliken, 1987). Boyne and Meier, (2009) argue that if shifts in external circumstances are predictable, the impact on organizational performance is likely to be small. However, if the future is difficult to predict on the basis of current knowledge and past experience, then the adverse consequences for performance may be substantial (Boyne and Meier, 2009). Miller and Friesen (1983) found that increases in environmental dynamism, hostility and heterogeneity are related to strategic changes in innovation and analysis.

According to Boyne and Meier (2009), complexity is the homogeneity or heterogeneity of the external factors that affect an organization. Dess and Beard (1984) observed that complexity is the heterogeneity of and range of environmental activities. Fernandez (2005) contends that complexity has a negative effect on firm performance. Boyne and Meier (2009) posit that turbulence is unpredictable change in the munificence and complexity of an organization's environment. They posit that the more unpredictable the change, the higher the negative impact on firm performance. Therefore, managers should be in the fore-front in scanning the external environment for information in order to be in charge and not be caught unawares.

Venkatraman and Prescott (1990) argue that the fit between environmental dimensions and strategic orientation will lead to better organizational performance. On the other hand, Bain (1951) and Mason (1939) postulate that organisations posture themselves appropriately through resource configuration to match environmental conditions. Due to external environment volatility, managers should be more flexible if their organizations have to excel.

1.1.4 Innovation in Organizations

Due to the changing customer tastes and preferences and environmental dynamism, a firm's survival and success depends on how it adapts to the external environment. According to Child (1997), innovation is considered as the ability to respond to changes in the external environment and to influence it. Strategic management theory posits that innovation is the primary means by which organizations adjust to their environmental supra-system (Mintzberg, 2008) via strategic choices they make (Child, 1997).

Schilling (2006) defines innovation as new ideas that acquire value by being converted into new products, services and processes at a later time. On the other hand, Mezas and Glynn (1993) define innovation as non-routine, significant and discontinuous organizational change that embodies a new idea that is not consistent with the current concept of the organization's business.

Dess and Picken (2000) argue that innovation is a crucial source of competitive advantage and survival in a given dynamic environment. They contend that organizations innovate to adapt to their environment and to respond to perceived external and organizational changes (Dess and Picken, 2000). Thus, an innovative organization is one that is intelligent and creative (Glynn, 1996), capable of learning effectively (Senge, 1990) and creating new knowledge (Nonaka, 1994). Damanpour (1991) and Porter (1985) propose that innovation can lead to superior firm performance and a SCA. Cohen and Levin (1989) argue that fierce competition increases innovation activities so that firms can outperform competitors. This study proposes that firms that embrace innovation in the presence of environmental uncertainty will achieve an improved performance.

Schumpeter (1934) argues that innovation is reflected in novel outputs that include new products, new processes, new raw materials, new forms of organization and new markets. Innovation has been sighted in both empirical and theoretical literature as critical to organizational renewal and growth which in turn drives competitiveness and superior performance (Child, 1997). Schumpeter pointed out that innovation involves doing things differently.

This study hypothesizes that if firms have to compete effectively in the market place, they should avoid status quo. Firms have to start doing things differently from their competitors for superior performance. Damanpour (1991) suggests that the innovation process involves the possession and use of new knowledge. Conversely, Eisenhardt and Brown (1999) opine that the presence of different organizational resources and capabilities positively affect the outcome of the innovation process. Firms seeking to outperform competitors should invest in employee knowledge creation and encourage employees to come up with innovative ideas in order to stay ahead of competition.

There are diverse ways for firms to innovate that include; business models, products/services, processes and channels to maintain or capture markets. This enables firms to out- distance competitors and to assure long-term growth and survival (Freeman, 1994). As such, firms seeking to earn a competitive advantage over competitors should commit to innovation as it is key to success in the long run.

Palmer and Kaplan (2007) suggest that innovation initiatives just like any other types of change often fail because the outcomes are not invented by the people. Rather, they argue that ideas imposed by senior management and pushed through by individuals with loud voices, seniority or political influences are bound to fail. They suggest that employees should be encouraged to come up with ideas as people support what they help create (Palmer and Kaplan, 2007).

According to the Organization of European Commission for Development ((OECD), 2007), innovation facilitates economic progress and enhances solutions to global challenges. They suggest the following as drivers for innovation, rapid advances in scientific discovery and in general purpose technologies such as Information and Communication Technology (ICT), biotechnology and globalization.

1.1.5 Insurance Companies in Kenya

Insurance companies in Kenya constitute the insurance industry which is governed by the Insurance Act Cap 487 of the Laws of Kenya and regulated by the IRA. The insurance industry plays a vital role in the political, social and economic development of a society. Insurance protects existing capital against loss, offers significant investment in property, equity and bond markets and takes on risk ensuring that the people of a country have peace of mind (AKI, 2011).

According to the AKI report of 2012, the Kenyan insurance industry continues to be dogged by negative attributes such as unhealthy competition, rate cutting, and apathy by consumers. These attributes are due to poor image, fraud and low level of consumer awareness (AKI, 2012). All these factors affect the performance of these firms. If performance is to improve, insurance firms should change the way they do things.

The insurance industry plays a vital role in the Kenyan economy. The Kenyan insurance industry serves a number of valuable economic functions that are different from other financial intermediaries that contribute to the realization of Kenya Vision 2030 goals.

Insurance provides indemnification and risk pooling which facilitate commercial transactions and the provision of credit by mitigating losses (AKI, 2011). Availability of insurance enables entrepreneurs to undertake higher risk, higher return activities than they would do in the absence of insurance. This promotes higher productivity and growth.

There were 46 insurance companies operating in Kenya as at December, 2012. Of these, 23 companies wrote non-life general insurance business, 11 wrote life insurance business while 12 wrote composite of both life and non-life businesses. There have been various changes in the Kenyan insurance sector as a result of IRA establishment in 2006 through the Insurance Amendment Act. This has seen a number of composite companies demerge into life and non-life general insurance companies. The demerger has enabled the management of the respective companies to focus on their line of business unlike in the past when management found themselves torn between growing life or non-life insurance business. This has seen performance of these companies improve and has also contributed to job creation for a number of Kenyans (AKI, 2011).

Apart from the 46 insurance companies, there were four reinsurers namely Kenya Reinsurance Corporation, Zep-Re (Preferential Trade Area (PTA), Reinsurance Company), East African Reinsurance Company and African Reinsurance Corporation. The role of the reinsurance companies is to ensure that insurance companies are indemnified against the risk they pay on the underlying insured risk. Reinsurance enhances financial risk spreading of insurance. It increases the capacity to write insurance, protects against catastrophic losses and financial growth (Raim and Langford,

2007). The reinsurers have given confidence to insurance companies to take higher risks. The Kenyan insurance industry operates in a competitive environment. There have been issues raised regarding price undercutting in order to get business despite IRA having set minimum premiums. Severe competition has seen several companies go under while others have been placed under receivership.

AKI report of 2011 notes that the introduction of new products in the market and the significant improvement in service delivery platforms are expected to propel the insurance industry to a higher growth level (AKI, 2011). This is underpinned by the huge potential of un-tapped insurance market in the country coupled by the on-going efforts by the Government of Kenya in strengthening the regulatory environment of the financial services sector. These include the review of the Insurance Act and the importance placed on insurance services under the Kenya Vision 2030.

For the last 10 years, the insurance industry has grown at an average rate of 15 percent per annum. In 2011, the industry wrote a gross premium of Kshs 91.6 billion compared to Kshs 79 billion in 2010. The year 2010, was however exceptional as the industry recorded 23 percent growth, the highest rate of growth recorded in recent times (AKI, 2012). The economic environment has posed a number of challenges which include the global financial crisis, the Eurozone crisis and the weak shilling that led to high inflation Central Bank of Kenya ((CBK), 2011). The political environment has been unstable following the 2008 post-election chaos that nearly crippled the economy.

Similarly, there have been significant climatic changes that have seen the horn of Africa region experience erratic weather patterns that have adversely affected Kenya's economy (CBK, 2011). However, this has provided an opportunity for new products which include agriculture insurance, livestock insurance and political unrest insurance. The regional integration of the Eastern African Community and the signing up of the East Africa Protocol accord in 2010 opened up 150 million people market and widens the territorial limits of operation. This will enhance performance of these firms (AKI, 2012).

1.2 Research Problem

Explaining why firms in the same industry and markets differ in their performance remains a fundamental question within strategic management circles (Rumelt, Schendel and Teece, 1994). There is no single explanation on the source of variation in firm performance. Differences in performance can partly be explained by a number of factors, key among them the external environment (Bourgeois, 1980), resources of a firm (Helfat and Peteraf, 2003) and continuous innovation that keep a firm a head of competition (Chesbrough, 2003). Amit and Schoemaker (1993) established a direct relationship between resources and firm performance. Strategic management scholars and practitioners however, argue that resources alone cannot explain variation in firm performance. Other factors come in to play, key among them external environment and innovation. Resources, innovation, external environment and performance have been studied in isolation, the results remain fragmented and no consensus has yet emerged. This study joins this debate to investigate the influence of external environment and innovation on the relationship between resources and firm performance.

An integrated empirical research proposed by this study will help shed light on causes of variation on performance of insurance companies in Kenya. Performance of insurance companies is important to the Kenyan economy as the insurance industry is among the industries that will spur economic development and help the country realize Vision 2030. The Kenyan insurance industry has been known to be conservative as innovation has not been fully embraced by these firms.

This is evidenced by the fact that insurance penetration remains low at 3.3 percent. If these companies have to experience improved performance, they should put more emphasis on innovation. Investment in innovation will help firms to adapt to the dynamic environment in which these firms operate. Dynamism of the environment is evident from the fact that some insurance companies have been placed under receivership yet they had good resources. Insurance companies in Kenya are in dire need to improve their performance. An empirical study on organizational resources, external environment and innovation could explain variation in performance in insurance companies.

Review of literature on empirical research established that studies that have focused on the relationship between organizational resources and firm performance remain fragmented and inconclusive (Amit and Schoemaker, 1993; Barney 1991). For instance, Cattani (2005) found that technological performance depended on a firms stock of relevant resources. His study focused on resources and did not link resources to innovation and the influence of external environment.

Kraatz and Zajack (2001) found that organizations that had greater stocks of historical valuable resources were less likely to engage in adaptive strategic change after environmental change. Their study was limited to resources and environment. The current study interrogated the intervening role of innovation on organizational resources and firm performance. Elsewhere, Cucculelli and Ermini (2012) found that product development promotes growth, an antecedent to superior sustained performance. Their study focused on product development and performance; this study brought on board other aspects of innovation such as processes and technology and interrogated the moderating role of external environment on organizational resources and firm performance.

Boyne and Meier (2009) established that environmental turbulence had a negative effect on firm performance. The current study treated external environment as a moderating variable on resources and firm performance. Carmeli and Tishler (2004b) in their survey of 93 Israel industrial enterprises revealed that managerial skills, organizational culture, communication and reputation positively influenced performance. This study integrated resources, external environment and innovation to investigate their influence on firm performance.

Studies conducted in Kenya on performance of insurance companies have focused on firm specific factors (Mudaki, Wanjere, Ochieng and Odera, 2012). Ochola, Muthama and Owino (2006) investigated the influence of weather conditions on performance of insurance industry in Nairobi and found that extreme weather conditions had a negative

influence on performance. Almajali, Almaro and Al-Soub (2012) study revealed that leverage, liquidity, size and management competence index had a positive statistical effect on financial performance of insurance companies in Jordan. Arasa's (2008) study established that employee participation in the strategic management process positively influenced performance of insurance companies in Kenya. Other studies in the Kenyan insurance industry have focused on the effectiveness balanced scorecard as a tool to implement corporate strategy (Boge, 2010).

None of these studies has focused on the influence of organizational resources, external environment and innovation on firm performance. Most of the studies reviewed have been undertaken in firms in different contexts such as United States (US), Jordan and Greece. These findings may not apply to firms in the Kenyan context. An empirical investigation into organizational resources, external environment and innovation is timely and could explain variations in performance of insurance firms in Kenya.

From the foregoing, no known study has looked at the moderating effect of the external environment and the intervening effect of innovation on the relationship between resources and performance of insurance companies in Kenya. There are conceptual, methodological and contextual research gaps which this study addressed. This study takes cognizance of the fact that firm performance may be a function of factors key among them organizational resources. However, this relationship is affected by a host of moderating and intervening factors such as the external environment and innovation. The study addressed the gaps identified from literature review by interrogating the joint

influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya by answering the question: What is the influence of the external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya?

1.3 Research Objectives

The general objective of the study was to determine the influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya. The specific objectives were to:

- i. Establish the influence of organizational resources on performance of insurance companies in Kenya.
- ii. Determine the relationship between organizational resources and innovation of insurance companies in Kenya.
- iii. Determine the intervening effect of innovation on the relationship between organizational resources and performance of insurance companies in Kenya.
- iv. Establish the relationship between organizational resources, external environment and innovation of insurance companies in Kenya.
- v. Establish the moderating effect of the external environment on the relationship between organizational resources and performance of insurance companies in Kenya.
- vi. Establish the joint influence of the external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya.

1.4 Value of the Study

The main aim of this study was to establish the influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya. The study also set to assess why some insurance companies performed better yet others went under. The study makes a significant contribution in strategic management theory advancement. The study was premised on the RBT, DCT, KBT and OST. The results of this study established that resources influence performance both directly and indirectly strengthening the resource based theory. Deploying these resources efficiently through innovation to adapt to the external environment enhances firm success and a sustained competitive advantage in the long run. The results of this study will form a basis for further empirical investigation.

Further, the study has shed light on the nature of influence of various variables on firm performance. The results of this study will provide a better understanding of the resources-performance relationship while clarifying the moderating effect of the external environment and intervening effect of innovation. The results of the study will no doubt add value to practice by establishing factors that affect firm performance and the manner in which they affect the performance. The findings of the study revealed that some resources had a higher influence on performance individually while others had a higher influence on performance when combined. It is anticipated that managers will use efficient combinations of resources to get improved performance. This will enable managers of insurance companies and other firms to focus on key performance drivers in order to improve performance.

The study serves as a source of information to policy makers not only in the insurance industry but also to the government. The insurance industry is one of the sectors that are envisioned to play a key role in the realization of Kenya's Vision 2030 by contributing to the country's economic growth of 10 percent per annum as spelt in the Kenya Vision 2030. The study will provide a better understanding of how managers can enhance performance within the insurance industry given the resources a firm owns, its innovation capability and the external environment it operates in. This will enable the regulator formulate appropriate policies to enhance competitiveness of the insurance industry. Based on the findings, the study recommends IRA to develop and implement policies that will in the long-run strengthen the industry against past failure and enhance firm performance.

Academically, the study will contribute to the growing body of knowledge on the drivers of and causes of variation in firm performance by elucidating conceptual linkages between resources, external environment and firm performance. Finally, this study will make significant contributions to the practice of strategic management. Today's firms are faced with an increasingly dynamic, complex and unpredictable environment where technology, globalization, knowledge and rapidly changing competitive approaches impact on their overall performance. Organizations should continuously adapt to the external environment or be selected out. This study is envisioned to equipped managers with knowledge on causes of variation in performance between insurance firms.

The findings of this study will help managers of insurance companies to focus on critical success factors within their organizations hence improving the performance of their institutions. By establishing that innovation contributes more to performance, managers will need to focus more on innovation if they are to improve the performance of insurance companies in Kenya.

1.5 Structure of the Thesis

This thesis is organized into six chapters. Chapter one presents the background of the study. It briefly discusses the variables of the study namely organizational resources, the external environment, innovation and firm performance. It also discusses the context of the study which is insurance companies in Kenya. The chapter also highlights the research problem, research objectives, value of the study and the structure of the thesis.

Chapter two presents an in depth review of theoretical, conceptual and empirical literature. It presents and discusses the theoretical underpinnings of the study, followed by discussions on key constructs of the study namely organizational resources, the external environment, innovation and firm performance. It then delves in the relationship between study variables. Lastly, the chapter presents a summary of empirical studies and knowledge gaps that resulted into the conceptual framework. The conceptual model and the hypotheses of the study developed from literature review are also presented. Chapter three presents the methodology; this includes the research philosophy adopted for the study, the research design, population of the study and the data collection instrument and method. In addition, it describes instrument validity and reliability and operationalisation of study variables. Finally, data analysis techniques are discussed.

The fourth chapter discusses pretests of multiple regression assumptions, data analysis and interpretation of the results. Research findings are presented at two levels. The first level deals with descriptive analysis of the data in terms of the demographic profiles of the respondents and firms. The demographic variables are cross-tabulated and presented using frequencies and percentages.

Chapter five discusses the second level of analysis which is hypothesis testing. Different relationships of the variables of the study are tested. Hypothesis testing was guided by the research objectives and each hypothesis was tested and subsequently interpreted. Further, the chapter discusses the findings and the results of the study. The findings are discussed in line with each objective in relation to previous studies. Areas of agreement and divergence are highlighted and discussed.

Chapter six presents the summary, conclusion and recommendations of the study. Further, the chapter gives the implications of the study with regard to theory, policy, methodology and practice as well as the limitations of the study. Areas for further research opportunities in the field of strategic management are also discussed.

1.6 Chapter Summary

This chapter has presented the background of the study, discussed briefly the variables of the study that include organizational resources, external environment, innovation and firm performance. This shed light on what other scholars have done and the gaps that need to be filled. The context of the study which is the insurance industry in Kenya was also discussed in light of the study variables.

Further, the chapter gave an over-view of the theories that anchor the study variables namely the RBT, the DCT, the open systems theory and the knowledge based theory. The chapter has also presented the research problem, objectives of the study, value of the study and an outline of the thesis. Chapter two will present the theoretical underpinnings of the study, literature review, conceptual framework and the hypotheses of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents theoretical, conceptual and empirical literature along the key constructs of the study. First, the theoretical underpinnings of the study are presented and discussed. The study constructs are then discussed individually, followed by pair wise review of empirical literature along the hypothesized relationships. This brings in to the fore the state of knowledge and extant gaps in knowledge that the study addresses and help in understanding how the constructs influence performance. It also presents a summary of selected empirical studies on study variables identifying specific knowledge gaps. The chapter further presents the conceptual framework used to address knowledge gaps and the hypotheses of the study.

2.2 Theoretical Perspectives

Strategic management scholars and practitioners have concerned themselves with the search for the differential characteristics that affect performance of organizations. Pfeffer and Salancik (1978) link firm performance and survival to the ability of firms to acquire and maintain resources. According to Barney (1991), these resources must be valuable, rare, inimitable and non-substitutable to be a source of SCA. For organizations to prosper, they should continuously innovate to address rapidly changing environments. Resources owned and controlled by a firm affect its ability to innovate in a changing environment and can be a prerequisite for sustainable superior performance.

If resources a firm owns are to improve firm performance, their innovative propensity within a changing environment should come into play. The study is anchored in several theories key among them the RBT of the firm (Penrose, 1959; Barney, 1991; Helfat and Peteraf, 2003), DCT (Teece et al., 1997), the Open Systems Theory (OST) (Burnes, 1996; Ansoff, 2007) and the Knowledge Based Theory (KBT) (Zack, 1999). The current study links the RBT, DCT, OST and the KBT to provide an inclusive explanation of organizational resources, external environment, innovation and their influence on firm performance.

The RBT was the main anchoring theory of this study. The DCT and the KBT are extensions of the RBT. The RBT proposes that resources owned by the firm positively influence its performance (Barney, 1991). This postulation is enhanced by the dynamic capabilities theory that argues that firms should continuously reconfigure and redeploy these resources to be firm specific if they have to earn a SCA (Teece et al. 1997). This can be enabled if firms encourage knowledge creation among its employees as proposed by the KBT. For firms to succeed in the dynamic environment, the OST suggests that they should continuously adapt to the external environment or die (Burnes, 1996).

2.2.1 Resource Based Theory

The RBT is a major theory in strategic management; it argues that the competitive advantage of a firm is determined by the key resources it owns. The RBT focuses on internal resources of a firm as a source of SCA. The RBT suggests that unique resources are the source of superior performance (Barney, 1991). Penrose (1959) posited that the manner in which firm resources are deployed can be a source of competitive advantage.

She further argued that it is the heterogeneity, not the homogeneity, of a firm's resources that give each firm its unique character. Barney (1991) posited that firms that owned resources that were valuable, rare, inimitable and non-substitutable would attain a sustained competitive advantage. However, Bhatt and Grover (2005) and Bharadwaj, Bharadwaj and Bendoly (2007) propose that the value of an organizational resource can increase in the presence of other complementary resources because it is difficult for competitors to copy the total effect. They posit that the joint value of complementary resources is higher than the total values of their individual.

Based on the premise of Barney (1991), the RBT can be summarized as follows; possessing valuable and rare resources leads to competitive advantage. However, if these resources are inimitable and non-substitutable, the firms will gain a SCA. A firm's SCA will lead to improved performance (Newbert, 2007). Building on the works of earlier scholars, Grant (2001) posits that on their own, few resources are productive and require capabilities for a team of resources to perform some task. He argues that resources should be strategic to enable firms achieve SCA.

Wernerfelt (1984) suggests that firms should identify types of resources which can lead to high profits. He posits that for a firm to earn high returns, it must possess both resource position barriers and entry barriers. This study proposes that resources owned by a firm can be configured through innovation in a dynamic environment to improve a firm's performance.

2.2.2 Dynamic Capabilities Theory

The DCT is an extension of the RBT. The DCT posits that organizational capabilities are the main source of a firm's performance advantages (Grant, 1991). Helfat and Peteraf (2003) define a capability as the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result. On the other hand, Teece et al. (1997) posit that dynamic capability is the firm's ability to integrate, build, and reconfigure internal and external competences in response to rapidly changing environments.

Dynamic capabilities enable an organization to achieve new and innovative forms of competitive advantage (Leonard-Barton, 1992). Grant (2001) argues that while resources are the source of firms' capabilities, capabilities are the main source of competitive advantage. Those organizations that adapt to the external environment survive while those that do not are selected out. According to Teece and Pisano (1994) and Teece et al. (1997), competitive success arises from the continuous development, alignment and reconfiguration of firm-specific assets. As a result, firms that can anticipate and react to the changes emerging in their environment have better opportunities to grow and to be profitable than do their slower rivals.

Knowledge based theory which is also an extension of the RBT contends that knowledge is the firm's most important resource. For firms to remain competitive, they must efficiently manage their intellectual resources and capabilities (Zack, 1999). The RBT proposes that the integration of individuals' specialized knowledge is the essence of organizational capabilities (Conner and Prahalad, 1996; Dierickx and Cool, 1989; Grant, 1996a; Leonard-Barton, 1992).

According to Amit and Schoemaker (1993), if a firm has strategic resources, they will contribute to its competitive advantage. These strategic resources involve explicit and tacit knowledge Nonaka (1994) that is embedded in a company's unique skills, knowledge, resources, and ways of working (Rumelt et al., 1994). Firms that encourage their employees to acquire knowledge are more likely to be more innovative and can have a competitive advantage over other firms. Since the environment has become increasingly dynamic, complex and unpredictable, firms should therefore strive to embrace innovation for success. The constant interaction between the external environment and resources motivates innovation and ultimately affects firm performance.

The KBT suggests that knowledge development and deployment may be a truly SCA (King and Zeithaml, 2003). Baker and Sinkula (1999) posit that a learning climate and firm innovation are highly correlated and that a learning orientation is closely related to organizational innovation. Pioneering works of Smith (1937) suggest that innovation requires the investment of money for it to be successful. For firms to excel, they should embrace an innovation culture for superior firm performance.

2.2.3 Open Systems Theory

The external environment is grounded in the OST, which contends that organisations are affected by factors that occur in the external environment and can have an effect on factors that exist in the internal environment (Burnes, 1996). For organizations to be successful, they should continuously interact with the environment for inputs and outputs. These inputs should be efficiently converted in to outputs which should be accepted by the environment. For superior performance, firms should continuously scan the environment for information that will enable them to be proactive.

Pioneering works of Von Bertalanffy (1950) propose that open systems are living systems; they maintain themselves in exchange of materials with the environment. Unless organizations can have permeable boundaries, they cannot interact with the environment (Kreitner, 2007). Pfeffer and Nowak (1976) argue that organizations as open systems have to make routine transactions with the others in their environment for success. Lawrence and Lorsch (1967) posit that as with any system, an organization can sustain itself by interacting with its external environment or by feeding upon itself. Open and adaptive organizations possess a highly permeable boundary while closed organizations possess an impenetrable boundary.

Theorists caution that perceptual screens, cognitive filters, or schemas can trigger a strategic myopia that can affect the degree to which managers engage in environmental scanning (Lawrence and Lorsch, 1967). Carmeli and Tishler (2004b) posit that closed systems are short lived because, unlike open systems, which delay entropy through import of crucial energies from the external environment, closed systems, do not make exchanges with their environment.

Carmeli and Tishler (2004b) argue that firms compete for scarce resources that are responsible for their existence and only those firms that can make themselves compatible with their task environment avoid mortality. Firms should endeavor to interact with their environment continuously to attract those resources that can enhance performance. A firm will be able to perform well only if it achieves a balance with the environment. Firms should also be compatible with the environment to avoid mortality.

2.3 Organizational Resources

Barney (1986) lists all assets, capabilities, organizational processes, firm attributes and information as resources. Wernerfelt (1984) defines a firm's resources as those (tangible and intangible) assets which are tied semi permanently to the firm. He proposes that resources are brand names, in-house knowledge of technology, employment of skilled personnel, trade contacts, machinery, efficient procedures, and capital. Helfat and Peteraf (2003) define a resource as an asset or input to production that an organization owns, controls or has access to on a semi-permanent basis.

This thesis adopts Marino's (1996) definition which states that resources are assets, knowledge, capabilities, and organizational processes that enable the firm to conceive and implement strategic decisions. He categorized resources in to three categories physical, human and organizational. Physical resources include plant and equipment, technology, financial endowments, location advantages, and raw materials. Human resources include the training, abilities and employee experience. Organizational resources include the firm's reputation, internal systems for research, planning, and motivation and the processes that support these systems (Marino, 1996).

Penrose (1959) pioneered the debate on the importance of resources to a firm's competitive position. She argued that a firm's growth is due to the manner in which its resources are employed. She posits that resources may only contribute to a firm's competitive position if they are exploited in such a manner that their potentially valuable services are made available to the firm.

Penrose sentiments were supported by Wernerfelt (1984) who argued that resources and products were two sides of the same coin. He argued that while a firm's performance is driven directly by its products, it is indirectly driven by the resources that go into their production. This is in tandem with Rubin (1973) who posits that merely possessing resources were not useful by themselves. Wernerfelt (1984) proposed that firms may earn above normal returns by identifying and acquiring resources that are critical to the development of demanded products.

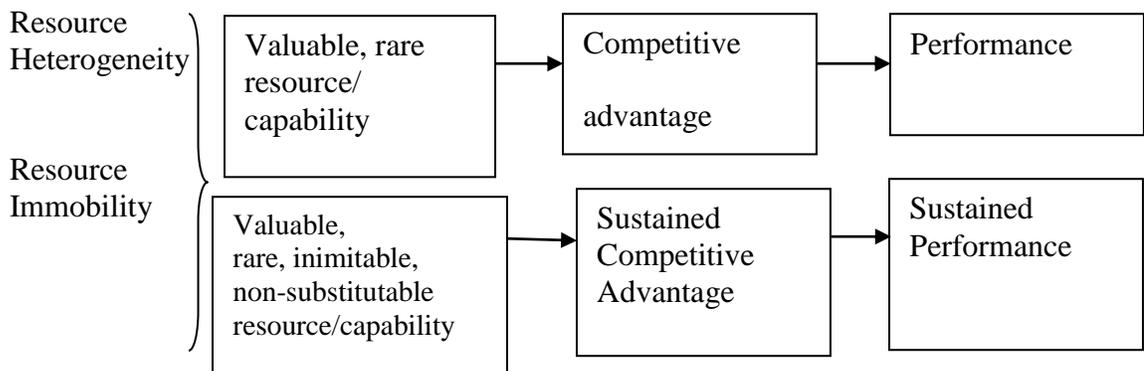
Building on works of previous scholars, Barney (1991) argued that firms that possessed resources that were valuable and rare would attain a competitive advantage and enjoy improved performance in the short-term. Borrowing from Dierickx and Cool (1989), Barney (1991) contended that in-order for a firm to sustain these advantages over time, its resources must also be inimitable and non-substitutable.

Barney (1991) argued that for a resource to be strategically important, it must possess the following characteristics. The resources must be valuable; a valuable resource should be able to deliver value to the firm. Resources are valuable when they enable a firm to formulate and implement strategies that improve its efficiency and effectiveness. The second attribute was that resources should be rare. Barney (1991) argued that resources that are owned by a large number of firms cannot confer competitive advantage, as they cannot deliver a unique strategy as compared to competing firms. Valuable organizational resources that reside within a large number of competitors cannot be a source of SCA (Barney, 1991).

Barney (1991) proposed inimitability as another attribute that a resource should possess in order to be a source of SCA. Barney argued that resources could only be a source of SCA if firms that do not possess these resources cannot obtain them. If an organization is to achieve SCA, it is important that competing organizations cannot imitate these resources. If a valuable resource is owned by one firm, it could be a source of a competitive advantage. This advantage could be sustainable if competitors are not able to duplicate this strategic asset perfectly (Barney, 1991). The resource should have causal ambiguity, which occurs if the source from which a firm's competitive advantage stems is unknown (Peteraf, 1993).

Lastly, a strategic resource should be non-substitutable. Barney (1991) argued that there must be no strategically equivalent valuable resources that are themselves neither rare nor inimitable. If competitors are able to offer a substitute product, then a firm's profits are reduced. According to Barney, if resources possessed the above attributes, they were deemed to offer SCA (Barney, 1991). This is illustrated in Figure 2.1 below in Barney's (1991) conceptual model.

Figure 2.1: Resource Based View Model



Source: Adapted from Barney (1991)

According to the model, if a resource is rare and valuable, it can only lead to competitive advantage. In the present turbulent business environment, this is not enough. For a firm to achieve SCA, in addition to the above two attributes, a firm's resources should be inimitable and non-substitutable. The SCA will in turn lead to sustained superior performance. Amit & Schoemaker, 1993; Mahoney & Pandian, 1992; Peteraf, 1993; Rumelt, 1984; Dierickx & Cool, 1989 have expanded Barney's view to include resource durability, non-tradeability, and idiosyncratic for superior firm performance.

Barney's proposals were criticized by Priem and Butler (2001) who argued that Barney's interpretation of the RBV; the processes through which particular resources provide competitive advantage remain in a black box. Barney (1991) argued that he adopted the assumption that once a firm understood how to use its resource, implementation followed, almost automatically. This proposition is debatable because from a strategic management perspective, implementation has remained a challenge for many firms and good strategies have failed because of implementation problems.

Mahoney and Pandain (1992) argue that a firm may achieve better performance not because it has better resources, but because of the firm's distinctive competence that support better use of resources (Mahoney and Pandain, 1992). Similar arguments have been put forth by Peteraf and by Henderson and Cockburn. They argue that to confer a competitive advantage, valuable resources must be properly leveraged (Peteraf, 1993; Henderson and Cockburn, 1994).

Similarly, Wernerfelt (1984) argues that the basis for a firm's competitive advantage lies primarily in the application of the bundle of valuable resources at the firm's disposal. Thus, firms wishing to gain a SCA should employ their bundle of resources in an efficient and effective manner to achieve competitiveness.

More recently, Brush, Greene, Hart and Haller (2001) have classified resources in a 2 by 2 classification matrix as simple or complex based on the resource type (Figure 2.2). They argue that simple resources are tangible, discrete, and property-based (financial resources are relatively simple in the sense that they are more tangible and quantifiable). They further propose that complex resources are intangible, systematic and knowledge based.

Brush et al. (2001) further classified resources as utilitarian or instrumental based on their application to the productive process. Utilitarian resources are used to produce products or services while instrumental resources are used to provide access to other resources. They argued that complex resources are most likely to be a source of competitive advantage (quadrant 4). These resources are complex, knowledge-based assets which are hard to identify and measure (Brush et al., 2001), not tradable (Priem and Butler, 2001; Wernerfelt, 1984), and embedded in an organization (Szulanski, 1996), thus making them harder for competitors to imitate.

Figure 2.2: Brush Framework for Classification of Resources

		Resource Application	
		Utilitarian	Instrumental
Resource Type	Complex	Quadrant 3	Quadrant 4
	Simple	Quadrant 1	Quadrant 2

Source: Adapted from Brush et al. (2001)

2.3.1 Intangible Resources

The RBV focuses on intangible resources as a source of a firm's SCA. More recent research has shifted focus from tangible to intangible resources because they are thought to be valuable, rare and difficult to imitate leading to a SCA (Barney, 1991). According to Baxter and Matear (2004), a firm's resources can be classified as either tangible or intangible or a combination of both. Similarly, Kostopoulos, Spanos and Prastacos (2002) classified resources as tangible (financial or physical) or intangible (employee's knowledge, experiences and skills, firm's reputation, brand name, organizational procedures). Kapelko (2009) contends that the definition of intangible resources is a problem in intangible research. This is because there is lack of a unified definition and a general classification of intangible resources. She posits that various researchers have classified intangible resources differently.

Stewart (1997) views intangible assets as knowledge, information, experience and intellectual property while Hendricksen and Van Breda (1992) opine that intangible resources are patents, brand names, Research and Development (R&D) and advertising. Empirical and theoretical literature proposes intangible resources as the drivers of a firm's superior performance (Amit and Schoemaker, 1993).

The RBT proposes that a firm's reputation, culture, knowledge and managerial skills (Carmeli and Tishler, 2004b) can lead to a CA. Reputation has been classified as a strategic intangible resource and Barnett, Jermier and Lafferty (2006) define a firm's reputation as observers' collective judgment of a corporation based on assessments of the financial, social and environmental impacts attributed to the corporation over time. They suggest that reputation accrue as an asset through three stages they identify as awareness, assessment and consolidation. The totality of this assessment yields the image which the organization becomes associated with.

Argenti and Druckenmiller (2009) propose that corporate reputation is the objective representation of multiple constituencies' images of a company, built up over time. It is based on a company's identity programs, its performance and how constituencies perceive its behavior. When an organization's reputation is good, it is said that it has a reputational asset (a high intangible value). Cultivating a strong reputation is a necessary foundation for today's firms that intend to beat competition, enhance their market outlook and financial performance as well as sustained existence.

A strong corporate image is associated with employee retention and superior firm performance and also increases customer confidence in a firm's goods and services. Customers and employees will be retained in a particular firm due to its image (Iwu-Egwuonwu, 2011). Strategic management scholars have found that a good reputation leads to superior firm performance (Carmeli and Tishler, 2004b). Iwu-Egwuonwu (2011) suggests that corporate reputation causes an enormous amount of wealth encapsulated in goodwill. He further states that the reputation which organizations orchestrate for themselves causes sustainable profits. Makadok (2001) posits that intangible resources are more important and critical in attaining and sustaining a competitive advantage position because they are not only valuable but also hard to imitate relative to the tangible resources.

In their study of the manufacturing industry of Malaysia; Ismail, Rose, Uli and Abdallah (2012) found a significant relationship between organizational resources, capabilities, systems and competitive advantage and concluded that the three were critical in achieving competitive advantage. Ahangar (2011) posits that in the current knowledge economy, intangible or intellectual assets have been recognized as prominent resources. He contends that currently, firms are mainly driven by technology, knowledge, expertise and relations with stakeholders collectively known as Intellectual Capital (IC). Edvinsson and Malone (1997) define IC as the possession of knowledge, applied experience, organizational technology, customer relations and professional skills that provide a company with a competitive edge in the market.

Bornemann (1999) established that enterprises which managed their IC better, achieved stronger competitive advantage than general enterprises. Conversely, in his empirical study of an Iranian company, Ahanger (2011) found that IC was responsible for profitability and productivity. According to Ahanger (2011) human capital has been recognized as the largest and the most important intangible asset in an organization. It includes the collective knowledge, competency, experience, skills and talents of people within an organization which in turn give a firm competitive advantage. Hall (1992) argues that intangible resources are a source of a firm's exceptional performance because they are a source of heterogeneity and have high barriers to duplication.

Firms are also recognizing the importance of environmental threats such as the climatic change due to the warming of the earth's atmosphere. Consequently, firms are developing strategies and programs to create products and production processes that are more environment friendly. Hunt and Auster (1990) argue that top management involvement in environment management demonstrates the importance given to the environment by the organization. Employees have a responsibility of ensuring that environment management is achieved by their firm (Berry & Rondinelli, 1998). For better performance, employees should be involved in the environmental decisions and in the process of continuous improvement of environmental performance (Florida, 1996). Henriques & Sadorsky (1999) propose that firms that embrace environmental management have top management support, support employee training and internal and external environmental reporting.

Another important intangible resource is knowledge and as a strategic resource, employees' knowledge has been thought to be an important determinant of a firm's success (Nonaka, 1994). Nonaka and Takeuchi (1995) identified two types of knowledge namely explicit knowledge and tacit knowledge. According to them, explicit knowledge refers to structured and codified knowledge that is formal, systematic and easily expressed in the production specifications, scientific formulae or computer programs (Nonaka and Konno, 1998). Conversely, tacit knowledge is unconsciously understood and applied, difficult to articulate and developed directly from experience, and action (Zack, 1999).

In tandem with the above discussion, the primary role of knowledge management is to make tacit knowledge more accessible since it accounts for the majority of an organization's collective knowledge (Clarke and Rollo, 2001). This view is supported by Nonaka (1994) and Knight and Cavusgil (2004) who contend that tacit knowledge is embedded in individuals and cannot be expressed explicitly. Nelson and Winter (1982) also agree that organizational knowledge derived from multiple individual sources is greater than the sum of its parts, and becomes a key strategic asset. Leadership plays an important role in knowledge creation and knowledge sharing for all employees. Leaders must develop capacity in others by creating a climate in which acquiring and sharing knowledge is encouraged or even demanded (Politis, 2002).

Barney (1986) defines organizational culture as a complex set of values, beliefs, assumptions and symbols that define the way in which a firm conducts its business. Schein (2004) posits that organizational culture consists of two layers of concepts, namely, visible and invisible characteristics. The visible layer consists of buildings, clothing and behaviour modes while the invisible layer consists of values, norms, faith and assumptions of business organization members.

Schein (2004) argues that culture can help organizations adapt well to the external environment for rapid and appropriate responses. Peters and Waterman (1982) proposed that firms' with strong cultures had excellent management. Consequently, firms with superior performance were believed to have strong managerial values. However, Barney (1986) proposes that for culture to be a source of SCA, it must be valuable, rare and imperfectly imitable.

2.3.2 Tangible Resources

Bakar and Ahmad (2010) posit that tangible resources include capital, location of buildings, warehouse and other facilities. Conner (2002) argues that tangible resources are a weak source of competitive advantage compared to intangible resources as competitors can easily duplicate them. Chatterjee and Wernerfelt (1984) contend that tangible assets are firm as well as usage specific and are used in a limited number of activities. Jugdev and Mathur (2012) propose that while tangible resources such as hardware, software, systems, methodologies and bodies of knowledge are valuable, they are imitable and unlikely to create a SCA for a firm.

Dierickx and Cool (1989) and Peteraf (1993) posit that the reason why tangible resources fail to meet the necessary conditions to be a critical factor of competitive advantage is the lack of value, heterogeneity, rareness, durability, imperfect mobility, unsubstitutability and imperfect imitability. Barney (1997) observed that tangible resources could be a source of advantage if they were obtained to a sufficient extent and if they had economies of scale (Clarke, 1988).

Barney (1997) proposed that tangible assets include company's land, geographical location, infrastructure, assets such as buildings, ICT, physical networks and other equipment, as well as access to raw materials and energy. Availability of capital has been found to be positively related to firm formation (Gartner, 1985) and to firm growth (Castrogiovanni, 1991). However, Farjoun (1998) posits that tangible resources are limited in the range of industries in which they can be applied. Chatterjee & Wernerfelt (1991) support this notion and argue that there are limitations in reusing tangible resources. In order for firms to prosper, they should have a combination of both tangible and intangible assets.

2.3.3 Organizational Capabilities

The RBT proposes that resources in themselves cannot be sources of competitive advantage. For resources to produce superior performance, they need to be employed in a particular manner. Henderson and Cockburn (1994) define an organizational capability as the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result. Capabilities refer to a firm's capacity to deploy and coordinate different resources, in combination,

using organizational processes, to affect a desired end (Amit & Shoemaker, 1993; Grant, 1996a; Prahalad & Hamel, 1994) in Kostopoulos et al. (2002).

Henderson and Cockburn (1994) classify capabilities as either operational or dynamic. According to Winter (2000), an operational capability is a high-level routine (or collection of routines) that, together with its implementing input flows, confers upon an organization's management a set of decision options for producing significant outputs of a particular type. Zott (2000) posits that dynamic capabilities are embedded in routine organizational processes aimed at changing the firm's resources, operational routines and competences.

The above views are supported by Teece et al. (1997) who argue that the essence of dynamic capabilities is rooted in the firm's organizational processes. They propose that dynamic capabilities build, integrate or reconfigure operational capabilities. Dynamic capabilities do not directly affect output for the firm in which they reside, but indirectly contribute to the output of the firm through an impact on operational capabilities.

Helfat and Peteraf (2003) propose that capabilities, whether operational or dynamic include those to perform individual tasks and those that coordinate the individual tasks. The need to coordinate tasks implies that a capability involves coordinated effort by individuals and teams. (Makadok, 2001) posits that a capability is firm specific since it is embedded in the organization and its processes. Since capabilities are firm specific, then they are inimitable and can thus be a source of competitive advantage. This is consistent with the propositions of Eisenhardt and Martin, 2000; Prahalad and Hamel, 1994; Teece

et al., 1997) who posit that dynamic capabilities are a source of a firm's competitive advantage. If insurance firms are to gain a SCA, they need to configure their resources in to firm specific capabilities difficult to imitate.

A firm will not achieve a SCA based only on resources and capabilities, rather its competences must come in to ensure that the firm stays a head of competition. Warren (2002) opines that organizational competencies are the activities an organization is good at. An innovative organization is one that is able to build and deploy distinctive resources faster than its competitors (Winter, 2003). Firms possessing strong innovation orientations encourage the acquisition of competences that facilitate innovation. The concept of core competence popularized by Prahalad and Hamel (1994) is based on a series of tests that identify organizational resources offering the greatest strategic value.

Prahalad and Hamel (1994) argue that to be considered a core competence, a stock of assets should offer benefits to customers, be difficult to imitate, and provide access to a variety of markets. According to Marino (1996), those bundles of resources that pass these three tests are considered strategic and relevant to the future product and market decisions of the firm. Competences have a technology or knowledge-based component and Marino (1996) proposes that competences often result from a blending of technology and production skills.

In tandem with the above discussion, Prahalad and Hamel (1994) propose that the critical task of management is to create radical new products enabled by the exploitative nature of the firm's core competences. This is echoed by Grant (1991) and Prahalad and Hamel

(1994) who opine that a firm requires capabilities, competences and management ability to deploy resources to produce superior performance. This will in turn lead to a competitive advantage. Teece et al. (1997) contend that it is the way resources are combined that make firms different from one another and in turn allow a firm to deliver superior products and services in the market.

2.4 Dimensions of Organizations' External Environment

Duncan (1972a) posits that the environment is a multidimensional construct. It consists of three dimensions which include, dynamism (Dess and Beard, 1984; Thompson, 1967), complexity (Child, 1972; Dess and Beard, 1984, and hostility (Miller and Friesen, 1978; Mintzberg, 1979). Environmental complexity and dynamism have been closely linked to the information uncertainty perspective (Lawrence and Lorsch, 1967; Thompson, 1967), while hostility has been tied to the resource dependence perspective (Aldrich, 1979; Pfeffer and Salancik, 1978).

According to researchers, two environmental perspectives exist; information uncertainty and resource dependence perspectives. Information uncertainty perspective proposes that the environment is the source of information (Duncan, 1972a; Lawrence and Lorsch, 1967). As a source of information managers can take advantage of this and get information that can be used for future planning. The second perspective is resource dependence, which posits that the environment is a source of scarce resources which are sought after by competing organizations (March and Simon, 1958; Pfeffer and Salancik, 1978).

March and Simon (1958) argue that as the environment becomes less munificent, firms are subjected to greater uncertainty. Therefore management's ability to cope with these conditions by reducing the firm's dependence on or increase its control over these resources will affect the firm's effectiveness. Components of environment dynamism and complexity have been linked to the perceived information uncertainty, while hostility has been linked to resource dependence (Tan and Litschert, 1994).

The business environment is multidimensional construct and Tan and Litschert (1994) and Jauch, Osborn and Martin (1980) have extended the concept to include institutional environment and stakeholder components. The dimensions covered include competitors, customer, suppliers, technological, regulatory, economical, social-cultural and international (Tan and Litschert, 1994).

According to Porter (1980; 1985) organizations do not respond to environments wholesomely. They scan the environment and respond to specific opportunities and threats through either structural reconfiguration or other resource driven strategies. Lumpkin and Dess (1996) identified four key environmental characteristics in their model namely; munificence, dynamism, complexity and industry characteristics. The first three items, dynamism, munificence and complexity, were identified by Dess and Beard (1984) as a refinement of Aldrich's (1979) six environmental dimensions.

2.4.1 Environmental Munificence

Child and Kieser (1981) define environmental munificence as the extent to which an environment can support a business and enable it to grow and prosper. Castrogiovanni (1991) argues that the degree of resource abundance in the firm's environment has a significant impact on the firm's entrepreneurial orientation and growth. Environmental munificence accords the firm greater opportunity to acquire resources. According to Bruno and Tyebjee (1982), environmental munificence is the extent to which critical resources exist in the environment. The more munificent the environment, the greater the firm's opportunity to acquire resources. Availability of capital has been found to be positively related to firm growth (Castrogiovanni, 1991; Covin and Slevin, 1991). Romanelli (1987) further posits that the firm's range of strategic options is broader if resources are available.

Boyne and Meier (2009) contend that munificence is the potential for organizational growth also known as the availability of economic resources. Boyne (2003) posits that abundant resources are positively correlated with better performance. Conversely, organizations that do not have adequate resources may not perform well (Boyne, 2003). In this study, munificence was measured by the favorability of the 12 elements in the external environment. Starbuck (1976) and Dess and Beard (1984) argued that firms will seek out environments that allow them to grow and remain stable. This in turn leads firms to generate slack resources which provide a buffer during periods of scarcity. For organizations to excel, it is imperative that managers be able to scan and interpret the environment and make appropriate decisions for both internal arrangement and external alignment.

Firms operating in competitive environments need a distinctive strategic orientation in order to exploit critical environmental resources and achieve a competitive advantage (Miller and Friesen, 1983). Evidence from Texas school districts showed that proactive networking with key environmental actors has a positive impact on performance (Goerdel, 2006).

Firms should scan the environmental continuously to obtain early warnings about the potential extent of shifts in munificence and complexity (Boyne and Meier, 2009). The abundance of resources in the environment (environmental munificence) is said to have an impact on the firm's entrepreneurial orientation. When managers believe that resources are abundant and available in the environment they are more secure about their ability to acquire resources.

2.4.2 Environmental Dynamism

Dess and Beard (1984) define environment dynamism as change over time in munificence and complexity. Researchers posit that there are three elements of dynamism (Wholey & Brittain, 1989) as cited in Boyne and Meier (2009). The frequency of change in the environment which can be termed as being seldom to too often, how large the changes are from one period to the other (amplitude) and the unpredictability of change.

A plausible extension by Duncan (1972a) is that uncertainty is the rate of change and unpredictability that a firm faces in its markets. Miller (1993) defines uncertainty as the unpredictability of environmental factors that have an impact on firm performance. Dess

and Beard (1984) argue that firms that operate in uncertain environments are characterized by high levels of change and unpredictability in customer wants, competitor challenges and dominant operating technologies. Duncan (1972a) argues that environmental uncertainty is a single, uni-dimensional construct, while Tosi and Slocum (1984) propose that that uncertainty is most appropriately measured in relation to specific environmental components.

This study chose to focus on specific dimensions to measure uncertainty. Waterhouse & Tiessen (1978) posit that environment uncertainty is associated with procedures becoming difficult to specify and organic control systems. When the environment of the organization is relatively predictable and stable over time, procedures can be specified more readily.

Milliken (1987) argues that when shifts in external environment are predictable, the impact on organizational performance is likely to be small. Conversely, if the future is difficult to predict based on the current knowledge and past experience, then the adverse consequences on firm performance may be substantial. Empirical studies have established that turbulence has a negative effect on firm performance (Power & Reid, 2005). Conversely, a study by Boyne and Meier (2009) on the effect of turbulence on performance found that a turbulent environment has a negative impact on performance.

Aldrich (1979) argued that environment turbulence leads to externally induced changes that make it hard for managers to perceive. This leads to poor performance as managers cannot plan for the future. This was echoed by Pfeffer and Salancik (1978) who observed

that dynamism is associated with inter-connection among environmental elements that creates uncertainty and instability making it difficult to plan as the changes come from anywhere without notice. Galbraith (1973) posits that uncertainty affects organization structure, because as uncertainty increases, more information must be processed among decision makers to achieve a given level of performance.

This study measured environmental dynamism through the predictability and change organizations had observed in each set of the 12 factors of the external environment. In a changing environment, firms must continually acquire, develop and upgrade their resources and capabilities if they are to maintain competitiveness and growth (Argyris, 1996a). Burns and Stalker (1961), Lawrence and Lorsch (1967) studied firms in three different industries and concluded that high-performance firms adopt structures that are more suited to competitive conditions in their environments than low-performance firms.

2.4.3 Environmental Complexity

Boyne and Meier (2009) define environmental complexity as the homogeneity or heterogeneity of the external factors that confront an organization. Firms can thus be classified as operating in a simple or complex environment. Firms are said to operate in a simple environment when they deal with one segment of the population. On the other hand, a firm that is tasked with providing services to a heterogeneous population with a variety of different needs is faced by a complex environment (Boyne and Meier, 2009).

Child (1972) defined environmental complexity as the heterogeneity of and range of an organization's activities. Duncan (1972a) as cited in Dess and Beard (1984) posits that managers facing a more complex environment will experience greater uncertainty than managers facing a simple environment. The managers will also have greater information-processing requirements than those in simple environments.

Fernandez (2005) as cited in Boyne and Meier (2009) argues that environmental complexity has been found to have an adverse effect on performance of public organizations. The current study measured complexity dimension using the range of environmental issues and the heterogeneity of the 12 elements in the external environment.

2.5 Innovation in Organizations

Survival for the fittest is the mantra of superior performance and SCA. This is based on organizational ecology which postulates that adaptability to environmental dynamism is not only a prerequisite for superior performance but the hall mark for sustainability. Scholars argue that in the modern environment characterized by hyper competition, innovation is paramount if firms have to earn a competitive advantage (D'Aveni, 1994). Intense and rapid competitive moves require firms to continuously innovate to create new advantages (Dess and Picken, 2000). Firms in turbulent environments must constantly innovate to stay ahead of the competition and to meet changing customer needs (Miller, Droge, and Toulouse, 1988). Calantone, Garcia and Droge (2003) posit that environmental turbulence facilitates innovation. Firms in turbulent environments should continuously scan the environment for information to stay ahead of competition.

According to Schilling (2006), innovation starts from generating new ideas, which later acquire value by being converted into new products, services and processes. As soon as idea is practically implemented it can then be called an innovation. Lundvall (2007) quoting Schumpeter (1934) argues that innovation can be new products, processes, raw materials, forms of organization and markets. Innovation is seen as a culture in which employees are encouraged to challenge and experiment. However, it is argued that innovation oriented firms must create an environment in which employees are free to explore without fear of punishment (Dundon, 2002).

Innovations may range from radical to incremental and as Damanpour and Gopalakrishnan (1999) posit, organizational performance is a function of innovating, not adopting radical, technical, product or any one type of innovation alone. Further, Palmer and Brookes (2002) found incremental innovation improved performance. However, Baker and Sinkula (2002) cautioned that incremental changes translate into only short-term competitive advantages. Datar, Clark, Sunder, Surenda and Kannan (1997) found that faster product development leads to higher market share. According to Smeds, (2001), process innovations are changes in the way business is done. It also involves the way of producing products and services: anything that alters the way the work gets done, the way the jobs get designed, or the way the execution occurs.

Evolutionary theories (Nelson and Winter, 1982; Dosi, 1988; Dosi, Marsili, Orsenigo and Salvatore, 1995) suggest that firms with a commitment to research and development and learning activities will experience a higher growth rate compared to competitors. Bharadwaj, Varadarajan and Jahy (1993) posit that product, process, and managerial

innovations can be used to gain a sustainable competitive advantage so long as the technology underlying such innovations remains exclusive. They posit that technology held proprietary through patents, copyrights or secrecy can deter new entrants, as well as achieve a competitive advantage by exploiting economies of scale through differentiation (Bharadwaj et al., 1993).

Many theoretical articles have investigated the presence of links between firm performance and product innovation (Thompson, 2001; Klette and Kortum, 2004; Lentz and Mortensen, 2005). However, no consensus has been reached on a clear framework for identifying innovation and its outcomes. According to Damanpour and Aravind (2011), organisations innovate to adapt to their environment and to respond to perceived external and organizational changes. Scholars suggest that an organization's propensity to innovate is a dynamic capability which contributes to competitive advantage (Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece, and Winter, 2007). A firm's ability to take risks, innovate and to be proactive is enhanced if it has access to resources.

2.6 Firm Performance and Measurement

Strategic management scholars and practitioners have attempted to explain why some organizations achieve higher levels of performance than others. Thompson (1967) and Schendel and Hatten (1972) suggest that the success of an enterprise seldom depends upon a single factor. Rather, it largely stems from the ability of administrators to reach and maintain a viable balance among a combination of different factors.

A wide range of definitions of firm performance have been proposed by scholars (Barney, 2002). Most studies of organizational performance define performance as a dependent variable and seek to identify variables that produce variations in performance (March and Sutton, 1997). Hofer (1983) posits that performance is a contextual concept associated with the phenomenon being studied.

According to Kirby, (2005) organizational performance is an open question and few studies have used consistent definitions and measures. Daft (1991) defined performance as the organization's ability to attain its goal by using resources in an efficient and effective manner. Lenz (1980) on the other opines that organizational performance refers to the achievement of an enterprise with respect to some criterion. According to Hansen and Wernerfelt (1989), the determinants of a firm's profitability include characteristics of the industry in which the firm competes, the firm's position relative to its competitors and the quality or quantity of the firm's resources.

The popular adage that what gets measured gets done emphasizes the importance of performance measurement. Tangen (2003) defines firm performance measures as metrics employed to quantify the efficiency and/or effectiveness of a firms actions. Kennerley and Neely (2003) suggest that implementing appropriate performance measurement systems ensures that actions are aligned to strategies and objectives. Some strategic management scholars suggest the use of multiple measures while others assert that various aspects of performance may be captured in a single measure (Hatten, Schendel, and Cooper, 1978).

Lenz (1980) posits that in deciding on which performance measure to use, identification of a measure that is relevant to the organizations studied is of outmost importance. The second consideration is to be able to relate findings from the study to previous empirical research on whole organizations.

According to Atkinson, Waterhouse and Wells (1997), performance measurement systems that focus on financial performance measures, lack the robustness needed for internal management and control. Traditional performance measurement systems have also been known to encourage conservatism and a playing it safe attitude. O'Regan and Ghobadian (2004) argue that an effective performance measurement system should not cover only financial measures. This is because financial measures focus on achieving quantifiable performance objectives such as profitability, sales and assets (Heidt, 2008). Tan and Smyrnios (2011) proposed the BSC as one of the most popular approaches used to measure firm performance. Kaplan and Norton (1992) opined that financial measures alone were insufficient, and firms should consider other factors such as competence, knowledge and customer focus.

The central premise of the BSC is to balance the domination of financial perspective in corporate performance and non-financial aspect. According to Kaplan and Norton (1992), the BSC provide a holistic view of firms and examines four areas finance, customers, internal business processes and learning and growth. The finance perspective looks at how well firms satisfy the needs of shareholders who expect a return on their investment. According to Kaplan and Norton (1996), the customer perspective deals with how satisfied the organizations' customers are. It describes the ways in which value can be

created for customers, how customer demand for this value is to be satisfied and why the customer will be willing to pay for it. The customer perspective is the health of the scorecard. If the company cannot deliver the right products and services cost effectively to satisfy the customer needs in the short and long run, revenue will not be generated and the business will wither and die (Kaplan and Norton, 1992).

The internal business process perspective identifies what the organizations key competences are and the areas of operational excellence. The internal business processes evaluates the efficiency and the effectiveness of the firms processes (Kaplan and Norton, 1996). The learning and growth perspective enables the organization to ensure its capacity for long term renewal, a prerequisite for a sustainable competitive advantage. Kaplan and Norton (2005) advocated a balance between these four perspectives to ensure long-term survival and growth.

Vorhies and Morgan (2005) measured firm performance using both quantitative financial measures and qualitative measures. Ghalayini, Noble and Crowe (1997) propose that the most commonly used financial measures are profit margin, Return on Assets (ROA) and Return on Equity (ROE). According to Stone and Banks (1997), softer non-financial measures such as customer and employee satisfaction can be complemented by hard financial measures. According to them, customer-based measures are gaining popularity because of an enthusiasm for customer-led quality improvements, which lead to company profits. They argued that a measure that includes procedures and surveys on customer complaints (Stone and Banks, 1997).

2.7 Organizational Resources and Firm Performance

The origins of the RBT can be traced back to the works by (Penrose 1959; Chandler, 1962; Williamson, 1975). They emphasized on the importance of resources on organizational performance (Conner, 1991; Rugman and Verbeke, 2002). Wernerfelt (1984) gave prominence to the RBV when he observed that a firm's internal resources are primary predictors of superior performance. Firms within the same industry with different stocks of resources and capabilities were thought to perform differently due to superior information about the expected value of resources (Barney, 1986). He further proposed that the valuable resource should enable the firm to conceive of, or implement strategies that improve its efficiency and effectiveness by meeting customer needs. Barney (1991) argues that if a firm is to achieve a state of SCA, it must acquire and control Valuable, Rare, Inimitable, and Non-Substitutable (VRIN) resources. This proposition is shared by other related analyses; core competencies (Prahalad and Hamel, 1994), dynamic capabilities (Helfat and Peteraf, 2003; Teece et al., 1997) and the knowledge-based view (Grant, 1996b).

Capabilities are the ability of a firm to deploy and coordinate different resources in combination, using organizational processes, to achieve a desired goal (Grant, 1996a; Prahalad and Hamel, 1994). Helfat and Peteraf (2003) argue that competitive heterogeneity based on the premise that close competitors differ in their resources and capabilities affects firm performance and competitiveness. Amit and Schoemaker (1993) established a positive relationship between organizational resources and performance. The study proposes that although the presence of resources is an antecedent for superior

performance, not all resources have equal importance. Some resources contribute more to a firm's performance than other resources. For superior firm performance, managers should invest in resources that cannot be easily duplicated by other firms.

2.8 Organizational Resources and Innovation

The RBV addresses the fundamental question of why firms differ in their performance and how they achieve and sustain competitive advantage by deploying their resources. Andrews (1971) proposed that an internal appraisal of strengths and weaknesses, lead to the identification of distinctive competencies. Penrose (1959) argued that it is the heterogeneity of the services available from a firm's resource that give it a unique character. Johnson et al. (2008) posit that resources per se do not lead to SCA. It is the configuration of the resources that lead to superior performance; this is achieved through dynamic capabilities. Lee et al. (2001) posit that availability of financial resources can expand a firm's capacity to support its innovative activities.

Technical resources have also been found to positively affect innovation (Song and Parry, 1997) while Hall, Lotti and Mairesse (2008) attribute differences in firm performance to innovation. Johnson et al. (2008) in their study of large European firms confirmed that systemic change and innovation was high in organizations with increased knowledge intensity. They propose that learning enables firms to generate new knowledge, recombine existing knowledge and skills, in order to adapt to changing market conditions. Lynn et al. (1999) studying high technology US firms found a positive relationship between learning and innovation. The presence of different organizational

resources and capabilities positively affects the outcome of the innovation process (Iansiti and Clark, 1994; Leonard-Barton, 1995). This study proposes that firms seeking to gain competitive advantage should attract different resources and capabilities that will enable the firm innovate to ensure long term survival.

2.9 Organizational Resources, Innovation and Firm Performance

Innovation is a key element of corporate competitiveness in the 21st century, and has therefore attracted special attention from strategic management researchers and practitioners. Researchers (Crepon, Duguet and Mairesse, 1998; Bönte, 2003; Hall et al., 2008; Ortega-Argilés and Brandsma, 2009) among others have investigated the relationship between firm performance and product innovation. Evolutionary theories (Nelson and Winter, 1982) suggest that firms with a strong commitment to research and development and learning will experience a higher growth rate. Darfus, Maggit, Grimm and Smith (2008) posit that resource scarcity, hyper competition, an innovative culture and resources may spur and foster innovation.

Hall et al. (2008) posits that production of new goods reflects innovation activity which has been successful. Product development is one of the mechanisms by which firms create, integrate, recombine, and shed resources. There is empirical evidence that commitment to innovation is a key to success and in the long run can be helpful in earning a competitive advantage for the firm. Cucculelli and Ermini (2012) found that product development promotes growth of firms.

Return on innovation accounting statistics show that as high as 50 percent of corporate revenue is innovation driven (Kotler, 1991). This study proposes that in order for firms to achieve and sustain competitive advantage, they should consistently innovate in order to stay ahead of competition.

2.10 Organizational Resources, Innovation and External Environment

Organizations operate in an open system, the environment, which is characterized by turbulence, dynamism and resource munificence among others. As such, organizations are environmental dependent and environment serving. They depend on the environment for resource input and produce goods or service for the consumption by the environment. Organization processes and outcomes are appraised to a great extent by the environment within which they operate. Fiol (2001) argues that in the current competitive environment, the skills/resources of organizations and the way are used should constantly change to produce continuously changing temporary advantages. Barney, (1991); Dierickx and Cool (1989) posit that innovation and external environment management are resource dependent and driven.

Kraatz and Zajac (2001) in a study of the educational sector in the US found that organizations that have greater stocks of historically valuable resources are less likely to engage in adaptive strategic change after environmental change. Johnson, et al. (2008) propose that to enhance survival, firms should continuous adapt to the changing environment.

Firms should continually acquire, develop and upgrade their resources and capabilities if they are to remain competitive (Argyris, 1996a). Teece et al. (1997) argue that firms should be able to integrate, build, and reconfigure internal and external competences to address rapidly changing environments.

Firms respond to competitive forces through innovation and resources play a critical role in the firm's ability to withstand external environmental pressures through innovation to ensure superior performance. As the environment becomes more turbulent, firms seeking to survive should continuously innovate to stay ahead of competition for improved performance. This study makes the proposition that organizational resources can be configured using capabilities or competencies and leveraged for superior performance by matching the resources with the external environment through innovation.

2.11 Organizational Resources, External Environment, Innovation and Firm Performance

Competitive intelligence helps organizations to identify threats in the external environment capable of impacting negatively on the future of the company. Intelligence also enables firms to identify new opportunities for the organization. This leads to innovation and ultimately benefits the competitive status of the organization. Kropp and Zolin (2005) take cognizance of the fact that the interaction between the environment, resources and innovation is reciprocal.

A firm that has superior capability to develop structures that better innovate products will, in due course, surpass the firm that has the best product innovation capability today (Collis, 1994). This notion is based on organizational ecology (Aldrich, 1979) which postulates that adaptability to environmental dynamism is not only a prerequisite for superior performance but the hallmark for sustainability.

Brittain and Freeman (1980) posit that as the environment becomes more complex, firms seeking to gain competitive advantage over other firms in their environment should become more innovative and proactive. Firms should increase experimental behaviour to find novel answers where old ones no longer work. Resource scarcity compels firms into an innovative mindset with the view to increasing process and product efficiency while ultimately creating SCA. Many enterprises are continuously attempting to develop new and innovative ways to reinforce their competitiveness.

According to RBV, firms should be able to create knowledge within their boundaries. In addition, they should expose themselves to new ideas from their external environment in order to prevent rigidity, to encourage innovative behavior, and to check their technological developments against those of competitors (Leonard-Barton, 1995). The constant interaction between the external environment and the organization encourages innovation, ultimately affecting firm performance.

2.12 Summary of Previous Studies and Knowledge Gaps

The studies reviewed in sections 2.3 to 2.11 present mixed findings on the effect of external environment and innovation on the resource-performance relationship due to different methodologies used, definition of variables and contextual factors. These studies have not tested the causal linkages of all the variables and consequently their joint influence on firm performance. This study addressed the identified gaps by investigating the joint effect of the external environment and innovation on the relationship between organizational resources and performance of insurance firms in Kenya. Table 2.1 presents a summary of previous studies and knowledge gaps.

Table 2.1: Various Studies and Knowledge Gaps

Researcher(s)	Focus	Methodology	Findings	Knowledge Gap	How the Study Addressed Gaps
Danneels (2002)	The Dynamics of Product Innovation and Firm Competences	Field research in five firms using interviews and observation	Product innovation leads to Organizational renewal and could therefore be considered a dynamic capability	Findings based on an in depth study of five firms and focused on product innovation.	The current study focused on external environment, resources and other aspects of innovation. It's a census survey of all Kenyan insurance firms.
Mishina, Pollock and Porac (2004)	Are More Resources Always Better for Growth?	Regression analysis	Firms pursuing product expansion logics generally grow more slowly than firms that are expanding their market base.	Focused on role of competencies and capabilities. Ignored role of innovation and external environment	The current study focused on environment and innovation as intervening and moderating variables in the resource-performance relationship.
Carmeli and Tishler (2004b)	Resources, Capabilities, and the Performance of Industrial Firms: A Multivariate Analysis	Survey of 93 Israeli industrial enterprises	Managerial skills, organizational culture, organizational communication, and perceived organizational reputation positively influence performance	The study focused on the role of selected intangible resources on performance of industrial firms	The current study focused on the role of organizational resources, external environment and innovation on performance of insurance firms in Kenya
Boyne and Meier (2009)	Environmental Turbulence, Organizational Stability, and Public Service Performance	Eight year data of 1,000 Texas district schools	Turbulence has a negative effect on performance. This is compounded by internal organizational change.	Focused on public service and external environment	The current study introduced resources and innovation. Context was the insurance industry in Kenya.

Table 2.1: Continued

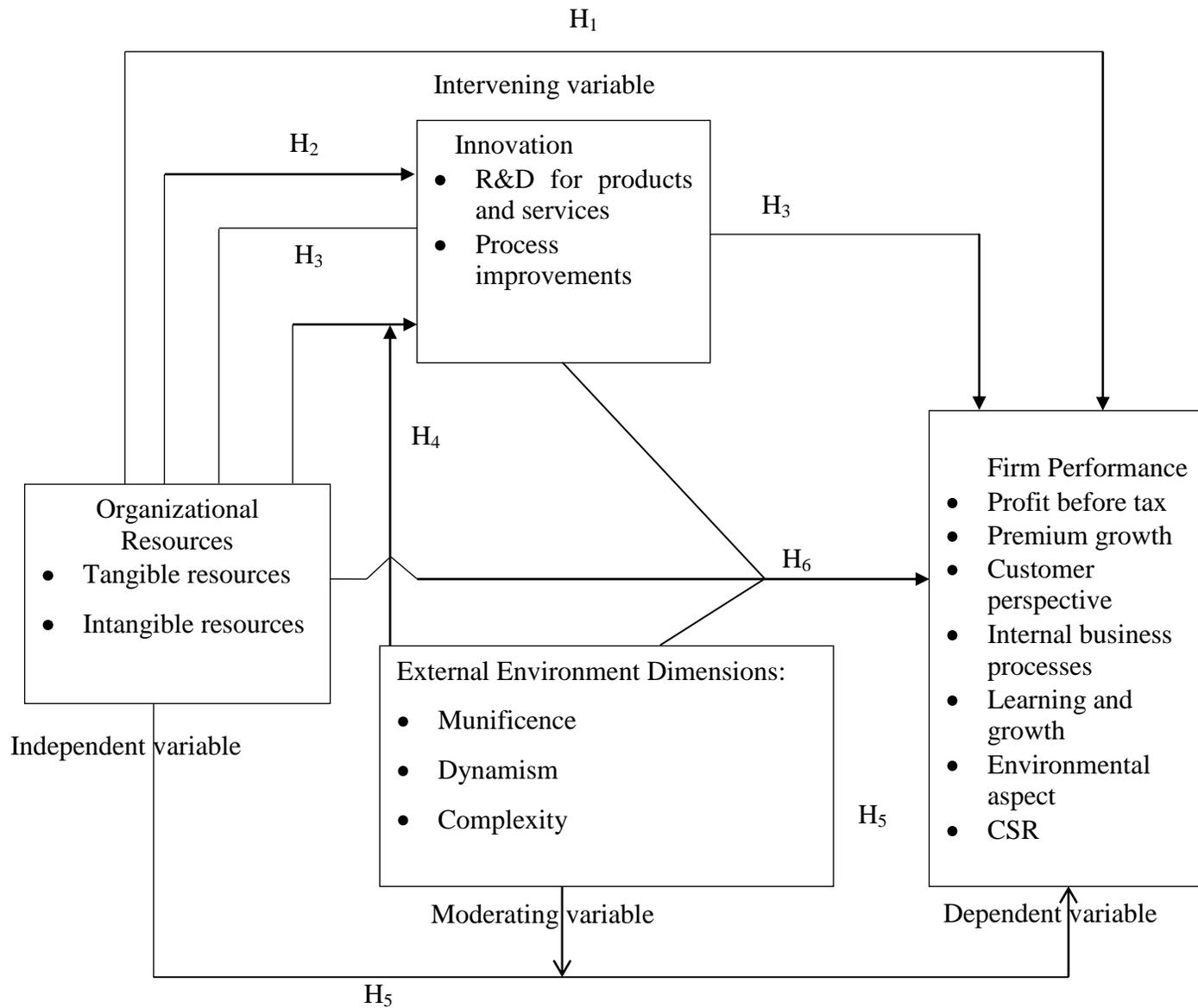
Researcher(s)	Focus	Methodology	Findings	Knowledge Gap	How the Study Addressed Gaps
Mudaki, Wanjere, Ochieng and Odera (2011)	Effects of Operational Factors on Organizational Performance in Kenyan Insurance Industry	Descriptive census survey of 40 insurance firms. Regression analysis.	Operational factors have no relationship with organizational performance	The study focused on the effect of operational factors on performance.	The current study addressed the role of innovation, external environment and resources on performance of insurance companies in Kenya.
Machuki and Aosa (2011)	The Influence of the External Environment on the Performance of Publicly Quoted Companies in Kenya	Cross-sectional survey. Hierarchical as well as multiple regression analyses	Varying degrees of the external environment influence the organizations strategic decision making. Environment is among the factors that affect corporate performance albeit not statistically significant.	The study focused on the role of environment on performance of firms listed at the Nairobi Securities Exchange.	The current study focused on the effect of innovation and external environment on resources and performance of insurance companies in Kenya.
Cucculelli and Ermini (2012)	The Effect of Innovation on Firm Growth	Study of 204 small/medium firms (2000-2006). Cross sectional survey ,interviews	Product development promotes the growth of firms belonging to sectors with stronger commitment to research and development.	The study focused on new products as drivers of growth. Did not focus on resources and external environment.	The current study proposed the external environment and resources also affect performance.
Almajali, Almaro and Al-Soub (2012)	Factors Affecting the Financial Performance of Jordanian Insurance Companies	Longitudinal study (2002-2007), secondary data	Leverage, liquidity, size, and management competence index have a positive statistical effect on the financial performance of Jordanian insurance companies	Findings based on 25 firms listed at the Amman stock exchange. Only used financial performance measures	This study addressed the effect of resources, innovation and external environment on performance of insurance companies in Kenya. It incorporated non-financial performance measures.

From the literature review, it was established that the variables had been studied in isolation. The current study takes cognizant of this fact and has hypothesized the direct, intervening and moderating relationships. The study investigated the intervening influence of innovation on the relationship between organizational resources and firm performance and the moderating influence of external environment on organizational resources and firm performance. Finally, the study investigated the joint influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya.

2.13 Conceptual Framework

The knowledge gaps highlighted in Table 2.1 above lead to the development of the conceptual framework below which was adapted to guide empirical research in filling the gaps identified from the review of conceptual and empirical literature. From the model, organizational resources were the independent variable while firm performance was the dependent variable. The external environment was the moderating variable while innovation was the intervening variable. It is explicit from the review of literature that the variables have been investigated individually and the relationships established. The relationship between resources and performance has been established by scholars. The model supports this direct relationship between resources and firm performance.

Figure 2.3: Conceptual Model



Source: Author

The model proposed that organizational resources influence innovation of a firm. The model further proposed that innovation has an intervening influence on the relationship between organizational resources and firm performance. Another linkage that was suggested was the moderating influence of the external environment on relationship between organizational resources and firm performance. Lastly, the model investigated the joint influence of external environment and innovation on the relationship between organizational resources and firm performance.

2.14 Conceptual Hypotheses

From the relationships in the conceptual model presented in Figure 2.3, the following hypotheses were formulated and tested.

- H₀₁: Organizational resources have no significant influence on performance of insurance companies in Kenya.
- H_{01a}: Tangible organizational resources have no significant influence on performance of insurance companies in Kenya.
- H_{01b}: Intangible organizational resources have no significant influence on performance of insurance companies in Kenya.
- H₀₂: Organizational resources have no relationship with innovation of insurance companies in Kenya.
- H₀₃: There is no significant intervening effect of innovation on the relationship between organizational resources and performance of insurance companies in Kenya.

H₀₄: There is no relationship between organizational resources, external environment and innovation of insurance companies in Kenya.

H₀₅: There is no significant moderating effect of external environment on the relationship between organizational resources and performance of insurance companies in Kenya.

H₀₆: The joint influence of external environment and innovation is different from the influence of individual variables on the relationship between organizational resources and performance of insurance companies in Kenya.

The empirical study investigated the direct effect, the intervening effect and the moderating effect. Further the joint effect was determined and this enabled the researcher to establish whether interrelationships existed among the study variables. This further enabled the hypothesized relationships either to be rejected or fail to be rejected.

2.15 Chapter Summary

Chapter two discussed the theoretical foundations of the study that include the RBT, the DCT, the OST and the KBT. The chapter also presented extensive previous theoretical and empirical literature review on the variables of the study and a summary of previous empirical studies that generated the knowledge gaps.

The aim of the literature review was to generate an understanding of the variables and how they relate to firm performance. A conceptual framework to guide the study was developed. The hypotheses of the study were also presented. Chapter three will present the research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter presents the methodology used to undertake the study. It discusses the research philosophy, research design and the target population. It further discusses the type and sources of data and the methods used to collect the data. Further, reliability and validity of tests, operationalisation of research variables and analysis of data is discussed. Finally, the chapter presents the procedure used for data analysis.

3.2 Research Philosophy

The study adopted the positivist philosophy based on the fact that in order to empirically establish the relationships between variables, hypotheses were formulated and tested and findings generalized. Saunders, Lewis and Thornhill (2007) argue that paradigms are the basic belief systems that guide investigations, in choices of methods and in ontologically and epistemologically fundamental ways.

Saunders et al. (2007) proposed that epistemology is the branch of philosophy that studies knowledge. Epistemology is concerned with determination of the nature and extent of human knowledge. It attempts to address the distinction of adequate and inadequate knowledge. Research in social sciences is guided by two major philosophical schools of thought; that is positivism and phenomenology. Positivism adopts a philosophical stance of the natural scientist who works with an observable social reality (Remenyi et al., 1998) in Holden and Lynch (2004).

Positivists use existing theory to develop hypotheses which are tested and confirmed, in whole or part or refuted, leading to further development of theory which then may be tested by further research (Zikmund, 2003). In the positivist paradigm, the researcher sees himself or herself as a neutral recorder and so different researchers using the same instruments should reach the same conclusions (Weber, 2004; Saunders et al. 2007). Positivistic research is undertaken in a value-free way. The researcher is external to the process of data collection and there is little that can be done to alter the substance of the data collected (Cooper and Schindler, 2006). The researcher is independent and neither affects or is affected by the subject of the research. Emphasis is on quantifiable observations that lend themselves to statistical analysis (Bryman and Bell, 2003).

Phenomenology, on the other hand, is a philosophy of science that focuses on the immediate experience. A phenomenology researcher starts from the unknown, is open and trusts experience (Mugenda and Mugenda, 2003). Phenomenology describes things as they are and not as a researcher thinks they are. Phenomenological analysis is holistic rather than reductionist. Phenomenologists do not break down phenomena; they study it as it is (Mugenda, 2008). By using the positivist paradigm, the researcher was guided by objectivity and was not able to influence the results of the study. Hypothesis testing was undertaken with the intent of either rejecting or failing to reject the hypotheses.

3.3 Research Design

The study adopted a descriptive cross-sectional survey. A research design is the plan for selecting the sources and types of information to be used to answer the research question. It is a framework for specifying the relationships among the study's variables as well as a blue print that outlines each procedure from the hypothesis to the analysis of data (Kerlinger, 2007). According to Cooper and Schindler (2006), cross sectional studies are carried out once. They help a researcher establish whether significant associations among variables exist at some point in time (Nachmias and Nachmias, 2004).

This study sought to establish the relationship between organizational resources and firm performance, the intervening effect of innovation and the moderating effect of the external environment on this relationship in insurance firms in Kenya. The researcher was dealing with events that have already happened and as such had no control over variables in terms of being able to manipulate them. Data was collected from insurance firms to determine linkages between study variables at the time of the survey. The cross sectional survey design was deemed to be the most appropriate as it enabled the researcher determine the relationship between study variables.

This design was successfully used by Machuki (2011) and Munyoki (2007) among other researchers as it enabled them test hypotheses and come up with credible conclusions. Mugenda (2008) posits that cross sectional studies are appropriate where the objective is to establish whether significant associations exist among study variables at some point in time.

3.4 Population

The target population was all insurance firms in Kenya and the unit of analysis was the insurance firm. According to the AKI report (2012), there were 46 firms operating in Kenya as at December 2012 (Appendix VI provides a list of insurance companies). Out of the 46 insurance companies, 11 were doing life business, 23 general business and 12 composite businesses (both life and general). The entire population was studied and thus no sampling was required. The researcher chose a census study as it enabled the study to capture variability of responses. It also enabled facilitate comparative analysis and ensured adequate representation, accuracy and reliability.

Insurance companies were chosen for the study because they provided a unique area in terms of products and services and unpredictability of risks and losses which affect firm performance (Arasa, 2008). Performance of these companies is important as the financial sector in which the insurance companies belong is targeted to help achieve the country's Vision 2030.

3.5 Data Collection

Given the population size, all the 46 insurance firms were contacted to participate in the survey. This eliminated accuracy concerns that arise when samples are used. The study collected both primary and secondary data which was largely quantitative. Primary data was obtained through structured questionnaires and interviews. Secondary data on firm performance was collected to complement primary data. Secondary data was collected from the firm's annual published and unpublished accounts and AKI annual reports.

The study used a triangulation approach of questionnaire and interview guide in the collection of data. Triangulation is the combining of qualitative and quantitative data. Quantitative data was collected using a five point Likert scale questionnaire while qualitative data was collected using an interview guide. Qualitative data was important because it helps deal with deficiencies of one method thus enhancing the validity of the results. This reduces weaknesses of relying on one type of data set and enhances validity of research findings. This is consistent with Aosa (1992) who posits that qualitative data is essential as it helps pick unexpected information and helps interpret/clarify numeric data collected.

During questionnaire pretesting, some respondents took more than a month to return the questionnaires. The researcher decided to administer the questionnaire personally in addition to mailing the questionnaire to enhance the response rate. This is consistent with Sharma, Yetton and Crawford (2009) who opined that personally administering questionnaires enhances the response rate and enables the researcher to get credible responses.

The questionnaire was designed on a five point Likert -type scale ranging from (1) - not at all to (5) - a very high extent. Likert scale is the most frequently used variation of the summated rating scale. It consists of statements that express either a favorable or unfavorable attitude toward the object of interest. Using the Likert, the respondent is asked to agree or disagree with each statement (Cooper and Schindler, 2006). The research instrument comprised of questions generated from previous empirical studies,

theory and the researchers own questions based on the context. Further, the instrument was refined by university resource persons during the various presentations departmental, open forum and doctoral committee.

The questionnaire was divided into five sections; Section A captured information on demographic profile of the respondents and the firm while the rest of the sections focused on each of the research variables. Section B covered data on organizational resources, section C on the external environment, section D on innovation and section E on firm performance. Data was collected through personal administration and emailing of the questionnaires and by use of personal interview.

The target respondents were senior managers of insurance companies and the study targeted Chief Executive Officers (CEO) or designated director, head of department, general manager or line managers. The senior managers were picked from either marketing department or strategy and risk departments. These respondents were best placed to answer the research questions as they were thought to be knowledgeable and define the direction of the organization. They were thus deemed to be able to provide credible responses. The above is consistent with Campbell (1995) who suggests that key informants should be knowledgeable about the issues being studied and also be willing to communicate the information.

Jye and Castka (2009) posit that top management decisions play a crucial role in defining the organizational position. Senior managers are involved in strategic planning and execution at the corporate level and are therefore best placed to answer the research

questions. They were also deemed to be able to give information that was reliable, objective and consistent that was needed for the rigor of this research. A single respondent from each firm filled the questionnaire to avoid information duplication that may arise from multiple responses from a single unit.

3.6 Reliability Tests

Reliability is the extent to which data collection techniques or analysis procedures will yield consistent findings (Mugenda and Mugenda, 2003). It establishes if the measure will yield the same results on other occasions, similar observations are reached by other observers and transparency in the raw data. Reliability was used to check the internal consistency of the data measuring instrument. Cronbach's coefficient alpha determines the internal consistency or the average correlation of items within the test. It was used after collection of data to test the results. Alpha values range from zero - no internal consistency to one - complete internal consistency. The higher the coefficient, the more reliable the measurements scale. Nunnally (1978) proposed that if values were too low, either few items were used or the items had little in common and suggested that a value of .70 and above was sufficient.

Kline (1998) noted that acceptable values for Cronbach's alpha are between 0.7 and 0.9. However, Sekaran (2003) argued that an alpha coefficient of between 0.50 and 0.80 is adequate to accept presence of internal consistency. For the purposes of this study, the alpha coefficient for the sample was put at 0.70. The alpha values of the research instrument are shown in Table 3.1.

Table 3.1: Reliability Test Results

Variable	Number of Items	Cronbach's Alpha	Conclusion
Tangible organization resources	7	.703	Reliable
Intangible organization resources	15	.881	Reliable
Munificence	12	.765	Reliable
Dynamism (predictability)	12	.850	Reliable
Dynamism (change)	13	.840	Reliable
Complexity(issues)	12	.900	Reliable
Complexity(similar/different)	12	.893	Reliable
Innovation	16	.940	Reliable
Non- Financial Firm performance	21	.891	Reliable

Source: Field Data (2014).

From Table 3.1, tangible resources had a reliability coefficient of 0.703 while intangible organizational resources had a reliability coefficient of 0.881. Further, munificence dimension of the external environment had a reliability coefficient of 0.765 while predictability and change had a coefficient 0.850 and 0.840, respectively. Under the complexity dimension, issues the firms had to deal with had a coefficient of 0.900 while similarity/difference in the issues had a coefficient of 0.893. Innovation had a reliability coefficient of 0.940 while non-financial firm performance had 0.891. The reliability coefficients of all the study variables were above 0.70. This is consistent with Nunnally (1978) who argued that a value of 0.70 is recommended, and therefore the measurement scale had a high level of internal consistency.

3.7 Validity Tests

According to Cooper and Schindler (2006), validity is the ability of the research instrument to measure what it is supposed to measure. There are three types of validity namely; construct validity, content validity, and criterion related validity. The study sought to measure content validity. Content validity measures the extent to which the instrument provides adequate coverage of the investigative questions guiding the study. Content validity was determined using expert judgment from lecturers of the University of Nairobi, doctoral research supervisors, research experts and colleagues in the doctoral class.

The questionnaire was pilot tested in five insurance firms randomly selected prior to data collection to establish if the respondents could answer the questions without difficulty. Pretesting helped the researcher to identify any ambiguous and unclear questions. Feedback received was used to fine-tune the questionnaire before embarking on the actual data collection. Following pretesting of the questionnaire, the researcher refined the unanswered questions and rectified those that were ambiguous. For instance, the respondents had expressed fears that questions that needed tabulation would pose a challenge as more time will be required to get the data. Others cited that some respondents would not be willing to give out some of the information. They suggested the questions to be rephrased for ease of answering. These questions were adjusted as appropriate.

3.8 Operationalisation of Study Variables

Operationalization of study variables is important as it enables the researcher to measure variables quantitatively thus enabling testing of the formulated hypotheses. Munyoki (2007) pointed out that no variable is designed to be always independent or dependent variable but depends on the situation. The study variables were operationalised based on research objectives. The variables under the study included organizational resources as the independent variable, firm performance as the dependent variable, external environment as the moderator variable and innovation as the intervening variable.

According to Zikmund (2003), operationalization gives meaning to a concept by specifying the operations necessary to measure it. Dillman (2000) proposed that study constructs should be operationalised in order to test relationships among the constructs in the theoretical model. Kothari (2004) posits that in a Likert scale, respondents are asked to respond to each of the statement in terms of several degrees, usually five degrees of agreement or disagreement. The respondent indicates his/her agreement or disagreement with each statement in the instrument. The technique assigns a scale value to each of the five responses indicating its favorableness or unfavorableness. The scores are totaled to measure the respondent's attitude (Kothari, 2004). Table 3.2 provides a summary on the operationalisation of study variables.

The firm characteristics measured in this study were age of the firm, category of firm, size of the firm, ownership structure and scope of operation. Managerial characteristics comprised the following variables position of the respondent, length of service, number

of years in current position and education level. The size of the firm was measured using the number of employees while firm age was measured using the number of years the organization has been in existence.

Organizational resources were the independent variable for this study and were operationalised based on Barney (1991) and Grant (2001). Organizational resources have been classified in different and overlapping ways. According to Barney resources can be physical, human, and capital (Barney, 1991). Grant (1991) expanded this list by including the technological and reputational aspects. This study categorized resources as tangible and intangible.

The study classified organizational resources into seven strategic resources namely physical, financial, reputational, culture, capabilities, knowledge and technological (Amit and Schoemaker, 1993; Barney, 1991). The specific measures for tangible resources were physical and financial resources while the measures for intangible resources were knowledge and skills, reputation, culture, capabilities and technology.

The external environment was the moderating variable and through empirical and theoretical exploration, the external environment was measured using a modified model from Tan and Litscherts' (1994) framework and Machuki's (2011) framework. In their study of Chinese firms in the electronic industry, Tan and Litschert (1994) operationalised the external environment using the three environmental dimensions of munificence, complexity and dynamism. They also used eight environmental segments of competitors, customers, suppliers, technological, regulatory, economic, social-culture, and international.

This study modified the Tan and Litscherts' (1994) model and used the three environmental dimensions of munificence, dynamism and complexity. Further, the study used the PESTEL framework and Porter's (1980) five forces model. The five forces model comprises of threat of new entrants, bargaining power of buyers, bargaining power of suppliers, industry competition and threat of substitute products. Industry regulations were also used as a measure. This model was used by Machuki (2011) who also modified the environmental segments and used 15 segments.

Duncan (1972a) considered the environment as all those variables outside the organization and these include customers, supplier's, governments and trade unions. The specific variables for this study were political, economic, social cultural, technological, ecological, legal requirements, industry regulations, threat of new entrants, threat of substitute products and services, bargaining power of customers, bargaining power of suppliers and competition among firms. The PESTEL framework categorizes environmental factors into six main types; political, economic, social, technological, environmental and legal (Johnson et al., 2008). Porters' (1980) five forces analysis provides an understanding of the competitive nature of an industry. The five forces framework helps identify the sources of competition in an industry or sector.

Innovation was another variable considered for this study and was the intervening variable. Based on extensive empirical and theoretical literature review, innovation was operationalised as two aspects namely, R&D and process improvements. The specific measures were number of new products and services, unique processes and channels, technology adoption and amount of money spend on R&D.

The dependent variable was firm performance and this study used both financial and non-financial indicators to examine firm performance. Non-financial performance indicators were based on the BSC approach of Kaplan and Norton (1992; 1996) that captures both qualitative and quantitative performance indicators. The study also included social and environmental aspects in line with Hubbards' (2009) proposition.

Financial performance measures for this study were three-year data from the AKI's industry report (AKI, 2012) and included profit before tax and premium. Arasa (2008) study used claims cover ratio, premium and profit as financial performance indicators for insurance companies. Non-financial performance indicators consisted of 21 statements on customer perspective, learning and growth, internal business processes, CSR and environmental aspect; the measures of variables are summarized in Table 3.2.

Table 3.2: Operationalisation of Study Variables

Variable/Nature	Operational Indicators	Measure	Questionnaire Items	Supporting Literature
Organizational resources - independent	Tangible resources: physical resources, financial resources Intangible resources: knowledge, capabilities, reputation, culture, technology	Ratio scale 5 -point Likert type scale	12 13	(Barney, 1999) (Grant, 1996a) (Pearce and Robinson, 2007)
External environment-moderating	Dimensions Munificence: favorability of the environment in terms of abundance or scarcity of resources Dynamism: degree of predictability and changeability of environmental factors Complexity: range of environmental issues and their heterogeneity.	5- point Likert type scale	14 15 16	(Tan & Litschert, 1994) (Venkatraman & Prescott, 1990) (Aldrich,1979) (Porter,1980)
Innovation-intervening	Research and development, processes improvements	5- point Likert type scale	17	(Lundvall, 2007; Schilling, 2006)
Performance-dependent	Financial indicators: profit, premium. Non-financial indicators: Customer perspective Learning and growth Internal business processes, CSR, environmental aspect.	Ratio scale 5- point Likert type scale	18	(Pandey,1999) (Hubbard, 2009) (Kaplan & Norton, 1992; Tsai et al., 2009)

3.9 Data Analysis

Data were analyzed using both descriptive and inferential statistics. Descriptive statistics such as frequency distribution, measures of central tendency, measures of dispersion, percentages, t- tests and tests of significance were computed to analyse the demographic data. Descriptive analysis was conducted on the characteristics of the sample. Hypotheses were tested using simple and multiple regression analyses. This was to determine the relationship between organizational resources, external environment, innovation and firm performance.

The study used simple linear regression analysis to test the influence of organizational resources on firm performance. Correlation analysis was used to determine the relationship between organizational resources and innovation. Composite indices were computed to aid in regression analysis. Pearson (product moment) correlation coefficient (r) was used to establish the extent of correlation between study variables and the strength of the linear relationship (Cooper and Schindler, 2006). P-value and t- statistic were used to determine the individual significance of the coefficients while the F statistic was used to determine the overall model significance.

To test for the intervening effect of innovation on the relationship between organizational resources and firm performance, the study used hierarchical regression analysis. This enabled the researcher to add variables sequentially to the regression equation. It helped determine how much each set of these candidate variables added to the prediction of the dependent variable over and above the contribution of the previously included

independent variables (Cohen et al., 2003). The first step in testing for the intervening effect involved establishing the direct relationship between organizational resources and performance. The second step involved establishing the joint effect of organizational resources and innovation as predictors of firm performance. The intervening influence of innovation could only be confirmed if the joint influence of innovation and organizational resources was more than that of the direct influence.

The moderating influence of the external environment on the relationship between organizational resources and firm performance was determined using Baron and Kenny model of 1986. In the first step, the direct influence of organizational resources on firm performance was established. In the second step, organizational resources, external environment and an interaction term were entered in to the model as predictors of the outcome variable-firm performance. The joint relationship accounts for additional variance in the dependent variable beyond that explained by organizational resources. Moderation could only be present if the joint influence explains a statistically significant amount of variance in the dependent variable.

To determine the joint influence of the external environment and innovation on the relationship between organizational resources and firm performance, hierarchical regression analysis was used. Multiple linear regression analysis was done to determine the joint influence of organizational resources, external environment and innovation on firm performance.

Multiple linear regression analysis was used to come up with the model expressing the relationship between the dependent variable (firm performance) and predictor variables (organizational resources, external environment and innovation). Multiple regression analysis yields the coefficient of determination (R^2) which provided the proportion of variance in the dependent variable accounted for by the combination of predictors (Mugenda and Mugenda, 2003). Multiple regression analysis was performed at 95 percent confidence level and the regression model is presented in Table 3.3.

Qualitative data was collected using the interview guide to compliment the quantitative data using question and answer sessions. This was important as it enabled the researcher to probe responses with further questions which provided depth in understanding the phenomena being studied. This data was analyzed using content analysis. Identification of trends was done and recurrent themes summarized to highlight emergent lines of interest. Meanings were condensed into constructs and then related to research objectives.

According to Nachmias and Nachmias (2004), content analysis is a technique used for making inferences through systematic and objective identification of specified characteristics of messages and using the same to relate trends. They posited that content analysis does not restrict respondents and has potential of generating more information with much detail (Nachmias and Nachmias, 2004). Therefore, the results from the interviews were used as excerpts when discussing descriptive statistics to enhance validity of the results.

Table 3.3: Summary of Research Objectives, Hypotheses and Statistical Tests

Objectives	Hypotheses	Analysis and Tests Done
Objective 1 To establish the influence of organizational resources on performance of insurance companies in Kenya.	H _{01a} : There is no statistically significant influence of tangible resources on performance of insurance companies in Kenya. H _{01b} : There is no statistically significant influence of intangible resources on performance of insurance companies in Kenya.	Simple linear regression analysis, t-test was conducted to establish individual significance of the relationship F- test was done to assess overall significance of the regression model $P_1 = \beta_0 + \beta_1 X_1 + \varepsilon_1$. P = performance, β_0 = constant, β_1 = regression coefficient, X_1 = organizational resources, ε_1 = error term
Objective 2 To establish the relationship between organization resources and innovation of insurance companies in Kenya.	H ₀₂ : There no relationship between organizational resources and innovation of insurance companies in Kenya.	Correlation analysis was performed using Pearson product moment correlation to establish the relationship between organizational resources and innovation.
Objective 3 To determine the intervening effect of innovation on the relationship between organizational resources and performance of insurance companies in Kenya.	H ₀₃ : Innovation has no significant intervening influence on the relationship between organizational resources and performance of insurance companies in Kenya	Multiple regression analysis, t- test was conducted to establish individual significance of the relationship F- test was conducted to assess overall significance of the regression model $P_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_3$. P ₂ = performance, β_0 = constant, β_1 , β_2 = regression coefficients, X_1 = organizational resources, X_2 = innovation, ε_3 = error term

Table 3.3: Continued

Objectives	Hypotheses	Analysis and Tests Done
<p>Objective 4 To determine the relationship between organizational resources, external environment and innovation of insurance companies in Kenya.</p>	<p>H₀₄: There is no relationship between organizational resources, external environment and innovation of insurance firms in Kenya.</p>	<p>Correlation analysis was performed using Pearson product moment correlation to establish the relationship between organizational resources, external environment and innovation.</p>
<p>Objective 5 To determine the moderating effect of external environment on the relationship between organizational resources and performance of insurance companies in Kenya.</p>	<p>H₀₅: The external environment has no significant moderating effect on the relationship between organizational resources and performance of insurance firms in Kenya.</p>	<p>Multiple regression analysis (Baron and Kenny, 1986). t- test was conducted to establish individual significance of the relationship F- test was conducted to assess overall robustness and significance of the regression model $P_3 = \beta_0 + \beta_1 X_1 + \beta_3 X_3 + \varepsilon_4$. P_3= performance, β_0= constant, β_1, β_3= regression coefficients, X_1= organizational resources, X_3= external environment, ε_4= error term</p>
<p>Objective 6 To determine the influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya.</p>	<p>H₀₆: External environment and innovation do not have a statistically significant influence on the relationship between organizational resources and performance of insurance companies in Kenya.</p>	<p>Multiple regression analysis, t- test was conducted to establish individual significance of the relationship F- test was conducted to assess overall significance of the regression model $P_3 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_5$. P_3= performance, β_0= constant, $\beta_1, \beta_2, \beta_3$= regression coefficients, X_1= organizational resources, X_2=innovation, X_3 = external environment ε_5= error term</p>

3.10 Chapter Summary

This chapter has presented the research methodology adopted for the current study. The chapter has described the research philosophy, research design, population of the study, data collection instruments, data collection method, reliability and validity of the data instruments.

The chapter further presented operationalisation of study variables and analytical techniques and models. The analytical techniques used included descriptive statistics, regression analyses, correlation analyses and hypotheses testing. The next chapter presents pretests of multiple regression assumptions, findings of descriptive data analysis and interpretation of results.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents preliminary findings of the study variables. While the overall objective of the study was to determine the influence of the external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya, it was necessary to investigate the manifestations of the variables. Descriptive statistics were used to analyze the demographic data and was presented in frequency tables, mean, standard deviation, coefficient of variation, one sample t-test and significance tests. Further, the chapter presents pretests of statistical assumptions and descriptive and demographic research findings. The findings were interpreted, discussed and excerpts from interviews presented.

4.2 Statistical Assumptions

Statistical tests rely upon certain assumptions about the variables used in the analysis. Osborne and Waters (2002), opine that when these assumptions are not met the results may not be valid. They further argue that this may result in a type I or type II error, or over or under-estimation of significance or effect size(s). It is therefore important to pretest for these assumptions for validity of their results. Osborne, Christensen, and Gunter (2001) observed that few articles report to having tested assumptions of the statistical tests they rely on for drawing their conclusions.

According to Osborne and Waters (2002), not pretesting for these assumptions has led to a situation where there is rich literature in education and social science, but questions in to the validity of many of these results, conclusions, and assertions still exist. Testing for assumptions is beneficial as it ensures that an analysis meets the associated assumptions and helps avoid type I and II errors (Osborne and Waters, 2002). Prior to data analysis, the following assumptions for linear regression were checked multicollinearity, linearity, normality and heteroscedasticity.

4.2.1 Linearity

Multiple linear regressions can only accurately estimate the relationship between dependent and independent variables if the relationships are linear in nature (Osborne and Waters, 2002). Absence of a linear relationship between independent variables and the dependent variable leads to the results of the regression linear analysis to under-estimate the true relationship.

Linearity of data means that the values of the outcome variable for each increment of a predictor variable lie along a straight line. Linearity is an important association between the dependent and the independent variables. In this study, linearity was tested using scatter plots and Appendix IX shows a general linearity of data despite some cases being slightly away from the regression line. This was an indication of a linear relationship among study variables.

4.2.2 Multicollinearity

Multicollinearity occurs when there is a high degree of correlation between independent variables. In order to test for multicollinearity, Variance Inflation Factor (VIF) was computed using Statistical Package for Social Sciences (SPSS). Multicollinearity increases the standard errors of the coefficients and thus makes some variables statistically not significant while they should otherwise be significant (Osborne and Waters, 2002).

If the VIF for one of the variables is around or greater than five, it is concluded that there is collinearity associated with that variable. The VIF measures how much the variance of the estimated coefficients is increased over the case of no correlation among the independent variables. If no two independent variables are correlated, then all the VIF's will be 1.

If there are two or more variables that have a VIF around or greater than 5, one of these variables must be removed from the regression model. If this happens, the researcher should use one set of the independent variable to make the estimate (Kothari, 2004). In this current study, all variables had a VIF of between 1.094 and 1.391 as shown in Appendix X. This was an indicator that there was no multicollinearity among the independent variables.

4.2.3 Normality

Osborne and Waters (2002) propose that regression analysis assumes that data is normally distributed. Non-normally distributed data can distort relationships and significance tests and hence statistical inference. Data that is not normally distributed may lead to inaccuracy of results. This study tested for normality using histograms. Normally distributed data is distributed symmetrically around the centre of all scores and is characterized by a bell shaped curve (Field, 2009). Non-normal data has characteristics of skewness and kurtosis.

Appendix VII shows a histogram for non-financial performance data from insurance companies which was bell shaped indicating that the data was normally distributed. The standard deviation was 0.95 on a sample of 32 companies indicating normal distribution. Further, the p-p plot in Appendix VIII shows data points that lay along the straight regression line an indication that data was normally distributed.

4.2.4 Heteroscedasticity

Heteroscedasticity occurs when the variance of the errors of the dependent variable are not the same across the data. Tabachnick and Fidel (2001) and Field (2009) posit that heteroscedasticity occurs when there is variance of the error term. It occurs when the variance of errors differs at different values of the independent variables. Berry and Feldman (1985) and Tabachnick and Fidel (1996) posit that slight heteroscedasticity has little effect on significance tests.

When heteroscedasticity is marked, it can lead to serious distortion of findings and seriously weaken the analysis thus increasing the possibility of a type I error. Heteroscedasticity occurs when the residuals are not evenly scattered around the horizontal line. In this study, assumption of heteroscedasticity was measured using the VIF. Appendix X shows that the VIF of the study variables was between 1.094 and 1.391 an indication that there was no heteroscedasticity. After testing for these assumptions and getting favorable results, the researcher proceeded to carry out further statistical tests (hypothesis testing).

4.3 Response Rate

The population of the study comprised of 46 insurance companies, however, 32 firms completed and returned the duly filled questionnaires, which was a response rate of 69.5 percent. This was an acceptable response rate as it compared well to similar studies conducted both locally and internationally. Machuki (2011) had a response rate of 43.3 percent. Arasa (2008) undertook a study on insurance companies and had a response rate of 72 percent. Conversely, Tan and Litscherts' (1994) study on environment strategy relationship of the Chinese electronic industry had a response rate of 40.2 percent.

Awino (2007) had a response rate of 65 percent and proposed that an average response rate of 65 percent for empirical studies is acceptable. This was an acceptable response rate compared to previous studies and can be considered representative of the population and can thus be generalized.

4.4 Respondents' Demographic Profiles

The respondents' characteristics were analyzed in terms of length of service in the current position, length of service in the company and the highest level of education attained. The designation of respondents was also important as the type of respondent is attributed to being able to give data that is reliable and objective. The respondents of the study were one CEO, strategy and risk managers, underwriting managers and marketing managers.

The respondent's length of service in the current position was important as it showed that they had interacted with the firms' systems long enough and were capable of giving credible responses. Table 4.1 shows the distribution of the respondents' length of service in the current position.

Table 4.1: Number of Years Worked in the Current Position

Years in Current Position	Frequency	Percentage
0- 5	25	78.1
6-10	7	21.9
Total	32	100.0

Source: Field data (2014)

The results in Table 4.1 indicate that 78.1 percent of the respondents had worked in the current position for at least five years. Length of service has been associated with experience. Thus the respondents were deemed to be authoritative and could give relevant information which was up to date. The study's respondents were thus in a good position to give reliable information. The study sought to establish the respondents' length of service in the firm and the results are shown in Table 4.2.

Table 4.2: Length of Service in the Firm

Years in Service	Frequency	Percentage
Below 5	17	53.1
6-10	11	34.4
11-15	1	3.1
16-20	2	6.3
Over 20	1	3.1
Total	32	100.0

Source: Field data (2014)

From the results in Table 4.2, 53.1 percent of respondents had worked for their respective firms for between one and five years and this indicates that majority of the respondents had worked in the firms for up to five years. The fact that senior managers had been in the organization for only five years might be an indication of high staff mobility in the insurance industry. This may be due to the fact that the products offered by insurance companies are similar and it is therefore easier to poach employees from other organizations that have already trained their staff.

Studies have shown that when employees stay long in a firm, they get used to the status quo and so it becomes hard for them to embrace change. The fact that majority of the respondents had worked in the current firm for up to five years is consistent with Pfeffer (1983) who argues that long tenures lead to rigidity suggesting that for change or adaptation to occur, there must be some infusion of new blood into the organizational context. The study also sought to establish the highest level of education attained by respondents and the results are shown in Table 4.3.

Table 4.3: Highest Level of Education

Level of Education	Frequency	Percentage
Diploma	3	9.3
Bachelor's degree	15	46.9
Master's degree	14	43.8
Total	32	100.0

Source: Field data (2014)

The results in Table 4.3 show that 46.9 percent of the respondents had a bachelor's degree, which means that the study's respondents were highly educated. This can be attributed to the recruitment policies of insurance companies that require an employee to have attained minimum qualification of a degree. The results imply that these employees have been exposed to diverse ideas that might enhance organizational performance. The results lend support to previous empirical research that has shown that a high level of education is associated with firm success (Hambrick and Mason, 1984; Kariuki, Awino and Ogutu, 2012).

According to Hambrick and Mason (1984), the amount, but not the type, of formal education of a management team is positively associated with innovation. Kariuki et al. (2012) posit that an individual's level of formal education reflects cognitive abilities and qualities. High levels of formal education are associated with a high ability to process information and to discriminate between a variety of alternatives (Kariuki, et al., 2012). The results thus indicate that the respondents had the ability to make informed decisions that could influence firm performance.

4.5 Company Profile

The firm's characteristics were analyzed in terms of age of the firm (indicated by the number of years the firm has been in existence), the category the firm belongs to, firm size (as indicated by the number of employees), ownership structure and scope of operation. The age of the firms was important as it showed the stability of the firms. Firms that have been in operation for a long time are thought to have established themselves and could be an indicator of superior performance.

The category of the firm was also significant as it indicated the diversity of the insurance businesses to be able to meet customer needs. The size of the firm indicated that firms had adequate employees to meet the goals of the organization. Scope of operation was an indicator of these firms' superior performance that has enabled them expand regionally and globally. The results for the profiles of the firms in the insurance industry are shown in Tables 4.4, 4.5, 4.6 and 4.7.

Table 4.4: Age of the Company

Age of Company (Years)	Frequency	Percentage
0-5	2	6.3
6-10	2	6.3
16-20	3	9.3
Over 20	25	78.1
Total	32	100.0

Source: Field data (2014)

The study respondents were asked to indicate the number of years the firm had been in existence and the results in Table 4.4 indicate that 78.1 percent of the firms had been in existence for over 20 years. The results indicate that only four firms had been licensed in

the last 10 years. This indicates that the insurance industry has rigid entry requirements that makes it is hard for new firms to enter the industry. The study also sought to find out the category in which the firms belonged to and the results are shown in Table 4.5 below.

Table 4.5: Category of the Insurance Business

Category of the Firm	Frequency	Percentage
Life	7	21.9
General	16	50.0
Composite	9	28.1
Total	32	100.0

Source: Field data (2014)

The results in Table 4.5 reveal that 50 percent of the firms were in the general insurance business and indicates that general insurance business is the preferred business for most insurance companies. This can be explained by the fact that most general businesses are a statutory requirement for example motor vehicle insurance and it is therefore assumed that there is a ready market.

Another contributory factor could be that the regulator requires firms doing general insurance to have a paid up share capital of Kshs 300 million while those in life business are supposed to have Kshs 500 million. It is also easier to sell general insurance than life insurance which matures after 15 years or at the death of the individual. The study also sought to establish the number of employees in each firm and respondents were required to indicate the number of employees in their firms. The results are shown in Table 4.6 below.

Table 4.6: Size of the Firm (Number of Employees)

Number of Employees	Frequency	Percentage
Less than 100	8	25.0
100-300	19	59.4
301-500	2	6.3
Above 500	3	9.3
Total	32	100.0

Source: Field data (2014)

The results in Table 4.6 show that 59.4 percent of the firms had between 100 to 300 employees, which indicates that most of the insurance firms were medium sized and had a lean work force to satisfy client needs. The number of employees was also important because when firms have adequate employees, they are able to perform their functions well.

Ownership structure was defined by classifying the firms in to three categories namely joint ownership (local and foreign), local private ownership and local public ownership. Respondents were asked to specify the ownership structure of their firms and Table 4.7 shows the findings on the ownership structure.

Table 4.7: Ownership Structure

Ownership Structure	Frequency	Percentage
Joint ownership (private local and foreign)	13	40.6
Private local ownership	16	50.0
Local public ownership	3	9.4
Total	32	100.0

Source: Field data (2014)

The results in Table 4.7 indicate that 50 percent of the insurance firms surveyed were privately locally owned, which means that majority of the firms operated locally and were privately owned. This is consistent with the regulations of the Kenyan Government that indicate that no firm should be 100 percent foreign owned. The findings are also in line with IRA requirements that insurance companies should not be 100 percent foreign owned. Further, the study sought to establish the scope of operation of insurance companies in Kenya and the results are shown in Table 4.8.

Table 4.8: Scope of Operation

Scope of Operation	Frequency	Percentage
National	12	37.5
Regional	10	31.3
Continental	5	15.6
Global	5	15.6
Total	32	100.0

Source: Field data (2014)

The results in Table 4.8 indicate that 37.5 percent of the firms operate in Kenya indicating that majority of the firms operate locally. However, 62.5 percent of the firms operated beyond Kenya. The results imply that insurance firms have an expansion strategy to help them reach many customers. This is likely to enhance performance of these companies.

4.6 Assessment of Organizational Resources

The first objective of this study was to establish the influence of organizational resources on performance of insurance companies in Kenya. Organizational resources were categorized into tangible and intangible resources. Both tangible resources (financial and physical) and intangible resources (employee's knowledge, experiences and skills, firm's reputation and brand name, culture, capabilities and technology) have been suggested as the principal drivers of firm profitability and strategic advantage (Barney, 1991; Amit and Schoemaker,1993). Those firms that have adequate stock of resources perform better than their counterparts who have fewer resources.

Tangible resources were operationalised as physical and financial resources and aligned to the insurance industry. Seven descriptive statements on tangible resources possessed by these firms were asked on a five point Likert scale ranging from 1 = not at all to 5 = to a very high extent. The respondents were asked to indicate the extent to which tangible resources were available in their firms. The aim was to establish the amount of tangible resources the firms possessed and the results are shown in Table 4.9 below.

The results in Table 4.9 indicate that the overall mean score for the seven statements used to measure tangible resources was 3.93. The results indicated a general appreciation that insurance firms in Kenya have adequate tangible resources for day to day operations. The statement with the highest mean (mean score = 4.19) "the firm has sufficient deposits in banks" indicates that insurance firms are liquid and can be able to meet their liabilities and that the respondents were in agreement with this statement.

Table 4.9: State of Tangible Resources

Tangible Resources Possessed	Number	Mean	Standard Deviation	Coefficient of Variation	t-value	Significance (2-tailed)
Firm allocates sufficient funds for day to day running	32	4.13	.707	0.171	9.000	.000
Firm has adequate employees to perform its functions	32	3.53	.950	0.269	3.164	.003
Firm has adequate fixed assets like land and buildings	32	3.75	1.244	0.332	3.410	.002
Firm has adequate office equipment	32	4.03	.695	0.172	8.395	.000
Firm has adequate furniture and fittings	32	4.16	.628	0.151	10.418	.000
Firm has adequately invested in stocks	32	3.69	1.091	0.296	3.566	.001
Firm has sufficient deposits in banks	32	4.19	.738	0.176	9.105	.000
Average mean score		3.93				

Source: Field data (2014)

The statement with the highest variability was firms have adequate fixed assets like land and buildings (coefficient of variation = 0.332) indicating that respondents' in all the 32 firms surveyed were in agreement that these firms do not have the same level of fixed assets. This could be explained by the fact that some of these firms are small while others are medium and others are large. The statement with the lowest variability was firms have adequate furniture and fittings (coefficient of variation = 0.151) implying that the respondents were in agreement that the firms had adequate furniture and fittings.

One of the determinants of a good performing insurance company is the ability of the firm to pay claims on time as this ensures that customers have faith in the company. Previously, failure to pay claims has led to some insurance companies being placed under receivership and others closing down. The internal working environment for insurance

firms can be said to be conducive for employees given that the responses on furniture and fittings, funds for day to day running and adequacy of office equipment had a mean score of 4.16, 4.13 and 4.03, respectively. However, the statement with the lowest mean score was the firm has adequate employees to perform its functions (mean score = 3.53). This was an indication that the respondents had a feeling that insurance companies are not well staffed. This could be due to the fact that in the recent past, most insurance companies have been downsizing to achieve efficiency. Statistically significant results were reported for all the seven statements and this meant that the firms surveyed had adequate tangible resources indicating that insurance firms had focused on all the tangible resources. Respondents interviewed were in agreement that insurance firms need financial muscle to be able to perform well; as one respondent put it:

"In this industry, it is imperative for one to have the required capital to be able to survive. The nature of the claims is always anticipated but the magnitude unknown. This necessitates insurance companies to have adequate cash in banks and also in investments to be able to mitigate any losses that might be incurred in future". Strategy Manager, Company 7.

He argued that financial resources give the firm the ability to be able to take on higher risk and in-turn get higher returns. He suggested that this could be achieved if firms invested in equity and real estate. The study also sought to determine the availability of intangible resources in insurance firms in Kenya. According to Barney (1991), intangible resources are the most important for a firm since they are difficult to imitate. Fifteen items were used to measure the availability of intangible resources. Respondents were asked to indicate the extent to which intangible resources were available in their firms and the results are shown in Table 4.10.

Table 4.10: State of Intangible Resources

Intangible Resources Possessed	Number	Mean	Standard Deviation	Coefficient of Variation	t-value	Significance. (2-tailed)
Firm employees have required skills	32	3.81	.738	0.194	6.230	.000
Firm has a unique culture	32	3.50	1.078	0.308	2.625	.013
Firms' employees are loyal	32	3.47	.842	0.243	3.150	.004
Firms' employees work as a team	32	3.47	.671	0.193	3.950	.000
Firm invests in modern technology	32	3.88	.707	0.182	7.000	.000
Firm has a good reputation in the industry	32	4.00	.762	0.191	7.424	.000
Firm has a valuable brand in the industry	32	3.97	.933	0.235	5.875	.000
Firm has unique resources	32	3.56	.914	0.257	3.483	.002
employees are sufficiently motivated	32	3.41	.615	0.180	3.738	.001
Firm facilitates relevant training for its employees	32	3.63	.793	0.218	4.458	.000
Relationship between management and employees is good	32	3.53	.621	0.176	4.836	.000
Firm's management and leadership styles are good	32	3.47	.621	0.179	4.267	.000
Firm encourages a culture of knowledge creation and accumulation	32	3.50	.762	0.218	3.712	.001
Employees have a strong emotional bond to the firm	32	3.19	.738	0.231	1.438	.161
Firm has resources that are difficult to imitate.	32	3.09	.818	0.265	.649	.521
Average mean score		3.57				

Source: Field data (2014).

The results in Table 4.10 indicate that the average mean score for intangible resources was 3.59 which show that respondents rated these resources moderately. The statement the firm has a good reputation had the highest mean score (mean score 4.00, standard deviation = 0.762) meaning that respondents appreciated that insurance firms portray a good image to the customers through reputation, brand, technology and skills. The efforts the organizations put in to the image are noticed and appreciated by the customers. The results indicate that the firm's internal process (culture and training) received a moderate rating.

However, team dynamics, that is relationship between management, employee loyalty, team work, employee motivation and strong emotional bond to the firm had the lowest mean scores (means score 3.47, 3.47, 3.47, 3.19 and 3.09), respectively meaning that the firms did not have a strong culture.

The statement with the highest variability was the firm has a unique culture (coefficient of variation = 0.308) indicating that there was disparity among respondents to the extent to which the firms had a unique culture. The statement with the lowest variability was the relationship between management and employees is good (coefficient of variation = 0.176). This means that the respondents were in agreement that the firms had a good relationship between employees and management.

Statistically significant results were reported for all the variables except the statement "employees have a strong emotional bond to the firm" (t-value = 1.438, p- value = 0.161) and firms have resources that are difficult to imitate (t-value = 0.649, p- value = 0.521). This means that the respondents were in agreement on the extent to which the firms' possessed the intangible resources except for the two statements.

The statement that received the highest mean score was the firm has a good reputation in the industry; a good reputation is important in the insurance industry as it is the reason why a customer will give a firm business or take it to a competitor. In an industry where customers are afraid because their claims sometimes go unpaid, a good reputation will give the firm a competitive edge over others and lead to sustainable competitive

advantage. Tan (2007) found that corporate reputation is positively correlated with superior earnings quality. Brammer, Brooks, and Pavelin, (2004) found that investors make abnormal returns when they purchase stocks of firms whose reputation has risen significantly. These results are an indication for insurance firms to invest in their image so as to create a good reputation for themselves. The results are therefore consistent with previous studies that posit that good corporate reputation could influence superior performance (Brammer, et al., 2004; Tan, 2007; Iwu-Egwuonwu, 2011).

The results indicate that the firm's internal process (culture and training) received a moderate rating. However, team dynamics that is, relationship between management, employee loyalty, team work, employee motivation and strong emotional bond to the firm had the lowest mean scores (3.47, 3.47, 3.47, 3.19 and 3.09), respectively. Team dynamics reveal how much employees of a firm are willing to put in on a day to day basis. If employees have a low morale and are demotivated, they will not be willing to put in much effort in their work and this leads to poor firm performance. These results support the results that showed most employees had worked for their organization for between zero to five years. The high staff turnover might be supported by the fact that the internal environment is not conducive to cultivate a culture of loyalty. Barney and Wright (1997) argue that SCA comes from teams more than from individuals.

The competitive advantage stemming from team production is characterized as being causally ambiguous, thus, making it difficult for competitors to imitate. Mishra and Mishra (1994) posit that trust among organization members is a determinant of firm

performance. Barney and Wright (1997) argue that trust and good relationships among organizational members are firm specific assets that provide value, are quite rare, and are extremely difficult for competitors to imitate.

4.7 External Environment

This study measured the external environment using the three dimensions namely munificence, dynamism and complexity and 12 factors comprising of the PESTEL factors, the Porters five forces (1985) which comprise of threat of new entrants, threat of substitute products, bargaining power of suppliers, bargaining power of buyers and rivalry within the industry. Industry regulations were also used. The results for each environmental dimension are presented.

4.7.1 Environmental Munificence

Munificence is the extent to which the external environment has resources to support firm activities. The environment can either have ample resources or scarce resources. In this light, the environment can either be friendly or hostile to the firms. Boyne (2003) suggested that firms that operated in environments that had plenty of resources were thought to perform better. Respondents were asked to state to what extent the environmental factors had become more favorable to their organization in the last five years and the results are presented in Table 4.11 below.

Table 4.11: Munificence External Environment

External Environment Factors	Number	Mean	Standard. Deviation	Coefficient of Variation	t-value	Significance. (2-tailed)
Political factors	32	2.84	1.019	0.359	-.867	.393
Economic factors	32	3.56	1.014	0.285	3.138	.004
Social cultural factors	32	3.22	1.008	0.313	1.228	.229
Technological factors	32	3.63	.833	0.229	4.245	.000
Ecological factors	32	2.63	.976	0.371	-2.175	.037
Industry regulations	32	3.09	1.058	0.342	.501	.620
Legal requirements	32	2.09	.856	0.410	-5.988	.000
Threat of new entrants	32	2.50	1.047	0.419	-2.701	.011
Threat of substitute products	32	2.63	1.157	0.440	-1.833	.076
Bargaining power of customers	32	2.69	1.281	0.476	-1.380	.177
Bargaining power of suppliers	32	2.56	1.190	0.465	-2.080	.046
Competition among firms in the industry	32	2.16	.884	0.409	-5.400	.000
Average mean score		2.80				

Source: Field data (2014)

Results in Table 4.11 indicate that the average mean score for environmental munificence was 2.80 (to a small extent). This implies that overall the respondents felt that the elements in the external environment had not been favorable to their firms. Technological factors had the highest mean score (3.63; coefficient of variation = 0.229). This revealed that technology has been more favorable albeit to a moderate extent as compared to the other factors and there was agreement among respondents on the extent of the favorability of the external environment. The statement with the highest variability was bargaining power of customers (coefficient of variation = 0.476) implying that there was disparity among respondents on the favorability in this factor.

Economic factors, technological factors, ecological factors, legal requirements, threat of new entrants, bargaining power of suppliers and competition among firms in the industry had statistically significant results (p-values < 0.05). This meant that respondents were in agreement on the extent to which the above factors were favorable.

Technology had the highest mean score and this is consistent with AKI report of 2012 that proposed that technology was one of the factors that has contributed to improved insurance penetration level in Kenya (AKI, 2012). The performance of insurance firms has been improved by recent developments in the technology such as M-pesa and the social media. The M-pesa money transfer has seen customers pay their premiums easily as compared to conventional methods like the check off system leading to improved firm performance.

Other technological developments in the social media such as twitter and face book have also been avenues where insurance companies can sell insurance and respond to customer queries. Indeed, this has seen a number of insurance company's employ dedicated staff to answer queries on social media and other insurance companies have started to follow suit. Simmons (2000) posits that those firms that are sensitive to technological change and innovation resulting from the technological change can increase the company's competitive advantage.

Results from personal interviews indicated that respondents were in agreement that improved technology had led to low claims loss ratio. Insurance companies that had good claims payment systems argued that they had saved a lot of money that would have otherwise gone to the drain. One company in particular had lost money to service providers because of being billed for services not rendered. Their current payment system was able to generate automatic reports to their clients' email addresses at the end of each month. The clients have been able to discover that some providers had billed them for services not rendered. The providers have then to offer credit notes and this has led to diligence on the part of providers to bill only for services rendered.

Threat of new entrants, competition among the firms in the industry and legal requirements recorded very low mean scores of 2.50, 2.16 and 2.09, respectively but significant meaning that these factors were not favorable. Competition among industry players has been very stiff and this can be attributed to the fact that there were many players in the industry, offering similar products. Therefore, the business to be shared is small and so firms have to compete using unfair means to get business.

Of particular concern was the price undercutting by firms which has seen some firms quote very low premium rates to get the business. This was echoed by the AKI report of 2012 that stated that the unhealthy competition has led to rate cutting, apathy by consumers due to poor image, fraud and low level of consumer awareness (AKI, 2012). On the detriment, when a claim is incurred, these insurance companies are unable to pay leading to customer dissatisfaction. Legal requirements in the industry are deemed to be

strict and this has made it hard for new entrants to enter the industry. The results supports the findings that showed that in the last 10 years, only four insurance companies had been licensed.

4.7.2 Environmental Dynamism

According to Dess and Beard (1984) dynamism is change over time in munificence and complexity. Since the environment is dynamic, organizations need to find coping mechanisms in order to succeed. When managers are aware of the frequency of change, they are in a position to plan in the future and improved service delivery. If changes are large but known in advance, they can be dealt with proactively to prevent organizations from poor performance (Wholey and Brittain, 1989).

Dynamism was operationalized along two dimensions namely predictability and changeability of environmental factors. As regards predictability, respondents were asked to indicate the extent to which the developments in the factors of the external environment had become more predictable to their firm in the last five years. Table 4.12 presents the findings as relates to predictability of the external environment.

Table 4.12: Predictability of Environmental Factors

Environmental Factors	Number	Mean	Standard Deviation	Coefficient of Variation	t-value	Significance (2-tailed)
Political factors	32	2.66	1.096	0.412	-1.775	.086
Economic factors	32	3.09	.963	0.312	.551	.586
Social cultural factors	32	3.16	.884	0.280	1.000	.325
Technological factors	32	3.59	.756	0.211	4.443	.000
Ecological factors	32	2.25	1.016	0.452	-4.176	.000
Industry regulations	32	3.38	.871	0.258	2.436	.021
Legal requirements	32	2.16	.847	0.392	-5.638	.000
Threat of new entrants	32	3.22	1.039	0.323	1.191	.243
Threat of substitute products	32	3.06	1.076	0.352	.329	.745
Bargaining power of customers	32	3.47	1.164	0.335	2.279	.030
Bargaining power of suppliers	32	3.22	1.237	0.384	1.000	.325
Competition among firms in the industry	32	3.75	1.078	0.287	3.937	.000
Average mean score		3.08				

Source: Field data (2014)

The results indicate that the average score for environment predictability was 3.08 (to a moderate extent). This implies that the environmental factors were predictable to a moderate extent. Competition among firms in the industry had the highest mean score (3.75) indicating that respondents felt that competition was more predictable. The statement with the highest variability was ecological factors (coefficient of variation = 0.412) indicating that there was lack of agreement among respondents on the extent to which the factors were predictable. The statement with the lowest variability was technological factors (coefficient of variation = 0.211) an indicator that there was agreement among respondents on predictability in this sector.

Statistically significant results were reported for technological factors, ecological factors, industry regulations, legal requirements, bargaining power of customers and competition among firms in the industry (p-values < 0.05). This implies that there was more predictability observed in these factors.

The results indicate that the competition in the insurance industry had become predictable. As earlier mentioned, the competition is stiff therefore very predictable. The players know that if one firm does not give a certain rate, their competitor will and the AKI report of 2011 corroborates these findings. The AKI director argued that competition for business had continued to be a challenge. He attributed this to the very low levels of product innovation and differentiation of products by insurance firms which has remained low.

Low levels of innovation have over the years led to massive price cutting, a phenomenon that has had a major impact on growth and profitability (AKI report, 2011). This was consistent with strategic management theorists who argue that firms compete in finite environments. Therefore, an excess of players in an industry segment may imply low performance due to strong rivalry for finite resources. As regards changeability, respondents were asked to indicate how much change they had observed in the environmental factors in the last five years and the results are shown in Table 4.13 below.

Table 4.13: Changeability of Environmental Factors

External Environment Factors	Number	Mean	Standard. Deviation	Coefficient of Variation	t-value	Significance (2-tailed)
Political factors	32	3.91	1.088	0.278	4.710	.000
Economic factors	32	3.81	.738	0.194	6.230	.000
Social cultural factors	32	3.41	.798	0.234	2.881	.007
Technological factors	32	4.22	.870	0.206	7.924	.000
Ecological factors	32	3.47	1.135	0.327	2.335	.026
Industry regulations	32	3.66	.902	0.246	4.116	.000
Legal factors	32	2.22	.832	0.375	-5.311	.000
Threat of new entrants	32	3.50	1.078	0.308	2.625	.013
Threat of substitute products	32	3.44	1.216	0.353	2.034	.051
Bargaining power of customers	32	3.72	1.143	0.307	3.559	.001
Bargaining power of suppliers	32	3.47	1.135	0.327	2.335	.026
Competition among firms in your industry	32	4.13	1.070	0.259	5.947	.000
Average mean score		3.58				

Source: Field data (2014)

The results in Table 4.13 indicate that the average mean score for change that had been observed in the environment factors was 3.58. The results reveal that there was more change observed in the environmental factors as compared to their predictability. There was a high ranking in the technological factors (mean score = 4.22, standard deviation = 0.870), competition among firms in the industry (mean score = 4.13, standard deviation = 1.070). The statement that had the lowest variability was economic factors (coefficient of variation = 0.194) indicating that there was agreement among respondents on how much change the organizations had observed in this sector. The statement with the highest variability was legal factors (coefficient of variation = 0.375) meaning that there was lack of agreement among respondents on how much change the organizations had observed in this sector.

Statistically significant results were reported in the all the sectors. This shows that there was a lot of change observed in the environmental factors. The results indicate that a lot of change was seen in the technological factors and this could be attributed to the fact that there have been a lot of developments in technology in the recent past. Insurance firms have, therefore had to adapt to this change if their performance has to improve. A lot of change has also been seen in the political and economic factors and the respondents proposed that if there is high inflation, then there is less disposable income and so purchase of insurance will not be top on the list. Similarly, when there is political instability/security, there is less money floating in the economy and the price of shares in the stock exchange reduces; all this will lead to poor performance.

Further, the study also sought to find out the frequency with which insurance firms carried out surveys on the external environment. Respondents were asked to indicate how often their firms conducted surveys on the external environment and the results are shown in Table 4.14 below.

Table 4.14: Frequency of Conducting Surveys on the External Environment

External Environment Survey Frequency	Frequency	Percentage
Never	3	9.4
Monthly	1	3.1
Quarterly	9	28.1
Bi-annually	5	15.6
Annually	14	43.8
Total	32	100.0

Source: Field data (2014)

The study established that 43.8 percent of the organizations carried out surveys on the external environment annually. However, it is worth noting that there were organizations that had never carried out surveys on the external environment. Findings from personal interviews indicated that most organizations did not have a department dedicated to environmental scanning. Furthermore, the study established that surveys on the external environment were mostly carried out on adhoc basis necessitated by some dramatic change in the environment.

However, most firms indicated that they had a way of carrying out surveillance and getting to know what was happening in the industry. This calls for insurance firms to be proactive because if they do not know what is happening in the external environment, the environment will affect their business. One respondent gave examples of insurance companies that had been placed under receivership and those that had gone-under as a sign that firms should know what is happening in the environment for prosperity.

4.7.3 Environmental Complexity

Complexity refers to the homogeneity or heterogeneity of the external circumstances that confront an organization. An organization that is charged with providing services to a heterogeneous population with a range of different needs is faced by a complex environment. Therefore, managers are tasked with knowing their environment to be able to deal with any negative effects of complexity that may affect their firm's performance. Environmental complexity was measured by the number of issues the firms had to deal with in the environmental sectors and whether these issues were similar to or different from each other.

Table 4.15 below presents results for the issues the firms had to deal with.

Table 4.15: Issues the Firms Have to Deal With

External Environment Factors	Number	Mean	Standard Deviation	Coefficient of Variation	t-value	Significance (2-tailed)
Political factors	32	3.16	1.167	0.369	.757	.455
Economic factors	32	3.84	.954	0.248	5.003	.000
Social cultural factors	32	3.22	.941	0.292	1.315	.198
Technological factors	32	4.25	.672	0.158	10.522	.000
Ecological factors	32	2.75	1.191	0.433	-1.187	.244
Industry regulations	32	4.06	.801	0.197	7.506	.000
Legal factors	32	4.00	.916	0.229	6.177	.000
Threat of new entrants	32	3.53	1.016	0.288	2.959	.006
Threat of substitute products	32	3.72	1.198	0.322	3.395	.002
Bargaining power of customers	32	3.97	1.031	0.260	5.314	.000
Bargaining power of suppliers	32	3.56	1.134	0.319	2.806	.009
Competition among firms in your industry	32	4.22	.975	0.231	7.071	.000
Average mean score		3.69				

Source: Field data (2014)

The results indicate that the average mean score for the number of issues was 3.69. The results reveal that the respondents felt there were moderate issues the firms had to deal with in the environment. Technological factors, competition among firms in the industry, industry regulations and legal requirements recorded the highest mean scores (4.25; 4.22; 4.06; 4.00) respectively meaning that there were many issues that firms needed to deal with in these sectors. The statement with the highest variability was political factors (coefficient of variation = 0.369) indicating that there was lack of agreement among respondents on the issues the firms had to deal with.

The statement with the lowest variability was technological factors (coefficient of variation = 0.158) indicating that there was agreement among respondents on the issues the firms had to deal with in this sector. Statistically significant results were reported in all the sectors except for political factors, social cultural factors and ecological factors. This means that issues the firms had to deal with in the three elements were few.

Threat of substitute products had a mean score of (3.72, standard deviation = 1.198). This has been a major concern for insurance companies in the recent past. Competition is not only within the industry, but also from without. Firms that traditionally did not offer insurance are doing so. Banks are doing bancassurance and churches are also offering insurance services to their members. This calls for innovativeness as this is the key opportunity left for increasing the industries' market share.

One of the managers interviewed emphasized that insurance companies should start doing the right things differently. He gave an example of firms that encouraged their members to pay daily for insurance, making it affordable. Other firms were selling insurance through the internet to increase both the top line (premiums) and the bottom line (profits). The results in Table 4.15 also indicate that technological factors had the highest ranking. This could be attributed to the various developments in the technological sector including social media and the M-pesa that the industry players need to deal with. Further, the study sought to establish if the issues were similar or different. Respondents were required to indicate whether the issues above were similar or different from each other and the results are shown in Table 4.16 below.

Table 4.16: Whether Issues Were Different or Similar

External Environment Factors	Number	Mean	Standard Deviation	Coefficient of Variation	t-value	Significance (2-tailed)
Political factors	32	3.25	1.047	0.322	1.350	.187
Economic factors	32	3.44	.840	0.244	2.946	.006
Social cultural factors	32	2.97	.967	0.326	-.183	.856
Technological factors	32	3.84	.920	0.240	5.190	.000
Ecological factors	32	2.75	.984	0.358	-1.438	.161
Industry regulations	32	3.53	1.135	0.322	2.647	.013
Legal factors	32	3.38	1.129	0.334	1.879	.070
Threat of new entrants	32	3.53	.950	0.269	3.164	.003
Threat of substitute products	32	3.56	1.076	0.302	2.958	.006
Bargaining power of customers	32	3.94	.914	0.232	5.805	.000
Bargaining power of suppliers	32	3.56	.948	0.266	3.356	.002
Competition among firms in your industry	32	3.91	1.027	0.263	4.990	.000
Average mean score		3.47				

Source: Field data (2014)

The results in Table 4.16 indicate that similarity or differences in the issues had an overall mean score of 3.47 implying that the issues were neither similar nor dissimilar. Bargaining power of customers had the highest ranking (mean score = 3.94), competition among firms in the industry (mean score = 3.91) and technological factors (mean score = 3.84). This indicates that issues in these sectors were more of dissimilar. The statement with the highest variation was ecological factors (coefficient of variation = 0.358) indicating that there was disparity among respondents on whether issues were similar or different in this sector. The statement with the lowest variation was bargaining power of customers (coefficient of variation= 0.232) an indicator that there was agreement among respondents on the state of issues in this sector.

Statistical significant results were reported for all the factors except political factors (t-value = 1.350), social cultural (-0.183), legal requirements (1.879) and ecological factors (t-value = -1.438); p-values > 0.05. This means that the issues in all the other statements except the four were neither similar nor dissimilar.

Today's customer is more empowered and informed and this could explain why the issues in this sector were different. The internet and price undercutting in the industry has given the customer the power to negotiate for favorable rates. The competition among industry players was stiff leading to every firm fighting for the reduced business. The sectors that had many issues to deal with present managers with a challenge as they need to be on the lookout for any turbulence in the environment to be able to know how to deal with the issues.

4.8 Organizational Innovation

The study sought to establish the innovative propensity of insurance firms in Kenya because innovation is important to insurance firms since their products are the same, they need to innovate consistently in order to remain a head of competition. Innovation was operationalised as R & D and process improvements. Respondents were asked to indicate to what extent the firms carried out the stated innovation activities and the results are shown in Table 4.17 below.

Table 4.17: Organizational Innovation

Innovation Activities	Number	Mean	Standard Deviation	Coefficient of Variation	t-value	Significance (2-tailed)
Firm frequently tries out new product ideas	32	3.34	1.096	0.328	1.775	.086
Firm is among the first to introduce new products in the market	32	3.34	1.382	0.414	1.407	.169
Turnaround time for new products is good	32	2.97	1.150	0.387	-.154	.879
Firm adopts cost effective methods of operation	32	3.63	.793	0.218	4.458	.000
Firm carries out frequent products upgrades/improvements	32	3.28	.991	0.302	1.605	.119
Firm processes and channels are efficient	32	3.44	.669	0.194	3.699	.001
Firm allocates adequate funds for innovation yearly	32	3.13	1.040	0.332	.680	.501
Firm invests in research and development	32	2.84	1.110	0.391	-.796	.432
Firm regularly develops new products and services	32	2.94	.948	0.322	-.373	.712
Firm's technology is among the latest in the market	32	3.16	1.051	0.333	.841	.407
Firm carries out continuous process reviews and improvements	32	3.34	.787	0.236	2.470	.019
Firm has a wide range of products and services	32	3.72	1.023	0.275	3.973	.000
Firm adopts new processes fast as compared to its competitors	32	3.19	.998	0.313	1.063	.296
Firm has a dedicated research and development/ innovations team	32	2.97	1.282	0.432	-.138	.891
Firm encourages its employees to provide innovative ideas	32	3.56	1.105	0.310	2.879	.007
Firm rewards its employees for innovative ideas	32	3.03	1.332	0.440	.133	.895
Average mean score		3.24				

Source: Field data (2014)

The results in Table 4.17 indicate that the overall mean score for innovation was 3.24. The results imply that almost all statements had a ranking of 3 (to a moderate extent) meaning that the respondents were in agreement that innovation was not highly embraced by their firms. The statement that insurance companies have a wide range of products and services had the highest mean score (3.72, standard deviation = 1.023) meaning that the firms surveyed possessed a wide range of products and services. The statement with the highest variability was the firm rewards employees for innovative ideas (coefficient of variation=0.440) implying that there was lack of agreement among respondents on the extent to which the firms rewarded its employees. The statement with the lowest variability was firms processes and channels are efficient (coefficient of variation = 0.194) implying that there was agreement among respondents on the extent to which the firms' processes and channels were efficient.

The firm invests in R & D had the lowest mean score (2.84, standard deviation = 1.110) and this could be attributed to the fact that most insurance companies copy what other firms have come up with. This was consistent with AKI report of 2011 which states that due to the very low levels of product innovation, differentiation remains quite low. This has led to massive price cutting, a phenomenon that has had a major impact on growth and profitability (AKI, 2011). The coefficient of variation of 0.391 implies that there was disparity among respondents as regards the extent to which the innovation activities were carried out in these firms.

The statement with the second highest a mean score (3.63, standard deviation = 0.793) was that the firm adopts cost effective methods of operation. This was an indicator that insurance companies have been able to focus on operational efficiency to enhance their performance. However, out of the 16 statements, there were statistically significant results for five statements (cost effectiveness, efficient processes, process reviews, wide range of products and innovative ideas; t-values = 4.458, 3.699, 2.470, 3.973, 2.879; p-value < 0.05. This showed that the firms were efficient and effective, had a wide range of products and encouraged innovative ideas.

The study further sought to establish whether the firms invested in R & D and the results are shown in Table 4.18 below.

Table 4.18: Investment in Research and Development

Investment in Research and Development	Frequency	Percentage
Yes	26	81.3
No	6	18.7
Total	32	100.0

Source: Field data (2014)

The results indicate that 81.3 percent of the respondents answered in the affirmative, therefore majority of the firms had invested in R & D. This trend was corroborated by a respondent who argued that in this industry, innovation was low and players copy each other's products very fast. The manager claimed that in the insurance industry, a firm had only six months to enjoy the advantages from a new product. As soon as it hits the market, others have already started thinking of how to differentiate it and offer it to the market. For survival and growth, he suggested that the firms need to keep on innovating.

Research and development was important for insurance companies because in the current competitive business environment, firms cannot compete on advantages of past business; they should keep on innovating to gain competitive edge over their competitors. Commitment to innovation has been found to be key to the success for firms and can lead to SCA (Hussain and Llyas, 2011). In addition, the study sought to establish how much the firms had invested in R & D in the last three years and the results are shown in Table 4.19.

Table 4.19: Expenditure on Research and Development

Expenditure (Million Kshs)	Frequency	Percentage
Below 5	15	46.8
5-10	10	31.3
11-15	1	3.1
16-20	3	9.4
Above 20	3	9.4
Total	32	100.0

Source: Field data (2014)

The results indicate that 46.8 percent of the firms had invested below 5 million in R & D which indicates that most insurance firms do not spent a substantial amount of their income on R & D. Dess and Picken (2000) propose that intense and rapid competitive moves require firms to continuously innovate to create new advantages. In order for insurance companies to improve their performance, they need to invest more in R & D. The study further sought to establish how many new products the firms had introduced in the last three years and the results are shown in Table 4.20 below.

Table 4.20: Number of New Products Introduced in the Last Three Years

Number of Products	Frequency	Percentage
None	4	12.5
1-5	19	59.4
6-10	5	15.6
10 and above	4	12.5
Total	32	100.0

Source: Field data (2014)

The results indicate that 59.4 percent of the firms had introduced between one to five products. The results indicate that majority of the insurance firms are slow to introduce new products in the market. This could be explained by the fact that the amounts spend on R & D is not adequate to introduce new products in the market.

4.9 Firm Performance

The study sought to establish to what extent the firms had achieved financial performance measures. Firm performance was operationalised as financial performance and non-financial performance. The specific indicators for financial performance were premium and profit before tax. Non-financial performance measures were customer perspective, internal business processes, learning and growth, environment aspect and corporate social responsibility.

4.9.1 Non-Financial Firm Performance

According to Kaplan and Norton (1992; 1996) non-financial firm performance measures are important as they take in to account all the stakeholders and are not subjective as compared to financial measures. Respondents were asked to indicate to what extent their firms possessed the non-financial measures of performance and the results are presented in Table 4.21.

Table 4.21: Non-Financial Firm Performance Measurement

Non-Financial Firm Performance Measures	Number	Mean	Standard Deviation	Coefficient of Variation	t-value	Significance (2-tailed)
Customer complaints have reduced considerably in the last three years	32	3.63	.751	0.207	4.706	.000
Customers are satisfied with the firms services	32	3.59	.665	0.185	5.049	.000
Firm responds to customer complaints within 24 hours	32	3.50	.762	0.218	3.712	.001
Firm offers excellent service to its customers	32	3.56	.619	0.174	5.141	.000
Firm is able to retain its customers as compared to its peers in the industry	32	3.56	.716	0.201	4.447	.000
Firm has a range of customized products for its customers	32	3.44	.948	0.276	2.610	.014
Firm has a customer loyalty scheme	32	2.88	1.238	0.430	-.571	.572
Firm's internal processes have improved considerably in the last three years	32	3.69	.821	0.222	4.739	.000
Firm's premiums have grown faster in the last three years compared to other firms in the industry	32	3.66	1.096	0.299	3.388	.002
Firm conducts clients satisfaction surveys and receives positive feedback	32	3.06	.982	0.321	.360	.721
Firms processes are standardized through procedure manuals	32	3.63	.942	0.260	3.754	.001
Firm has improved its customer care through technology and process automation	32	3.59	.946	0.264	3.552	.001
Employees have superior skills and capabilities	32	3.56	.716	0.201	4.447	.000
Employees of the firm are motivated	32	3.44	.669	0.194	3.699	.001
Firms activities are customer centric	32	3.53	.671	0.190	4.477	.000
Employees have knowledge required to satisfy customer needs	32	3.81	.644	0.169	7.132	.000
Firm engages in environmental friendly activities	32	3.47	1.135	0.327	2.335	.026
Firm complies with environmental laws	32	3.91	.856	0.219	5.988	.000
Firm is in the fore front in corporate social responsibility	32	3.59	1.012	0.282	3.320	.002
CSR expenditure has been increasing over the years	32	3.59	1.160	0.323	2.895	.007
Firm continually improves its services as compared to its competitors	32	3.75	.762	0.203	5.568	.000
Average Mean Score		3.54				

Source: Field data (2014)

Results in Table 4.21 indicate that the firm that complies with environmental laws had the highest mean score (3.91, standard deviation = 0.856) followed by the firms employees have required skills to satisfy customer needs (mean score 3.81, standard deviation = 0.644) and the results indicate that majority of the firms embraced safe environmental practices. The statement with the lowest variability was the firm offers excellent services to its customers (coefficient of variation = 0.174) indicating there was a general agreement among respondents on the extent to which the firms had achieved this measure.

The statement with the highest variability was firms have a customer loyalty scheme (coefficient of variation = 0.430) indicating there was lack of agreement among respondents on the extent to which the firms had achieved this measures. Statistically significant results were observed in all the 22 statements except two statements (customer loyalty scheme and customer satisfaction surveys t values = -0.571, 0.360; p-value > 0.05), respectively. The results indicate that the firms have achieved the non-financial measures except the two.

The results indicate that most insurance companies have embraced sustainability reporting and conform to environmental laws. The SBSC approach proposes that companies must not only focus on profitability but also conserve the environment. Strategic management scholars hypothesize that improved environmental performance can enhance economic performance (Russo and Fouts, 1997). The firms' customer service was wanting because this element received the lowest rating; being a service industry in a

sector that has similar products, customer service is the only edge that the firms can have over the other firms. One of the key pillars in achieving corporate objectives is quality customer service. As one CEO put it during the interviews:

"Customers are the main objective that organisations exist. Businesses exist primarily to satisfy customer and client needs, all other business objectives are subordinate to this objective. Customers are the lifeblood and the reason organizations are in business. Without customers there would be no organization. For organizations success, customers must remain its number one priority". CEO Company 1.

4.9.2 Financial Firm Performance

The study sought to establish to what extent the firms had achieved financial firm performance measures. Respondents were asked to indicate the premium growth that the firms had achieved in the last three years and results are shown in Table 4.22.

Table 4.22: Premium Growth Achieved

Premium Growth (Percentage)	Frequency	Percentage
Below 5	1	3.1
6-10	8	25.0
11-20	11	34.4
Over 20	12	37.5
Total	32	100.0

Source: Field data (2014)

Results in Table 4.22 indicate that 37.5 percent of the firms had achieved a premium growth of over 20 percent, which indicates that majority of the firms had achieved above 20 percent premium growth. Premium is the income insurance firms receive in exchange with a promise to cover the insured person's liability if a claim occurs.

Growth in premiums was thus an indicator of improved firm performance. These results were consistent with AKI 2012 report that revealed that the insurance industry achieved a premium growth of Kshs 108.54 billion in 2012 compared to Kshs 91.60 billion in 2011, representing a growth of 18.49 percent (AKI, 2012). When insurance companies have good premiums, then it is almost given that they will be able to pay for claims incurred. The study further sought to establish the firms' profit growth and respondents were asked to rate their firms profit growth in the last three years. The results are presented in Table 4.23 below.

Table 4.23: Profit Growth Achieved

Profit Growth (Percentage)	Frequency	Percentage
Below 10	4	12.5
11-30	22	68.8
31-60	5	15.6
61-100	1	3.1
Total	32	100.0

Source: Field data (2014)

The results in Table 4.23 indicate that 68.8 percent of the firms had a profit growth of between 11 and 30 percent and the results indicate that the profit for the firms in the insurance sector is relatively good. Profit has been traditionally used to measure firm performance and as Davis, Schoorman, Mayer and Hoon (2000) propose, profitability has been widely used as a measure of firm performance.

4.10 Chapter Summary

The chapter has presented findings regarding the respondents and the firm demographics. It also presented the findings of descriptive statistics of the study variables. Descriptive findings were discussed based on the frequencies, mean scores, standard deviations, coefficient of variation, one sample t-tests and significance levels. The discussion of results included excerpts picked during interviews. The results indicated that insurance companies had more tangible resources as compared to the intangible resources (mean score 3.93 and 3.59), respectively. Environmental predictability and munificence had the lowest mean scores (3.08 and 2.80), respectively. This indicates that there was a general feeling among respondents that the external environment was not favorable to the insurance companies.

The low appreciation of predictability means that the external environment was hard to predict. Managers of these companies should constantly scan the environment to be aware of what is happening. As environment become more dynamic, managers should look for ways of to scan the environment for opportunities and to adjust its resources and processes to meet future challenges presented by the environment. Insurance companies can only know the opportunities and threats that face them by carrying out environmental scanning as all organizations are environment serving. This will lead to better adaption to the external environment and better performance. The next chapter presents the results of hypotheses testing and discussion of results.

CHAPTER FIVE

TESTS OF HYPOTHESES AND DISCUSSION

5.1 Introduction

This chapter presents the results of hypotheses testing and interpretation of the results. The main objective of the study was to establish the influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya. Innovation was tested for its intervening effect while external environment was tested for its moderating effect.

The specific objectives of the study were to establish the influence of organizational resources on performance of insurance companies in Kenya, determine the relationship between organizational resources and innovation of insurance companies in Kenya and to determine the intervening influence of innovation on the relationship between organizational resources and performance of insurance companies in Kenya. Further, the study sought to establish the moderating influence of the external environment on the relationship between organizational resources and performance of insurance companies in Kenya.

Lastly, the study sought to establish the joint influence of the external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya. From the six objectives, eight hypotheses were formulated for testing. In order to establish the statistical significance, Pearson's product moment correlation and multiple regression analyses were performed at 95 percent

confidence level (p-value = 0.05). Hypothesis one was tested using simple linear regression analysis while hypothesis two was tested using correlation analysis. To test for hypothesis three, the study used hierarchical regression analysis. Hypothesis four was tested using correlation analysis while hypothesis five was tested using Baron and Kenny model of 1986. Finally, hypothesis six was tested using hierarchical regression analysis.

Hypothesis testing was carried out at two levels. The individual effects of the variables on various performance indicators were carried out. Further, composite indices of the various attributes that defined the parameters of interest that included organizational resources, external environment, innovation and non-financial performance were computed and multiple regression analysis performed. This formed the basis of rejecting or failing to reject the main hypotheses. If the p-value was > 0.05 the hypothesis was rejected and if the p-value was < 0.05 the hypothesis was not rejected.

With respect to financial performance, the study employed premium ratio and profit before tax ratio. The ratios were computed for a three year period (2010, 2011 and 2012) with year 2010 as the base year. An average of the three years was then computed and the average used for regression analysis.

5.2 Organizational Resources and Firm Performance

The first objective of the study was to establish the influence of organizational resources on performance of insurance companies in Kenya. Based on the literature review, the following hypothesis was formulated for testing.

H₀₁: There is no statistically significant influence of organizational resources on performance of insurance companies in Kenya.

Organizational resources were operationalised as tangible resources and intangible resources. Tangible resources were conceptualized as physical and financial resources. The specific indicators were deposits in banks, investments in stocks, furniture and fittings, office equipment, land and buildings, number of employees and operational funds. Non-financial performance indicators were composed of the SBSC perspectives namely; customer, internal business processes, learning and growth, CSR and environmental aspect perspectives. Based on the operationalization, the following sub hypothesis was tested.

H_{01a}: Tangible organizational resources do not have a statistically significant influence on performance of insurance companies in Kenya.

To address this sub hypothesis, independent influence of tangible resources (physical resources and financial resources) was tested on various performance indicators (premium, profit, customer perspective, internal business processes, learning and growth, environmental aspect and CSR). The second part addressed the combined effect of tangible resources on the above performance measures. Lastly, the composite index of non-financial firm performance measures was regressed on the composite index of tangible resources measures.

Table 5.1 shows regression results for influence of tangible resources on premium. The coefficient of determination was 0.303 indicating that 30.3 percent of variation in premium growth was explained by tangible resources. The remaining 69.7 percent was

explained by other factors not considered in the study. The overall model had a p-value of 0.008, which revealed a statistically significant model. This means that tangible resources have a significant influence on premium.

Table 5.1: Influence of Tangible Resources on Premium

Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.551 ^a	.303	.252			.27968
ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.919	2	.460	5.875	.008 ^a
	Residual	2.112	27	.078		
	Total	3.031	29			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.535	.396		3.874	.001
	Physical Resources	-1.569	.500	-.564	-3.140	.004
	Financial Resources	1.154	.438	.473	2.635	.014

A. Predictors: (Constant), Financial Resources, Physical Resources

B. Dependent Variable: Premium

Source: Field data (2014)

The hypothesis was thus rejected with respect to premium. The beta coefficients were statistically significant (p- values < 0.05). The results revealed statistically significant results for individual effect of financial resources and physical resources on premium growth. Positive effects were reported for financial resources while negative effects were observed for physical resources.

The relationship in Table 5.1 was represented by the following equation:

$$\text{Premium Growth} = - 0.564 \text{ PHY} + 0.473 \text{ FIN}$$

$$(0.004) \quad (0.014)$$

Where; PHY = Physical resources, FIN = Financial resources.

The regression equation shown above indicates that for every unit change in financial resources, there is an increase of KShs 0.473 in premium. However, a unit change in physical resources causes a decrease of KShs - 0.564 in premium. This means that insurance companies should focus on financial resources as they lead to increased premium.

Table 5.2 shows regression results for influence of tangible resources on profit.

Table 5.2: Influence of Tangible Resources on Average Profit

Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
1	.275 ^a	.076	.005		2.10542	
ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	9.434	2	4.717	1.064	.360 ^a
	Residual	115.253	26	4.433		
	Total	124.687	28			

A. Predictors: (Constant), Financial Resources, Physical Resources

B. Dependent Variable: Profit

Source: Field data (2014)

The coefficient of determination was 0.076 which indicate that only 7.6 percent of variation in profit was explained by tangible resources. The remaining 92.4 percent was explained by other factors not considered in the study. The overall model had a p-value of 0.360. The results indicate a statistically not significant model which is not robust to

explain the results. This indicates that tangible resources do not influence profit. The hypothesis was not rejected with respect to average profit and thus tangible resources do not influence profit.

Table 5.3 shows regression results for the influence of tangible resources on customer perspective.

Table 5.3: Influence of Tangible Resources on Customer Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.351 ^a	.124	.063	.09925		
ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.040	2	.020	2.044	.148 ^a
	Residual	.286	29	.010		
	Total	.326	31			

A. Predictors: (Constant), Financial Resources, Physical Resources

B. Dependent Variable: Customer Perspective

Source: Field data (2014)

The coefficient of determination was 0.124 which indicate that only 12.4 percent of variation in customer perspective was explained by tangible resources. The remaining 77.6 percent was explained by other factors not considered in the study. The overall model had a p-value of 0.148 and the results indicate a statistically not significant model. The hypothesis was not rejected with respect to customer perspective and concluded that tangible resources do not influence customer perspective.

Table 5.4 shows regression results for the influence of tangible resources on internal business processes.

Table 5.4: Influence of Tangible Resources on Internal Business Processes

Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
1	.468 ^a	.219	.165		.10561	
ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.091	2	.045	4.069	.028 ^a
	Residual	.323	29	.011		
	Total	.414	31			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	.366	.140		2.608	.014
	Physical Resources	.098	.181	.101	.543	.591
	Financial Resources	.363	.164	.411	2.207	.035

A. Predictors: (Constant), Financial Resources, Physical Resources

B. Dependent Variable: Internal Processes

Source: Field data (2014)

The coefficient of determination was 0.219 which indicate that 21.9 percent of variation in internal business processes was explained by tangible resources. The remaining 78.1 percent was explained by other factors not considered in the study. The overall model had a p-value of 0.028 and the results reveal a statistically significant model indicating that tangible resources influence internal business processes. The beta coefficient for physical resources was statistically not significant (p-value > 0.05) while the beta for financial resources was statistically significant (p-value < 0.05).

The results indicate that the individual effect of physical resources was not significant while statistically significant results were reported for financial resources. Positive effects were reported for financial resources on internal business processes. The hypothesis was rejected concluding that tangible resources significantly influence internal business processes.

The relationship in Table 5.4 was represented by the following equation:

$$\text{Internal Business Processes} = 0.411 \text{ FIN} \\ (0.035)$$

Where; FIN = Financial resources.

The regression equation shown above indicates that a unit change in financial resources causes an increase of KShs 0.411 in internal business processes. This means that insurance firms should focus on acquiring financial resources as they lead to efficiency in internal business processes.

Table 5.5 shows regression results for the influence of tangible resources on learning and growth.

Table 5.5: Influence of Tangible Resources on Learning and Growth

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.410 ^a	.168	.111	.09093		
ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.049	2	.024	2.936	.069 ^a
	Residual	.240	29	.008		
	Total	.288	31			

A. Predictors: (Constant), Financial Resources, Physical Resources

B. Dependent Variable: Learning and Growth

Source: Field data (2014)

The coefficient of determination was 0.168 which indicate that 16.8 percent of variation in learning and growth was explained by tangible resources. The remaining 83.2 percent was explained by other factors not considered in the study. The results also indicated a statistically not significant model (p-value = 0.069). This indicates that tangible resources do not influence learning and growth. The hypothesis was not rejected with respect to learning and growth and thus tangible resources do not influence learning and growth.

Table 5.6 shows regression results for the influence of tangible resources on environment aspect.

Table 5.6: Influence of Tangible Resources on Environment Aspect

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.532 ^a	.283	.234	.16451		
ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.310	2	.155	5.731	.008 ^a
	Residual	.785	29	.027		
	Total	1.095	31			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	.252			1.149	.260
	Physical Resources	-.243	.282	-.154	-.862	.396
	Financial Resources	.842	.256	.588	3.291	.003

A. Predictors: (Constant), Financial Resources, Physical Resources

B. Dependent Variable: Environment Aspect

Source: Field data (2014)

The coefficient of determination was 0.283 indicating that 28.3 percent of variation in environment aspect was explained by tangible resources. The remaining 71.7 percent was explained by other factors not considered in this study. The results indicate a statistically significant model (p-value = 0.008). The hypothesis was rejected and this shows that tangible resources influence environment aspect. The results reveal statistically not significant results for the independent effect of physical resources while statistically significant results are observed for financial resources on environment aspect.

The relationship in Table 5.6 was represented by the following equation:

$$\text{Environment Aspect} = 0.588 \text{ FIN} \\ (0.003)$$

Where; FIN = Financial resources.

The regression equation shown above indicates that a unit change in financial resources causes an increase of KShs 0.588 in environment aspect. The results indicate for managers of insurance companies to invest more in financial resources as it will enable these organizations to allocate more finances for environmental conservation.

Table 5.7 shows regression results for the influence of tangible resources on social responsibility.

Table 5.7: Influence of Tangible Resources on Corporate Social Responsibility

Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
1	.435 ^a	.189	.134		.19843	
ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.267	2	.133	3.389	.048 ^a
	Residual	1.142	29	.039		
	Total	1.409	31			
Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t-value	Sig.
1	(Constant)	.373	.264		1.413	.168
	Physical Resources	-.384	.340	-.214	-1.128	.268
	Financial Resources	.803	.309	.494	2.601	.014

A. Predictors: (Constant), Financial Resources, Physical Resources

B. Dependent Variable: Corporate Social Responsibility

Source: Field data (2014)

The coefficient of determination was 0.189 indicating that 18.9 percent of variation in social responsibility was explained by tangible resources. The remaining 81.1 percent was explained by other factors not considered in the study. The results indicate a statistically significant model (p-value = 0.048) and therefore tangible resources influence social responsibility. The hypothesis was rejected with respect to CSR. The results reveal statistically significant results for the independent effect of financial resources while statistically not significant results are observed for physical resources on social responsibility. Positive effects were reported for financial resources.

The relationship in Table 5.7 was represented by the following equation:

$$\text{Corporate social responsibility} = 0.494 \text{ FIN} \\ (0.014)$$

The regression equation shown above indicates that for every unit change in financial resources there is an increase of KShs 0.494 in social responsibility. The results indicate that insurance firms should put more emphasis on financial resources as they will improve the firms' investment in CSR.

After establishing the individual and combined effects, a composite index was computed for tangible resources and regressed on the composite index of all the non-financial performance indicators to establish the influence of tangible resources on non-financial firm performance and the results are shown in Table 5.8.

Table 5.8: Influence of Tangible Resources on Non-Financial Firm Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.439	.193	.166	.09019		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F-value	Significance (P-value).
1	Regression	.058	1	.058	7.175	.012 ^a
	Residual	.244	30	.008		
	Total	.302	31			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	.390	.120		3.253	.003
	Tangible Resources	.406	.152	.439	2.679	.012
a. Predictors: (Constant), Tangible Resources						
b. Dependent Variable: Non-Financial Firm Performance						

Source: Field data (2014)

The regression results in Table 5.8 indicate a statistically significant model (p-value = 0.012). The results indicate that 19.3 percent of variation in non-financial performance was explained by tangible organizational resources. The remaining 80.7 percent was explained by other factors not considered in the study. The variation coefficient was also significant (p-value = 0.012). The hypothesis that tangible resources do not influence non-financial performance was rejected and therefore tangible resources influence non-financial performance. The results are consistent with previous studies that have found a positive relationship between tangible resources and firm performance (Lee et al., 2001). Based on the results in Table 5.8, the following simple regression equation can be used to estimate non-financial performance of an insurance company in Kenya for a given level of tangible resources.

$$\text{NFP} = 0.439\text{TR} \\ (0.012)$$

Where; NFP = Non-financial firm performance; TR = Tangible resources

The regression equation shown above indicates that for every unit change in tangible resources, there is an increase of Kshs 0.439 in non- financial firm performance.

Intangible resources were defined in terms of reputation, capabilities, culture, technology and knowledge. Both theoretical and empirical studies have shown that intangible resources are the most important for a firm as they are difficult to imitate (Barney, 1991; Hitt et al., 2001). Amit and Schoemaker (1993) proposed that intangible resources were most likely to be a source SCA as opposed to tangible resources. Based on this proposition, the following sub hypothesis was formed for testing.

H_{01b}: Intangible organizational resources do not significantly influence performance of insurance companies in Kenya.

The study employed 15 statements that required respondents to indicate to what extent their firms possessed the intangible resources. Table 5.9 shows regression results for influence of intangible resources on average profit.

Table 5.9: Influence of Intangible Resources on Average Profit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.204 ^a	.041	.167	2.27952		
ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F-value	Sig.
1	Regression	5.174	5	1.035	.199	.960 ^a
	Residual	119.513	23	5.196		
	Total	124.687	28			

A. Predictors: (Constant), Culture, Capabilities, Technology, Reputation, Knowledge

B. Dependent Variable: Average Profit

Source: Field data (2014)

Results in Table 5.9 show the coefficient of determination was 0.014 indicating that 4.1 percent variation in profit was accounted for by intangible resources. The remaining 95.9 percent was explained by other factors not considered in the model. The results indicated a statistically not significant model (p -value = 0.960). This means that intangible resources do not have a significant influence on average profit. The hypothesis was not rejected with respect to profit.

Table 5.10 shows regression results for influence of intangible resources on premium.

Table 5.10: Influence of Intangible Resources on Premium

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.384 ^a	.147	-.030	.32813		
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.447	5	.089	.830	.541 ^a
	Residual	2.584	24	.108		
	Total	3.031	29			

A. Predictors: (Constant), Culture, Capabilities, Technology, Reputation, Knowledge

B. Dependent Variable: Premium

Source: Field data (2014)

The coefficient of determination was 0.147 which indicates that only 14.7 percent of variation in premium was explained by intangible resources. The remaining 85.3 percent was explained by other factors not considered in the study. Results also reveal a statistically not significant model (p-value = 0.541) which means that intangible resources do not influence premium growth and the hypothesis was not rejected with respect to premium growth. The results reveal statistically not significant results for individual effect of intangible resources on premium growth (p-values > 0.05) indicating that variables do not explain changes in premium. The hypothesis was not rejected and concluded that intangible resources do not influence premium.

Table 5.11 shows regression results for influence of intangible resources on customer perspective.

Table 5. 11: Influence of Intangible Resources on Customer Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.475 ^a	.226	.077	.09853		
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.074	5	.015	1.515	.220 ^a
	Residual	.252	26	.010		
	Total	.326	31			

A. Predictors: (Constant), Culture, Capabilities, Technology, Reputation, Knowledge

B. Dependent Variable: Customer Perspective

Source: Field data (2014)

The coefficient of determination was 0.226 which indicates that 22.6 percent of variation in customer perspective was explained by intangible resources. The remaining 77.4 percent was explained by other factors not considered in the study. Results also reveal a statistically not significant model (p-value = 0.220). The hypothesis was not rejected indicating that intangible resources do not influence customer perspective. The results reveal statistically not significant results for the independent effect of intangible resources on customer perspective (p-values > 0.05) indicating that the variables do not explain changes in customer perspective.

Table 5.12 shows regression results for influence of intangible resources on internal business processes.

Table 5.12: Influence of Intangible Resources on Internal Business Processes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.525 ^a	.276	.137	.10739		
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.114	5	.023	1.983	.115 ^a
	Residual	.300	26	.012		
	Total	.414	31			

A. Predictors: (Constant), Culture, Capabilities, Technology, Reputation, Knowledge

B. Dependent Variable: Internal Business Processes

Source: Field data (2014)

The coefficient of determination was 0.276 which indicates that only 27.6 percent of variation in internal business processes was explained by intangible resources. The remaining 72.4 percent was explained by other factors not considered in the study. Results also show a statistically not significant model (p-value = 0.115). The hypothesis was not rejected indicating that intangible resources do not influence internal business processes.

The results reveal statistically not significant results for the independent effect of intangible resources on internal business process (p-values > 0.05). This indicates that the variables do not explain the changes in internal business processes.

Table 5.13 shows regression results for influence of intangible resources on learning and growth.

Table 5.13: Influence of Intangible Resources on Learning and Growth

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.627 ^a	.393	.277	.08203		
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.113	5	.023	3.371	.018 ^a
	Residual	.175	26	.007		
	Total	.288	31			
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	.291	.114		2.548	.017
	Knowledge	-.064	.242	-.072	-.263	.794
	Capabilities	.146	.168	.191	.873	.391
	Technology	.034	.126	.049	.267	.792
	Reputation	.094	.121	.154	.778	.444
	Culture	.405	.245	.428	1.652	.111

a. Predictors: (Constant), Culture, Capabilities, Technology, Reputation, Knowledge

b. Dependent Variable: Learning and Growth

Source: Field data (2014)

The coefficient of determination was 0.393 which indicates that 39.3 percent of variation in learning and growth was explained by intangible resources. The remaining 60.7 percent was explained by other factors not considered in the study. Results also show a statistically significant model (p-value = 0.018). The results indicate that intangible resources have a significant influence on learning and growth. The hypothesis was rejected with respect to learning and growth.

The results reveal statistically not significant results for the independent effect of intangible resources on learning and growth (p- values > 0.05). This shows that independently, the variables do not explain the changes in learning and growth.

Table 5.14 below presents regression results for the influence of intangible resources on environment perspective.

Table 5.14: Influence of Intangible Resources on Environment Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.472 ^a	.223	.074	.18088		
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.244	5	.049	1.494	.226 ^a
	Residual	.851	26	.033		
	Total	1.095	31			

a. Predictors: (Constant), Culture, Capabilities, Technology, Reputation, Knowledge

b. Dependent Variable: Environmental Aspect

Source: Field data (2014)

The coefficient of determination was 0.223 which indicates that 22.3 percent of variation in environment aspect was explained by intangible resources. The remaining 77.7 percent was explained by other factors not considered in the study. Results also show a statistically not significant model (p-value = 0.226) indicating that intangible resources do not influence environmental aspect. The results reveal statistically not significant results for the independent effect of individual intangible resources on environment perspective (p-values > 0.05). This means that the variables do not explain the changes in learning and growth.

Table 5.15 presents results for the influence of intangible resources on CSR. The coefficient of determination was 0.338 which indicated that 33.8 percent of variation in social responsibility is explained by intangible resources. The remaining 66.2 percent was explained by other factors not considered in the study. The overall model had a p-value of 0.046 indicating that the model was statistically significant and robust to explain results. The results indicate that intangible resources have a statistically significant influence on CSR and the hypothesis was rejected. The beta coefficients for the variables were however, not significant (p-values > 0.05). This indicates that the independent variables do not explain the changes in CSR.

Table 5.15: Influence of Intangible Resources on Corporate Social Responsibility

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	
1	.581 ^a	.338	.210		.18944	
ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.476	5	.095	2.651	.046 ^a
	Residual	.933	26	.036		
	Total	1.409	31			

A. Predictors: (Constant), Culture, Capabilities, Technology, Reputation, Knowledge

B. Dependent Variable: Corporate Social Responsibility

Source: Field data (2014).

In order to test the hypothesis that intangible resources do not influence non-financial performance, a composite index for intangible resources was computed and regressed on the composite index of non-financial performance. Table 5.16 below shows results for the influence of intangible resources on non-financial performance. The R^2 was 0.287 meaning that 28.7 percent of variation in non-financial performance is accounted for by

intangible resources. The remaining 71.3 percent was explained by other factors not considered in the study.

The overall model had a p-value of 0.002 which is less than 0.05. The results indicate that intangible resources have a statistically significant influence on non-financial firm performance. The variation coefficient was also significant (p-value = 0.002). The hypothesis that intangible resources do not have a statistically significant influence on non-financial performance was rejected.

Table 5.16: Influence of Intangible Resources on Non-Financial Performance

Model	R	R Square	Adjusted R Square		Std. Error of the Estimate		
1	.536 ^a	.287	.263		.08477		
ANOVA							
Model		Sum of Squares	df	Mean Square	F-value	Sig.	
1	Regression	.087	1	.087	12.077	.002 ^a	
	Residual	.216	30	.007			
	Total	.302	31				
Coefficients							
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.	
		B	Std. Error	Beta			
1	(Constant)	.316	.114		2.772	.009	
	Intangible Resources	.551	.159	.536	3.475	.002	

A. Predictors: (Constant), Intangible Resources

B. Dependent Variable: Non-Financial Performance

Source: Field data (2014)

These findings are consistent with previous research findings that posit that intangible resources are important determinants for a firm's success (Barney, 2001; Amit and Schoemaker, 1993). Similarly, Eisenhardt and Santos (2000) posit that while tangible

resources enable a firm to execute its business processes, it is the intangible resources that are more likely to serve as sources of competitive advantage. The following simple regression equation can be used to estimate non-financial firm performance of an insurance company in Kenya for a given level of intangible resources.

$$\text{NFP} = 0.536 \text{ NTR} \\ (0.002)$$

Where; NFP = Non-financial firm performance, NTR = Non tangible resources

The regression equation shown above indicates that for every unit change in intangible resources, there is an increase of KShs 0.536 in non- financial firm performance. The results indicate that firms should invest in intangible resources as they lead to an increase in non-financial performance.

To be able to test the main hypothesis that stated that organizational resources do not influence performance, a composite index of both tangible and intangible resources combined was regressed on the composite index of non-financial performance indicator.

The combination of tangible and intangible organizational resources against non-financial firm performance yielded the results as shown in the Table 5.17.

Table 5.17: Influence of Organization Resources on Non-Financial Firm Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.586	.343	.321	.08136		
ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.104	1	.104	15.683	.000
	Residual	.199	30	.007		
	Total	.302	31			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	.210	.127		1.658	.108
	Organization Resources	.678	.171	.586	3.960	.000

Predictors: (Constant), Organization Resources

Dependent Variable: Non-Financial Performance

Source: Field data (2014)

Results in Table 5.17 indicate that the coefficient of determination was 0.343 and the results reveal that 34.3 percent variation in non-financial performance was explained by both tangible and intangible resources. The remaining 65.7 percent was explained by other factors not included in the study. The overall model had a p-value of 0.000 indicating that the model was statistically significant. The hypothesis that organizational resources do not influence performance of insurance companies in Kenya was rejected. Organizational resources had a beta coefficient of 0.586 with a p-value of 0.000 indicating that a unit change in organizational resources causes a change of 0.586 in non-financial performance.

The current study findings are consistent with those of previous researchers that have found a positive relationship between organizational resources and firm performance (Lee et al., 2001; Carmeli and Tishler, 2004b). The following simple regression equation can be used to estimate non-financial firm performance of an insurance company in Kenya for a given level of both tangible and intangible resources.

$$\text{NFP} = 0.586 \text{ OR} \\ (0.000)$$

Where; NFP = Non-financial firm performance, OR = Organizational resources (Intangible resources and tangible resources).

The regression equation shown above indicates that for every unit change in organizational resources, there is an increase of KShs 0.586 in non-financial firm performance. Firms should therefore invest in organizational resources as they lead to an increase in non-financial performance.

The first objective of the study was to establish the influence of organizational resources on performance of insurance companies in Kenya. To achieve this objective, respondents were asked to state to what extent their firms possessed tangible and intangible resources. Based on the findings from descriptive statistics, the results indicated that insurance companies possessed tangible resources to a high extent and intangible resources to a moderate extent. The tangible resource with the highest mean was deposits in banks while the intangible resource with the highest score was reputation. Insurance firms need to have sufficient financial resources to be able to settle claims when they occur.

Financial resources are also important as they can be invested to earn more returns. The results are consistent with empirical and theoretical studies that posit that the resources possessed and controlled by a firm (both tangible and intangible) are the drivers of a firm's competitive advantage (Wernerfelt, 1984; Barney, 1991; Grant, 1991; Lee et al., 2001).

The study hypothesized that there was a statistically significant relationship between organizational resources and performance of insurance companies in Kenya. This was based on the premise that the relationship between resources and firm performance has been established by different scholars as seen in the literature review. The extant literature reveals that there is a positive relationship between resources that a firm owns and its performance (Barney, 1999). Strategic management scholars and practitioners posit that resources are the primary predictors of a firm's superior performance (Wernerfelt, 1984; Barney, 1999). According to the extant literature, not all resources a firm possesses have the potential to provide the firm with a SCA (Clulow, 2007). The study sought to empirically investigate further the relationship between resources and performance in insurance companies in Kenya.

With respect to the individual effect of tangible resources on the various performance indicators, the findings were mixed. The study reported statistically significant influence of tangible resources on premium, internal business processes, environment aspect and CSR. Statistically not significant results were observed for profit, customer perspective and learning and growth. This indicated that, tangible resources significantly influence premium but do not significantly influence profit.

Conversely, when the composite index of tangible resources was regressed on the composite of non-financial performance measure, the results indicated an R^2 of 0.193 which was lower as compared to the R^2 of some of the individual effect results. This was an indicator that individually, tangible resources had a higher contribution to non-financial performance than when combined. The results for the individual effect of intangible resources on various firm performance indicators were statistically not significant for premium, profit, customer perspective, internal business processes and environment aspect. The results indicated that intangible resources do not significantly influence both premium and profit.

The results indicated statistically not significant results for the individual effects of intangible resources on the non-financial performance indicators except for internal business processes and corporate social responsibility. However, when the composite index for intangible resources was regressed on the composite index of non-financial performance, the study established statistically significant influence of intangible resources on non-financial performance. This means that the various attributes may not have a significant effect on non-financial performance as individual variables. However, in combination, they had a significant influence.

This study established that when the composite index of tangible and intangible resources was regressed on non-financial performance; there was a statistically significant relationship between organizational resources and non-financial performance of insurance companies in Kenya. However, intangible resources had a higher contribution

to non-financial performance of insurance companies in Kenya as compared to the tangible resources. These results compare well to both local and international studies. In their empirical study of 93 Israeli firms, Carmeli and Tishler (2004b) found that intangible resources (managerial skills, organizational culture, organizational communication, and perceived organizational reputation) were a source of superior firm performance. Of the four variables, their study established that reputation had the highest contribution to firm performance.

Descriptive statistics results revealed that reputation had the highest mean score. According to Fombrun (1996), publics will prefer to enter into a contract with a firm with a favorable reputation, and would be willing to pay a reasonable premium to do so. This is consistent with other strategic management researchers (Carmeli and Tishler, 2004b) who argue that intangible resources are the main drivers of SCA. Teece (2000) posited that a firm's superior performance depended on its ability to defend and use intangible assets. Itami and Roehl, (1987) propose that intangible resources such as organizational reputation and culture are a source of SCA.

These results suggest that in order for insurance companies to achieve a SCA, they need not only to invest in tangible resources but need to put more emphasis on intangible resources that are hard to imitate. Insurance firms should ensure that they have a good reputation as it is the firm's image that draws stakeholders to the organization. Employees, customers, suppliers, investors and the general public will be attracted to a firm that has a positive image. Iwu-Egwuonwu (2011) found that corporate reputation

had a positive influence on firm performance. He posited that firm reputation was highly perishable and so firms should strive to maintain it.

The results of this study lend support to Kaplan and Norton's (1996) BSC perspective of measuring a firm's performance using both financial and non-financial performance indicators. Kaplan and Norton noted that financial indicators were subjective and for firms to better measure their performance, they need to focus on non-financial performance. Non-financial performance measures are important to firms as they not only focus on shareholders but on all the firms' stakeholders. If all stakeholders' expectations are met, the firms will be in a better position to experience better performance.

The results that tangible resources influence performance are consistent with previous studies that have found a positive relationship between tangible resources and performance. Morgan et al. (2004) in Ismail et al. (2012) argued that financial resources such as cash-in-hand, bank deposits and/or savings and financial capital (such as stocks and shares) were a source of a firm's competitive advantage and superior performance. This is true for insurance firms as earlier noted that they had highly invested in tangible resources.

In this study, when intangible resources were combined, their influence on non-financial performance was statistically significant. However, when the study sought to establish if individual resources influenced performance, there were mixed findings. This is consistent with Hult and Ketchen (2001) who established a non-linear relationship between resources and firm success. They posited that no single resource had a positive

advantage on performance. They content that when resources are used in combination, they are a source of superior performance. The results contribute to the RBT by indicating to managers of insurance firms that it is how resources are combined that leads to a competitive advantage. It is the bundling/re-bundling and configuration of resources by managers that will lead to superior performance in line with (Penrose 1959).

With respect to financial performance measures, the study found a statistically not significant relationship between organizational resources and profit before tax and premium. These results indicate that for insurance companies, premium and profit (financial performance) are not driven by resources. Other factors might come in to play. For instance, in the recent past due to acts of terrorism, insurance companies have increased their premiums due to customers wanting to insure their properties against terrorism. Other factors that might be driving profitability in insurance companies are high income, instability (terrorism) and IRA fixing minimum premiums payable. Conversely, the study established that non-financial performance of insurance companies was accounted for by organizational resources. This indicated that managers of these companies should focus on non-financial performance measurement.

5.3 Organizational Resources and Innovation

Objective two of the study was to establish the relationship between organizational resources and innovation of insurance companies in Kenya. According to Brown and Eisenhardt (1995) and Henderson and Cockburn (1994), the resources and capabilities owned by a firm determine its capacity to innovate. Thus, firms that have strategic resources will be innovative as compared to their counterparts who do not possess these resources.

The extant literature proposes that organizational resources influence innovation and for firms to successfully innovate they need resources. According to the RBV, the presence of different organizational resources and capabilities positively affects the outcome of the innovation process. Kostopoulos et al. (2002) propose that organizational resources (tangible and intangible) provide the input that in turn is combined and transformed by capabilities to produce innovative forms of competitive advantage. The availability of financial resources can expand a firm's capacity to support its innovative activities (Lee et al. 2001). It is in this light that the study sought to test the following hypothesis.

H₀₂: Organizational resources do not have a relationship with innovation of insurance companies in Kenya.

To achieve this objective, correlation analysis was performed to establish the degree of correlation between organizational resources and innovation using Pearson product moment correlation. To test for the hypothesis, innovation was evaluated as R & D and process improvements while resources were evaluated as tangible and intangible. The variables that were significant at p-values < 0.05 and p-values < 0.01 were reported and the results are shown in Table 5.18 below.

Table 5.18: Relationship Between Tangible Resources, Intangible Resources, Research and Development and Process Improvements

Variables		Research and Development	Process Improvement
Tangible resources	Pearson Correlation	.135	.277
	Sig. (2-tailed)	.460	.125
Intangible resources	Pearson Correlation	.522**	.484**
	Sig. (2-tailed)	.002	.005

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

Source: Field data (2014)

Table 5.18 presents results of the correlation between tangible and intangible resources and R & D and process improvements. A moderate and positive relationship was observed between intangible resources and R & D ($r = 0.522$, $p\text{-value} = 0.002$). There was also a moderate and positive relationship between intangible resources and process improvements ($r = 0.484$, $p\text{-value} = 0.005$). This means that intangible resources are significantly related to R & D and process improvements. The results imply that managers of insurance companies should focus on attracting intangible resources if innovation has to improve.

The results indicate that intangible resources significantly influence both R & D and process improvements in tandem with previous research findings and the RBT which propose that intangible resources are the primary predictors of innovation (Song & Parry, 1997). However, a weak positive statistically not significant relationship was observed between tangible resources and both R & D and process improvements. This finding contradicts findings from previous empirical studies that have found a relationship between tangible resources and innovation (Lee et al., 2001).

The study further sought to establish the relationship between resources and innovation by using the composite index for resources and the composite index for innovation. Table 5.19 presents correlation results between innovation and organizational resources.

Table 5.19: Relationship Between Resources and Innovation

Variables		Innovation	Organization Resources
Innovation	Pearson Correlation	1	.485**
	Sig. (2-tailed)		.005

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

Source Field data (2014)

The results in Table 5.19 indicate that innovation has a moderate positive correlation with organizational resources that was statistically significant ($r = 0.485$, $p\text{-value} = 0.005$.) This was an indicator that there is a significant relationship between organizational resources and innovation. The results imply that for innovation to take place, firms should possess adequate resources consistent with the RBT which states that the presence of different organizational resources and capabilities positively affect the outcome of the innovation process (Kostopolous et al., 2002). However, it is worth noting that when tangible and intangible resources are combined, the relationship was weaker as compared to the relationship of intangible resources alone indicating that intangible resources were important predictors of firm innovation.

The hypothesis that resources do not have a relationship with innovation was rejected. The findings support previous studies that found a positive relationship between intangible resources and innovation. Bakar and Ahmad (2010) studying small firms in Malaysia found that intangible resources were the main drivers of innovation. This is consistent with the RBV that states that intangible resources are the main drivers of innovation and hence performance (Barney, 1991).

Empirical and theoretical literature proposes that certain resources are important for innovation to take place. Lee et al. (2001) proposed that firms that had adequate financial resources had the capacity to expand their innovative activities. Conversely, Teece and Pisano (1994) argued that lack of financial resources inhibits the firm's ability to innovate. Results of this study did not support this proposition as there was no correlation between tangible resources and R & D and process improvements.

The results revealed that intangible resources have a strong positive correlation with both R&D and process improvement indicating that insurance companies should focus on acquiring intangible resources as they will enhance innovation. The results indicate that intangible resources influence innovation while tangible resources do not influence innovation. The results of this study support previous empirical and theoretical studies. Song & Parry (1997) proposed that technical resources like Information Technology (IT) systems had a significant influence on firm performance while Barney (1991), proposed that intangible resources are more important than tangible resources since they were hard to imitate.

Song & Parry (1997) argue that organizations with qualified human personnel will be more likely to spur the firm to be more innovative. The results of this study suggest that insurance companies should pay more attention to intangible resources if they are to be innovative. As suggested through theoretical literature, intangible resources such as knowledge that is embedded in employees will lead to innovative ideas that are the beginning of the innovative process.

Findings from personal interviews indicated that most insurance firms had not fully embraced innovation and that there was more of copying other company's' products instead of coming up with new ones. Further, most organizations did not seem to invest in R & D (mean score of 2.84). The result suggest that managers of insurance firms should endeavor to put more emphasis on intangible resources such as knowledge, skills and training that influence innovative capacity of the firm in order to get a competitive advantage and improved performance.

A number of studies have established a positive relationship between intangible resources and innovation. Kostopoulos et al. (2002) established a positive relationship between organizational knowledge and the firm's innovative propensity. Song and Parry (1997) proposed that a firm that possess qualified personnel with advanced technical skills, know-how in R&D projects, and risk taking propensity increases the firm's ability to innovative. Tiger and Calantone (1998) carried out a study of the US software industry and established that thorough customer knowledge enhances new product development. Conversely, Johnson et al. (2008) in their study of large European firms confirmed that firms with high knowledge were in a position to embrace systemic change and innovation. Luoma-Aho et al. (2012) proposed that intangible resources were very important for organizational innovation. Lev (2001) argues that firms that invest in intangible resources have a higher capacity to innovate.

Cox and Blake (1991) argue that firms should invest in a more diverse work force. This will lead to creativity and innovativeness that will in turn lead to superior performance. Conversely, Romanelli, (1987) posits that the firm's range of strategic options is broader if resources are available. By having access to resources, a firm's ability to take risks, to innovate and to be proactive is enhanced. Newman (2000) argues that learning can help organizations to change as learning helps firms to generate new knowledge, recombine existing knowledge and skills, and adapt to changing market conditions. Organizational learning has been found to have positive effects on innovation. Knowledge determines competitiveness and encourages firms to have an innovative behaviour (Nonaka, 1994).

Other scholars propose that intangible assets do not depreciate with repeated use (Wernerfelt, 1991) and are associated with improved performance (Carmeli & Tishler, 2004b). With respect to tangible resources, the results of the current study were not consistent with previous studies that had suggested that tangible resources are important for a firm's innovation. Lee et al. (2001) established that firms that had adequate financial resources had the capacity to expand their innovative activities as compared to those who had scarce resources. Conversely, Teece and Pisano (1994) posit that firms that lack adequate financial resources may limit a firm's ability to innovate. Firms with adequate funds (financial resources) are more likely to be involved in R & D than their counterparts.

5.4 Organizational Resources, Innovation and Firm Performance

Objective three of the study was to determine the intervening influence of innovation on the relationship between organizational resources and performance of insurance companies in Kenya. To achieve this objective, the following hypothesis was set:

H₀₃: Innovation does not have a statistically significant intervening influence on the relationship between organizational resources and performance of insurance companies in Kenya.

To test for the intervening influence, the study used hierarchical regression analysis. The composite index of non-financial performance, profit and premium was regressed on tangible and intangible resources and innovation and the results are presented in the tables that follow.

Table 5.20: Organizational Resources and Innovation on Non-Financial Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.587 ^a	.344	.299	.08270	.344	7.607	2	29	.002
2	.769 ^b	.591	.547	.06646	.247	16.909	1	28	.000

A. Predictors: (Constant), Intangible Resources, Tangible Resources

B. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

Source: Field data (2014).

Table 5.20 shows the coefficient of determination for tangible and intangible resources in model one while model two shows the coefficient of determination for the tangible and intangible resources jointly with innovation. In model one, R² was 0.344 indicating that resources alone accounted for 34.4 percent variation in non-financial performance. In

model two, when innovation was added, R^2 was 0.591. This indicates that tangible and intangible resources together with innovation accounted for 59.1 percent variation in non-financial performance of insurance companies in Kenya. The R^2 change was 0.247 when innovation was added implying that innovation accounted for a further 24.7 percent variation in non-financial performance.

The results indicate that for insurance companies in Kenya, innovation will lead to a SCA hence improved performance. Managers of these firms should focus on innovation to realize improved performance. The results are consistent with previous studies that have found that combining resources with innovation led to improved performance.

Table 5.21: Analysis of Variance of the Influence of Organizational Resources and Innovation on Non-Financial Performance.

Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.104	2	.052	7.607	.002 ^b
	Residual	.198	29	.007		
	Total	.302	31			
2	Regression	.179	3	.060	13.490	.000 ^c
	Residual	.124	28	.004		
	Total	.302	31			

A. Dependent Variable: Non-Financial Performance

B. Predictors: (Constant), Intangible Resources, Tangible Resources

C. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

Source: Field data (2014)

Table 5.21 presents results for the model summary and both models one and two were significant (p-values = 0.002 and 0.000), respectively. The hypothesis was rejected and therefore innovation had a statistically significant intervening influence on the relationship between organizational resources and non-financial performance of insurance companies on Kenya.

Table 5.22: Coefficients of Organizational Resources and Innovation on Non-Financial Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.205	.131		1.566	.128
	Tangible resources	.242	.153	.262	1.588	.123
	Intangible resources	.439	.170	.427	2.585	.015
2	(Constant)	.181	.106		1.710	.098
	Tangible resources	.271	.123	.293	2.204	.036
	Intangible resources	.099	.160	.096	.617	.542
	Innovation	.379	.092	.591	4.112	.000

A. Dependent Variable: Non-Financial Performance
 Source: Field data (2014).

Table 5.22 above shows coefficients for tangible and intangible organizational resources in model one. Model two presents coefficients for tangible and intangible organizational resources jointly with innovation. Tangible resources and innovation had positive coefficients ($b_1 = 0.293$, $p\text{-value} = 0.036$; $b_2 = 0.591$; $p\text{-value} = 0.000$), respectively indicating that a unit change in tangible resources causes a positive change in non-financial performance. Likewise, a unit change in innovation causes a positive change in non-financial performance. The relationship can be represented by the following equation:

$$\text{Non-financial performance} = 0.293 \text{ TR} + 0.591 \text{ INN}$$

(0.036) (0.000)

The results indicate that a unit change in tangible resources causes an increase of KShs 0.293 in non-financial performance while a unit change in innovation causes an increase

of KShs 0.591 in non-financial performance. The results indicate that insurance companies should focus on innovation and tangible resources for improved performance.

Table 5.23: Organizational Resources and Innovation on Premium

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.176 ^a	.031	.041	.32983	.031	.431	2	27	.654
2	.313 ^b	.098	.006	.32427	.067	1.933	1	26	.176

A. Predictors: (Constant), Intangible Resources, Tangible Resources

B. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

Source: Field data (2014)

Table 5.23 shows the coefficient of determination for tangible and intangible resources in model one while model two shows the coefficient of determination for tangible and intangible resources jointly with innovation. In model one, R^2 was 0.031 indicating that resources alone account for 3.1 percent variation in premium. In model two, when innovation was added, R^2 was 0.098. This indicates that tangible and intangible resources together with innovation accounted for 9.8 percent variation in premiums of insurance companies in Kenya. The R^2 change was 0.067 when innovation was added implying that innovation accounted for a further 6.7 percent variation in premium.

Table 5.24: Analysis of Variance of the Influence of Organizational Resources and Innovation on Premium

Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.094	2	.047	.431	.654 ^b
	Residual	2.937	27	.109		
	Total	3.031	29			
2	Regression	.297	3	.099	.942	.435 ^c
	Residual	2.734	26	.105		
	Total	3.031	29			

A. Dependent Variable: Premium Growth

B. Predictors: (Constant), Intangible Resources, Tangible Resources

C. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

Source: Field data (2014)

Table 5.24 presents results for the model summary and both models one and two were not significant (p-values = 0.654 and 0.435), respectively. The hypothesis was not rejected and therefore innovation does not have a statistically significant intervening influence on the relationship between organizational resources and premium growth of insurance companies in Kenya. The model being not significant implied that it was not robust enough to predict results.

Table 5.25 shows the coefficient of determination for tangible and intangible resources in model one while model two shows the coefficient of determination for tangible and intangible resources jointly with innovation. In model one R^2 was 0.029 indicating that resources alone accounted for 2.9 percent variation in profit. In model two, when innovation was added, R^2 was 0.108 and this indicates that tangible and intangible resources together with innovation accounted for 10.8 percent variation in premium of insurance companies in Kenya. The R^2 change was 0.079 when innovation was added implying that innovation accounted for a further 7.9 percent variation in profit.

Table 5.25: Organizational Resources and Innovation on Profit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.170 ^a	.029	.046	2.15819	.029	.385	2	26	.684
2	.328 ^b	.108	.001	2.10968	.079	2.209	1	25	.150

A. Predictors: (Constant), Intangible Resources, Tangible Resources

B. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

Source: Field data (2014)

Table 5.26 presents results for the overall model summary which indicated that both models one and two were statistically not significant (p-values = 0.648 and 0.407), respectively. The hypothesis was not rejected and therefore innovation did not have a

statistically significant intervening influence on the relationship between organizational resources and profit of insurance companies in Kenya. The model being not significant implied that it was not robust enough to predict results.

Table 5.26: Analysis of Variance of the Influence of Organizational Resources and Innovation on Profit

Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	3.585	2	1.792	.385	.684 ^b
	Residual	121.102	26	4.658		
	Total	124.687	28			
2	Regression	13.418	3	4.473	1.005	.407 ^c
	Residual	111.269	25	4.451		
	Total	124.687	28			

A. Dependent Variable: Profit

B. Predictors: (Constant), Intangible Resources, Tangible Resources

C. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

Source: Field data (2014)

The study sought to determine if innovation had a statistically significant intervening influence on the relationship between organizational resources and performance of insurance companies in Kenya. The results established a statistically significant intervening influence of innovation on the relationship between organizational resources and non-financial performance of insurance companies in Kenya. However, with regards to financial performance, the study established that innovation does not have a statistically significant intervening influence on premium and profit.

The results of this study lend partial support to previous studies that have indicated that organizational resources in the presence of innovation are likely to lead to superior firm performance (Bakar and Ahmad, 2010). They argue that when resources are combined

with innovation, they lead to a competitive advantage (Bakar and Ahmad 2010). In their study of 700 Malaysian small and medium firms, they sought to find out which of the firm's resources contributed most to product innovation performance. Their study established that intangible resources were the main drivers of product innovation performance in line with the RBV. However, for this study, tangible resources and innovation were found to be the drivers of non-financial performance which is a contradiction of Bakar and Ahmads' (2010) study.

Penrose (1959) proposed that it was not the resources owned by the firm that produced a CA. Rather she argued that it was how the firms combined the bundle of resources that produced a SCA. Further, she posits that product innovation can be a source of competitive advantage. The results of this study suggest to managers of insurance firms that in order for them to achieve success, they need to use the firms' resources effectively and efficiently.

5.5 Relationship Between Organizational Resources, External Environment and Innovation

Objective four of the study was to establish the relationship between organizational resources, external environment and innovation. To achieve this objective, the following hypothesis was formulated;

H₀₄: There is no relationship between organizational resources, external environment and innovation.

Correlation analysis was used to test this relationship. In the first analysis, the relationship between individual variables was determined followed by the relationship of the combined variables. The results for the relationship between individual variables are shown in Table 5.27.

Table 5.27 presents results for the relationship between tangible resources, intangible resources, R & D, process improvements and environmental munificence, dynamism and complexity. The results indicate that there was a moderate positive relationship between intangible resources and tangible resources ($r = 0.478$, $p\text{-value} = 0.006$). Conversely, there was a moderate positive correlation between intangible resources and R & D ($r = 0.522$, $p\text{-value} = 0.002$). Intangible resources had a positive moderate correlation with process improvements ($r = 0.484$, $p\text{-value} = 0.005$).

There was a strong positive correlation between R & D and process improvements that was statistically significant ($r = 0.746$, $p\text{-value} = 0.000$). The results imply that investment in R & D will significantly lead to process improvements while possessing intangible resources will lead to R & D and process improvements. However, there were weak positive and negative relationships between resources, innovation and external environment dimensions which were statistically not significant. This indicates that external environment does not have a statistically significant influence on organizational resources and innovation.

Table 5.27: Relationship Between Tangible Resources, Intangible Resources, Research and Development, External Environment and Innovation.

Variables		Tangible resources	Intangible resources	Research and Development	Process improvement	Munificence	Dynamism	Complexity
Tangible resources	Pearson Correlation	1	.478**	.241	.318	.046	-.093	-.141
	Sig. (2-tailed)		.006	.184	.076	.803	.614	.441
Intangible resources	Pearson Correlation	.478**	1	.522**	.484**	.166	.117	.261
	Sig. (2-tailed)	.006		.002	.005	.363	.523	.150
Research and Development	Pearson Correlation	.241	.522**	1	.746**	.160	.086	-.043
	Sig. (2-tailed)	.184	.002		.000	.381	.641	.814
Process improvement	Pearson Correlation	.318	.484**	.746**	1	.194	.045	-.107
	Sig. (2-tailed)	.076	.005	.000		.288	.805	.562
	Sig. (2-tailed)	.441	.150	.814	.562	.153	.000	

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

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

Source: Field data (2014)

Further, the study computed a composite index for resources, innovation and external environment and sought to determine if any relationship existed and the results are shown in Table 5.28 below.

Table 5.28: Relationship Between Organizational Resources, Innovation and External Environment

Variables		Organization Resources	Innovation	External Environment
Organization resources	Pearson Correlation	1	.485**	.292
	Sig. (2-tailed)		.005	.105
Innovation	Pearson Correlation	.485**	1	.166
	Sig. (2-tailed)	.005		.364
External environment	Pearson Correlation	.292	.166	1
	Sig. (2-tailed)	.105	.364	

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

Source: Field data (2014).

Results in Table 5.28 indicate that there was a statistically significant positive moderate correlation between organizational resources and innovation ($r = 0.485$, $p\text{-value} = 0.005$). This implies that organizational resources influence innovation and firms should therefore invest in resources if they have to successfully innovate. This is consistent with previous empirical findings that have established a positive relationship between resources and innovation. (Kostopoulos et al., 2002). However, results also indicated that there was a weak positive relationship that was statistically not significant between organizational resources, innovation and external environment. The hypothesis that there is no relationship between organizational resources, external environment and innovation was not rejected.

Objective four of the study sought to establish the relationship between organizational resources, external environment and innovation. The results indicated that there was a moderate positive statistically significant correlation between organizational resources and innovation. However, a weak positive statistically not significant relationship was established between organizational resources, external environment and innovation.

The results of this study are partially consistent with previous empirical and theoretical findings. Russell and Russell (1992) found that organizations that operated in uncertain environments were expected to adopt a greater number of innovations than those that operated in relatively certain environments. Damanpour and Gopalakrishnan (2001) posit that firms that adapt to variations in the environment by adopting administrative and technical innovations will increase the effectiveness of firm's operations and process. These observations indicate that the firms' external environment influences the decision that firms make on whether to innovate or not which leads to better performance.

Results from descriptive statistics showed that the external environment was found to be unfavorable to insurance companies. This implies that the external environment in terms of abundance/scarcity of resources does not favour insurance companies. This could be due to price wars and undercutting by insurance companies and poaching of employees from one company to the other affecting the performance of these companies.

In his study of the influence of environmental and organizational factors on innovation adoptions in the public sector in Spain, Naranjo-Gil (2009) found that high adopters of technical and administrative innovations were more sensitive to environmental factors than to organizational factors. Naranjo-Gil (2009) argued that organizations operating in a more competitive environment are more likely to adopt innovation. Conversely, Damanpour and Gopalakrishnan (2001) argue that firms adapt to changes in the environment by adopting innovation and this leads to improved firm performance.

Miles and Snow (1978) in their study of the U.S. electronics industry found that increased environmental uncertainty prompted firms to adopt more to innovation than those firms that were in a stable environment. Conversely, Miller and Friesen (1983) in their studies of competitive industries in the U.S. and Canada found that as environmental uncertainty and hostility increased firms were likely to engage in innovative activities.

These results indicate that the driver of the firm's innovation is not the external environment and other factors might come in to play. The study concludes that for insurance companies, external environment was not a driver of innovation as established. Managers of insurance companies should thus focus on scanning the external environment for improved performance.

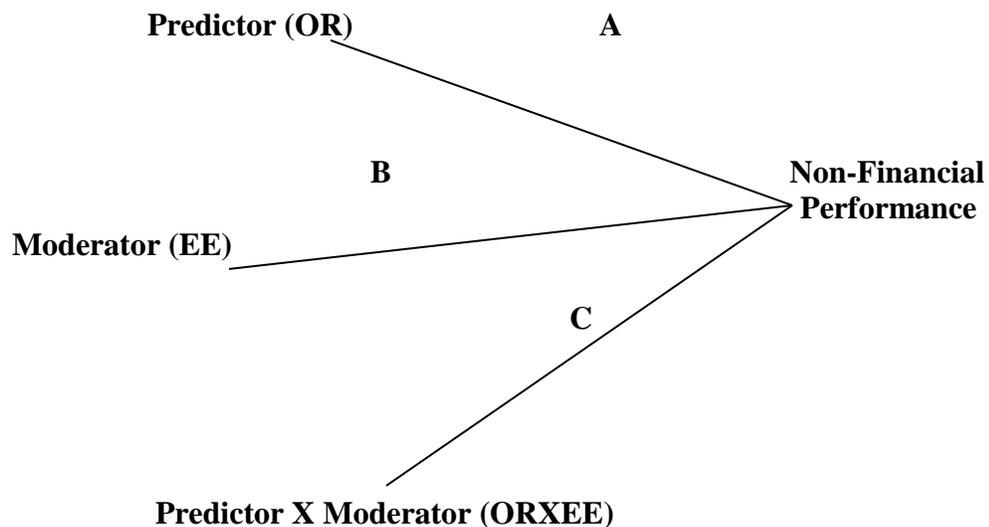
5.6 Organizational Resources, External Environment and Non-Financial Performance

To determine the moderating influence of external environment on the relationship between organizational resources and performance of insurance companies in Kenya, the following hypothesis was formulated for testing:

H₀₅: The external environment does not have a moderating effect on the relationship between organizational resources and performance of insurance companies in Kenya.

To assess the moderating effect, the study used Baron and Kenny (1986) method. They define a moderator as a variable that affects the direction and or strength of the relationship between a predictor and a criterion variable. They posit that moderation can only be supported if path C (which is the interaction of paths A and B) is significant.

Figure 5.1: Moderator Model



Source: Adapted from Baron and Kenny (1986) model

Baron and Kenny (1986) have proposed the following steps when testing for moderation. Step one involves testing the direct effect between the independent and the dependent variables. The results should be statistically significant for the researcher to proceed to the next step. Step two involves testing the influence of external environment and resources on performance. Finally, resources, external environment and the interaction term between resources and external environment are regressed on performance. Moderation can only be present if the effect of the interaction between organizational resources and external environment and the interaction term is statistically significant (Path C). The moderating effect of the external environment was tested on the relationship between resources and non-financial performance.

The direct relationship between resources and non-financial performance had earlier been established and it was statistically significant ($\beta = 0.586$; $p\text{-value} = 0.000$). This is because moderation can only be performed on a significant relationship. In this light, moderation was not tested using non-financial indicators as their relationship was statistically not significant with resources.

Testing for the moderating effect of external environment on the relationship between resources and non-financial performance yielded the results shown in table 5.29

Table 5.29 Moderating Effect of External Environment on the Relationship Between Resources and Non-Financial Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.576 ^a	.332	.286	.08345	.332	7.213	2	29	.003
2	.577 ^b	.332	.261	.08491	.000	.008	1	28	.928

ANOVA

Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.100	2	.050	7.213	.003 ^a
	Residual	.202	29	.007		
	Total	.302	31			
2	Regression	.101	3	.034	4.647	.009 ^b
	Residual	.202	28	.007		
	Total	.302	31			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	.170	.149		1.143	.262
	Organizational resources	.615	.182	.537	3.381	.002
	External environment	.114	.172	.105	.663	.512
2	(Constant)	.173	.154		1.120	.272
	Organizational resources	.616	.186	.538	3.320	.003
	External environment	.107	.188	.099	.571	.573
	Interaction term (Organizational resources, External environment)	.002	.018	.015	.091	.928

A. Predictors: (Constant), External Environment, Organizational Resources

B. Predictors: (Constant), External Environment, Organizational Resources, Interaction Term (Organizational Resources, External Environment)

C. Dependent Variable: Non-Financial Performance

Source: Primary Data 2014

Results in table 5.29 above indicate that in model one, when resources and external environment were put together, R^2 was 0.332 indicating that 33.2 percent variation in non-financial performance was accounted for by resources and external environment. In model two when resources, external environment and the interaction term were put together, the R^2 was 0.332. The R^2 change was zero indicating that the external environment and interaction term did not add any statistically significant influence on performance (p-value= 0.928).

The results also indicate that inclusion of external environment and the interaction term in the regression model yielded a statistically significant model (p-value = 0.009). However, the external environment was statistically not significant (p-value = 0.928). The findings thus did not support moderation of external environment on the relationship between resources and non-financial performance.

In the coefficients table, only resources were statistically significant (p-value= 0.003). The interaction was statistically not significant (0.928) indicating that the external environment does not moderate the relationship between resources and non-financial performance. The hypothesis was not rejected. The results indicate that the contribution of resources and external environment on non-financial performance is independent of each other. It is therefore plausible to conclude that resources influence performance but this relationship was not moderated by the external environment. The results contradict Ting, Wang and Wang (2012) who established that environment had a substantial impact on innovation and firm performance.

The fifth objective of this study was to establish the moderating influence of external environment on resources and performance. The study established that external environment did not moderate the relationship between resources and non-financial performance. These results contradict previous results. Gordon, Stewart, Sweo, and Luker (2000) argue that unpredictability of elements in the environment leads organizations to rapidly adapt to the external environment in order to survive. Boyne and Meier (2009) found that the more stable the firm was, the less likely it was affected by turbulence. Firms in turbulent environment were less likely to perform well as compared to their counterparts in relatively stable environments. This is true for insurance companies as intense competition among the industry players has affected the performance of these firms.

The more munificent the environment, the greater the firm's opportunity to acquire resources. The degree of resource abundance in the firm's environment (munificence) has a significant impact on the firm's entrepreneurial orientation and subsequently innovation and superior performance (Castrogiovanni, 1991; Romaneli, 1987). Hannan and Freeman (1977, 1984) and Aldrich (1979) argue that organizations fail when they cannot learn about their environments and change strategies and structures as quickly as their environments change. This structuring may not necessarily be limited to organizational forms but encompasses resource configuration and innovative efforts. Firms respond to competitive forces through innovation and as such, resources play a critical role in the firm's ability to withstand external environmental pressures through innovation to ensure improved performance.

5.7 Joint Effect of External Environment, Innovation on the Relationship Between Organizational Resources and Firm Performance

Objective six of this study was to determine the joint influence of external environment and innovation on the relationship between Organizational resources and performance of insurance companies in Kenya. The following hypothesis was developed and tested.

H₀₆: The joint influence of external environment and innovation on the relationship between organizational resources and firm performance is not greater than the influence of individual variables on performance of insurance companies in Kenya.

This hypothesis was tested using hierarchical regression analysis. Model one was used to establish the direct relationship between of organizational resources on performance and model two measured the influence of organizational resources and innovation on the firm performance while model three measured the joint influence of organizational resources, external environment and innovation on firm performance. To achieve this objective, organizational resources, external environment and innovation were regressed on three financial indicators namely non-financial performance, profit and premium.

Table 5.30 presents results for the model summary.

The coefficient of determination (R^2) in model one was 0.344, R^2 in model two was 0.591, while R^2 for model three was 0.599. The R^2 change in model two was 0.247 while the R^2 change in model three was 0.008. The results indicate that jointly, organizational resources, innovation and external environment account for 59.9 percent variation in non-financial performance ($R^2 = 0.599$).

Further, the results indicated that organizational resources and innovation accounted for 59.1 percent variation in non-financial performance.

Table 5.30: Organizational Resources, Innovation and External Environment on Non-Financial Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.587 ^a	.344	.299	.08270	.344	7.607	2	29	.002
2	.769 ^b	.591	.547	.06646	.247	16.909	1	28	.000
3	.774 ^c	.599	.540	.06702	.008	.535	1	27	.471

A. Predictors: (Constant), Intangible Resources, Tangible Resources

B. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

C. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation, External Environment

Source: Field data (2014)

However, when the environment was added to the equation, the R^2 change was 0.008 which implies that the external environment only accounts for 0.8 percent variation in non-financial performance. This means that the external environment had the least influence on non-financial performance of insurance companies in Kenya.

Table 5.31 presents the results for analysis of variance.

The results indicate that models one, two and three were statistically significant (p-values = 0.002, 0.000 and 0.000). The hypothesis was rejected and concluded that the joint influence of organizational resources, innovation and the external environment on non-financial performance of insurance companies in Kenya was greater than the influence of the individual variables.

Table 5.31: Analysis of Variance of the Joint Influence of Organizational Resources, External Environment and Innovation on Non-Financial Performance.

Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.104	2	.052	7.607	.002 ^b
	Residual	.198	29	.007		
	Total	.302	31			
2	Regression	.179	3	.060	13.490	.000 ^c
	Residual	.124	28	.004		
	Total	.302	31			
3	Regression	.181	4	.045	10.083	.000 ^d
	Residual	.121	27	.004		
	Total	.302	31			

A. Dependent Variable: Non-Financial Performance

B. Predictors: (Constant), Intangible Resources, Tangible Resources

C. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

D. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation, External Environment

Source: Field data (2014)

Table 5.32 presents results for the beta coefficients.

The results show the beta coefficients of tangible and intangible organizational resources in model one. Model two shows the coefficients organizational resources and innovation while model three shows the coefficients of organizational resources, innovation and external environment. In model one; intangible resources had a p-value of 0.015 while tangible resources had a p-value > 0.05 meaning that tangible resources did not make a significant contribution to the model. In model two, tangible resources had a p-value of 0.036 while innovation had a p-value = 0.000. Intangible resources had a p-value > 0.05 indicating that they did not make a significant contribution to the model.

Table 5.32: Coefficients of Organizational Resources, Innovation and External Environment on Non-Financial Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.205	.131		1.566	.128
	Tangible resources	.242	.153	.262	1.588	.123
	Intangible resources	.439	.170	.427	2.585	.015
2	(Constant)	.181	.106		1.710	.098
	Tangible resources	.271	.123	.293	2.204	.036
	Intangible resources	.099	.160	.096	.617	.542
3	innovation	.379	.092	.591	4.112	.000
	(Constant)	.140	.120		1.159	.257
	Tangible resources	.265	.124	.287	2.132	.042
	Intangible resources	.075	.164	.073	.454	.653
	Innovation	.378	.093	.589	4.065	.000
External environment	.101	.138	.093	.731	.471	

Source: Primary data (2014)

In model three, tangible resources had a p-value of 0.042 while innovation had a p-value of 0.000. Intangible resources and external environment had p values > 0.05 meaning that they did not make a significant contribution to the model.

The relationship was represented by the following equation:

$$\text{Non-financial performance} = 0.287 \text{ TR} + 0.589 \text{ INN}$$

$$(0.042) \quad (0.000)$$

The regression equation above indicates that a unit change in tangible resources causes an increase of KShs 0.287 in non-financial performance while a unit change in innovation causes an increase of KShs 0.589 in non-financial performance. This shows that tangible resources and innovation are the critical drivers of non-financial performance and so insurance companies should focus more on tangible resources and innovation.

The regression coefficients indicated that the biggest contributor to non-financial firm performance was innovation followed by tangible organizational resources. The study further revealed that the contribution of the external environment and intangible resources were statistically not significant. The results show that intangible resources and external environments' influence on non-financial firm performance was not statistically significant.

Table 5.33 shows results for the model summary.

Table 5.33: Organizational Resources, Innovation and External Environment on Premium

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.176 ^a	.031	.041	.32983	.031	.431	2	27	.654
2	.313 ^b	.098	.006	.32427	.067	1.933	1	26	.176
3	.313 ^c	.098	.046	.33067	.000	.003	1	25	.953

A. Predictors: (Constant), Intangible Resources, Tangible Resources

B. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

C. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation, External Environment

Source: Field data (2014)

The results show the coefficient of determination for tangible and intangible resources in model one, tangible and intangible resources and innovation in model two, and tangible and intangible resources, innovation and external environment in model three. The R^2 in model three was 0.098 indicating that jointly, organizational resources, innovation and external environment accounted for 9.8 percent variation in premium ($R^2 = 0.098$). Further, the results indicated that organizational resources and innovation account for

0.098 percent variation in premium growth. However, when the environment was added to the equation, the R^2 change was 0.000 which implies that the external environment did not account for any variation in premium. This means that the external environment had no statistical significant influence on premium growth of insurance companies in Kenya.

Table 5.34 presents results for the analysis of variance.

Table 5.34: Analysis of Variance of the Joint Influence of Organizational Resources, External Environment and Innovation on Premium.

Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.094	2	.047	.431	.654 ^b
	Residual	2.937	27	.109		
	Total	3.031	29			
2	Regression	.297	3	.099	.942	.435 ^c
	Residual	2.734	26	.105		
	Total	3.031	29			
3	Regression	.298	4	.074	.680	.612 ^d
	Residual	2.734	25	.109		
	Total	3.031	29			

A. Dependent Variable: Premium

B. Predictors: (Constant), Intangible Resources, Tangible Resources

C. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

D. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation, External Environment

Source: Field data (2014).

The results show the overall significance of the model and the p-value was 0.612 in model three which was greater than 0.05. The hypothesis was not rejected and therefore the joint influence of organizational resources, external environment and innovation on premium growth was not greater than that of their individual influence. The model was not significant and so the model was not robust enough to predict results.

Table 5.35 presents results for the model summary.

Table 5.35: Organizational Resources, Innovation and External Environment on Profit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.170 ^a	.029	-.046	2.15819	.029	.385	2	26	.684
2	.328 ^b	.108	.001	2.10968	.079	2.209	1	25	.150
3	.366 ^c	.134	-.011	2.12149	.026	.722	1	24	.404

A. Predictors: (Constant), Intangible Resources, Tangible Resources

B. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

C. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation, External Environment

Source: Field data (2014)

The findings show the coefficient of determination for models one to three. In model one, R^2 was 0.029, in model two R^2 was 0.108 while in model three R^2 was 0.134. This indicated that jointly, organizational resources, innovation and external environment accounted for 13.4 percent variation in profit ($R^2 = 0.134$). The R^2 change in model two was 0.079 indicating that innovation accounted for 7.9 percent more to on profit while external environment added 2.6 percent more to profit.

Table 5.36 presents results for analysis of variance.

The results show the overall significance of the model and the p-value was 0.465 in model three which was greater than 0.05. The hypothesis was not rejected and therefore the joint influence of organizational resources, external environment and innovation on profit is not greater than that of their individual influence. The model was not significant indicating that the model was not robust enough to predict the results.

Table 5.36: Analysis of Variance of the Joint Influence of Organizational Resources, External Environment and Innovation on Profit.

Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	3.585	2	1.792	.385	.684 ^b
	Residual	121.102	26	4.658		
	Total	124.687	28			
2	Regression	13.418	3	4.473	1.005	.407 ^c
	Residual	111.269	25	4.451		
	Total	124.687	28			
3	Regression	16.669	4	4.167	.926	.465 ^d
	Residual	108.018	24	4.501		
	Total	124.687	28			

A. Dependent Variable: Profit

B. Predictors: (Constant), Intangible Resources, Tangible Resources

C. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation

D. Predictors: (Constant), Intangible Resources, Tangible Resources, Innovation, External Environment

Source: Field data (2014).

The hypothesis was rejected and thus the joint influence of the variables on profit is not greater than the individual variables.

Objective six of the study set to establish whether the joint influence of organizational resources, external environment and innovation on firm performance was greater than their individual influence. Hierarchical regression analysis was done to establish this relationship. The study established that the joint influence of organizational resources, the external environment and innovation on non-financial performance of insurance companies in Kenya was greater than that of the individual variables. The study established that the predictors had varied effects on firm performance. Innovation had the greatest influence on non-financial firm performance followed by organizational resources. However, the external environment yielded statistically not significant results.

The study established that with respect to premium and profit, the hypothesis was not confirmed. The results indicate that for insurance companies, the joint influence of organizational resources, external environment and innovation on premium and profit was not statistically significant. The results of this study lend partial support to previous empirical and theoretical findings. Kotler (1991) posits that return on innovation accounting statistics show that as high as 50 percent of corporate revenue is innovation driven. Gronhaug and Kaufmann (1988) argue that innovation is vital for a firm's survival and growth in the midst of intensifying competition and environmental uncertainty.

Barney (1991) argues that openness to innovation is a source of innovative ideas, and in turn facilitates aggressive product adaptation leading to improved performance. Naranjo-Gil (2009) posits that organizations that had high number of innovations achieved better performance. These results indicate that innovation was the most important driver of non-financial firm performance. In order, therefore to drive performance of these companies management need to put more emphasis on innovation. Secondly, they need to focus on intangible resources as they were the drivers of innovation. Innovation and resources combined were better predictors of non-financial firm performance. Managers need to protect their resources from imitation by competitors for improved performance.

The results indicated that the external environment was not a predictor of performance in the insurance industry. The results of the descriptive statistics also established that the environment was unfavorable, difficult to predict and had many issues to deal with that were neither similar nor dissimilar. Managers of the insurance companies need to scan the environment to be able to discover what their competitors were doing. They need to

be more flexible in adapting to the environment to ensure survival. These results suggest that for insurance firms to achieve improved performance, they need to be more innovative and acquire strategic intangible resources.

5.8 Chapter Summary

Chapter five has presented hypotheses testing using Pearson product moment correlation and multiple regression analyses. The study results indicated that hypothesis one was rejected with respect to non-financial performance indicators but was not rejected with respect to financial performance indicators (premium and profit). Hypothesis two was rejected with respect to intangible resources but was not rejected with respect to tangible resources.

Hypothesis three was rejected with respect to non-financial performance but not rejected with respect to financial performance indicators. Hypothesis four was not rejected as there was no significant relationship between organizational resources, external environment and innovation. Hypothesis five was rejected with respect to non-financial performance indicators but was not rejected with respect to premium and profit. Finally, hypothesis six was not rejected with regards to profit growth and premium but was rejected with respect to non-financial performance. Further, the chapter presented discussion of results from hypothesis testing. Areas of agreement and disagreement were noted with respect to each hypothesis. The results suggest that managers of insurance companies should be more innovative for improved performance. The next chapter presents summary of findings, conclusion and recommendations.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

The purpose of this study was to establish the joint influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya. This chapter presents the summary of findings, conclusion, recommendations and implications for theory, policy, practice and methodology. Further, limitations of the study are highlighted and areas for further study suggested. Contribution to the body of knowledge is also discussed.

6.2 Summary of Findings

This section presents a summary of the findings of the study. There were six objectives out of which eight hypotheses were developed and tested. The findings are presented based on the objectives and are summarized in Table 6.1 below. The study established that insurance firms were mostly both private locally and foreign owned and that 80 percent of the insurance firms had been in operation for more than 20 years. Majority of employees had a bachelor's and master's degree which indicated a highly learned work force that was in a better position to give the required information. Fifty three percent of the respondents had worked for their organizations for between zero and five years. This suggested low retention levels of employees in the insurance industry. Managers should devise ways of preventing this loss as committed employees are less likely to leave the organization.

Table 6.1 Summary of Findings

Objective	Hypotheses	Sub-hypotheses	Performance Measure	Remarks on Hypotheses
Objective 1 To establish the influence of organizational resources on performance of insurance companies in Kenya.	H ₀₁ : Organizational resources do not have a significant influence on performance of insurance companies in Kenya	Tangible resources have no influence on performance	Non-financial	Rejected
			Premium	Failed to reject
			Profit	Failed to reject
		Intangible resources have no influence on performance	Non-financial	Rejected
			Premium	Failed to reject
			Profit	Failed to reject
Objective 2 To establish the relationship between organization resources and innovation of insurance companies in Kenya.	H ₀₂ : There no relationship between organizational resources and innovation of insurance companies in Kenya.	There is no relationship between tangible resources and innovation		Failed to reject
		There is no relationship between intangible resources and innovation		Rejected
Objective 3 To determine the intervening effect of innovation on the relationship between organizational resources and performance of insurance companies in Kenya.	H ₀₃ :Innovation has no significant intervening effect on the relationship between organizational resources and performance of insurance companies in Kenya	Innovation has no significant intervening effect on the relationship between organizational resources and performance	Non-financial	Rejected
			Premium	Failed to reject
			Profit	Failed to reject

Table 6:1 Cont...

Objective	Hypotheses	Sub-hypotheses	Performance measure	Remarks on hypotheses
Objective 4 To determine the relationship between organizational resources, external environment and innovation of insurance companies in Kenya.	H ₀₄ : There is no relationship between organizational resources, external environment and innovation of insurance companies in Kenya.			Failed to reject
Objective 5 To determine the moderating effect of external environment on the relationship between organizational resources and performance of insurance companies in Kenya.	H ₀₅ : The external environment has no significant moderating effect on the relationship between organizational resources and performance of insurance companies in Kenya.		Non-financial	Rejected
Objective 6 To determine the influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya.	H ₀₆ : External environment and innovation do not have a statistically significant influence on the relationship between organizational resources and performance of insurance companies in Kenya.		Non-financial	Failed to reject
			Premium	Rejected
			Profit	Rejected

As regards availability of tangible resources, the results showed that sufficient bank deposits had the highest mean score indicating that insurance companies have adequate bank reserves to take care of their liabilities (claim settlement) as this was their primary duty. With respect to intangible resources, the statements the firm has a good reputation, valuable brand and technology had the highest mean scores. This suggests that reputation and a valuable brand are very important for the success of insurance firms. Further, the results suggest that insurance companies should build a positive image for themselves and defend it if they are to achieve superior performance.

The study established that with respect to environmental munificence, technological factors had been more favorable to the insurance industry. With respect to dynamism, the study established that competition in the industry had the highest mean score indicating the severity of competition in the insurance industry. The results suggest that managers should be alert in scanning the environment and adapting to the changes in the external environment so as to stay ahead of competition. Most change was observed in technology indicating that insurance firms should embrace technology if they are to improve their performance.

Complexity measured the number of issues the firms had to deal with and whether these issues were similar or different. Bargaining power of customers had the highest mean score indicating that this sector had different issues to deal with. Insurance firms should strive to be responsive to customer needs given that the products offered are similar if they are to gain competitive advantage over their competitors.

As regards innovation, the study established that investment in R & D had the lowest mean score. The results suggest that insurance companies had not adequately invested in R & D and if these companies are to perform well, they need to be more innovative. This is supported by results from hypothesis testing that established that innovation had the highest contribution to firm performance.

Objective one of the study was to establish the influence of organizational resources on performance of insurance companies in Kenya. The results established a statistically significant relationship between organizational resources and non-financial performance of insurance companies in Kenya. The results also revealed that intangible resources had a higher predictive power on non-financial performance as compared to tangible resources.

With respect to financial performance indicators (profit and premium), the study established a statistically not significant influence of tangible resources on profit but a statistically significant influence of tangible resources on premium. Intangible resources had a statistically significant influence on non-financial performance of insurance companies in Kenya. With respect to premium and profit, the study established a statistically not significant influence of intangible resources. The hypothesis that organizational resources influence firm performance was therefore confirmed with respect to non-financial performance and rejected with respect to financial performance measures. The results indicate that insurance companies in Kenya should focus more on both tangible and intangible resources if they have to achieve improved performance.

The firms should focus on reputation as the image of the firm will either attract or repulse the customers. Regression results for the individual effects of tangible resources and financial performance revealed that tangible resources significantly influence premium but do not statistically significantly influence profit. On the other hand, regression results for tangible resources and non-financial performance revealed that tangible resources significantly influence internal business processes, environment aspect and CSR but had no statistically significant influence on learning and growth and customer perspective.

Conversely, regression results for the individual effects of intangible resources and non-financial performance revealed that intangible resources significantly influence CSR and learning and growth. Statistically not significant results were reported for customer perspective, internal business processes and learning and growth. With respect to financial performance indicators, regression results revealed statistically not significant influence of intangible resources on premium and profit.

The results indicate that financial performance of insurance companies in Kenya was not driven by both tangible and intangible resources and other factors might come in to play. When the study sought to establish the combined influence, intangible resources had a higher explanatory power as compared to tangible resources. The results were in line with RBT that proposes that intangible resources are more likely to contribute to improved firm performance as compared to tangible resources (Carmeli and Tishler, 2004b).

The second objective of the study was to determine the relationship between organizational resources and innovation of insurance companies in Kenya. The results indicated that tangible resources had a weak positive correlation with both R & D and processes improvements that was not statistically significant. With respect to intangible resources, there was a moderate positive statistically significant correlation between intangible resources and both R & D and process improvements.

The study also revealed a moderate and positive correlation between organizational resources and innovation. The hypothesis that resources have a relationship with innovation was confirmed. The results suggested that intangible resources influence innovation of insurance companies in Kenya indicating that insurance companies should invest more in intangible resources as they are difficult to imitate and could accord the firm a SCA. For managers of insurance firms, these results were important for future planning and allocation of resources that are vital for the success of the firm.

The third objective of the study was to determine whether innovation had an intervening effect on the relationship between organizational resources and performance of insurance companies in Kenya. The results of the study revealed that innovation had a statistically significant intervening influence on the relationship between organizational resources and non-financial performance of insurance companies in Kenya. With regards to financial performance measures, the study established statistically not significant intervening influence of innovation on the relationship between organizational resources and profit and premium.

The hypothesis was thus confirmed with respect to non-financial performance and rejected with respect to profit and premium. Tangible resources and innovation lead to non-financial firm performance while the models for premium growth and profit growth were statistically not significant indicating that they were not robust enough to predict results. Based on the findings, it was plausible to conclude that innovation had a statistically significant intervening influence on the relationship between organizational resources and non- financial performance of insurance companies in Kenya.

The fourth objective of the study was to determine the relationship between organizational resources, external environment and innovation. The study established a moderate positive relationship between intangible resources and tangible resources. There was also a moderate positive correlation between intangible resources and R & D. Intangible resources had a positive moderate correlation with process improvements while a strong positive correlation was established between R & D and process improvements. However, there were weak positive and negative relationships established between resources, innovation and external environment dimensions. The relationships were statistically not significant and so the hypothesis was not confirmed.

The fifth objective of the study was to determine the moderating effect of the external environment on the relationship between organizational resources and performance of insurance companies in Kenya. The results indicated that external environment had a statistically not significant moderating influence on the relationship between organizational resources and non- financial performance of insurance companies in Kenya. The hypothesis was thus not confirmed.

Objective six sought to establish the joint influence of external environment and innovation on the relationship between organizational resources and performance of insurance companies in Kenya. Empirical results confirmed that the joint influence of external environment and innovation on the relationship between organizational resources and non-financial performance was stronger than their individual effect.

Innovation had the highest contribution followed by tangible resources. However, the external environment contribution was statistically not significant. The study also established that the results with respect to premium and profit were statistically not significant indicating that in the context of insurance firms, organizational resources and innovation account for variation in non-financial performance. When the external environment was added, statistically not significant influence on this relationship was observed. Thus, the external environment had no statistically significant influence on performance of insurance companies in Kenya.

6.3 Conclusion

This study examined the relationship between organizational resources, the external environment, innovation and performance of insurance companies in Kenya. A conceptual model was developed to empirically test these relationships. Data was collected from a cross section of senior managers of insurance companies in Kenya that facilitated the testing of the model.

The results indicate a statistically significant relationship between resources and non-financial performance of insurance companies in Kenya providing support to and extension of the RBT. With respect to financial performance indicators, there was no statistically significant relationship evidenced. The combined influence of intangible resources was more than that of independent influence on non-financial performance indicators while for tangible resources the opposite was true. The empirical results indicated that reputation and financial resources were rated highly and therefore, they were important for achievement of a firm's success.

These results indicate that managers of insurance companies should focus on key performance indicators as not all resources influence performance equally. They should also know how to combine these resources to gain maximum benefits. Focus should be in combining resources as compared to using them individually. If these resources are bundled in the right manner, then firms will experience improved performance as both tangible and intangible resources and important for a firm's success.

The study also examined the relationship between organizational resources and innovation of insurance companies in Kenya. Results suggested a positive moderate correlation between intangible resources and innovation. There was a weak correlation between tangible resources and innovation that was not statistically significant. These results are important to practice as managers should invest more in intangible resources as they are important drivers of innovation. The findings are important for managers of insurance companies. If these firms have to be innovative, they need resources as studies

have established that lack of resources can influence a firm's capacity to innovate. These findings thus support previous studies that have found that firms need to have different kinds of resources to support innovative activities.

The study also established that innovation had a statistical significant intervening influence on the relationship between organizational resources and non-financial performance of insurance companies in Kenya. The results suggest that in the presence of innovation, organizational resources will enhance the performance of insurance companies. These results support that RBT and DCT views that the reconfiguration of resources in to firm specific assets and processes will enhance performance because the total effect cannot be duplicated by other firms.

The study also established that the external environment had a statistically not significant moderating influence on the relationship between organizational resources and non-financial performance of insurance companies in Kenya. These results indicate that the relationship between resources and firm performance is not influenced by the external environment.

As pertains the joint influence of external environment and innovation on the relationship between organizational resources and non-financial performance, the results indicated that the joint influence of innovation and external environment on the relationship between organizational resources and non-financial firm performance was greater than that of their individual influence. Managers of these firms should focus on innovation if they are to succeed in the market place as it greatly influences firm performance.

Overall, the results of the study reveal a statistically significant relationship between resources and non-financial firm performance in line with the RBT. The study also established the intervening influence of innovation on the relationship between resources and non - financial firm performance extending strategic management theory. Further, the study established a statistically not significant moderating influence of external environment on the relationship between organizational resources and non- financial performance. The results suggest that insurance firms should be proactive rather than reactive in order to promptly and effectively deal with changes taking place in the complex business environment in order to improve their performance.

6.4 Implications of the Study

This study sought to establish the relationship between organizational resources, external environment, innovation and performance of insurance companies in Kenya. Innovation was hypothesized as the intervening variable while external environment was the moderator. The study was able to establish the aspects of organizational resources, innovation and external environment that contribute to performance of insurance companies in Kenya. The study came up with findings that will enhance the understanding of the drivers of performance in insurance companies in Kenya. The results have implications on theory, policy, practice and methodology.

6.4.1 Theoretical Implications

The results of this study contribute to strengthening the existing body of literature by confirming empirically that organizational resources influence performance of insurance companies in Kenya both directly and indirectly through moderation and intervening influence. The study contributes to strategic management theory by establishing the specific resources and their influence on both financial and non-financial firm performance. The results further extended the theoretical discourse on the RBT of competitive advantage and the DCT by empirically illustrating the magnitude of the relationships among organizational resources, innovation, external environment and performance as viewed by insurance companies in Kenya.

By establishing the intervening influence of innovation on the relationship between resources and non-financial firm performance, managers of insurance companies in Kenya can configure resources through innovation for improved performance. The results have demonstrated the vital role played by innovation in enabling firms to succeed in the market place as the findings indicated that innovation had the highest contribution to firm performance as compared to the other variables.

6.4.2 Implications on Policy

Findings of this study have policy implications for insurance companies in Kenya. The insurance industry is one of the key sectors identified to help spur economic growth and help achieve the country's Vision 2030. The performance of the insurance industry is important and therefore the results of this study will assist policy makers to make sound

decisions regarding which variables to focus on in order for firms to achieve a SCA. Managers of insurance firms should be encouraged to attract resources that cannot be easily imitated as they propel organizations to better performance.

From the descriptive statistics, the study established that innovation had not been fully embraced by insurance companies yet tests of hypotheses revealed that innovation was the greatest contributor to firm performance. The results suggest that insurance companies need to strengthen their R&D policy in order to attain a better CA position over their competitors. Policy makers in the insurance industry should encourage insurance companies to invest in R & D and to be more innovative as this will lead to development of more products in the industry. This will no doubt increase the insurance penetration which currently stands at 3.3 percent.

6.4.3 Implications on Practice

While the insurance regulator has put limits on premiums payable, interview results indicated that some insurance companies do not adhere to these regulations. This has been the source of stiff competition that has led to price undercutting and this has had a negative impact on the performance of these companies. The IRA should come up with punitive measures to deal with those insurance companies found floating the rules. This will give the players a level playing field which could enhance their performance.

Organizational resources have been proposed to be important drivers of a firm's success. The results of this study have empirically established the variables that lead to CA. For insurance companies, the study suggests that the key success factors or drivers of better performance are resources owned and controlled by the firm and the firm's innovative propensity. This study suggests that it is imperative for insurance companies to have strategic resources that are rare, valuable inimitable and non-substitutable and to continuously innovate in order to gain SCA that in turn lead to improved firm performance.

Further, the results show that managers need to focus on intangible resources as the study established that they contributed more to performance as compared to tangible resources. In particular, managers should focus on improving their reputation as this gives the stakeholders a positive image of the firm. A good image draws investors, suppliers, employees and customers to the firm leading to improved performance.

The results of the study indicated that innovation had the highest positive and significant contribution to performance. This indicates that managers should focus more on innovation in order to enhance performance of their firms. The study established a weak positive correlation between organizational resources, external environment and innovation that was not statistically significant. This implies that the external environment as perceived by insurance companies is not favorable and managers should come up with ways to mitigate this situation.

The study established that some resources had a higher influence on performance individually than when combined. Managers will need to focus on and understand the drivers of performance and those that hinder performance and focus on acquiring and guarding specific resources. The study proposes that insurance firms should focus on non-financial performance measures and not just financial performance indicators for a balanced and more focused and holistic approach.

The study established that organizational resources significantly influence performance of insurance companies in Kenya. This implies that in order for insurance companies to improve their performance, they should acquire more resources as possession of strategic resources can enhance performance of these firms.

Innovation was reported to have a significant intervening influence on the relationship between resources and non-financial firm performance. This indicates that firms should increase their investment in innovation as this can lead to improved performance. Insurance firms should invest in R & D of new products targeting niche markets to increase insurance penetration in Kenya.

The findings also revealed the external environment does not statistically significantly moderate the relationship between organizational resources and non-financial firm performance. The implication is that managers of these companies should continuously scan the external environment for information that will help them make timely decisions that will keep them ahead of competition and this will no doubt impact on their

performance. Insurance companies need to focus on innovation as this was a key driver of performance in the industry. All organizations should establish a dedicated department to handle R & D as this will go a long way in enhancing the performance of these companies.

Insurance companies should lay emphasis on acquiring and nurturing both tangible and intangible resources. These resources should be configured in such a way that they create capabilities and competences that are hard to imitate for improved performance. Further, insurance companies should embrace both financial and non-financial performance indicators in their financial reporting as financial performance indicators have been found to misrepresent results and for a more complete picture, non-financial performance indicators should be adapted.

6.4.4 Implications for Methodology

To carry out this study, both quantitative and qualitative data were used. Similarly, the study utilized both financial and non-financial measures of performance. In this light, the study used the SBSC to measure firm performance. When regression analysis was carried out, the results did not provide statistically significant results for all the hypotheses. This study provides a platform for testing theoretical foundations to provide quantitative support for theory. The study proposes that a stakeholder approach should be used when measuring performance to ensure a holistic approach.

Scholars have argued that using mixed methods in carrying out research is beneficial as it avoids the two extremes and prevents the limitations that occur when a researcher uses one method. By using the triangulation approach, the study has demonstrated that researchers can overcome the shortcomings of a single method. The triangulation approach was very useful for the success of this study since when one indicator returned not significant results the other indicator evidenced statistically significant results.

6.5 Limitations of the Study

This study had a number of limitations; the study used a survey approach and out of the 46 insurance companies, 32 responded giving a response rate of 69.5 percent which was considered acceptable. The results of this study can thus be generalized to other similar contexts. The study lacked comparison of other similar studies done locally and had to rely on studies carried out in other countries making it hard to generalize findings.

The study utilized a cross sectional survey because it was the most appropriate method available to address the issues of time and financial constraints. Cross sectional studies do not allow for causal effects on the observed relationships and therefore could not give actual relationships that exist between organizational resources, external environment, innovation and performance of insurance companies in Kenya. Future researchers could consider using other approaches like longitudinal studies that will give the change in performance of insurance companies over time.

The study was only able to capture the response of one respondent per firm at a given point in time. Using a single informant for research has limitations as there is a possibility of common method bias. Despite the fact that respondents are thought to give objective responses, they could have their own perceptions which could lead to misleading responses. It therefore becomes difficult to tell whether the perception was the respondents' or the organizations'. Future researchers could consider using multiple respondents so as to be able to compare views of other respondents in the company.

The study focused on insurance companies which fall under the financial services sector. Similar studies could be carried out in the manufacturing sector to determine if the same results will be achieved. The study can also be replicated in developed countries like South Africa to determine the validity of the results. The study was carried out in a service industry; future research could be carried out in sectors that deal with tangible goods to be able to establish if similar results can be obtained.

Lastly, the study used profit and premium as financial performance indicators. However, the results were statistically not significant when other variables were regressed on them. Future researchers could use other financial measures like ROA and ROI to establish if similar results will be obtained.

6.6 Suggestions for Further Research

As an area for further research, this study can be replicated in different sectors of the financial services like the banking industry to establish if similar results can be achieved. The study can also be carried out in the insurance industry in different years to establish

if the same results hold as well as carry out this research in developed countries like South Africa in - order to compare results.

The study was only able to capture the response of one respondent per firm at a given point in time. Future research should consider using multiple respondents to enhance the findings and address the common bias method that occurs when one respondent is interviewed. Further, future researchers could include factors not covered in this study to establish drivers of variation in firm performance.

The study used a cross sectional survey design. Cross sectional studies do not detect causal effects of variables. Future research could use a longitudinal study to be able to provide a better understanding of the resources - performance relationship over time. A longitudinal survey will also give causal effects of variables.

6.7 Contribution to Knowledge

This study has contributed to strategic management knowledge by empirically establishing the extent to which organizational resources both tangible and intangible influence firm performance. The current study findings add to knowledge by demonstrating empirically that both tangible and intangible resources are important to a firm's success and that no single resources can be a source of competitive advantage.

Another notable contribution of the study is that it has provided empirical evidence on the extent to which the study variables influence performance. This enhances knowledge by providing empirical validity of the relationships among study variables. By establishing

that a firm's performance is a function of several variables is a confirmation that firms should focus on drivers of performance for SCA.

The study results revealed that innovation had an intervening effect on the relationship between organizational resources and non-financial performance. This finding also provides empirical validity on the importance of innovation as it is an avenue through which firms can configure their resources for enhanced firm performance. The joint influence of resources, external environment and innovation on performance was greater than the individual influence. This indicates that combining resources has a multiplicative effect and enhances firm performance.

6.8 Chapter Summary

The chapter has presented the summary of the findings of the study and these were discussed based on the objectives. Some of the findings supported previous results while others contrasted previous research findings. The chapter also presented policy, practice, theoretical and methodological implications in the field of strategic management.

Further, the study presented limitations of the study. It is however worthy noting that the limitations did not affect the validity of the findings in any way. Areas for further research have been suggested and the study's contributions to knowledge have also been enumerated.

REFERENCES

- Ahanger, R. G. (2011). The relationship between intellectual capital and financial performance: An empirical investigation in an Iranian company. *African Journal of Business Management*, 5 (1), 88-95.
- Aldrich, H. E. (1979). *Organisations and environments*. Englewood Cliffs, NJ: Prentice Hall.
- Almajali, A. Y., Almaro, S. A., & Al-Soub, Y. Z. (2012). Factors affecting the financial performance of Jordanian insurance companies listed at Amman stock exchange. *Journal of Management Research*, 4 (2), 1-24.
- Amit, R., & Schoemaker, P. (1993). Strategic assets and organizational rent. *Strategic Management Journal*, 14 (1), 33-46.
- Andrews, K. (1971). *The Concept of corporate strategy*. Dow Jones-Irwin: Homewood.
- Ansoff, H. I. (1965). *Corporate strategy*. New York: McGraw Hill.
- Ansoff, H. I. (1987). *Corporate strategy*. London: Penguin.
- Ansoff, H. I. (2007). *Strategic management*. New York: Macmillan.
- Ansoff, H. I., & Suvillan, A. P. (1993). Optimizing profitability in turbulent environments: A formula for strategic success. *Long Range Planning*, 26 (5), 11-23.
- Aosa, E. (1992). *An empirical investigation of aspects of strategy formulation and implementation within large, private manufacturing companies in Kenya*. (Unpublished PhD Thesis). University of Strathclyde, Glasgow, Scotland.
- Arasa, R. A. M. (2008). *Strategic planning, employee participation and firm performance in Kenya's insurance industry*. (Unpublished PhD Thesis). School of Business, University of Nairobi.
- Argenti, P., & Druckenmiller, B. (2009). Reputation and the corporate brand. Tuck School of Business at Dartmouth: *Working Paper No. 03-13*.
- Argyris, N. (1996a). Evidence on the role of firm capabilities in vertical integration decisions. *Strategic Management Journal*, 17, 129-150.
- Asch, D., & Salaman, G. (2002). The challenge of change. *European Business Journal*, 14 (3), 133-143.
- Association of Kenya Insurers (2012). *Insurance industry annual report*, 1 (34), 1-68.

- Association of Kenya Insurers (2011). *Insurance industry annual report*, 1 (33), 1-64.
- Atkinson, A. A., Waterhouse, J. H., & Wells, R. B. (1997). A stakeholder approach to strategic performance measurement. *Sloan Management Review* 38, 25-37.
- Awino, Z. A. (2007). *Effects of selected strategy variables on corporate performance: A survey of supply chain management in large private manufacturing firms in Kenya*. (Unpublished PhD Thesis). School of Business, University of Nairobi.
- Bain, J. S. (1951). Relation of profit ratio to industry concentration: American manufacturing 1936-1940. *Quarterly Journal of Economics*, 65, 293-324.
- Bakar, L. J. A., & Ahmad, H. (2010). Assessing the relationship between firm resources and product innovation performance: A resource based view. *Business Process Management Journal*, 16 (3), 420-435.
- Baker, W. E., & Sinkula, J. M. (1999). Learning orientation, market orientation, and innovation: Integrating and extending models of organizational performance. *Journal of Market-Focused Management*, 4 (4), 295–308.
- Baker, W. E., & Sinkula, J. M. (2002). Market orientation, learning orientation and product innovation: Delving into the organization's black box. *Journal of Market-Focused Management*, 5 (1), 5–23. In Siguaw et al. (2006). Conceptualizing innovation orientation: A framework for study and integration of innovation research.
- Barney, J. B. (1986). Organizational culture: Can it be a source of SCA. *Academy of Management Review*, 11 (3), 656-665.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barney, J. B. (1997). *Gaining and sustaining competitive advantage*. Reading: Addison-Wesley.
- Barney, J. B. (1999). How a firm's capabilities affect boundary decisions. *Sloan Management Review*, 40, 137-145.
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten year retrospective on the resource-based view. *Journal of Management*, 27 (6), 643-650.
- Barney, J. B. (2002). *Gaining and sustaining competitive advantage* (2nd ed.). Upper Saddle River, NJ: Prentice-Hall.

- Barney, J. B., & Wright, P. M. (1997). On becoming a strategic partner: The role of human resources in gaining competitive advantage. (CAHRS: *Working Paper #97-09*).
- Barnett, M. L., Jermier, J. M., & Lafferty, B. A. (2006). Corporate reputation: The definitional landscape (Electronic Edition). *Corporate Reputation Review*, 9.
- Baron, R. M., & Kenny, D. A. (1986). The moderator- mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Baxter, R., & Matear, S. (2004). Measuring intangible value in business-to-business buyer-seller relationships: An intellectual capital perspective. *Industrial Marketing Management*, 33 (6), 491-500.
- Berry, W. D., & Feldman, S. (1985). *Multiple regression in practice*. Sage University paper series on quantitative applications in the social sciences, series no. 07-050). Newbury Park, CA: Sage.
- Berry, M. A., & Rondinelli, D. A. (1998). Proactive corporate environmental management: A new industrial revolution. *Academy of Management Executive*, 12, 38-50.
- Bharadwaj, S. G., Varadarajan, P., R. & Jahy, J. (1993). Sustainable competitive advantage in service industries: A conceptual model and research propositions. *Journal of Marketing*, 57, (4) 83 - 99.
- Bharadwaj, S., Bharadwaj, A., & Bendoly, E. (2007). The performance effects of complementarities between information systems. Marketing, manufacturing and supply chain processes. *Information Systems Research*, 18 (4), 437-53.
- Bhatt, G. D., & Grover, V. (2005). Types of information technology capabilities and their role in competitive advantage: An empirical study. *Journal of Management Information Systems*, 22 (2), 253-77.
- Boge, B. E. (2010). *The effectiveness of the balanced scorecard in implementation of corporate strategy at CFC Life Assurance Limited*. (Unpublished MBA Project). School of Business, University of Nairobi.
- Bönte, W. (2003). Research & development and productivity: Internal versus external R&D evidence from West German manufacturing industries. *Economics of Innovation and New Technology*, 12, 343-360.
- Bornemann, M. (1999). Empirical analysis of the intellectual potential of value systems in Austria according to the VAIC.

- Bourgeois, L. J. III (1980). Strategy and environment: A conceptual integration. *Academy of Management Review*, 5 (1), 25-39.
- Boyne, G. A. (2003). Sources of public service improvement: A critical review and research agenda. *Journal of Public Administration Research and Theory*, 13, 367-394.
- Boyne, G. A., & Meier, K. J. (2009). Environmental turbulence, organizational stability and public service performance. *Administration and Society*, 40 (8), 799-825.
- Brammer, S., Brooks, C., & Pavelin, S. (2004). Corporate reputation and stock returns: Are good firms good for investors (Electronic version). *Social Science Research Network (SSRN)*. [Online] Available: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=637122 (January 10, 2010).
- Brandenburger, A. M., & Stuart, H. W. (1996). Value-based business strategy. *Journal of Economics and Management Strategy*, 5, 5-24.
- Brittain, J., & Freeman, J. (1980). *Organizational proliferation and density-dependent selection*. In Kimberly, J., & Miles, R. (eds.), *Organizational life cycles*. San Francisco: Jossey-Bass.
- Brown, S. L., & Eisenhardt, K. M. (1995). Product development: Past research, present findings, and future directions: *The Academy of Management Review*, 20 (2), 343-378.
- Bruno, A. V., & Tyebjee, T. T. (1982). *The environment for entrepreneurship: Encyclopedia of entrepreneurship*. Englewood Cliffs, NJ: Prentice-Hall.
- Brush, C. G., Greene, P. G., Hart, M. M., & Haller, H. S. (2001). From initial idea to unique advantage: The entrepreneurial challenge of constructing a resource base. *The Academy of Management Executive*, 15 (1), 64-78.
- Burnes, B. (1996). No such thing as a one best way to manage organizational change. *Management Decision*, 34 (10), 11-18.
- Burns, T., & Stalker, G. (1961). *The management of innovation*. London: Tavistock.
- Business Monitor International (2011). *Kenya insurance report Q1 2012; Includes 5-year forecasts to 2016*. 85. Queen Victoria Street: Business Monitor International.
- Bryman, A., & Bell, E. (2003). *Business research methods*. New York: Oxford University Press.

- Calantone, R. J., Garcia, R., & Droge, C. (2003). The effects of environmental turbulence on new product development strategy planning. *Journal of Product Innovation Management*, 20 (2), 90–103.
- Campbell, J. Y. (1995). Some lessons from the yield curve. *Journal of Economic Perspectives*, 9, 129-152.
- Carmeli, A., & Tishler, A. (2004b). Resources, capabilities and the performance of industrial firms: A multivariate analysis. *Managerial and Decision Economics*, 25, 299-315.
- Castrogiovanni, G. J. (1991). Environmental munificence: A theoretical assessment. *Academy of Management Review*, 16, 542-565.
- Cattani, G. (2005). Preadaptation, firm heterogeneity, and technological performance: A study on the evolution of fiber optics, 1970–1995. *Organization Science*, 16, 563–580.
- Central Bank of Kenya (2011). *Bank supervision annual report 2011*. Central Bank of Kenya, Nairobi.
- Chandler, A. D. Jr. (1962). *Strategy and structure: Chapters in the history of the American industrial enterprise*. Cambridge, MA: MIT Press.
- Chatterjee, S., & Wernerfelt, B. (1991). The link between resources and type of diversification: Theory and evidence. *Strategic Management Journal*, 12, 33-48.
- Chesbrough, H. (2003). *Open innovation: The new imperative for creating and profiting from technology*. Cambridge, Mass: Harvard University Press.
- Child, J. (1972). Organizational structure, environment, and performance: The role of strategic choice. *Sociology*, 1 (6), 1-22.
- Child, J. (1997). Strategic choice in the analysis of action, structure, organizations and environment. *Retrospect and Prospect Organization Studies*, 18 (1), 43-76.
- Child, J., & Kieser, A. (1981). *Development of organizations over time. Handbook of organizational design*. New York: Oxford University Press.
- Clarke, C. J. (1988). Using finance for competitive advantage. *Long Range Planning*, 20 (2), 63-69.
- Clarke, T., & Rollo, C. (2001). Corporate initiatives in knowledge management. *Education and Training*, 43, 206-14.

- Clulow, V. (2007). The resource based-view and value: The customer-based view of the firm. *Journal of European Industrial Training*, 31 (1), 19-35.
- Cockburn, I. M., Henderson, R. M., & Stern, S. (2000). Untangling the origins of competitive advantage. *Strategic Management Journal*, 21, 1123–1145.
- Cohen, J., Cohen, P., West, G. S., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- Cohen, W. M., & Levin, R. (1989). Empirical studies of innovation and market structure, in: Schmalensee, R., & Willig, R. D. (Eds.). *Handbook of Industrial Organization*, 2 (Amsterdam), 1059–1107.
- Collis, D. J. (1994). How valuable are organizational capabilities? *Strategic Management Journal*, 15 (Winter Special Issue), 143-152.
- Conner, K. R. (1991). A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of Management*, 17, 121-154.
- Conner, K. R., & Prahalad, C. K. (1996). A resource-based theory of the firm: Knowledge versus opportunism. *Organization Science*, 7 (5), 477-501.
- Conner, T. (2002). The resource-based view of strategy and its value to practicing managers. *Strategic Change*, 11, 307-316.
- Cooper, D. R., & Schindler, P. S. (2006). *Business research methods* (9th ed.). NY: McGraw-Hill.
- Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice*, 16 (1), 7-25.
- Cox, T., Jr., & Blake, S. (1991). Managing cultural diversity: Implications for Organizational competitiveness. *Academy of Management Executive*, 5 (3), 45–56.
- Crepon, B., Duguet, E., & Mairesse, J. (1998). Research, innovation and productivity: An econometric analysis at the firm level. *Economics of Innovation and New Technology*, 7 (2), 115–158.
- Cucculelli, M., & Ermini, B. (2012). New product introduction and product tenure: What effects on firm growth? *Research Policy*, 41, 808– 821.
- Daft, R. L. (1991). *Management* (2nd ed.). Chicago: Dryden Press.

- D'Aveni, R. (1994). *Hyper-competition: Managing the dynamics of strategic maneuvering*. New York: The Free Press.
- Damanpour, F. (1991). Organizational innovation: A meta-analysis of effect of determinants and moderators. *Academy of Management Journal*, 34 (3), 555-590.
- Damanpour, F., & Aravind, D. (2011). Managerial innovation: Conceptions, processes, and antecedents. *Management and Organization Review*, 8 (2), 423–454.
- Damanpour, F., & Gopalakrishnan, S. (1999). Organizational adaptation and innovation: The dynamics of adopting innovation types.
- Damanpour, F., & Gopalakrishnan, S. (2001). Dynamics of the adoption of product and process innovations in organizations. *Journal of management studies*, 28, 45-65.
- Danneels, E. (2002). The dynamics of product innovation and firm competences. *Strategic Management Journal*, 23, 1095-1121.
- Danny, M., Droge, C., & Toulouse, J. M. (1988). Strategic process and content as mediators between organizational context and structure. *Academy of Management Journal*, 31 (3), 544–569.
- Darfus, P. J., Maggit, P. G., Grimm, C. M., & Smith, K. G. (2008). The red queen effect: Competitive actions and firm performance. *Academy of Management Journal*, 51 (1), 61-80.
- Datar, S., Clark, J. C., Sunder, K., Surenda, R., & Kannan, S. (1997). Advantages of time-based new product development in a fast-cycle industry. *Journal of Marketing Research*, 34 (1), 36–49.
- Davis, J. H., Schoorman, D., Mayer, R. C., & Hoon, T. H. (2000). The trusted general manager and business unit performance: Empirical evidence of a competitive advantage. *Strategic Management Journal*, 21, 563-576.
- Dess, G. G., & Beard, D. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly*, 29, 52-73.
- Dess, G. G., & Picken, J. C. (2000). Changing roles: Leadership in the 21st century. *Organizational Dynamics*, 28, 18–34.
- Dess, G. G., & Robinson, R. B. Jr. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, 5, 265-273.
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35, 1504–1511.

- Dillman, D. (2000). *Constructing the questionnaire. Mail and internet surveys*. New York: John Wiley & Sons.
- Dosi, G. (1988). Sources, procedures, and microeconomic effects of innovation. *Journal of Economic Literature*, 26, 1120-1171.
- Dosi, G., Marsili, O., Orsenigo, L., & Salvatore, R. (1995). Learning, market selection and the evolution of industrial structures. *Small Business Economics*, 7 (6), 411–436.
- Duncan, R. B. (1972a). Characteristics of organizational environments and perceived environmental uncertainty. *Administrative Science Quarterly*, 17 (2), 313-327.
- Dundon, E. (2002). *The seeds of innovation: Cultivating the synergy that fosters new ideas*. New York: AMACOM.
- Edvinsson, L., & Malone, M. S. (1997). *Intellectual capital: The proven way to establish your company's real value by measuring its hidden brainpower*. London: Judy Piatkus.
- Eisenhardt, K. M., & Brown, S. L. (1999). Patching: Restitching business portfolios in dynamic markets. *Harvard Business Review*, 77 (3), 72–82.
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(October–November Special Issue), 1105–1121.
- Eisenhardt, K. & Santos, F. (2000). *Knowledge-based view: a new theory of strategy?* In Pettigrew, A., Thomas, H. & Whittington, R. (Eds), *Handbook of Strategy and Management* (1st ed.). London: Sage.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone.
- Etzioni, A. (1964). *Modern organisations*. Prentice-Hall: Englewood Cliffs.
- Farjoun, M. (1998). The independent and joint effects of the skill and physical bases of relatedness in diversification. *Strategic Management Journal*, 19, 611-630.
- Fernandez, S. (2005). Developing and testing an integrative framework of public sector leadership: Evidence from the public education arena. *Journal of Public Administration Research and Theory*, 15, 197-217.
- Field, A. (2009). *Discovering statistics using SPSS*. London: Sage Publishers.

- Fiol, C. M. (2001). Revisiting an identity-based view of sustainable competitive advantage. *Journal of Management*, 27, 691-699.
- Florida, R. (1996). Lean and green: The move to environmentally conscious manufacturing. *California Management Review*, 39 (1), 80-103.
- Fombrun, C. J. (1996). *Reputation: Realizing value from the corporate image*. Cambridge, MA: Harvard Business School Press.
- Ford, J. D., & Schellenberge, D. A. (1982). Conceptual issues of linkage in the assessment of organizational performance. *Academy of Management Review*, 49-58.
- Freeman, E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Freeman, C. (1994). *Innovation and growth*. In: *Handbook of industrial innovation*, Part I. Mark Dodgson and Roy Rothwell (Eds.). Aldershot UK: Edward Elgar Publishing Limited.
- Galbraith, J. R. (1973). *Designing complex organizations*. Addison : Wesley Publishing Company.
- Garcia, R., & Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: A literature review. *Journal of Product Innovation Management*, 19 (2), 110–132.
- Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review*, 10, 696–706.
- Ghalayini, A. M., Noble, J. S., & Crowe, T. C. (1997). An integrated dynamic performance measurement system for improving manufacturing and competitiveness. *International Journal of Production Economics*, 48, 207–225.
- Glynn, M. A. (1996). Innovative genius: A framework for relating individual and organizational intelligence to innovation. *Academy of Management Review*, 21 (4), 1081-1111.
- Goerdel, H. T. (2006). Taking initiative: Proactive management in networks and program performance. *Journal of Public Administration Research and Theory*, 16, 351-367.
- Gordon, S., Stewart, W., Sweo, R., & Luker, W. (2000). Convergence versus strategic reorientation: The antecedents of fast-paced organizational change. *Journal of Management*, 26, 911-945.

- Grant, R. M. (1991). The resource based theory of competitive advantage. *California Management Review*, 33, 114 – 135.
- Grant, R. M. (1996a). Prospering in dynamically-competitive environments: Organizational capability as knowledge creation. *Organization Science*, 7, 375-387.
- Grant, R. M. (1996b). Towards knowledge based theory of the firm. *Strategic Management Journal*, 17 (Special Issue: Knowledge and the Firm), 109-122.
- Grant, R. M. (2001). The resource based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 1-22.
- Grønhaug, K., & Kaufmann, G. (1988). *Innovation: A cross-disciplinary perspective*. USA: Oxford University Press.
- Hall, R. (1992). The strategic analysis of intangible resources. *Strategic Management Journal*, 13, 135-144.
- Hall, B. H., Lotti, F., & Mairesse, J. (2008). Innovation and productivity in SMEs: Empirical evidence for Italy. *Small Business Economics*, 7, 13-33.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9 (2), 193- 206.
- Hannan, M. T., & Freeman, J. (1977). The population ecology of organizations. *American Journal of Sociology*, 82, 929–964.
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review*, 49, 149–164.
- Hansen, S. G., & Wernerfelt, S. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic Management Journal*, 10 (5), 399-411.
- Hatten, K. J., & Schendel, D. E. (1976). Strategy's role in policy research. *Journal of Economics and Business*, 28, 195-202.
- Hatten, K. J., Schendel, D. E., & Cooper, A. C. (1978). A strategic model of the US brewing industry. *Academy of Management Journal*, 21 (4), 592-610.
- Hayes, D. (2010). *Brand technology brokers international*. New York.
- Heidt, T. V. D. (2008). *Developing and testing model of cooperative inter-organizational relationships in product innovation in an Australian manufacturing context: A multi-stakeholder perspective*. Southern Cross University: Lismore.

- Helfat, C. E., & Peteraf M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24, 997–1010.
- Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. G. (2007). *Dynamic capabilities: Understanding strategic change in organizations*. Malden, MA: Blackwell.
- Henderson, R. M., & Cockburn, I. M. (1994). Measuring core competence? Evidence from the pharmaceutical industry. *Strategic Management Journal*, 15 (Winter Special Issue), 63-84.
- Hendriksen, E. S., & Van Brenda, M. F. (1992). *Accounting theory*. Boston: Irwin.
- Henriques, I., & Sadorsky, P. (1999). The relationship between environmental commitment and managerial perceptions of stakeholder importance. *Academy of Management Journal*, 42 (1), 87-99.
- Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional services firms: A resource-based perspective. *Academy of Management Journal*, 44, 13-28.
- Hofer, C. W. (1983). ROVA: A new measure for assessing organizational performance. In R. Lamb (Ed.), *Advances in Strategic Management*, 2, 43-55. New York: JAI Press.
- Hofer, C. W., & Schendel, D. (1978). *Strategy formulation: Analytic concepts*. St. Paul, MN: West Publishing Company.
- Hubbard, G. (2009). Measuring organizational performance: Beyond the triple bottom-line. *Business Strategy and the Environment*, 19, 177-191.
- Hult, G. T. M., & Ketchen, D. J. Jr. (2001). Does market orientation matter? A test of the relationship between positional advantage and performance. *Strategic Management Journal*, 22, 899-906.
- Hunt, C. B., & Auster, E. R. (1990). Proactive environmental management: Avoiding the toxic trap. *Sloan Management Review*, 31 (2), 7-18.
- Hussain, M. F., & Ilyas, S. (2011). Environment for innovation: Gaining competitive advantage. *African Journal of Business Management*, 5 (4), 1232-1235.
- Iansiti, M., & Clark, K. (1994). Integration and dynamic capability: Evidence from product developments in automobiles and mainframe computers. *Industrial and Corporate Change*, 3, 557-605.

- Insurance Regulatory Authority (2011). *Life Insurance Industry Statistics for year 2012*. 20 (3), 201-214.
- Ismail, A. I., Rose, R. C., Uli, J., & Abdullah, H. (2012). The relationship between Organizational resources, capabilities, systems and competitive advantage. *Asian Academy of Management Journal*, 17 (1), 151–173.
- Itami, H. (1987). *Mobilizing invisible assets*. Cambridge, MA: Harvard University Press.
- Itami, H., & Roehl, W. T. (1987). *Mobilizing invisible assets*. Cambridge, MA: Harvard University Press .
- Iwu-Egwuonwu, R. C. (2011). Corporate reputation & firm performance: Empirical literature evidence. *International Journal of Business and Management*, 6 (4), 1-10.
- Jauch, L. R., Osborn, R. N., & Martin, T. N. (1980). Structured content analysis of cases: A complementary method for organizational research. *Academy of Management Review*, 5 (4), 517–526.
- Johnson, G., Scholes, K., & Whittington, R. (2008). *Exploring corporate strategy: Texts and cases*. Boston: Prentice Hall Inc.
- Jugdev, K., & Mathur, G. (2012). Classifying project management resources by complexity and leverage. *International Journal of Managing Projects in Business*, 5 (1), 105-124.
- Jye, Y. L., & Castka, P. (2009). Corporate social responsibility in Malaysia. *Corporate Social Responsibility and Management*, 16,146 -159.
- Kapelko, M. M. (2009). *Intangible assets and firm efficiency: International analysis in the textile and apparel industry*. (Published PhD Thesis). University of Autonona de Barcelona.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: Measures that drive performance. *Harvard Business Review*, 70 (1), 71-79.
- Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategies into action*. Boston, MA: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (2005). The balanced scorecard: Measures that drive performance. *Harvard Business Review*, 83 (7/8), 172–180.
- Kariuki, P., Awino, Z. B., & Ogutu, M. (2012). Firm strategy, business environment and the relationship between firm level factors and performance. *Journal of Department of Business Administration*, 2 (1), 95-122.

- Kennerley, M., & Neely, A. (2003). Measuring performance in a changing business environment. *International Journal of Operations and Production Management*, 23 (2), 213–229.
- Kenya Vision 2030 Report (2007). Abridged version, 1-32.
- Kerlinger, N. F. (1992). *Foundations of behavioral research*. Fort Worth, TX: Harcourt Brace Publishers.
- Kerlinger, N. F. (2007). *Foundations of behavioural research*. New Delhi: Surjeet.
- King, A. W., & Zeithaml, C. P. (2003). Measuring organizational knowledge: a conceptual and methodological framework. *Strategic Management Journal*, 24 (8), 763–772.
- Kirby, J. (2005). Towards a theory of high performance. *Harvard Business Review*, (July-August), 30-39.
- Klette, T. J., & Kortum, S. (2004). Innovating firms and aggregate innovation. *Journal of Political Economy*, 112 (5), 986–1018.
- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York: Guilford.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35, 124–141.
- Kothari, C. R. (2004). *Research methodology. Methods and techniques*. New Delhi: New Age International Publishers.
- Kotler, P. (1991). *Marketing management (7th ed.)*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Kostopoulos, K. C., Spanos Y. E., & Prastacos, G. P. (2002). The resource – based view of the firm and innovation: Identification of critical linkages. *The 2nd European Academy of Management Conference*, Stockholm.
- KPMG Kenya Limited (2004). *Kenya insurance survey, paradigm shift*.
- Kraatz, M. S., & Zajac, E. J. (2001). How organizational resources affect strategic change and performance in turbulent environments: Theory and evidence. *Organization Science*, 12, 632–657.
- Kreitner, R. (2007). *Fundamentals of organizational behaviour (1st ed.)*. McGraw-Hill.
- Kropp, F., & Zolin, R. (2005). Technological entrepreneurship and small business innovation research programs. *Academy of Marketing Sciences Review*, 7, 1-16.

- Lawrence, P. R., & Lorsch, J. W. (1967). *Organization and environment: Managing differentiation and integration*. Boston, MA: Division of Research, Graduate School of Business Administration, Harvard University.
- Learned, E., Christensen, C., Andrews, K., & Guth, W. (1969). *Business policy: Text and cases*. Irwin: Homewood, IL.
- Lee, C., Lee, K., & Pennings, J. M., (2001). Internal capabilities, external networks, and performance: A study on technology-based ventures. *Strategic Management Journal*, 22, 615-640.
- Lenz, R. T. (1980). Environment, strategy, organization structure and performance: Patterns in one industry. *Strategic Management Journal*, 1, 209-226.
- Lentz, R., & Mortensen, D. (2005). Productivity growth and worker reallocation. *International Economic Review*, 46 (3), 731-749.
- Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal*, 13 (Special Issue), 111–125.
- Leonard-Barton, D. (1995). *Wellsprings of knowledge: Building and sustaining the source of innovation*. Boston: Harvard Business School Press.
- Lev, B. (2001). *Intangibles: Management, measurement and reporting*. Washington, D.C., USA: The Brookings Institution.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21 (1), 135-172.
- Lundvall, B. (2007). National innovation systems: Analytical concept and development tool. *Industry and innovation*, 14 (1), 95-119.
- Luoma-aho, V., Vos, M., Lappalainen, R., Lamsa, A. M., Uusitalo, O., Maaranen, V., & Koski, A. (2012). Added value of intangibles for organizational innovation. *Human Technology*, 8 (1), 7–23.
- Lynn, G. S., Skov, R. B., & Abel, K. D. (1999). Practices that support team learning and their impact on speed to market and new product success. *Journal of Product Innovation Management*, 16, 439-454.
- Machuki, V. N. (2011). *External environment strategy co alignment, firm level institutions and performance of publicly quoted companies in Kenya* (Unpublished PhD Thesis). School of Business, University of Nairobi.

- Machuki V. N., & Aosa, E. (2011). The influence of the external environment on the performance of publicly quoted companies in Kenya. *Prime Journal of Business Administration and Management*, 1 (7), 205-218.
- Mahoney, J. T., & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal*, 13 (5), 363-80.
- Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22 (5), 387-401.
- March, J. G., & Simon, A. H. (1958). *Organizations*. New York: Wiley.
- March, J. G., & Sutton, R. I. (1997). Organizational performance as a dependent variable. *Organization Science*, 8 (6), 698-706.
- Marino, K. E. (1996). Developing consensus on firm competencies and capabilities. *Academy of Management Executive*, 10 (3), 40-51.
- Mason, E. S. (1939). Price and production policies of large scale enterprises. *American Economic Review*, 29, 61-74.
- McCann, P. (2004). The changing definition of organizational effectiveness. *Human Resource Planning*, 27 (1), 7-30.
- Mezias, S. J., & Glynn, M. A. (1993). The three faces of corporate renewal: Institution, revolution, and evolution. *Strategic Management Journal*, 14 (2), 77-101.
- Michailova, S., & Hutchings, K. (2006). National cultural influences on knowledge sharing: A comparison of China and Russia. *Journal of Management Studies*, 43 (3), 383-405.
- Miles, R. E., & Snow, C. C. (1978). *Organizational strategy, structure and process*. New York: McGraw-Hill.
- Miller, K. D. (1993). Industry and country effects on managers' perceptions of environmental uncertainties. *Journal of International Business Studies*, 24 (4), 693-714.
- Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: The third link. *Strategic Management Journal*, 4, 221-235.
- Miller, K. D., & Friesen, P. H. (1978). Archetypes of strategy formulation: *Management Science*, 24 (9) 921-933

- Miller, K. D., Droge, C., & Toulouse, J. (1988). Strategic process and content as mediators between organizational context and structure. *Academy of Management Journal*, 31 (3), 544–69.
- Milliken, F. (1987). Three types of perceived uncertainty about the environment: State, effect and response uncertainty. *Academy of Management Review*, 12, 133-143.
- Mintzberg, H. (1979). *The structure of organizations*. Prentice-Hall: Englewood Cliffs, NJ.
- Mintzberg, H. (2008). *Strategy safari: Your complete guide through the wilds of strategic management* (2nd ed.). Prentice Hall: Pearson Education.
- Mishina, Y., Pollock T. G., & Porac J. F. (2004). Are more resources always better for growth? Resource stickiness in market and product expansion. *Strategic Management Journal*, 25, 1179–1197.
- Mishra, A., & Mishra, K. (1994). The role of trust in effective downsizing strategies. *Human Resource Management*, 33, 261-280.
- Morgan, N. A., Kaleka, A., & Katsikeas, C. S. (2004). Antecedents of export venture performance: A theoretical model and empirical assessment. *Journal of Marketing*, 68, 90–108.
- Mudaki, A. L., Wanjere, D., Ochieng, I., & Odera, O. (2012). Effects of operational factors on organizational performance in Kenyan insurance industry. *International Journal of Business and Social Science*, 3 (17), 237-241.
- Mugenda, A. G. (2008). *Social science research*. Nairobi: African Centre for Technology Studies.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods, qualitative and quantitative approaches*. Nairobi: African Centre for Technology Studies.
- Munyoki, J. M. (2007). *The effects of technology transfer on organizational performance: A study of medium and large manufacturing firms in Kenya* (Unpublished PhD Thesis). School of Business, University of Nairobi.
- Nachmias, C. F., & Nachmias, D. (2004). *Research methods in the social sciences* (5th ed.). India: Replica Press.
- Naranjo-Gil, D. (2009). The influence of environmental and organizational factors on innovation adoptions: Consequences for performance in public sector organizations. *Technovation*, 29, 810–818.
- Nelson, R. R., & Winter, S. G. (1982). *An evolutionary theory of economic change*. Cambridge: Belknap Press/Harvard University Press.

- Newbert, S. L. (2007). Empirical research on the resource-based view of the firm: An assessment and suggestions for future research. *Strategic Management Journal*, 28, 121-146.
- Newman, K. L. (2000). Organizational transformation during institutional upheaval. *Academy of Management Review*, 25, 602-619.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5, 14-37.
- Nonaka, I., & Konno, N. (1998). The concept of 'Ba': Building a foundation for knowledge creation. *California Management Review*, 40, 40-54.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. New York, NY: Oxford University Press.
- Nunnally, J. C. (1978) *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Ocholla, A. M., Muthama, N. J., & Owino, J. O. (2006). The influence of weather on the insurance industry in Nairobi. *African Journal of Science and Technology*, 7 (1), 112 - 120.
- OECD (2007). *Innovation and growth: Rationale for an innovation strategy*.
- Ortega-Argilés, R., & Brandsma, A. (2009). EU-US differences in the size of R&D intensive firms: Do they explain the overall R&D intensity gap? *IPTS Working Paper Series on Corporate R&D and Innovation*. No. 2/2009 - JRC50909 European Communities.
- O'Regan, N., & Ghobadian, A. (2004). The importance of capabilities for strategic direction and performance. *Management Decision*, 42 (2), 292-312.
- Osborne, J. W., Christensen, W. R., & Gunter, J. (2001). Educational psychology from a statistician's perspective: A review of the power and goodness of educational psychology research. *Paper presented at The National Meeting of the American Education Research Association (AERA)*, Seattle: WA.
- Osborne, J., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8 (2). Retrieved April 25, 2014 from <http://PAREonline.net/getvn.asp?v=8&n=2>.
- Palmer, A., & Bob, H. (2002). *The business environment*. London: McGraw-Hill.
- Palmer, R., & Brookes, R. (2002). Incremental innovation: A case study analysis. *Journal of Database Management*, 10 (1), 71-83.

- Palmer, D., & Kaplan, S. (2007). *A framework for strategic innovation. Blending strategy and creative exploration to discover future business opportunities*. [Online]. Available:http://www.1000ventures.com/business_guide/innovation_strategic_byip.html [04 January 2009].
- Pandey, I. M. (1999). *Financial management* (8th ed.). Vikas Publishing House: New Delhi.
- Pearce, A. J. II., & Robinson, B. R. (2007). *Strategic management: Formulation, implementation and control*. (10th ed.). Boston: Irwin McGraw-Hill.
- Penrose, E. (1959). *The theory of the growth of the firm* (3rd ed.). Oxford: Oxford University Press.
- Peteraf, M. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14, 179-91.
- Peters, T. J., & Waterman, R. H. (1982). *In search of excellence*. New York: Harper and Row.
- Pfeffer, J. (1983). Organizational demography. *Research in Organizational Behavior*, 5, 299-357.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Pfeffer, J., & Nowak, P. (1976). Joint ventures and inter-organizational interdependence. *Administrative Science Quarterly*, 21, 398-418.
- Politis, J. D. (2002). Transformational and transactional leadership enabling (disabling) knowledge acquisition of self-managed teams: The consequences for performance. *The Leadership and Organizational Development Journal*, 23 (4), 186-197.
- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: Free Press.
- Porter, E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: The Free Press.
- Porter, M. E. (1991). Towards a dynamic theory of strategy. *Strategic Management Journal*, 12 (Special Issue), 95-117.
- Prahalad, C. K., & Hamel G. (1990). The core competence of the corporation. *Harvard Business Review*, May-June, 79-91.

- Prahalad C. K., Hamel G. (1994). Strategy as a field of study: Why search for a new paradigm. *Strategic Management Journal*, 15 (Special Issue), 5-16.
- Priem, R. L., & Butler, J. E. (2001). Is the resource-based view a useful perspective for strategic management research? *Academy of Management Review*, 26 (1), 22-40.
- Power, B., & Reid, G. (2005). Flexibility, firm-specific turbulence and the performance of the long-lived small firm. *Review of Industrial Organization*, 26, 415-443.
- Raim, D. M., & Langford, J. L. (2007). *Understanding reinsurance*. Mathew Bender and Company: INC.
- Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing research in business and management*. London: Sage Publications. In Holden, M. T., & Lynch, P. (2004). Choosing the appropriate methodology: Understanding research philosophy. *The Marketing Review*, 4 (4), 397- 409.
- Romanelli, E. (1987). New venture strategies in the minicomputer industry. *California Management Review*, 30(1), 160-175.
- Rubin, P. H. (1973). The expansion of firms. *Journal of Political Economy*, 84, 936-949.
- Rugman, A. M., & Verbeke, A. (2002). Edith Penrose's contribution to the resource-based view of strategic management. *Strategic Management Journal*, 23,769–780.
- Rumelt, R. P. (1984). Towards a strategic theory of the firm, in Lamb, R. B. (ed.). *Competitive Strategic Management*. Prentice Hall: Englewood Cliffs, NJ.
- Rumelt, R. P., Schendel, D. E., & Teece, D. J. (1994). *Fundamental issue in strategy: Research agenda*, Boston, MA: Harvard Business School Press.
- Russell, R., & Russell, C. (1992). An examination of the effects of organizational norms, organizational structure, and environmental uncertainty on entrepreneurial strategy. *Journal of Management*, 18, 639–657.
- Russo, M. V., & Fouts, P. A. (1997). Resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40 (3), 534-559.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students* (4th ed.). Harlow: Prentice Hall, Pearson Education Limited.
- Savitskaya, I. (2011). Environmental influences on the adoption of open innovation: Analysis of structural, institutional and cultural impacts. *Conradi Research Review*, 2 (10), 1-18.

- Sharma, R., Yetton, P., & Crawford, J. (2009). Estimating the effect of common method variance: The method-method pair technique with an illustration from TAM Research. *MIS Quarterly*, 33 (3), 473-490.
- Schendel, D. E., & Hatten, K. J. (1972). Business policy or strategic management: A view of an emerging discipline. In Mitchell, V. F., Barth, R. T., & Mitchell F. H. (Eds). *Academy of management proceedings*.
- Schein, E. H. (2004). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.
- Schilling, M. (2006). *Strategic management of technological innovation*. (2nd ed.). New-York: McGraw-Hill.
- Schumpeter, J. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest and business cycle*. Cambridge: Harvard University Press.
- Sekaran, U. (2003). *Research methods for business: A skill building approach*. NY: Wiley.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Simons, R. (2000). *Performance measurement and control system for implementing strategy: Text and cases*. New Jersey: Prentice Hall.
- Smeds, R. (2001). Implementation of business process innovations: An agenda for research and action. *International Journal of Technology Management*, 22 (1), 1-12.
- Smith, A. (1937). *The wealth of nations*. New York: McGraw-Hill
- Soh, P. H. (2003). The role of networking alliances in information acquisition and its implications for new product performance. *Journal of Business Venturing* 18, 727-744.
- Song, X. M., & Parry, M. E. (1997). The determinants of Japanese new product successes. *Journal of Marketing Research*, 34 (1), 64-76.
- Steurer, R. (2006). Mapping stakeholder theory anew: From the stakeholder theory of the firm to three perspectives on business-society relations. *Business Strategy and the Environment*, 15, 55-69.
- Stevenson, H. H., & Jarillo, J. C. (1990). A paradigm of entrepreneurship: Entrepreneurial management. *Strategic Management Journal*, 11, 17-27.

- Stewart, T. A. (1997). *Intellectual capital - The new wealth of organizations* (1st ed.). London: Nicolas Brealey Publishing.
- Starbuck, W. H. (1976). *Organizations and their environments*. In Marvin D. Dunnette (ed.), *Handbook of industrial and organizational psychology*: 1069-1123. Chicago: Rand McNally.
- Stone, C. L., & Banks, J. M. (1997). The use of customer and employee-based measures in the times top 500 companies. *The TQM Magazine*, 9 (2), 152–158.
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17 (Winter Special Issue), 27–43.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. (4th ed.). Needham Heights, MA: Allyn and Bacon.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics*. (3rd ed.). New York: Harper Collins College Publishers.
- Tan, H. (2007). Does reputation matter? Corporate reputation and earnings quality (Electronic version). *Social Science Research Network (SSRN)*. [Online] Available:http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1013127&rec=1&rcabs=628261 (September 18, 2009)
- Tan, C. S. L., & Smyrnios, K. X. (2011). How do Australian fast-growth small-to-medium enterprises measure performance. *Journal of Enterprising Culture*, 19 (1), 41–60.
- Tan, J. J., & Litschert, R. J. (1994). Environment-strategy relationship and its performance implications: An empirical study of the Chinese electronics industry. *Strategic Management Journal*, 15 (1), 1-20.
- Tangen, S. (2003). An overview of frequently used performance measures. *Work Study*, 52 (7), 347–354.
- Teece, D. J. (2000). Strategies for managing knowledge assets: The role of firm structure and industrial context. *Long Range Planning*, 33 (1), 35–54.
- Teece, D. J., & Pisano, G. (1994). The dynamic capabilities of firms: An introduction. *Industrial and Corporate Change*, 3 (3), 537-556.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18 (8), 509-533.

- Thompson, V. A. (1965). Bureaucracy and innovation. *Administrative Science Quarterly*, 10, 1-20.
- Thompson, J. D. E. (1967). *Organizations in action*. New York: McGraw-Hill.
- Thompson, D. E. (2001). Get big enough (but not too big) to source innovation. *Research-Technology Management*, 44 (6), 22-25.
- Tiger, L., & Calantone, R. J. (1998). The impact of market knowledge competence on the new product advantage: Conceptualization and empirical examination. *Journal of Marketing*, 62, 13-29.
- Ting, H. F., Wang, H. B., & Wang, D. S. (2012). The moderating role of environmental dynamism on the influence of innovation strategy and firm performance. *International Journal of Innovation, Management and Technology*, 3 (5), 517-520.
- Tosi, H., & Slocum, J. W. Jr. (1984). Contingency theory: Some suggested directions. *Journal of Management*, 10, 9-26.
- Tsai, W. H., Chou, W. C., & Hsu, W. (2009). The sustainability balanced scorecard as a framework for selecting socially responsible investments: An effective MCDM model. *Journal of the Operational Research Society*, 60 (10), 1396-1410.
- Venkatraman, N., & Prescott, J. E. (1990). Environment strategy co- alignment - An empirical test of its performance implications. *Strategic Management Journal*, 11 (1), 1-23.
- Von Bertalanffy, L. (1950). The theory of open systems in physics and biology. *Science New Series*, 111 (2872), 23-29.
- Vorhies, D. W., & Morgan, N. A. (2005). Benchmarking marketing capabilities for sustainable competitive advantage. *Journal of Marketing*, 69 (1), 80-94.
- Warren, C. (2002). *Qualitative interviewing*. USA: Sage Publications Ltd.
- Waterhouse, J. H., & Tiessen, P. (1978). A contingency framework for management accounting systems research. *Accounting, Organizations and Society*, 3 (1), 65-76.
- Weber, R. (2004). The rhetoric of positivism versus interpretivism: A personal view. *MIS Quarterly*, 28(1), 1-12.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5 (2), 171-180.

- Wholey, D., & Brittain, J. (1989). Characterizing environmental variation. *Academy of Management Journal*, 32, 867-882.
- Williamson, O. E. (1975). *Markets and hierarchies*. New York: Free Press.
- Winter, S. G. (2000). The satisfying principle in capability learning. *Strategic Management Journal*, Special Issue 21(10-11), 981-996.
- Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic Management Journal*, 24 (10), 991-995.
- Yuchtman, E., & Seashore, S. E. (1967). A system resource approach to organizational effectiveness. *American Sociological Review*, 891-903.
- Zack, M. H. (1999). Developing a knowledge strategy. *California Management Review*, 41 (3), 125-145.
- Zikmund, W. G. (2003). *Business research methods* (7th ed.). Thomson Publishers: New York.
- Zott, C. (2000). Dynamic capabilities and the emergence of intra-industry and differential firm performance: Insights from a simulation study. *A working paper in the INSEAD working paper series*. France: INSEAD Fontainebleau.
- Zott, C. (2003). Dynamic capabilities and the emergence of intra-industry differential firm performance: Insights from a simulation study. *Strategic Management Journal*, 24, 97-125.

APPENDICES

Appendix I: 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.ac.ke

P.O. Box 30197
Nairobi, Kenya

2nd April, 2014

TO WHOM IT MAY CONCERN

RE: BEATRICE E. OMBAKA: D80/72718/2012

This is to certify that, **BEATRICE E. OMBAKA: D80/72718/2012** is a Ph.D candidate in the School of Business, University of Nairobi. The title of her study is: “**Resources, External Environment, Innovation and Performance of Insurance Companies in Kenya**”.

The purpose of this letter therefore, is to kindly request you to assist and facilitate in carrying out the research/study 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.

A handwritten signature in black ink, appearing to read 'Evans Aosa'.

Feh **PROF. EVANS AOSA**
ASSOCIATE DEAN
GRADUATE BUSINESS STUDIES
SCHOOL OF BUSINESS

MO/nwk

**Appendix II: Letter of Introduction from National Commission for Science,
Technology and Innovation**



**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,
2241349, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No.

Date:

24th April, 2014

NACOSTI/P/14/2247/1378

Beatrice Elesani Ombaka
University of Nairobi
P.O.Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Resources, external environment, innovation and performance of Insurance Companies in Kenya*," I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for a period ending **5th December, 2014**.

You are advised to report to the **Managing Directors of selected Insurance Companies, the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.


SAID HUSSEIN
FOR: SECRETARY/CEO

Copy to:

The Managing Directors
Selected Insurance Companies.

Appendix III: Researcher's Letter of Introduction

Beatrice Ombaka
University of Nairobi
P.O. Box 3863 - 00200
Nairobi.
Tel. 0721336288
beatrice.ombaka@yahoo.com

15th March, 2014

Dear Respondent,

RE: REQUEST FOR ACADEMIC RESEARCH DATA

I am a PhD candidate at the University of Nairobi, School of Business. As part of the requirements for the award of this degree, one is expected to undertake a research study.

To this effect, I'm undertaking an academic research thesis on the influence of **Resources, External Environment, Innovation and Performance of Insurance Companies in Kenya.**

Since your firm is part of the population of interest, we hereby request for your participation in the study. The information collected will be used for this academic research and will be treated with utmost confidentiality. I will be grateful if you could spare part of your time to answer the questions as honestly as possible. The target respondents are the senior managers in your organization.

Your participation and cooperation will be highly appreciated.

Yours faithfully,



Beatrice Elesani Ombaka

PhD Candidate.

Appendix IV: Research Questionnaire

RESOURCES, EXTERNAL ENVIRONMENT, INNOVATION AND PERFORMANCE OF INSURANCE COMPANIES IN KENYA.

Dear Respondent,

The purpose of this questionnaire is to collect data to establish the role of organizational resources, external environment and innovation on performance of insurances companies in Kenya. The data collected will be used for academic purposes only and will be treated with strict confidentiality. Kindly spare some time to respond to the questions. Please note that there is no right or wrong answer.

SECTION A

DEMOGRAPHIC DATA

(Tick where appropriate)

Respondents Particulars

1. Position of respondent.....

2. How long have you worked in this position?

Below 5 years [] 6-10 years [] 11-15 years []
16-20 years [] Over 20 years []

3. How long have you worked for this firm?

Below 5 years [] 6-10 years [] 11-15 years [] 16-20 years [] Over 20 years []

4. What is the highest level of education you have attained?

Secondary level [] Master's degree level []
Diploma level [] PhD/Doctorate degree level []
Bachelor's degree level []

Information on the Firm

5. Name of the firm (*Optional*)

.....

6. How long in years has the firm been in existence?

0-5 [] 6-10 [] 11-15 [] 16-20 [] Over 20 []

7. Which category does your firm belong? Life [] General [] Composite []

8. Number of employees.

Less than 100 [] 100-300 [] 301-500 []
Above 500 []

9. Please specify the ownership structure of your firm.

Joint Ownership (both local and foreign [] Local Public Ownership []
Local Private Ownership [] Government Ownership []

10. Please indicate the scope of operation of your firm.

National (Kenya) [] Continental (Africa) []
Regional (East Africa) [] Global (Beyond Africa) []

SECTION B

ORGANIZATIONAL RESOURCES

11. Please specify to what extent the following tangible resources are available in your firm. Use the key below and TICK as appropriate.

Key:

1 = Not at all; 2 = Small extent; 3 = Moderate extent; 4 = High extent; 5 = Very high extent.

No.	Organizational Resource Measures	1	2	3	4	5
1.	The firm allocates sufficient funds for its day to day running					
2.	The firm has adequate employees to perform its functions					
3.	The firm has adequate fixed assets like land and buildings					
4.	The firm has adequate office equipment					
5.	The firm has adequate furniture and fittings					
6.	The firm has adequately invested in stocks					
7.	The firm has sufficient deposits in banks					

12. Please specify to what extent the following intangible resources are available in the firm. Use the key below and TICK as appropriate.

Key:

1 = Not at all; 2 = Small extent; 3 = Moderate extent; 4 = High extent;

5 = Very high extent.

No.	Organizational Resource Measures	1	2	3	4	5
1.	The firms employees are knowledgeable in terms of skills and experience					
2.	The firm has a unique culture					
3.	The firms employees are loyal					
4.	The firms employees work as a team					
5.	The firm invests in modern technology including software to support its operations and interactions with customers					
6.	The firm has a good reputation in the industry					
7.	The firm has a valuable brand in the industry					
8.	The firm possesses unique resources					
9.	The firms employees are sufficiently motivated					
10.	The firm facilitates relevant training for its employees					
11.	The relationship between employees and management is good					
12.	The firm's management and leadership style are good					
13.	The firm encourages a culture of knowledge creation and accumulation					
14.	Employees have a strong emotional bond to the firm					
15.	The firm possess resources that are difficult to imitate by competitors					

SECTION C
EXTERNAL ENVIRONMENT

13. Munificence refers to the extent of availability or scarcity of resources in the firm's environment. Please indicate to what extent each of the following factors in the external environment has been **favorable** to your firm in the last five years. Use the key below and TICK as appropriate. **Key:1 = Not at all; 2 = Small extent; 3 = Moderate extent; 4 = High extent; 5 = Very high extent.**

No.	Environmental Factors	1	2	3	4	5
1	Political factors in the economy					
2	Economic factors like market and economic growth					
3	Social cultural factors like social values and demographics					
4	Technological factors					
5	Ecological factors like weather conditions					
6	Industry regulations					
7	Legal requirements					
8	Threat of new entrants in your firm's industry					
9	Threat of substitute products and services					
10	Bargaining power of customers					
11	Bargaining power of suppliers					
12	Competition among firms in your industry					

14. Dynamism refers to the degree of change and unpredictability of factors in the firm's environment. Please indicate to what extent has the developments in each of the following factors in the external environment have been **predictable** to your firm in the last five years. Use the key below and TICK as appropriate.

Key: 1 = Not at all; 2 = Small extent; 3 = Moderate extent; 4 = High extent; 5 = Very high extent.

No.	Environmental Factors	1	2	3	4	5
1	Political factors					
2	Economic factors like market and economic growth					
3	Social cultural factors like social values and demographics					
4	Technological factors					
5	Ecological factors like weather conditions					
6	Industry regulations					
7	Legal requirements					
8	Threat of new entrants in your firm's industry					
9	Threat of substitute products and services					
10	Bargaining power of customers					
11	Bargaining power of suppliers					
12	Competition among firms in your industry					

15. In each sector, how **much change** have you observed in last five years? Use the key below and TICK as appropriate. **Key: 1 = No change at all; 2 = Little; 3 = Moderate change; 4 = great change; 5 = Dramatic change.**

No.	Environmental Factors	1	2	3	4	5
1	Political factors					
2	Economic factors like market and economic growth					
3	Social cultural factors like social values and demographics					
4	Technological factors					
5	Ecological factors like weather conditions					
6	Industry regulations					
7	Legal requirements					
8	Threat of new entrants in your firm's industry					
9	Threat of substitute products and services					
10	Bargaining power of customers					
11	Bargaining power of suppliers					
12	Competition among firms in your industry					

13. How often does your firm conduct surveys on the external environment?

Never [] Monthly [] Quarterly [] Bi annually [] Annually []

16. Complexity refers to the range of environmental issues and their heterogeneity.

Please indicate in each set of factors **how many issues** has your firm had to deal with in the last five years. Use the key below and TICK as appropriate. **Key: 1 = None at all; 2 = Very few; 3 = Moderate number; 4 = Many; 5 = Very many.**

No.	Environmental Factors	1	2	3	4	5
1	Political factors					
2	Economic factors like market and economic growth					
3	Social cultural factors like social values and demographics					
4	Technological factors					
5	Ecological factors like weather conditions					
6	Regulatory factors					
7	Legal requirements					
8	Threat of new entrants in your firm's industry					
9	Threat of substitute products and services					
10	Bargaining power of customers					
11	Bargaining power of suppliers					
12	Competition among firms in your industry					

17. Following the previous question, are those **factors different from or similar** to each other? Use the key below and TICK as appropriate. **Key: 1 = Similar; 2 = somewhat similar; 3 = neither similar nor different; 4 = somewhat different; 5 = Different.**

No.	Environmental Factors	1	2	3	4	5
1	Politics factors					
2	Economic factors like market and economic growth					
3	Social cultural factors like social values and demographics					
4	Technological factors					
5	Ecological factors like weather conditions					
6	Regulatory factors					
7	Legal requirements					
8	Threat of new entrants in your firm's industry					
9	Threat of substitute products and services					
10	Bargaining power of customers					
11	Bargaining power of suppliers					
12	Competition among firms in your industry					

SECTION D
INNOVATION

18. Please specify to what extent the following innovation activities are carried out in your firm. Use the key below and TICK as appropriate. **Key:1 = Not at all; 2 = Small extent; 3 = Moderate extent; 4 = High extent; 5 = Very high extent.**

No.	Innovation Measures	1	2	3	4	5
1	The firm frequently tries out new product ideas					
2	The firm is among the first to introduce new products and services in the industry					
3	The turnaround time for new products is good					
4	The firm adopts cost effective methods of operation					
5	The firm carries out frequent products upgrades/improvements					
6	The firm processes and channels are efficient					
7	The firm allocates adequate funds for innovation yearly					
8	The firm invests in research and development					
9	The firm regularly develops new products and services					
10	The firms technology is among the latest in the market					
11	The firm carries out continuous process reviews and improvements					
12	The firm has a wide range of products and services					
13	The firm adopts new processes fast as compared to its competitors					
14	The firm has a dedicated research and development/innovations team					
15	The firm encourages its employees to provide innovative ideas					
16	The firm rewards its employees for innovative ideas					

17. Does your firm invest in research and development?

Yes No

18. If yes, how much has your firm spend on Research and Development in the last three years?

Below 5Million 5-10 Million 11-15 Million 16-20 Million above 20M

19. How many new products has your firm introduced in the last three years?

None 1-5 6 -10 10 and above

SECTION E

FIRM PERFORMANCE

19. Please indicate to what extent your firm has achieved the following non-financial performance measures. Use the key below and TICK as appropriate.

Key:

1 = Not at all; 2 = Small extent; 3 = Moderate extent; 4 = High extent;

5 = Very high extent.

No.	Firm Performance Measures	1	2	3	4	5
1	Customer complaints have reduced considerably in the last three years					
2	Customers are satisfied with the firms services					
3	The firm responds to customer complaints within 24 hours					
4	The firm offers excellent service to its customers					
5	The firm is able to retain its customers as compared to its peers in the industry					
6	The firm has a range of customized products for its customers					
7	The firms has a customer loyalty scheme					

No.	Firm Performance Measures	1	2	3	4	5
8	The firm's internal processes have improved considerably in the last three years					
9	The firm's premiums have grown faster in the last three years compared to other firms in the industry					
10	The firm conducts clients satisfaction surveys and receives positive feedback					
11	The firms processes are standardized through procedure manuals					
12	The firm has improved its customer care through technology and process automation					
13	Employees have superior skills and capabilities					
14	Employees of the firm are satisfied and motivated					
15	The firms activities are customer centric					
16	Employees have knowledge required to satisfy customer needs					
17	The firm engages in environmental friendly activities					
18	The firm complies with environmental laws					
19	The firm is in the fore front in corporate social responsibility					
20	CSR expenditure has been increasing over the years					
21	The firm continually improves its services as compared to its competitors					

22. In the last three years, what has been the growth rate of your firm's premium?

Below 5%, 6-10%, 11-20% Over 20%

23. In the last three years, what has been your firm's net profit growth?

Below 10%, 11-30%, 31-60% 61-100%

END

Thank you for your time and cooperation

Appendix V: Interview Guide

1. What is the effect of organizational resources on your firms' performance?
2. What is the effect of the external environment on resources of your firm?
3. Describe the business environment in which your firm operates
4. How does the current business environment impact on your firm's performance?
5. How does your organization react to competitor threats?
6. What is the effect of innovation on your firm's performance?
7. What is the effect of resources on your firm's capacity to innovate?
8. What is the effect of external environment on your firm's capacity to innovate?
9. What has been the performance of your firm in the last five years?
10. What factors do you feel have contributed most to your firm's performance in the last five years?

Appendix VI: List of Insurance Companies in Kenya

Number	Company Name	Address
1	AAR Insurance Kenya Limited	George Williamson House, 2nd Floor, 4th Ngong Avenue, Box 41766 – 00100 Nairobi
2	Africa Merchant Assurance Ltd	2nd Floor, Trans-National Plaza, Mama Ngina Street, Box 64599-00200, Nairobi
3	AIG Kenya Insurance Company Ltd	AIG House, Eden Square Complex, Chiromo Road, Box 49460-00100, Nairobi
4	APA Insurance Company Ltd	Apollo Center, Off Ring road, Box 30065-0100, Nairobi
5	Apollo Life Insurance Ltd	Apollo Center, Off Ring road, Box 30065-0100, Nairobi
6	British American Insurance Company Ltd	Britak Centre, Mara/Ragati Road, 30375-00100, Nairobi
7	Cannon Assurance Company Ltd	Gateway Business Park, Mombasa Road, Box 30216-00100, Nairobi
8	Capex Life Assurance Company Ltd	5th Avenue Office Suites, Ngong Road, Box 12043-00400, Nairobi
9	CFC Life Assurance Ltd	CFC House, Mamlaka Road, Box 30390-00100, Nairobi
10	CIC General Insurance Company Ltd	CIC Plaza, Mara Road, Box 59485-00100, Nairobi
11	CIC Life Insurance Company Ltd	CIC Plaza, Mara Road, Box 59485-00100, Nairobi
12	Corporate Insurance Company Ltd	Corporate Place, Kiambere Road, Box 43172-00100, Nairobi
13	Directline Assurance Company Ltd	17th Floor, Hazina Towers, Monrovia Street, Box 40863-00100, Nairobi
14	Fidelity Shield Insurance Company Ltd	Fisco Center, Muthangari Drive, Box 47435-00100, Nairobi
15	First Assurance Company Ltd	First Assurance House, Gitanga Rd, Box 30064-00100, Nairobi
16	GA Insurance Company Ltd	GA Insurance Hse, Ralph Bunche Rd, Box 42166-00100, Nairobi
17	Gateway Insurance Company Ltd	Gateway House, Gateway Place, Milimani Road, 60656-00200, Nairobi
18	Geminia Insurance Company Ltd	Geminia Insurance Plaza, Kilimanjaro Avenue, Box 61316-00200, Nairobi
19	Heritage Insurance Company Ltd	CFC House, Mamlaka Road, Box 30390-00100, Nairobi
20	ICEA LION General Insurance Co Ltd	ICEA Building, Kenyatta Avenue, Box 46143-00100, Nairobi
21	ICEALION Life Assurance Co Ltd	ICEA Building, Kenyatta Avenue, Box 46143-00100, Nairobi
22	Intra Africa Assurance Company Ltd	Williamson House, 4th Ngong Avenue, Box 43241-00100, Nairobi
23	Invesco Assurance Company Ltd	Bishop Mangua Centre, Box 52964-00200, Nairobi

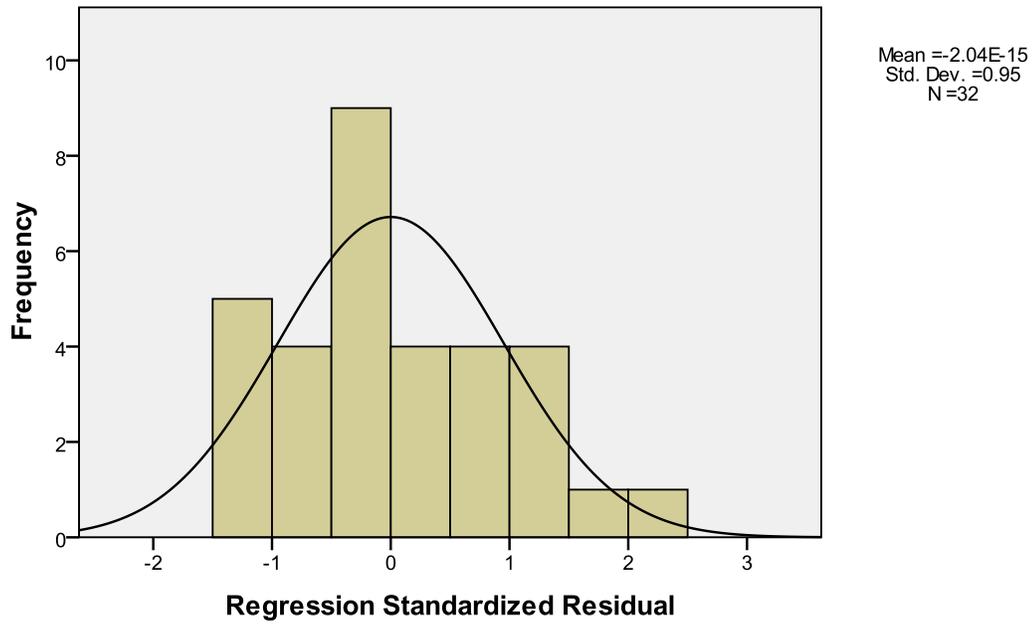
Number	Company Name	Address
24	Jubilee Insurance Company Ltd	Jubilee Insurance Hse, Mama Ngina Street, Box 30376-00100, Nairobi
25	Kenindia Assurance Company Ltd	Kenindia House, Loita Street, Box 44372-00100, Nairobi
26	Kenya Orient Insurance Company Ltd	Capital Hill Towers, Cathedral Road, Box 34530-00100, Nairobi
27	Kenyan Alliance Insurance Company Ltd	Chester House, Koinange Street, Box 34530-00100, Nairobi
28	Madison Insurance Company Ltd	Madison Insurance House, Upper Hill Rd, Box 47382-00100, Nairobi
29	Mayfair Insurance Company Ltd	Mayfair Centre, Ralph Bunche Road, Box 45161-00100, Nairobi
30	Mercantile Insurance Company Ltd	Ecobank Towers, Muindi Mbingu Street, Box 20680-00200, Nairobi
31	Metropolitan Life Assurance Company Ltd	International Life House, Mama Ngina St., Box 46780-00100, Nairobi
32	Monarch Insurance Company Ltd	Mornach House, 664 Olenguruone Avenue, Box 44003-00100, Nairobi
33	Occidental Insurance Company Ltd	Corner Plaza, 2nd Floor, Parklands Road, Box 82788-00100, Nairobi
34	Old Mutual Life Assurance Company Ltd	Old Mutual Building, Cnr of Mara/Hospital Rd, Box 30059-00100, Nairobi
35	Pacis Insurance Company Ltd	Centernary Hse, 2nd Floor, Off Ring Rd, estlands, Box 1870-00100, Nairobi
36	Pan Africa Life Assurance Company Ltd	Pan Africa House, Kenyatta Avenue, Box 44041-00100, Nairobi
37	Phoenix of E. A. Assurance Company Ltd	Ambank House, 17th Floor, University Way, Box 30129-00100 Nairobi
38	Pioneer Life Assurance Company Ltd	Pioneer House, Moi Avenue, Box 30129-00100, Nairobi
39	REAL Insurance Company Ltd	Royal Ngao House, Hospital Road, Box 40001-00100, Nairobi
40	Shield Assurance Company Ltd	5th Avenue Office Suites, Ngong Road, Box 5093-00100, Nairobi
41	Takaful Insurance of Africa Ltd	CIC Plaza, Mara Road, Box 1181-00100, Nairobi
42	Tausi Assurance Company Ltd	Tausi Court, Tausi Road, Off Muthithi Rd, Box 28889-00100, Nairobi
43	Trident Insurance Company Ltd	Capital Hill Towers, Cathedral Road, Box 13501-00100, Nairobi
44	UAP Insurance Company Ltd	Bishops Garden Towers, Bishops Road, Box 3013-00100, Nairobi
45	UAP Life Assurance Company Ltd	Bishops Garden Towers, Bishops Road, Box 3013-00100, Nairobi
46	Xplico Insurance Company Ltd	Park Place 5th Floor, Limuru Road, Box 38106-00623, Nairobi
HMO	Resolution Insurance Company	Roshanmaer Place, Lenana Road, Box 4469 - 00100, Nairobi

Source: AKI Report, 2012

Appendix VII: Histogram for Non-Financial Performance

Histogram

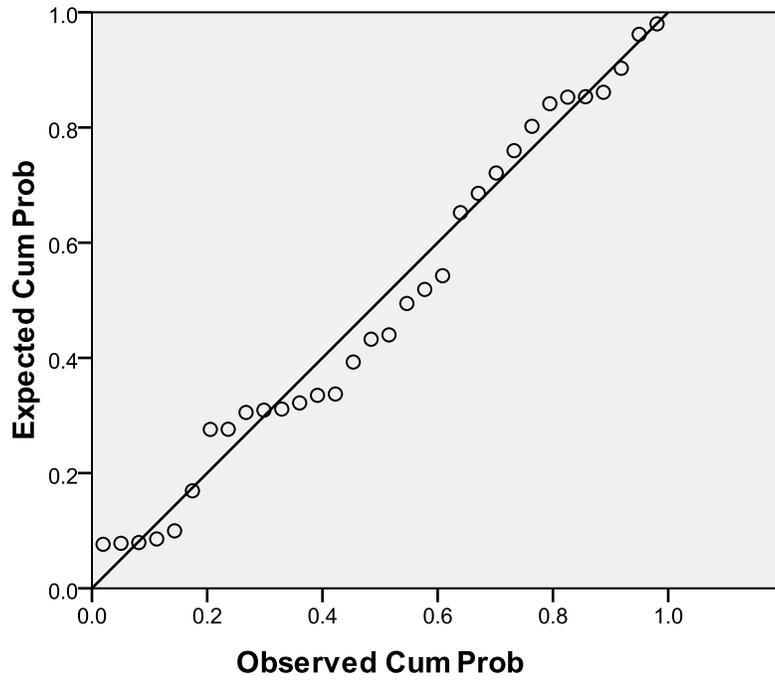
Dependent Variable: non financial performance



Appendix VIII: P-P Plot for Non-Financial Performance

Normal P-P Plot of Regression Standardized Residual

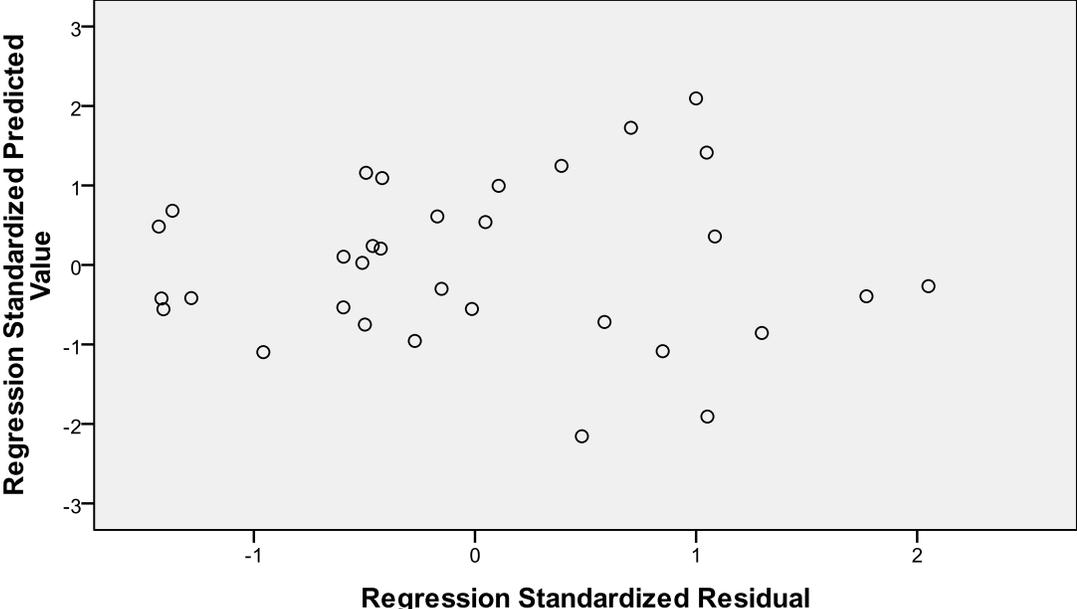
Dependent Variable: non financial performance



Appendix IX: Scatter Plot for Non-Financial Performance

Scatterplot

Dependent Variable: non financial performance



Appendix X: Variance Inflation Factor for Non-Financial Performance

Model		Unstandardized Coefficients		Beta	t-value	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	.172	.120		1.431	.164		
	Organization resources	.349	.169	.301	2.064	.048	.719	1.391
	Innovation	.343	.091	.535	3.778	.001	.764	1.309
	External environment	.093	.140	.086	.664	.512	.914	1.094

a. Dependent Variable: Non- Financial Performance