KNOWLEDGE TRANSFER, STRATEGY CONTENT, EXTERNAL ENVIRONMENT AND PERFORMANCE OF COMPANIES LISTED ON THE NAIROBI SECURITIES EXCHANGE

By

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DECLARATION

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

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DEDICATION

This thesis is specifically dedicated to the Almighty God for the gift of life and knowledge; and to my late Dad, Mr. Samson Ogendo Apondi and my mother, Mrs. Yuniah Ogendo for their consistent support, motivation, patience, prayers, encouragement and understanding. Dad, you commenced my journey to merit and anticipated to witness me attain the Doctoral academic level, but your demise could not allow you to. Mama, you consistently kept an eye on my feat, and persistently encouraged me to pursue my goals boldly, despite the challenges that I encountered. I am grateful for the efforts that Dad and Mum imparted on me to enable me achieve this far.

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ABSTRACT

The generation and transfer of knowledge is vital source of a firm's competitive advantage. In order to identify business strategies, expand businesses and develop competitive advantage, organizations need to scan the environment and align the managerial processes with the environment. Since companies listed on the Nairobi Securities Exchange ensure optimal performance, they may mobilize organizational change through the deployment of modes of knowledge transfer, translation of strategy, alignment of organization to strategy and scanning the external environment. The study examined the influence of strategy content and external environment on the relationship between knowledge transfer and organizational performance of companies listed on the Nairobi Securities Exchange. Using a structural questionnaire, data on the study variables were obtained from 36 companies listed on the Nairobi Securities Exchange and were analyzed using descriptive and inferential statistics. Overall, the study findings reveal the influence of strategy content and the varying degree of environmental dynamism on the relationship between knowledge transfer and organizational performance. Specifically, knowledge transfer has significant effect on organizational performance. Knowledge transfer has significant effect on strategy content. External environment has no significant moderating influence on the relationship between knowledge transfer and strategy content. Strategy content has significant intervening influence on the relationship between knowledge transfer and organizational performance. The joint effect of knowledge transfer, strategy content and external environment on organizational performance is significantly different from the independent effect of variables. Theoretical implications of the study illustrates full support of the dynamic theory of organizational knowledge creation through socialization, internalization, externalization and combination, industrial organization economics theory through environment-strategy-performance; and partly support of the knowledge based theory through knowledge transfer within the organizations, the contingency theory through environmental dynamism and stakeholders theory through customer, internal business process and learning and growth perspectives. Methodological implication shows the operationalization of knowledge transfer as independent variable, external environment as moderating variable, strategy content as intervening variable and organizational performance as dependent variable. The non-financial and financial indicators of the variables were measured using the likert scale and the ratio scale respectively. Managerial implications illustrate that organizations that embrace the balanced scorecard performance measurement employ the modes of knowledge transfer to develop their strategy content of strategic stances and actions within their industry in dynamic environment. The researcher recommends future research on knowledge retention and other concepts of knowledge management using longitudinal and case studies and specify the absolute number of companies that use the balanced scorecard as a performance measurement tool.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The paradigm for strategic management that governs the ideas of learning (Senge, 1990), knowledge (Nonaka, 1994) and innovation (Schilling, 2005) emerged from early 2000s. The basis of this paradigm enables firms to achieve valuable information (Wernerfelt, 1984), gather intangible capabilities (Barney, 1991) and create knowledge (Nonaka, 1991). Knowledge generation and transfer is a vital source of firm's sustainable competitive advantage (Osteloh and Frey, 2000). Moreover, the integration of information technology systems would be relevant through the concept of strategy content (Hsu, 2001), process (Ketchen Jr, 1996) and the comprehension of the organization strategy (Von Neumman and Mongestern, 1947; Drucker, 1954; Chandler, 1962; Ansoff, 1965). However, the strategic business unit needs to align its managerial process with environment (Miles and Snow, 1978) in order to expand its business (Ansoff, 1965), identify its business strategy (Porter, 1985) and develop competitive advantage. The theories of the organizational knowledge creation, knowledge based theory, learning organizations, industrial organization economics, contingency and stakeholders anchor the aforesaid concepts of knowledge transfer, strategy content, external environment and organizational performance.

The dynamic theory of organizational knowledge creation suggests that organizations that operates in changing environments needs to create and process information efficiently (Nonaka, 1994). Besides, Industrial Organization Economics theory of structure-conduct-performance framework behavior depends largely on the industry environment in which it competes is crucial (Porter, 1981).

However, Contingency theory confirms that organizational context presents constraints to which the firm must properly adjust (Lawrence and Lorsch, 1967). Porter's five forces model postulate industry environment. The knowledge based theory of the firm focuses on knowledge as the most strategic resource of the firm (Grant, 1996) that can explain variation of performance. In learning organizations, leadership is binding (Senge, 1990). The stakeholders' theory focuses on balanced scorecard (Kaplan and Norton, 1992) which communicates strategy across the organization. The balanced scorecard measures the financial perspective on what financial returns are required by investors; customer perspective on what customers want; internal business process perspective on what the business needs to deliver; and learning and growth perspective on how to sustain the business.

Companies listed on the Nairobi Securities Exchange represent most if not all of the business sectors in Kenya. They may exhibit appropriate behaviour that would enable them sustain competitive advantage in turbulent external environment to realize their short and long term goals to both quantitative and qualitative aspects of performance. Knowledge may be the most essential resource in these organizations given that it is significant in gaining and sustaining competitive advantage.

1.1.1 Knowledge Transfer

Knowledge can be differentiated from opinion, beliefs, speculation, or other types of unverified information and includes written documents and blue prints as well as un-symbolic habits. It is information whose legitimacy has been ascertained through tests of confirmation (Liebeskind, 1996). Knowledge is considered as a human faculty resulting from interpreted information, a grasp that develops from combination of data, information, individual interpretation and experience (Nyarko, 2009).

Tsoukas and Vladimirou (2001) defined organizational knowledge as the capability of members to draw peculiarity in the process of carrying out their work in particular contexts, by enacting sets of generalizations whose application depends on historically developed collective understanding. The knowledge of the firm can be classified as information and expertise (Zander and Kogut, 1995). Knowledge transfer is associated with the communication of a message from a source to a recipient in a given context (Cummings, 2003). Grant (1996) argued that the transferability of knowledge is a critical determinant of capacity to consider competitive advantage both between firms and within firms. Transfer of knowledge is dependent upon the receiver's ability to absorb and understand knowledge.

Transferred knowledge can reside in design, production, installation, sales and distribution, operation and maintenance or management (Nonaka, 1994). Socialization transfers tacit knowledge in one person to another. Externalization makes tacit knowledge explicit. This involves articulation, extracting and translating tacit knowledge of others. Internalization transfers organization and group explicit knowledge to the individual. Knowledge can be conveyed in documents, email, data bases, as well as through meetings and briefings through the combination. As mentioned by Nonaka (1994), socialization, externalization, internalization and combination processes are the modes of knowledge transfer.

The modes of knowledge transfer would affect the strategy content during the strategic process, commence at the formulation stage of strategies and affirm the strategic stance and actions of an organization. This may enable the members of the organization to effectively participate in the implementation of the given strategies. Knowledge is a dynamic human process of justifying personal belief towards truth (Nonaka and Takeuchi, 1995).

Tsoukas (2003) noted that by using the concept of tacit and explicit knowledge (as cited in Nonaka and Krogh, 2009), organizational knowledge creation theory departed from the original work of Polanyi (1966, 1969), since explicit knowledge is always grounded in tacit knowledge. As a result, the management would be in a position to put appropriate control measures of the given strategies.

1.1.2 Strategy Content

The four distinct types of decision-making rules are objectives, business strategy, organizational concepts and operational strategies. Von Neumann and Morgenstern (1947) are the first scholars (as cited in Bracker, 1980) to relate concept of strategy in the theory of game and economic behavior and defined strategy as a series of actions by a firm that are decided upon according to particular situations. Strategy enables one to analyze the current situation, change it if necessary and find out what resources are and what they should be (Drucker, 1954). A strategy is a set of decision-making rules for management of organizational behavior (Ansoff and McDonell, 1990).

The strategy content determines and reveals the organization purpose in terms of long term objectives, resource allocation and actions programs (Chandler, 1962; Boyne et al, 2006) as strategy engages all the hierarchical levels of corporate, business, and functions. Miles and Snow (1978) argued that businesses were conceptually classified on the basis of their pattern of decisions. Prospectors technologically innovate and seek out new markets, analyzers prefer a second but better strategy, defenders are engineering oriented and focus to maintain secure niche in relatively stable market segments and reactors lack stable strategy and are highly responsive to short term environmental demands. Ansoff (1965) suggested that strategy process evaluates strategy as the nature of economic and non-economic contributions that organizations

intends to make to its stakeholders as they attempt to achieve long term sustainable advantage in their businesses by responding properly to the opportunities and threats in the firms' environment and the strengths and weaknesses of the organizations (Hohnen, 2007). Strategy enables organizations to select their businesses (Mircea, 2008) since it is articulated, unifying and provides incorporated pattern of decisions (Bakir and Todorik, 2010).

As strategy development process orientation arises deliberately, through rational planning, planning as a guided learning process, planning on the basis of logical incrementalism and emergent strategy formulation (Pearce and Robinson, 2005), strategy development goal orientation arises through the strategy content of strategic stances and strategic actions. Strategic stance is a long term goal and it entails a general description of the organization's position and how it interacts with its environment by improving performance (Andrews et al, 2006). Strategic action is a short term goal and engages generic strategies that enable an organization obtain competitive advantage against its competitors. If applied, the strategy content may influence the modes of knowledge transfer to determine the performance.

1.1.3 External Environment

The external environment comprises the micro, macro and industry environments. It is the outside world that the organization relates with (Worthington and Britton, 2009). The micro environment includes suppliers, competitors, labor markets, financial institutions and customers and may also include trading organizations, trade unions and possibly a parent company (Serfontein, 2006). The macro environment covers political, economic, socio-cultural, technological, legal and ethical influences of the business (Banhan, 2010). Firms competing in the same industry develop homogeneous competitive strategies (Mauri and Michaels, 1998).

Firms operating in the same industry have comparable levels of resource allocation for the development of similar types of resources though they do not lead to possession of the same resources. Bourgeois III (1980) argues that, the development of strategy to guide organizational activities is a significant managerial function, and the guidance is accomplished through the effect of co-alignment of organizational resources with the environmental conditions. The environmental characteristics such as complexity, dynamism and munificence can have an influence on performance both indirectly and directly (Machuki, 2011). Scanning of the environment may enable organizations to determine the modes of knowledge transfer and the appropriate strategy content to be applied for optimal performance.

1.1.4 Organizational Performance

Performance continues to be a controversial issue amongst organizational researchers Barney (1991). It is the ability of the organization to achieve its goals and objectives (Ricardo and Wade, 2001) and is equivalent to efficiency, effectiveness and economy, quality, consistent behavior and normative measures (Daft, 2000). March and Sutton (1997) argue that the identification of the true causal structure of performance phenomena on the basis of the incomplete information generated by historical experience is problematic based on organizational history. The organizational performance should be the outcome or results obtained from the effects of the knowledge transfer, strategy content and external environment.

The importance of business performance can be argued along theoretical, empirical and managerial dimension (Venktraman and Ramanujan, 1986). Theoretically, the concept of performance is at the centre of strategic management, since performance is the time test of any strategy. Empirically, most strategy research studies employ the construct of performance to examine a variety of strategy content and process issues. The managerial importance of performance is also evident in many prescriptions offered in performance improvement.

Hansen and Wernerfelt (1989) emphasized that the economic model of performance was determined by the quality of the firm's resources, the characteristics of the industry in which the organization compete and the organization's position relevant to its competitors. In the 1990's the financial and non-financial measuring tool for the short term and long term performance was introduced. The balanced scorecard measures the financial, customers, internal business processes and the learning and growth perspectives of performance (Kaplan and Norton, 1992; Kaplan and Norton, 2001). Currently, the sustainable balanced scorecard has been applied to integrate the environmental and social aspects into successful implementation of both conventional corporate strategy and explicit corporate sustainability strategies (Figge et al, 2002; Hubbard, 2009). The triple bottom line performance measurement also focuses on the corporate economic, environmental and social performance (Norman and MacDonald, 2004). Performance is a function of several factors key among them knowledge transfer, but this can also be influenced by strategy and external environment.

1.1.5 Companies Listed on the Nairobi Securities Exchange

Dealings in shares and stocks in Kenya began in the 1920's during the British colony. This was followed by the first professional stock broking firm in 1951 which Francis Drummond, an Estate Agent recognized. The Nairobi Stock Exchange was constituted in 1954 as a voluntary association of stock brokers registered under the Societies Act. The first privatization through the Nairobi Stock Exchange began in 1988 that led to the successful sale of a 20% government stake in Kenya Commercial Bank. The sale left the Government of Kenya and affiliated institutions retaining 80% ownership of the bank. The Nairobi Stock Exchange Limited changed its name in July 2011 to the Nairobi Securities Exchange Limited. There were sixty one organizations that were listed on the Nairobi Securities Exchange as at 31st December, 2013 (Nairobi Securities Exchange, 2014). Companies listed on the Nairobi Securities Exchange represent most if not all of the business sectors in Kenya. These sectors are categorized as agriculture, commercial and services, telecommunications and technology, automobile and accessories, banking, insurance, investment, manufacturing and allied, construction and allied; petroleum and energy; and growth enterprise market segment.

The justification of the companies listed on the Nairobi Securities Exchange as the selection of study is as a result of their operation in various industries that cut across the various sectors of the economy and their businesses entail both services and tangible products. Moreover, their consistency as the reporting requirement for publicly traded organizations offers the comparison across firms in the same sector and across different sectors. Besides, reliable financial performance data of companies is also available.

For successful performance, the companies listed on the Nairobi Securities Exchange may mobilize change through the deployment of the modes of knowledge transfer, translation of strategy, alignment of the organization to the strategy, and scan the external environment. Knowledge transfer may be an issue in most organizations due to lack of proper education, competition and globalization. The way these organizations manage their modes of knowledge transfer may affect the choice of strategy and ensure optimal performance, in view of the fact that they are not subject to the same environment which may influence knowledge transfer and strategy content to provide performance.

1.2 Research Problem

Knowledge transfer, in the fields of organizational learning and organizational development cause practical problems (Levin and Cross, 2004) in most organizational set up. These problems may hinder the organizational goals. Strategically, businesses are classified on the basis of their pattern of decisions (Miles and Snow, 1978). These decision patterns would enhance the strategic actions that organizations would choose. Strategy and external environment influence performance (Machuki, 2011) in some organizations. The ability to achieve goals and objectives is performance (Richard and Wade, 2001). Knowledge transfer has been found to be among the ways through which organizations achieve their goals. The way organizations undertake knowledge transfer is expected to affect performance. However, this effect would be subject to an organization's strategy content and external environment.

Companies listed on the Nairobi Securities Exchange operate in various industries that cut across the various sectors of the economy and their businesses entail both services and tangible products. These organizations may manage knowledge transfer that has

implications on their performance to sustain competitive advantage. However, the organization's strategic choices are likely to influence this relationship. These companies operate in environments that manifest different levels of complexity, dynamism and munificence (Machuki, 2011) and are likely to influence the effect of knowledge transfer on their strategic choices. It will be important to note that the ultimate effect of knowledge transfer on the organization's performance would be subject to both the nature of their environments as well as the strategic choices these organizations make.

Knowledge transfer has been a subject of much empirical research (Lin et al, 2005, Jacob et al, 2005; Hansen, 2002; Zander and Kogut, 1995). While studies (Rasula et al, 2012; Hassan and Al-Hakim, 2011; Fernandes et al, 2006; Osteloh and Frey, 2000) have established the relationship between knowledge transfer and performance, the influence of external environment and strategy content in this relationship is inconclusive. The contextual gap in these empirical studies is companies listed on the Nairobi Securities Exchange. Studies conducted on companies listed on the Nairobi Securities Exchange have focused on various concepts. These concepts include: ownership structure, board effectiveness, managerial and corporate performance (Ongore, 2008); board of directors' attributes, strategic decision making and corporate performance (Letting, 2011); external environment-strategy co-alignment, firm level institutions and corporate performance (Machuki, 2011). The conceptual gap in these studies is the relationship between knowledge transfer, strategy content, external environment and organizational performance. While these studies (Lin et al, 2005, Rasula et al, 2012; Hassan and Al-Hakim, 2011) treated performance as a dependent variable, their independent, moderating and intervening variables were different from each another.

From the empirical studies on knowledge transfer, the relationship between knowledge transfer, strategy content, external environment and performance is inconclusive. This prompted the need to conduct this research to investigate the relationship between knowledge transfer, strategy content, external environment and organizational performance to address the identified gaps. What is the influence of strategy content and external environment on the relationship between knowledge transfer and organizational performance of the companies listed on the Nairobi Securities Exchange in Kenya?

1.3 Research Objectives

The main objective of the study was to examine the influence of strategy content and external environment on the relationship between knowledge transfer and organizational performance of companies listed on the Nairobi Securities Exchange. The specific objectives were:

i. To determine the effect of knowledge transfer on organizational performance of companies listed on the Nairobi Securities Exchange.
ii. To assess the effect of knowledge transfer on the strategy content of companies listed on the Nairobi Securities Exchange.
iii. To establish the influence of external environment on the relationship between knowledge transfer and the strategy content of companies listed on the Nairobi Securities Exchange.
iv. To determine the influence of strategy content on the relationship between knowledge transfer and organizational performance of companies listed on the Nairobi Securities Exchange.

v. To determine the joint effect of knowledge transfer, strategy content and external environment on organizational performance of companies listed on the Nairobi Securities Exchange.

1.4 Value of the Study

This study contributes to the advancement of knowledge based theory of the firm, the dynamic theory of knowledge creation, organizational learning, industrial organizational economics theory, contingency theory and stakeholders' theory. It relates the theories of knowledge transfer and organizational performance; knowledge transfer and strategy content; knowledge transfer, external environment and strategy content; and knowledge transfer, strategy content and organizational performance provides the relevant contribution to the aforesaid theories.

Policies on knowledge transfer may be applied in given organization to ensure efficient and effective performance. The study used the descriptive and inferential statistical tests to obtain information that enabled the researcher to extract appropriate policies on knowledge transfer from the data. These tests identified the appropriate modes of knowledge transfer and the strategic content to use despite the prevailing external environment to meet their organization's goals efficiently and effectively. The given policies may also enable organizations to obtain competitive advantage over their competitors in the global market.

This study identified the normal practice of the organizations of the study and confirmed its findings. Internalization and combination have positive effects on financial performance and non-market performance; socialization, internalization and combination have positive effect on learning and growth performance; Socialization, internalization and externalization have positive effect of defender stance, product development, market development and research organizations; socialization,

internalization and combination have positive effect on cost leadership and internalization and externalization have positive effect on quality. The findings may enable the practicing consultants to advise their clients on the need to apply effective transfer of knowledge in the firm despite turbulent environments. The consultants may also use the study to obtain insight and also advise their clients on varied ways of applying the modes of knowledge transfer in their organization. The applications may comprise of the significant effect of knowledge transfer on organizational performance and strategy content; the significant moderating influence of strategy content on the relationship of knowledge transfer and organizational performance; the influence of external environment on the relationship of knowledge transfer and organizational performance; and the joint effect of knowledge transfer, strategy content, external environment and organizational performance. The study may be a data bank to the academicians, researchers and students, in reference to information on knowledge transfer, strategy content, external environment and organizational performance.

1.5 Structure of the Thesis

Chapter one deals with the background of the thesis, the research problem, the research objectives and the value of the study. The background has explained the conceptual, theoretical and contextual argument of the study. The research problem identified the gaps that were used to disclose the objectives and value of the study. Chapter two deals with the literature review. The literature review has presented the underpinning theories of the study and the relations of the specific objectives of the study through conceptual and theoretical literature review, the conceptual framework and model and enlisted the conceptual hypotheses that have been used to guide the research.

The research methodology used in the study is explained in chapter three. The research methodology has explained the research philosophy of the study, the research design used in the study, the population of the study, data collection mechanisms, operationalization of the research variables, reliability and validity tests used and data analysis. Chapter four has presented. It entails the response rate, organizational demographics, preliminary findings, inter-correlation of modes of knowledge transfer, tests of hypotheses, interpretation of results, significant effects of regression results, auto-correlation and heteroskedasticity tests and the compared objectives, hypotheses and results.

Chapter five has presented the discussion on the findings. It entails the discussion of the relations of the specific objectives by explaining the results and comparing the results with the literature review. Chapter six has presented the summary, conclusions and recommendations followed by the references and finally the appendices.

1.6 Chapter Summary

This chapter dealt with the background of the study, the research problem and the research objectives. Consequently, the value of the study was clarified and the structure of the thesis affirmed. The background has explained the conceptual, theoretical and contextual argument of the study.

The research problem explains the predicament of the study. The research problem has identified the gaps that were used to disclose the objectives and value of the study. The research objectives state the main objective and the specific objectives. The value of the study has explained the theoretical, policy and practices aspects of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on the literature review that is relevant to the study. It focuses on theoretical, conceptual and empirical literature along the study objectives. It will evaluate the theoretical underpinnings of the study. The relationship between knowledge transfer and organizational performance; knowledge transfer and strategy content; knowledge transfer, external environment and strategy content; knowledge transfer, strategy content and organizational performance; and the relationship of knowledge transfer, strategy content, external environment and organizational performance; conceptual framework, the conceptual hypotheses and a summary of objectives and corresponding hypotheses are also highlighted. It has related the concepts of the study to discover respective knowledge gaps and conceptual model.

2.2 Theoretical Foundation

The underpinning theories anchor the concepts of the study. Knowledge transfer is anchored by the dynamic theory of knowledge creation, the discipline of learning organization and the knowledge based theory of the firm. Strategy content is anchored by the industrial organizational economics theory. External environment is anchored by contingency theory, while the organizational performance is anchored by the stakeholders' theory. However, these theories have their benefits and weaknesses.

The dynamic theory of organizational knowledge creation through the modes of knowledge transfer analyzes the discipline of learning organization by ensuring the application of shared vision, testing mental models and system thinking. As a result, the knowledge based theory of the firm would be versatile when knowledge is transferable within and around the organizations. Coordination mechanism may lead to

effective knowledge transfer. Knowledge transfer may be effective through socialization, internalization, externalization and combination. The coordination mechanism may be applicable through common language for integration and symbolic communication through information technology.

The dynamic theory of knowledge creation and the knowledge based theory would affect the industrial organizational economics theory at the commencement of strategy formulation, affirmation of strategic stances and actions and during the strategy process. The industrial organizational economics theory evaluates the environment-strategy-performance framework. In view of this, the study would engage the contingency theory to assess the external environment and the stakeholders' theory to evaluate the organizational performance of the companies in this study. The outcome of the stakeholders' theory in this study would be the function of the dynamic theory of knowledge creation, the knowledge based theory of the firm, the industrial organizational economics theory and the contingency theory.

2.2.1 The Dynamic Theory of Organizational Knowledge Creation

The dynamic theory of organizational knowledge creation (Nonaka, 1994) intensifies individual creativity and shapes it up as part of knowledge network of the organization. This theory has four modes of knowledge transfer. It postulates knowledge transfer from tacit knowledge to tacit knowledge (socialization), from explicit knowledge to tacit knowledge (internalization), from tacit knowledge to explicit knowledge (externalization) and from explicit to explicit (combination); and enables the collection of raw data, retrieving data; investigate new solutions based on probabilistic queries and install permanency of newly discovered actions (Bhajaria, 2000). The theory explains how knowledge can be created by individual, organizations and societies through spiral interactive intensification of tacit and explicit knowledge.

The application of this theory facilitates the transfer of knowledge in organizations. Knowledge creation is essential in organizations with scarce resources (Aghajani et al. 2011). However, the theory is limited to tacit and explicit knowledge creation. It focused on the knowledge creation within the organization and assumed that the organization could not create in their surroundings. The theory could have considered the external environmental factors that enhance knowledge creation.

Social Capital has effects on knowledge transfer performance with organizational learning as the mediating role (Li and Luo, 2010). When the organizational learning costs are high, the financial goal may be impaired. Senge's focus on distributed leadership neglects issues of practice and power since his work does not provide exploration for the increasing dispersion of human agency, power, knowledge and autonomy within the workplace (Caldwell, 2011).

2.2.2 Knowledge Based Theory of the Firm

The knowledge based theory of the firm explores the coordination mechanisms through which firms integrate the specialist knowledge of their members. Grant (1996) argues that these mechanisms depend upon the existence of common knowledge for their operation. The common knowledge postulates common language for integration of mechanism which relies on verbal communication between individuals. There are other forms of symbolic communication such as information technology; commonality of specialized knowledge; shared meaning and recognition of individual knowledge domain.

Business strategy affect knowledge sharing within organizations (Ryan et al, 2010) which supports the knowledge based theory of the firm. The use of common language within and around organizations would enhance effective knowledge transfer that may

lead to optimal performance. However, inefficient symbolic communication through information technology may hinder knowledge transfer to most of the stakeholders of the organization and thus lead to inadequate performance by the organizations in question.

2.2.3 Industrial Organizational Economics Theory

The concepts of strategy content and organizational performance are supported by the traditional Industrial Organization theory of structure-conduct-performance framework work of the firm (Porter, 1981). The conduct represents the strategy content of the firm, while performance is the goal of the firm. The concept of knowledge transfer can be represented by the structure of the industrial organizational Economics theory. The strategic choice aspect is based on Miles and Snow's typology that defines the dynamic process in which organizations continually adjust internal interdependencies to environmental opportunities and risks (Miles and Snow, 1978).

Strategy attempts to achieve a long term sustainable advantage in each of its businesses, by responding properly to the opportunities and threats in the firm's environment and the strengths and weaknesses of the organization (Hohnen, 2007). Strategy is a coherent, unifying and integrative pattern of decisions (Bakir and Todorik, 2010). It selects the businesses that organizations operate in or are expected to operate in (Mircea, 2008).

The industrial organization Economics theory assumes that strategy as the intervening variable of structure and performance. However, Habib and Victor (1991) confirmed that strategy-structure fit had no effect on organization's economic performance. Wolf and Egelhoff (2002) argue that strategy-structure fit is an attribute created by managers and selected by competitive environments.

2.2.4 Contingency Theory

The concepts of external environment is supported by the contingency theory (Lawrence and Lorsch, 1967) which argues that organizations have to be differentiated and integrated to optimal performance subject to the level of environmental uncertainty. The external environment is postulated by environmental dynamism, complexity and munificence. Porter's (1980) five forces model of industrial environment postulates threat of new entrants, competition among rivals, exit barriers, relative power of customer and suppliers of the firm. Dess and Beard (1984) integrated strategic management and organizational theory literature and provided theoretical and empirical support for dynamism, complexity and munificence. The specific environment that one is in dictates the trust builders that offer the greatest potential in improving interpersonal trust (Abrams et al, 2003).

Mason (2007) argued that a stable environment change little and is predictable, while there are many unexpected changes in a turbulent environment. He further argued that environmental complexity is a measure of diversity in the environment, and as systems become more complex, making sense becomes more difficult and environmental adaptation becomes more problematic. Environmental munificence entails the abundance of resources or otherwise (Machuki, 2011). The firm's adaption capability to different business environments is valuable, difficult to imitate, non-tradable, rare but not scarce and path dependent resource (Ferreira et al, 2009).

2.2.5 Stakeholders Theory

The concept of performance is supported by the stakeholders' theory of balance scorecard (Kaplan and Norton, 1992) and the sustainable balanced scorecard (Figge, 2002). The balanced scorecard postulates that the organizational performance has four perspectives. The financial perspective appraises financial returns for investors;

customer perspective measures customers' wants; internal business process perspective gauges the business delivery needs; and learning and growth perspective assesses on how to sustain the business. On the other hand sustainable balanced scorecard has an additional non-market performance which gauges the social and environmental aspects of organizations.

The balanced scorecard can predict the effectiveness of an organization's strategy through a series of linked performance measures based on the perspectives (Išoraité, 2005). Building a balanced scorecard performance system using a given framework would enable managers to think more strategically about their organization (Caraiani et al, 2012). The global crisis has demonstrated the need for reporting that gives better information about how businesses perform against long term strategy. Companies that implement balanced scorecard suggested that it contributes to their success and none of them was to abandon it (Petr et al, 2012).

The balanced scorecard is tailored for large public owned businesses rather that small private companies who are base their achievement on financial performance (Wang, 2005). Managers should think seriously about the managerial purposes to which performance measurement might contribute and deploy the organization's measures (Behn, 2003). These theories views organization as systems of interdependent activities embedded on dependent wider environments (Shafritz, 2011).

2.3 Knowledge Transfer and Organizational Performance

Idea creation involves gathering knowledge and understanding the problem, pondering over the problem without deliberate concentration, discovering the solution and evaluating the newly formed idea. Girotra et al (2009) posits that in groups where individuals work alone first and then work together, are able to generate more and

better ideas, and to discern their best ideas better than the teams that rely purely on group work. Paulin and Suneso (2012) argue that knowledge sharing is an exchange of knowledge between two individuals whereby one communicates knowledge and one absorbs it. Innovation requires combining a creative idea with resources and expertise that make it possible to embody the creative idea in a useful form (Schilling, 2005). Hornitzky (2009) posits that individual innovators share their knowledge with those they trust and have similar values. Panahi et al (2012) posits that social media have abilities to comply some of the main requirements of tacit knowledge sharing. Zander and Kogut (1995) argued that the dilemma to speed the internal transfer of knowledge arises when the capabilities which can be easily communicated within the firm are more likely to be easily imitated by competitors.

The champion of innovation ought to be the Chief Executive Officer who should consistently express and demonstrate their conviction (Berger et al, 2009). Schilling (2005) posits that an individual with too little knowledge is unlikely to understand well enough to contribute meaningfully to it. An individual who knows the field too well can become trapped in the existing logic and paradigms, preventing him from coming up with solutions that require an alternative perspective. An individual with only a moderate degree of knowledge might be able to produce more creative solutions than an individual with extensive knowledge.

Levin and Gilbert (1998) suggested that the process of knowledge transfer involves idea creation, sharing, evaluation, dissemination and adoption. Employees who perceive greater organizational rewards for sharing spend more hours sharing beyond their immediate work group (Burgess, 2005), than those who perceive knowledge as a means of achieving upward organizational mobility.

Argote and Ingram (2000) argued that moving technology and tasks from one site to another has been found to be more effective when accompanied by moving people since people are capable of adapting the tools and technology to the next context. Lee and Choi (2003) established that information technology support had a positive impact on knowledge combination only. Organizational units produce more innovations and enjoy better performance if they occupy central network positions that provide success to new knowledge developed by other units. This depends on units' absorption capacity, or ability to successfully replicate new knowledge (Tsai, 2001). Al-Gharibeh (2011) suggests that organizational culture and information technology are the enablers that support knowledge transfer. Knowledge transfer has a significant relationship with performance (Rasula et al, 2012). The emerging proposition from the cited empirical studies is that knowledge transfer has significant effect on organizational performance.

2.4 Knowledge Transfer and Strategy Content

Knowledge transfer begins with the generation of new ideas. Toubia (2006) argues that idea generation is critical to the design and marketing of new products, to marketing strategy and to the creation of effective advertising. Ryan et al (2010) argued that the business strategies affect knowledge sharing. Knowledge sharing enhances good data management practices that ensure quality and sound decision making.

The firm's knowledge mix or profile may change over time (Spender, 1996). Jacobson et al (2005) argued that consulting can be a strategy for transferring knowledge between researchers and decision makers and is effective at promoting the enlightenment and interactive model of knowledge use. Osteloh and Frey (2000) argued that both basic and extrinsic motivation is crucial for generating and transferring tacit and explicit knowledge. Fernandes et al (2006) confirmed that firms

do not see improvement in performance or strategy when knowledge is hard to transfer but do see improvement when it is transferred easily. It can therefore be proposed that the more usage of modes of knowledge transfer in a firm, the effective the strategies.

2.5 Knowledge Transfer, External Environment and Strategy Content

Individual creativity and organizational creativity are the common types of creativity (Schilling, 2005). An individual's creative ability is a function of his or her intellectual abilities, knowledge, styles of thinking, personality, motivation and environment. Information quality has significant positive impact on supply chain management performance, though information sharing had significant impact on negative economical performance (Wu et al, 2010).

Lavis et al (2003) confirmed that the directors of research organizations were not evaluating the knowledge transfer activities. Firms should therefore realize the effect of short term costs and benefits of knowledge transfer in order to enhance supply chain management performance. Regarding the significant dimensions of industry environment, Dess and Beard (1984) integrated strategic management and organizational theory literature and provided theoretical and empirical support for munificence, dynamism and complexity. The environment is dynamic, therefore environmental scanning keeps abreast of change, reveals factors that constitutes threats and opportunities, monitors competitors' activities and gives necessary strategic formulation and implementation inputs (Babatunde and Adebisi, 2012).

Alipour and Karimi (2011) argue that in learning organizations, innovation enables organizations to anticipate and adapt to dynamics of changing environment. Firms competing in the same industry tend to develop homogeneous competitive strategies for investing in technology and marketing resources (Mauri and Michaels, 1998).

Bourgeois III (1980) argues that, the development of strategy to guide organizational activities is a key managerial function, and the guidance is accomplished through the effect of co-alignment of organizational resources with the environmental conditions. Kotabe et al (2007) who conducted the study in United States international firms argued that at low and moderate level of international knowledge content, a firm's strategy to transfer international knowledge improve its innovative performance, and at a higher level of international content, there is diminishing marginal returns to transferring knowledge from overseas. Therefore, the study would expect the external environment to influence the relationship between knowledge transfer and strategy content.

2.6 Knowledge Transfer, Strategy Content and Organizational Performance

Implementation of created ideas into some new mechanism or course of action would be enhanced by the transfer of knowledge. Berger et al (2009) suggest that senior management should treat innovation as a corporate trait to be encouraged by the proper mindset, since the company's values and mission statement are most visible indicators. The categories of businesses depend on their business growth and market share (Henderson, 1979). Bain and Mason industrial organizational theory of structure-conduct-performance held a promise for strategy formulation (Porter, 1981). An 8S framework of strategy implementation, including strategy, structure, resources, shared values, style, staff, systems and processes, and strategic performance enables senior management to enact, monitor and assess the cross functional execution of strategies (Higgins, 2005).

Schilling (2005) suggests that the types of collaboration strategies include the internal development, strategic alliance, joint venture, contract manufacturing, and licensing

and collective research organizations. Lee and Choi (2003) confirmed that the impact of trust was essential for knowledge creation. Rottman (2007) argued that managing the relationship at structural, cognitive and relational dimensions allowed strategic alliance partners to increase network stability, reduce cultural barriers, share, understand common goals and strengthen network ties. Syed-Ikhsan and Rowland (2004) suggested that public organizations should never neglect issues on political directives when implementing knowledge management. Hassan et al (2011) revealed that the importance of critical success factors of knowledge management such as human resource, information technology, leadership, organizational learning, strategy, structure, and culture in relation to enhanced innovation such as technological, administrative, radical and incremental improved performance. Hence, the proposition is that strategy content has influence on the relationship between knowledge transfer and organizational performance.

2.7 Knowledge Transfer, Strategy Content, External Environment and Organizational Performance

Knowledge generation and transfer is essential source of firm's sustainable competitive advantage (Osteloh, 2000). Strategic stance is a general description of the organization's position and how it interacts with its environment by improving performance (Miles and Snow, 1978). Strategic action engages generic strategies. Dess and Beard (1984) integrated strategic management and organizational theory literature and provided theoretical and empirical support for munificence, dynamism and complexity. Ansoff and Sullivan (1993) established that the strategic success of the firm is optimized when its strategic behavior is aligned with its environment. Moreover, more successful companies in dynamic environments would use radical, fast and disruptive strategies (Manson, 2007). Machuki (2011) argued that varying degrees

of external environmental complexity, dynamism and munificence appeared to have great influence in the company's strategic decision making.

Pearce and Robinson (2005) argue that the balanced scorecard is a set of measures that is directly linked to the company's strategy. However, Hubbard (2009) argued that since organizations are under significant pressure to measure and reports their social, environmental and economic performance, firms need to adopt a stakeholder view of value and develop strategies that take more than simple shareholder performance. The function of transferring knowledge within and around the organization should be significant to ensure competitive results (Grant, 1996). Moreover, external environment need to be scanned to identify the opportunities and threats facing the organization (Babatunde and Adebesi, 2012). Thus the joint effects of knowledge transfer, strategy content and external environment on organizational performance is significantly different from the independent effect of variables.

The reviewed literature has provided basis for the identification of extant knowledge gaps. The gaps identified are along conceptual, contextual and methodological gaps lines. It is clear that the various relationships between variables that have guided the review of literature provide a strong anchor of the conceptual framework of this study. To guide focus of the current study, the identified gaps are summarized and presented in Table 2.1.

Table 2.1: Summary of Knowledge Gaps

Author (s)	Focus of the Study	Methodology	Findings	Knowledge Gaps and Focus of the Current Study
Rasula et al (2012)	The impact of knowledge management on performance	They applied the structural equation modeling analysis. The sample size was 329 companies in slovenia and croatia	There is significant relationship between knowledge and performance	The study did not consider the effect of knowledge transfer on strategy content. This has been addressed by objective (ii).
Hassan and Al-Hakim (2011)	The relationships among critical success factors of knowledge management, innovation and performance: A conceptual framework	They used descriptive statistics.	The study revealed the importance of critical success factors of knowledge management in relation to enhanced innovation and performance.	The study did not consider the intervening influence of strategy content on the relationship between knowledge transfer and performance in Kenya. This has been addressed by objective (iv).
Machuki (2011)	External environment – strategy co-alignment, firm level institutions and performance of publicly quoted companies in Kenya	The descriptive and inferential statistics were employed to analyze data and test research hypothesis. Hierarchical regression analysis was used	The external environment influenced the companies' strategic decision making but had no significant effect on performance.	The study did not consider the effect of knowledge transfer on performance. This has been addressed by objective (i).
Letting (2011)	Board of directors attributes, strategy decision making and corporate performance of firms listed on the Nairobi Stock Exchange.	The cross section survey. The descriptive research design. Focused on firms listed in the Nairobi Securities Exchange	There is support and positive relationship between board of directors' involvement in strategic decision making and some measures of corporate performance.	The study did not consider the influence of strategy and external environment on the relationship between knowledge transfer and performance. This has been addressed by objective (v).
Ongore (2008)	The effects of ownership structure, board effectiveness and managerial discretion on performance listed companies in Kenya	The cross sectional Survey of the firms listed in the Nairobi Securities Exchange. He used the descriptive design.	Managerial motivation and entrenchment through executive share options and other perks improve performance.	The study did not consider the joint effect of knowledge transfer, strategy content, external environment and performance This has been addressed by objective (v).

Table 2.1 Cont ……..

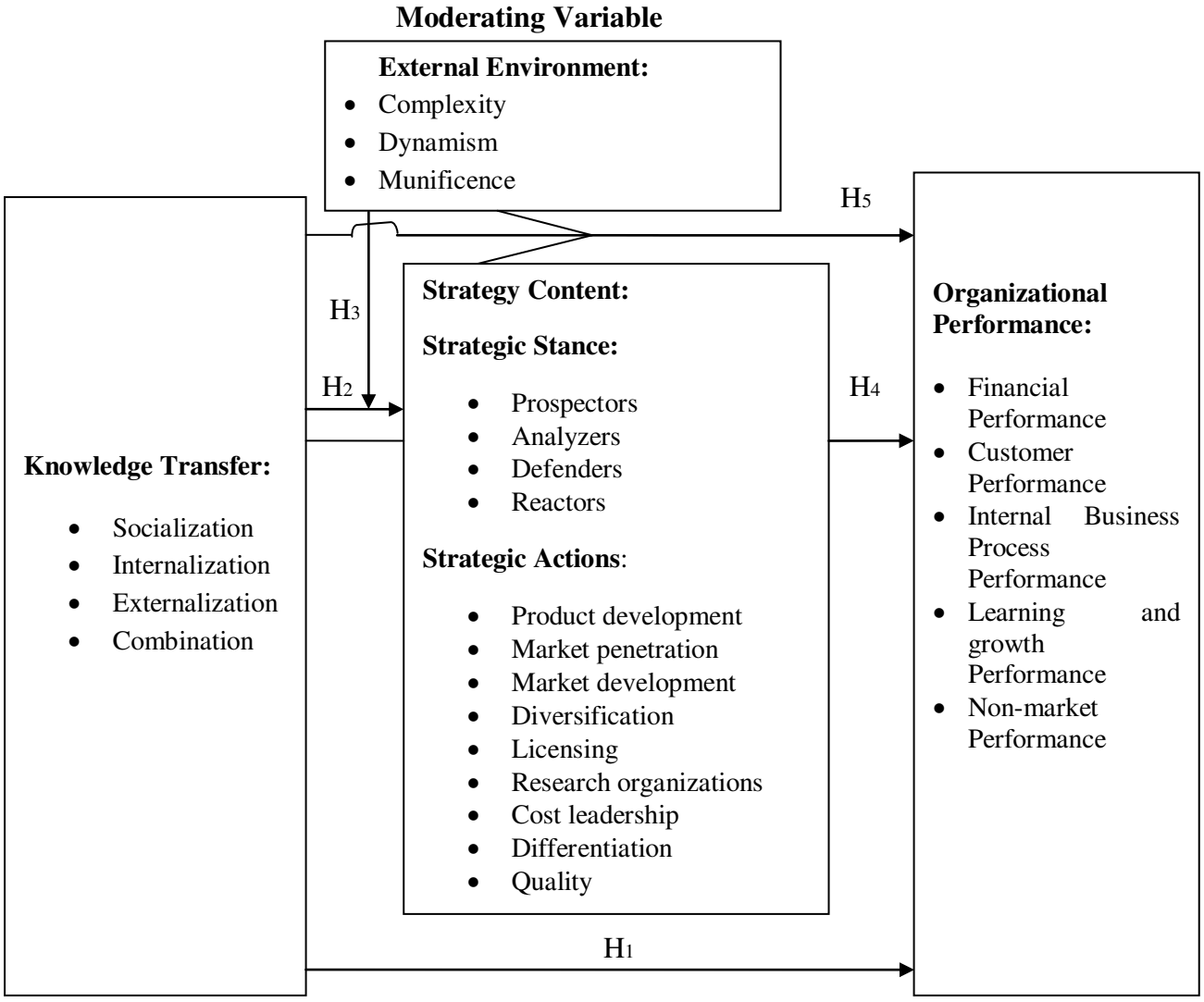
Author (s)	Focus of the Study	Methodology	Findings	Knowledge Gap
Kotabe et al (2007)	Determinants of cross national knowledge transfer and its effects on firm innovation	They did a cross sectional study using patent analysis methodology. The sample size includes united States firms. The secondary data was obtained from top 100 United Stated international firms.	The study established that at low and moderate level of international knowledge content, a firm's strategy to transfer international knowledge improves its innovative performance, and vice versa.	The study did not consider the effect of knowledge transfer on strategy content on Companies listed on the Nairobi Securities Exchange in Kenya. This has been addressed by objective (ii).
Irungu (2007)	The effect of top management teams on the performance of publicly quoted companies in Kenya	The cross sectional Survey of the firms listed in the Nairobi Securities Exchange. He used the descriptive design.	Top management teams impact some of performance differently in different sectors.	The study did not consider the effect of knowledge transfer on performance. This has been addressed by objective (i).
Jacobson et al (2005)	Consulting as a study of knowledge transfer.	They conducted case studies in the United States and used methodological approach from symbolic interactions, grounded theory and dimensional analysis.	Consulting can be a strategy for transferring knowledge between researchers and decision makers.	The study did not consider the intervening influence of strategy content on the relationship between knowledge transfer and performance in Kenya. This has been addressed by objective (iv).
Lin et al (2005)	A sender – receiver framework for knowledge transfer	The method of study was descriptive exploratory. They used game theory set up of framework.	The study confirmed that a firm involved in knowledge transfer must decide to which type of information structure a knowledge transfer belongs.	The study did not consider the effect of knowledge transfer on performance. This has been addressed by objective (i).

In Table 2.1, some studies recognize the area of knowledge transfer and performance; a few have been conducted in companies listed on the Nairobi Securities Exchange, while others have not. The conceptual, methodological and contextual knowledge gaps in these studies impose the need to conduct a designed study to fill these gaps. In view of these gaps, the emphasis on the influence of strategy content and external environment on the relationship between knowledge transfer and organizational performance of companies listed on the Nairobi Securities Exchange is vital.

2.8 Conceptual Framework

In light of the conceptual gaps and arguments presented earlier, knowledge transfer is expected to have an effect on organizational performance. The strategy content and the external environment are expected to influence knowledge transfer on the organizational performance. The external environment is expected to have strong contingent effect on the relationship between knowledge transfer and the strategy content. The strategy content is to be present between the time knowledge transfer is operational to the time it affects organizational performance. Organizational performance is to be the outcome obtained from the effects of knowledge transfer, strategy content and external environment as shown in Figure 2.1.

Figure 2.1: The Conceptual Model



Source: Researcher, 2014

Figure 2.1 illustrates the conceptual model of the study. The linkages in relation to the hypotheses are shown. The linkages intertwine the independent, intervening, moderating and dependent variables. The variables include knowledge transfer, strategy content, external environment and organizational performance. The dimensions of each variable are enlisted in the given variable packs.

2.9 Conceptual Hypotheses

The conceptual hypotheses relate the concepts of the study. They are meant to guide the researcher in affirming the given underpinning theories. The conceptual hypotheses of the study were stated as follows:

H_1: Knowledge transfer has significant effect on organizational performance.

H_2: Knowledge transfer has significant effect on strategy content.

H_3: External environment has significant moderating influence on the relationship between knowledge transfer and strategy content.

H_4: Strategy content has significant intervening influence on the relationship between knowledge transfer and organizational performance.

H_5: The joint effect of knowledge transfer, strategy content and external environment on organizational performance is significantly different from the independent effect of the variables.

The aforesaid hypotheses guided the researcher during the study to examine the outcome of the relationships between the concepts of knowledge transfer, strategy content, external environment and organizational performance. Each of the five hypotheses was tested separately; their individual outcomes were obtained and interpreted. This led to further discussion and recommendation of the study.

2.10 Chapter Summary

This chapter has brought in light the state of knowledge along the variables of the study. The underpinning theories of the study have been discussed separately and the concepts that are linked to them stated. This has been followed by the relations of the concepts based on the objectives of the study.

Moreover, a summary of knowledge gaps from selected empirical studies has been stated and shown how they are addressed by the study. The conceptual framework has elaborated the linkages of the concepts of the study and the conceptual model has been drawn. Consequently the conceptual hypotheses have been enlisted to guide the researcher in hypothesis tests.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter entails the plan that was used in the study. It describes the research methodology applied. It explains the adopted research philosophy, the research design, population of the study, data collection methods and data analysis.

3.2 The Research Philosophy

Research philosophy relates to the development of knowledge and the nature of that knowledge (Saunders et al, 2009). Knowledge of any given philosophy helps the researcher to recognize the designs that would either work or not work. It also helps the researcher identify, and even create designs that may be outside his or her past experience. The extreme continuums for traditional philosophies of how social science is conducted are positivism and social constructionism (Easterby-Smith et al, 2008).

Positivism entails elements of both deductive approach and inductive strategy. The principle of deductive is applied when the purpose of the theory is to generate hypotheses that can be tested and thereby allow explanations of laws to be assessed. The principle of induction is applied when knowledge is arrived at through the gathering of facts that provide the basis of the laws (Bryman and Bell, 2003).

Social constructionism is the study of the details of the situation to understand the reality or perhaps a reality working behind them (Saunders et al, 2009). One of the main intellectual traditions that have been responsible for the anti-positivist position has been phenomenology (Bryman and Bell, 2003), a philosophy that is concerned with the question of how individuals make sense of the world around them and how the philosopher should bracket out preconceptions in his or her grasp of the world.

The researcher used an acceptable knowledge of applying the methods of natural sciences, also known as the positivism paradigm of epistemology (Easterby-Smith et al, 2008). This involved deductive approach whereby theories were used to generate hypotheses. These hypotheses were tested to allow the explanation of laws assessed in the literature and were revised according to the findings of the study. The researcher also viewed an organization as a reality that was external to the individual who inhibited it; this concern is known as the objectivism of ontological. The application of this philosophy enabled the researcher to determine the viability of hypotheses relating the concepts of variables anchored on theoretical propositions.

3.3 Research Design

The research design adopted in this study was cross-sectional survey. Cross-sectional studies are carried out once and represent a snapshot of one point in time (Cooper and Schindler, 2006). It seeks to describe the incidence of a phenomenon and may be used to explain how factors are related in different organizations (Saunders et al, 2009). Other elements of design included descriptive and causal relationships which are used to analyze data and test hypotheses.

The descriptive statistics described the data; while causal relationship design was used to test the hypotheses of the study. The data was gathered through electronic mail, post office and self administered questionnaire. The unit of analysis was the organization and the research was field based. The researcher did not have control over the variables in the sense of being able to manipulate them, but only reported what had happened or was happening and tested the hypotheses quantitatively.

3.4 Population of the Study

The population of the study consisted of all the 61 companies listed on the Nairobi Securities Exchange (Nairobi Securities Exchange, 2014). The study used one sample parametric *Z*-test to determine the statistical significance between the sample distribution mean and parameter. The procedure used to determine the multiple regression sample size as suggested by Green (1991) was $n > 50 + 8m$.Where m is the number of independent variables for testing the multiple correlations (Voorhis and Morgan, 2007).

In this study, there is one independent variable. The expected sample number $(n) > 50 + 8(1)$; Where n should be 58 companies and above. The computation of the regression sample size proved the adequacy of the 61 companies for survey to the application of multiple correlation analysis. A census survey of all the 61 companies listed on the Nairobi Securities Exchange was conducted.

3.5 Data Collection

The study collected both primary and secondary data. The primary data on knowledge transfer, strategy content, external environment and unpublished data relating to organizational performance that was relevant to the study. It was collected using a semi-structured questionnaire. The questionnaire was divided into five parts. The questions had been adopted from various empirical studies. Section A focused on the background information of the organization, section B focused on knowledge transfer (Nezafati et al ,2009; Panahi et al, 2012), section C focused on the strategy content (Miles and Snow, 1978; Schilling, 2005), section D focused on external environment (Serfontein, 2006; Banhan, 2010; Machuki, 2011) and section E focused on organizational performance (Figge et al, 2002).

The respondents were the senior managers in the targeted organizations. The senior managers comprised of the Chief Executive Officers, Branch Managers and Heads of Departments. The administration of the questionnaire commenced in May, 2014 to June, 2014. 12 questionnaires were posted through the post office, 15 questionnaires were sent via electronic mail and 34 questionnaires were self administered to the respective companies. In some organizations, the Chief Executive Officer responded to the questionnaire, while in others, the Branch Managers and the Heads of Departments did so. The companies where some questionnaires were posted to did not respond immediately. This compelled the researcher to follow up through telephone conversations and self administration of additional questionnaires to the companies to avoid their excuses with regard to the same.

Secondary data was extracted from the published information in the targeted companies' annual reports for the five years from 2008 to 2012 (Nairobi Securities Exchange, 2013) on organizational financial performance obtained from the Nairobi Securities Exchange office. The researcher computed this data to obtain the average earnings per share, average dividend yield and average return on equity. Ratio scale was used to measure this data. The results were later adapted to suite the likert scale and ease the processing of the information via the SPSS IBM version 21.

3.6 Operationalization of Research Variables

Knowledge transfer, strategy content, external environment and organizational performance were the variables of this study. Indicators were measured using the likert scale and the ratio scale. Knowledge transfer was operationalized using the workings of Nezafati et al (2009), Panahi et al, (2012) and Nonaka (1994). External environment was operationalized using the workings of Porter (1980), Serfontein (2006), Banhan (2010) and Machuki (2011).

Strategy content of strategic stances and strategic actions was operationalized using the workings of Miles and Snow (1978), Ansoff (1965), Porter (1985) and Schilling (2005). Organizational performance was operationalized using the workings of Kaplan and Norton (2001), Figge et al (2002) and Hubbard (2009). Table 3.1 highlights the variables of the study, their corresponding nature, dimensions, measurement indicators, sources of empirical study, measurement scales and the sections of the specified variables within the questionnaire.

Table 3.1 Operationalization of the Study Variables

Nature	Variable	Dimensions	Indicators	Source	Measurement	Questionnaire Section
Independent	Knowledge Transfer	Socialization	Social media, team working interest, individual creativity.	Nonaka, 1994; Nezafati et al 2009; Panahi et al, 2012	Likert scale	Sections B
		Internalization	On job training, product development, Manager flexibility.			
		Externalization	Information technology, sharing culture, strategic plan.			
		Combination	Workshops, replication, Non financial bonuses.			
Moderating	External Environment	Complexity	New entrant, rivalry competition, exit barriers, customers, suppliers, substitute products, Political, economical, socio-cultural, technological, ecological, legal, labor markets, financial institutions, trading organizations, trade unions, parent company.	Porter (1980); Serfontein, 2006; Banhan, 2010; Machuki, 2011.	Likert scale	Section C
		Dynamism				
		Munificence				
Intervening	Strategy Content	Strategic Stance	Prospectors, analyzers, defenders, reactors.	Miles and Snow, 1978	Likert scale	Section D
		Strategy Action	Product development, market penetration, market development, Diversification, licensing, research organizations, cost leadership, differentiation, quality.	Ansoff, 1965; Porter, 1985; Schilling, 2005	Likert scale	
Dependent	Organizational Performance	Financial Perspective	Earnings per share, Dividend Yield, Return on Equity.	Kaplan and Norton, 2001; Figge et al, 2002, Hubbard, 2009	Ratio scale	Section E
		Customer Perspective	Distribution time process, quality, service delivery, public relations, branding.		Likert scale	
		Internal Business Process	Innovation, customer management, operation and logistics			
		Learning and growth	Competencies, technologies, climate for action, health and safety.			
		Non- Market Perspective	Social aspect, Environmental aspect.			

Source: Researcher, 2014

Table 3.1 illustrates the operationalization of the study variables. The nature of the variables is classified as independent, moderating, intervening and dependent. The variables are identified as knowledge transfer, external environment, strategy content and organizational performance. The dimensions of each of the variables are disclosed together with their indicators. Furthermore, the sources of the dimensions and indicators, their measurements and questionnaire sections are related respectively.

3.7 Reliability and Validity of the Research Instrument

The questionnaires submitted to different companies listed on the Nairobi Securities Exchange had the same questions to provide the researcher with consistent results. The questions through electronic mail and those posted via post office were the same (Cooper and Schindler, 2006). To ensure reliability and validity of the questionnaire, pilot test was done with the research experts and some corporate senior managers. The pilot test was meant to test and improve the questionnaire and also determine response time of various respondents.

3.7.1 Reliability Test

The study considered the perspectives of equivalence reliability and internal consistency (Cooper and Schindler, 2006). Equivalence reliability ascertained the variations of answers at one point in time among the companies listed on the Nairobi Securities Exchange. The scores of the same events in the companies listed on the Nairobi Securities Exchange were compared to test for the equivalence of measurements from both the primary and the secondary data collected.

Cronbach's alpha test of internal consistency was used after the collection of data to test the findings from the gathered data. Cronbach's alpha indicated the extent to which a set of items could be treated as using a single latent variable. The

recommended value of 0.7 and above was used as cut off point. The value of less than 0.7 implies that the internal consistency among number of items is weak (Cooper and Schindler, 2006). The closer the Cronbach's alpha coefficient is to 1, the greater the internal consistency of the items in the scale. Table 3.2 illustrates the values of Cronbach's Alpha of the aforesaid variables. This proves that the internal consistency of the questionnaire was strong since it had exceeded the value of 0.7 and is within the acceptable range of between 0 and 1.

Table 3.2: Reliability Test

Scale	Cronbach's Alpha	Number of Items
Knowledge Transfer	0.849	12
Strategy Content	0.916	29
External Environment	0.942	102
Organizational Performance	0.935	26

Source: Research Data, 2014

3.7.2 Validity Test

The forms of validity that the study used included the content validity and the criterion- related validity (Cooper and Schindler, 2006). The content validity of the questionnaire was judged by measurement of adequate coverage of the investigative questions on knowledge transfer, strategy content, external environment and organizational performance. The indicators that were criterion-related to these concepts were associated using the Likert scale. The questionnaire was divided into five parts, sections A, B, C, D and E.

Section A focused on the background information of the organization. This included the demographics of the organizations, the respondent's designation and the number of years that the respondent had worked in the company in question. The question had multiple choices of a, b, c and d.

Section B focused on knowledge transfer. The questionnaire requisite the respondents to indicate the extent to which the enlisted knowledge transfer statements were applied in their organizations. A 5 point likert scale was used to collect this data ranging from 'A very large extent' (5) to 'Not at all' (1).

Section C focused on the strategy content. The questionnaire had two questions on strategy content. The First question requisite the respondents to indicate the favourability of the given strategic positions in their organizations. A 5 point likert scale was used to collect this data ranging from 'Extremely favorable' (5) to 'Extremely unfavorable' (1). The next question requisite the respondents to indicate the extent of adopting given strategies in their organization. A 5 point likert scale was used to collect this data ranging from 'A very large extent' (5) to 'Not at all' (1).

Section D focused on external environment. The questionnaire had six questions on the external environment. The first two questions requisite the respondents indicate their response on environmental munificence. A 5 point likert scale ranging from 'A very large extent' (5) to 'Not at all' (1) were used. The next two questions requisite the respondents to indicate their response on environmental dynamism. A 5 point likert scale ranging from 'A very large extent' (5) to 'Not change at all' (1), were used respectively. The subsequent two questions requisite the respondents to indicate their response on environmental complexity. A 5 point likert scale ranging from 'A very large extent' (5) to 'Very similar' (1), were used respectively.

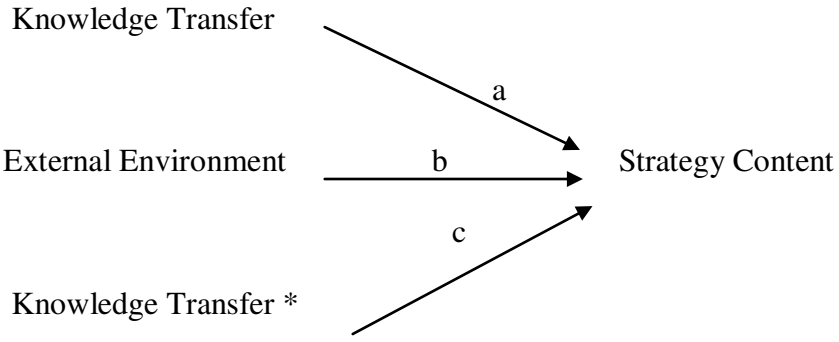
Section E focused on organizational performance. The questionnaire requisite the respondents to indicate the extent the enlisted performance statements were applied in their organizations. A 5 point likert scale ranging from 'A very large extent' (5) to 'Not at all' (1) was used. A detailed thirteen- page questionnaire was constructed to collect research data.

3.8 Data Analysis

The collected data were first edited to correct errors of omission and commission and the variables coded. The missing values were identified and the incomplete questionnaires were invalidated. Data was then entered into the SPSS system as soon as it was received from the field. The answers from the contextual organizations were aggregated and used as contextual indicators. An index of consistency which represents consistency of variance among raters was necessary. The study used one sample t-test and skewness tests for descriptive statistics and multiple regression analysis for hypotheses testing, since there are more than two variables (Waller, 2008). IBM SPSS version 21 was used to analyze the data and test hypotheses.

Hypothesis testing was done to check on the level of significance between the given variables. The researcher used simple regression analysis to test for hypotheses 1 and 2, and multiple regression analysis to test for hypotheses 3, 4 and 5. Hierarchical and simultaneous methods of path analysis were applied in testing the moderating (external environment) and intervening (strategy content) variables respectively.

Figure 3.1: Testing for the Moderating Effect – Hierarchical Method



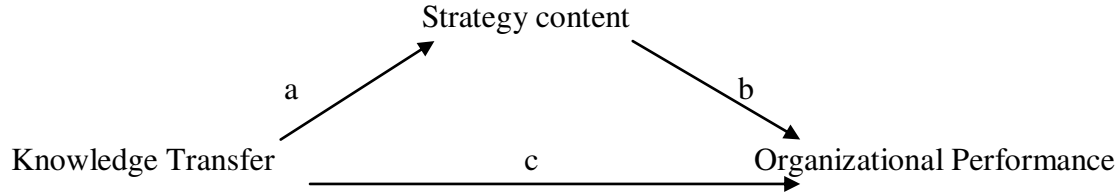
Source: Adapted from Moderating and Mediating Effects in Causal Models, by Kim, J.-S., Kaye, J., & Wright, L. K. (2001). *Issues in Mental Health Nursing, 22*, P.67.

Figure 3.1 shows three causal paths that feed into the outcome variable of strategy (Kim et al, 2001). When processing the data using the hierarchical method of regression analyses, the basic command of analyze, regression, linear lead the researcher to a main dialog analyzing box. Strategy content was entered as a dependent variable, on the first block of independent variables, knowledge transfer constructs of socialization, internalization, externalization and combination were entered as a set of the first model, on the second block of independent variables, the external environment constructs of munificence, dynamism and complexity were entered as additional set of the second model, on the third block of independent variables, interaction of constructs of knowledge transfer and constructs of external environment were entered as additional set of the third model. This order of entry feature, where some predictors are considered before looking at others is what makes this a hierarchical regression procedure; as some variables take precedence in the hierarchy over other, based on the order in which one enter them into the model.

Figure 3.1 shows how strategy content was predicted by knowledge transfer and external environment. *Path a,* represented strategy content regressed on knowledge transfer; while, *Path b*, represented strategy content regressed on external environment. Since the relationship between knowledge transfer and strategy content is significant, a new hypothesis, of the external environment dynamics to moderate the effect of knowledge transfer on strategy content is introduced as a third *path c*. *Path c* represented strategy content regressed on the interaction or product of knowledge transfer and external environment. It tests whether external environment is a moderator variable. External environment hypothesis (H_3) is not supported since *Path c* is found to have no significant relationship with the strategy content.

Figure 3.2 introduced strategy content as an intervening variable on the relationship between knowledge transfer and organizational performance. Prior to using path analytic regression techniques, Pearson correlations among strategy content was examined.

Figure 3.2: Testing for the Intervening Effect – Simultaneous Method



Source: Adapted from Moderating and Mediating Effects in Causal Models, by Kim, J.-S., Kaye, J., & Wright, L. K. (2001). *Issues in Mental Health Nursing, 22*, P.70.

From figure 3.2, Path *a* represented knowledge transfer significantly associated with strategy content; *Path b* represented strategy content significantly associated with organizational performance; *Path c* represented knowledge transfer significantly associated with organizational performance (Kim et al, 2001). After the establishment of the above significant correlations, three regression analyses were performed.

The sequence of regression analyses to establish the intervening effect

Equation 1: Strategy content was regressed on knowledge transfer

Equation 2: Organizational performance was regressed on knowledge transfer

Equation 3: Organizational performance was regressed on knowledge transfer and strategy content simultaneously

In the third equation simultaneous entry, rather than hierarchical entry was used. Simultaneous entry allowed to control the effect of knowledge transfer while the effect of strategy content on performance was examined (Kim et al, 2001). The results compared the relative effect of knowledge transfer on organizational performance when strategy content was controlled and when strategy content was not controlled.

Table 3.3: Data Analysis Models

Research Objective	Hypothesis	Analysis Models	Test Statistics
1. To determine the effect of knowledge transfer on organizational performance of companies listed on Nairobi Securities Exchange.	H1: Knowledge transfer has significant effect on organizational performance.	**Multiple Regression Analysis**: $Y_1 = \alpha_o + \alpha_1 X + \epsilon_o$; Where, Y= Organizational Performance; X=Knowledge Transfer; α_1= coefficient estimate of the effect of X on Y; α_o= coefficient estimate of the intercept; ϵ_o= error term.	Mean, t-value, Pearson's correlation, R, R^2 F-Ratio, P-values.
2. To assess the effect of knowledge transfer on strategy content of companies listed on Nairobi Securities Exchange.	H2: Knowledge transfer has significant effect on the strategy content.	**Multiple Regression Analysis**: $M_1 = \alpha_o + \alpha_1 X + \epsilon_o$; Where, M=Strategy content; X=Knowledge Transfer; α_1= coefficient estimate of the effect of X on Y; α_o= coefficient estimate of the intercept; ϵ_o= the regression error term.	Mean, t-value, Pearson's correlation, R, R^2, F-Ratio, P-values.
3. To establish the influence of external environment on the relationship between knowledge transfer and the strategy content of companies listed on Nairobi Securities Exchange.	H3: External environment has significant moderating influence on the relationship between knowledge transfer and strategy content.	**Multiple Regression Analysis**: $M_2 = \alpha_o + \alpha_1 X + \alpha_2 Z + \alpha_3 (X*Z)$; Where, M=Strategy content; X=Knowledge Transfer; Z = External environment; $\alpha_1, \alpha_2, \alpha_3$ = coefficient estimate of the effect of X, Z and XZ on Y, respectively; α_o= coefficient estimate of the intercept.	Mean, t-value, Pearson's correlation, R, R^2. F-Ratio, P-values.
4. To determine the influence of strategy content on the relationship between knowledge transfer and organizational performance of companies listed on Nairobi Securities Exchange.	H4: The strategy content has significant intervening influence on the relationship between knowledge transfer and organizational performance.	**Multiple Regression Analysis**: $M_1 = \alpha_o + aX + \epsilon_o$ - (1); $Y_1 = \alpha_1 + cX + \epsilon_1$ - (2); $Y_2 = \alpha_2 + cX + bM_1 + \epsilon_2$ - (3). Where, M= Strategy content; Y= Organizational Performance; X=Knowledge Transfer; a, c and b= coefficient estimate of the effect of X and M on Y; α_o, α_1, α_2= coefficient estimate of the intercept; ϵ_o, ϵ_1, ϵ_2 = the regression error term.	Mean, t-value, Pearson's correlation, R, R^2, F-Ratio, P-values.
5. To determine the joint effect of knowledge transfer, strategy content and external environment on organizational performance of companies listed on Nairobi Securities Exchange.	H5: The joint effect of knowledge transfer, strategy content and external environment on organizational performance is significantly different from the independent effect of the variables.	**Multiple Regression Analysis** : $Y_3 = \alpha_o + \alpha_1 X + \alpha_2 M + \alpha_3 Z + \epsilon_o$; Y= Organizational Performance; X=Knowledge Transfer; M= Strategy content; Z=External environment; $\alpha_1, \alpha_2, \alpha_3$ = coefficient estimate of the effect of X, M and Z on Y respectively; α_o= coefficient estimate of the intercept; ϵ_o= the regression error term.	Mean, t-value, Pearson's correlation, R, R^2 F-Ratio, P-values.

Table 3.3 illustrates the data analysis and interpretation. The specific research objectives of the study are enlisted. These research objectives are related to their hypotheses, analysis models and test statistics respectively.

3.9 Chapter Summary

This chapter has explained the research philosophy, research design, population and data collection used in the study. The operationalization of the research variable has also been evaluated. Furthermore, reliability and validity of the research instrument has been described.

Consequently, the data analysis of the study has been assessed. The chapter has been finalized with data analysis and interpretation on how Pearson's correlation (R) has been used to measure the nature and strength of variable relationships, while the coefficient of determination (R^2) was used to measure the amount of variation explained by model variables. Other statistical tests included the one sample t-test and skewness tests.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter deals with data analysis and findings of the concepts of knowledge transfer, strategy content, external environment and organizational performance of companies listed on the Nairobi Securities Exchange. It is divided into the background of the study, the presentation of findings, the tests of hypotheses, interpretation of results and results of regression analysis. The presentation of findings lay focus on descriptive statistics. One sample t-test, coefficient of variation and skweness tests have been used to analyze the data. The one sample test has been used to determine the statistical significance between mean and t-values. The coefficient of variation has been used to gauge the variability of the constructs. The skewness tests measure the degree of normality in given distributions. Data has been presented by use of tables.

The tests of hypotheses focus on inferential statistics and comprises of the effects of knowledge transfer on organizational performance, the effects of knowledge transfer on strategy content, the moderating effect of external environment on the relationship between knowledge transfer and organizational performance, the intervening effect of strategy content on the relationship between knowledge transfer and organizational performance and the joint effect of knowledge transfer, strategy content, external environment and organizational performance. The interpretation of the results focuses on hypotheses one (H_1), two (H_2), three (H_3), four (H_4) and five (H_5). Consequently, effects in regression results confirm the validity of the study.

4.2 Response Rate

There were 61 companies listed on the Nairobi Securities Exchange represented by 11 business sectors by the 31 December, 2013. These companies represented varied business sectors of agricultural, commercial and services, telecommunications and technology, automobile and accessories, banking, insurance, investment, manufacturing and allied, construction and allied, energy and petroleum; and growth enterprise market segment in Kenya as shown on Table 4.1

Table 4.1: Sector wise Response Rate

Business Sector	**Number of Companies**	**Percentages**
Agricultural	3	8%
Commercial and Services	7	19%
Telecommunications and technology	1	3%
Automobile and accessories	2	6%
Banking	10	28%
Insurance	3	8%
Investment	0	0%
Manufacturing and allied	3	8%
Construction and allied	4	11%
Energy and Petroleum	2	6%
Growth Enterprise Market Segment	1	3%
Total	**36**	**100%**

Source: Research Data, 2014

Of the 61 companies, respondents from 39 companies submitted their response to the researcher. 36% of the companies declined to respond to the questionnaire due to varied reasons. Some multinationals claimed that their organizations' policies prohibited them to disclose information to researchers, others companies were apprehensive about the publication of the information obtained from their data, while a few hesitated that the provision of their company data to researchers could raise legal issues. Of the 39 respondents, one company provided inadequate response by answering few questions of the questionnaire; while 2 others provided unanswered questionnaires and were therefore declared invalid.

The valid respondents were 36 companies which represents 59% of the companies listed on the Nairobi Securities Exchange. Based on past incidences of empirical studies (Adegbite, 1986; Ting and Lean, 2011; Machuki, 2011; Arasa et al, 2011; Aljibri, 2012; Timraz and Al-Shubiri, 2012) with less than sample size of 36 companies, a sample of 36 companies was considered suitable to present the number of responses required for analysis. All the business sectors responded with one sector providing blank response as shown in Table 4.1. The banking sector has the highest response rate of 28%. The investment sector was not represented in the valid responses because two companies declined and one provided unanswered questionnaire and claimed not to have a strategy officer.

4.3 Organizational Demographics

The organizational demographics used for the study focused on the number of employees and the organizational age in years. The number of employees represented the size of the organization. The organizational age in years represented the tenure in which organizations had operated.

The sizes of the organizations were determined by the number of employees. The size of the organization determines the mode of knowledge transfer and the strategy applied within the given organization. The sizes were measured in the ranges of 500 and under, 501 to 1000; and 1001 and above employees. The number of companies within each sector was grouped according to the range of the employees of the given companies.

Table 4.2: Size of the Companies

Number of Employees	Frequency	Percentage
500 and under	8	22.2
501 to 1000	9	25.0
1001 and above	19	52.8
Total	**36**	**100.0**

Source: Research Data, 2014

Table 4.2 shows the range of the size of the companies and their respective percentages. The small, medium and large organizations were represented by the ranges of 500 and under, 501 and 1000; and 1001 and above respectively. 1001 and above has the highest rate of 52.8% which illustrates that this study is dominated by large companies who apply knowledge transfer practices based on their response.

The organization age was determined by the number of years in operation. The age determines the strategies used by the organization and the type of external environment that affect the organizations' performance based on the response. The organization age was measured in the ranges of 5 and under, 6 to 10; and 10 and above years. The number of companies within each sector was grouped according to the range of the years in operation.

Table 4.3: Organizations' Age

Age of Business in years	Frequency	Percentage
6 to 10	2	5.6
10 and above	34	94.4
Total	**36**	**100.0**

Source: Research Data, 2014

Table 4.3 points up the organizations age in years, their frequency and respective percentages. The age of the company represents the tenure and stability of the companies. The table illustrates that none of the companies listed on the Nairobi Securities Exchange had operated their business between 5 and under years based on the secondary data obtained from the Nairobi Securities office. The results show that, the companies that have been in operation for 10 and above years have the highest rate of 94.4% which illustrates that this study is guided by stable companies who have adopted given strategies to enable them compete in business despite environmental complexity, munificence and dynamism based on their response.

4.4 Designations of the Respondents

The job positions held by the respondents was determined by the designation. The respondents included the Chief Executive Officers, the company secretaries, the finance directors, the human resource managers, the branch managers and other heads of departments. The research chose to deal with the foresaid senior managers in these organizations since they fully participate in the companies' decision making and strategy content.

Table 4.4: Designations of Respondents

Respondents	Frequency	Percentage
Chief Executive Officers	1	2.8
Branch Managers	7	19.4
Heads of Departments	28	77.8
Total	**36**	**100.0**

Source: Research Data, 2014

The Chief Executive Officers, the Branch managers and the Heads of Departments of organizations were targeted. Table 4.4 shows that the Heads of Departments has the highest response rate of 77.8%. This illustrates that the study is guided by the heads of departments who are involved in their companies' strategy decision making and implement knowledge transfer practices through the influence of strategy content on their respective organizational performance based on their response.

4.5 Work Experience in the same Organization in Years

The work experience of the respondents was determined by the number of years they worked in their current specified organization. The work experience was measured in the range of 1 to 5, 6 to 10; 11 to 15 and; 16 and above years. The number of the respondents' work experience within each company was grouped according to the range of the years worked in the companies of this study.

Table 4.5: Work Experience in Years

Years of Company's Experience	Frequency	Percentage
1 to 5	15	41.7
6 to 10	11	30.6
11 to 15	3	8.3
Over 15	7	19.4
Total	**36**	**100.0**

Source: Research Data, 2014

Table 4.5 illustrates the years that the respondents had worked in their respective organizations. The years of experience determine the extent that the respondent is knowledgeable about the business and the organization and his or her flexibility to respond to issues. The range of 1 to 5 years has the highest rate of 41.7 %, followed by the range of 6 to 10 years of 30.6%, which illustrates that this study is guided by the senior managers who have worked for their organizations between 1 to 10 years and were flexible to respond to issues on knowledge transfer, strategic stances and actions, environmental (munificence, dynamism, complexity) and organizational performance.

4.6 Preliminary Findings

The preliminary findings cover the data analysis on knowledge transfer, strategy content, external environment and organizational performance. Descriptive statistics are used to analyze the data. The results are explained after each conceptual analysis. One sample t-test was used at 95% confidence level to test the level of significance ($p < 0.05$). The number 3 was used as a test value since it is the midpoint of the 5 point Likert scale. The test generated t-values and mean scores. The t-value explains the statistical significant differences with regard to the manifestation of variables across the study. The mean score illustrate the ranking of the dimensions and indicators of variables. The coefficient of variation gauges variability.

The manual formula for $t = x\text{-}3/(s/\sqrt{n})$ and the critical t-value from the t-tables is 2.037, with 99 degrees of freedom and a level of significance value of 0.05. The t-value has low value when it is less than 2.037. However, the decision point is when t-value is equal to 2.037 and greater than 2.037.

4.6.1 Knowledge Transfer

The dimensions of knowledge transfer of socialization, internalization, externalization and combination have been analyzed using the skewness, coefficient of variation and t-value and p-value. The skewness and coefficient of variation test the normality and variability of the knowledge transfer dimensions respectively. The t-value shows how statistically significant are the differences in the manifestation of knowledge transfer across the organizations, while the p-value tests the significance level of the knowledge transfer dimensions.

Table 4.6: Normality and Manifestation of Knowledge Transfer

Knowledge Transfer	Skewness Test	One Sample Test					
		Test Value = 3					
		N	Mean	Std. Deviation	Coefficient of Variation	t-value	p-value
Socialization	-1.182	36	3.72	.732	19.67%	5.916	.000
Internalization	0.098	36	3.82	.706	18.48%	7.004	.000
Externalization	-0.824	36	3.41	.748	21.93%	3.268	.002
Combination	-0.210	36	3.59	.781	21.75%	4.552	.000

Source: Research Data, 2014

Table 4.6 shows normality and manifestation of knowledge transfer. The results show that socialization, internalization, externalization and internalization are significant ($p < 0.05$). The coefficient of variation shows that externalization is greatest (21.93%). Internalization received the highest ranking (mean score = 3.82). The statistically significance differences describe internalization ($t = 7.004$, $p < 0.05$). The frequency

distributions of socialization, externalization and combination are negatively skewed, while internalization is positively skewed. This shows that the distribution of data is not normally distributed. The results of coefficient of variation show that externalization has the largest variability. However, the mean scores illustrate that socialization, internalization, externalization and combination are practiced.

The indicators of knowledge transfer have been analyzed using the coefficient of variation and t-value and p-value. The coefficient of variation test the variability, while the t-value shows how statistically significant are the differences in the manifestation of knowledge transfer across the organizations. The p-value tests the significance level.

Table 4.7: Manifestation of Knowledge Transfer Practices

Knowledge Transfer	Test Value = 3					
	N	Mean	Std. Deviation	Coefficient of Variation	t-Value	P-Value
Socialization						
Social Media	36	3.08	1.156	35.53%	.433	.668
Team Working interests	36	4.08	.906	22.2%	7.172	.000
Individual Creativity	36	4.00	.986	24.65%	6.088	.000
Internalization						
On job training	35	4.00	.874	21.85%	6.765	.000
Product Development	36	3.75	.874	23.3%	5.147	.000
Manager's flexibility	36	3.72	.741	19.91%	5.847	.000
Externalization						
Information technology	36	3.28	1.031	31.43%	1.616	.115
Sharing Culture	36	3.22	.898	27.88%	1.485	.147
Strategic plan	36	3.72	1.137	30.56%	3.812	.001
Combination						
Workshops	36	4.03	.810	20.09%	7.612	.000
Replication	36	3.81	1.009	26.48%	4.790	.000
Non-financial bonuses	36	2.94	1.393	47.38%	-.239	.812

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1-not at all; 2-small extent; 3-moderate extent; 4-large extent; 5-a very large extent.

Table 4.7 illustrates the manifestation of knowledge transfer practices. Socialization, internalization, externalization and combination are the dimensions of knowledge transfer. An insurance sector company did not respond to the on job training question due to its uncertainty. The results show that, the test is significant at 95% confidence if $p < 0.05$. The purpose of the coefficient of variation is to measure the dispersion within a data set.

The results of knowledge transfer shows that social media and non-financial bonuses, information technology and sharing culture are not significant ($p > 0.05$). The critical t-value is greater than the computer generated t-value (2.037 > t-value) so we conclude that social media, non-financial bonuses, information technology and sharing knowledge have low t-value. Knowledge transfer practices rank differently. Team working interests and workshops received the highest rankings with mean scores of 4.08 and 4.03 respectively. Social media of socialization (35.53%), product development of internalization (23.3%), information technology of externalization (31.43%) and non-financial bonuses of combination (47.38%) have large variability in their respective modes of knowledge transfer. Statistically significance differences are reported for workshops of combination ($t = 7.612$, $p < 0.05$) followed by team working interests of socialization ($t = 7.172$, $p < 0.05$). The test confirmed that workshops, team working interests, on job training, individual creativity, manager flexibility, product development, replication and strategic plan were significant ($p < 0.05$). The calculated t-value is greater than the critical value (t-values > 2.037) and so we conclude that the significant differences of the modes of knowledge transfer across the companies of this study have high t-values

4.6.2 Strategy Content

The dimensions of strategy content of strategic stances and strategic actions have been analyzed using the skewness, coefficient of variation and t-value and p-value. The skewness and coefficient of variation test the normality and variability respectively. The t-value shows how statistically significant are the differences in the manifestation of strategy content across the organizations, while the p-value tests the significance level of the strategy content dimensions.

Table 4.8 Normality and Manifestation of Strategy Content

Strategy Content	Skewness	One-Sample Test					
		Test Value = 3					
		N	Mean	Std. Deviation	Coefficient of Variation	t-value	P-value
Strategic Stances	-0.973	36	3.65	.634	17.36%	6.150	.000
Strategy Actions	-0.322	36	3.37	.617	18.30%	3.676	.001

Source: Research Data, 2014

Table 4.8 shows the normality and manifestation of strategy content. Strategic stances received higher ranking (mean score = 3.65). Statistically significance differences reported strategic stances as ($t = 6.150$, $p < 0.05$). Both strategic stances and strategy actions are negatively skewed. Strategic actions (18.30%) have a larger variability.

The result of the mean reveals that organizations apply strategic stances more than the strategic actions. The normality test reveals that strategic stances and actions are not normally distributed. The coefficient of variation reveals that the strategic actions are larger in strategic actions than strategic stances.

The indicators of strategic stances of prospectors, defenders, analyzers and reactors have been analyzed using the skewness, coefficient of variation and t-value and p-value. The skewness and coefficient of variation test the normality and variability respectively. The t-value shows how statistically significant are the differences in the manifestation of strategic stances across the organizations, while the p-value tests the significance level of the strategic stances indicators.

Table 4.9: Normality and Manifestation of the Strategic Stances

Strategic Stances	Skewness Test	One Sample Test					
		Test Value = 3					
		N	Mean	Std. Deviation	Coefficient of Variation	t-value	P-value
Prospectors	-0.527	36	3.56	.760	21.34%	4.385	.000
Defenders	-0.250	36	3.75	.644	17.15%	6.985	.000
Analyzers	-0.857	36	3.58	.837	23.37%	4.181	.000
Reactors	-1.090	36	3.71	.851	22.93%	5.025	.000

Source: Research Data, 2014

Table 4.9 shows normality and manifestation of strategic stances. The results show that the strategic stances of prospectors, defenders, analyzers and reactors are significant ($p < 0.05$). Defenders received the highest ranking with a mean score of 3.75. Statistically significance differences report for defenders ($t = 6.985$, $p < 0.05$). Analyzers have the largest variability (23.93%). The normality test of skewness shows that the frequency distribution of prospectors, defenders, analyzers and reactors are negatively skewed.

The results of the normality test imply that prospectors, defenders, analyzers and reactors are not normally distributed. However, the mean scores illustrate that defenders and reactors are favorable strategic stances. Besides, the coefficient of variation reveals that analyzers have the largest variability.

The entrepreneurial, engineering and administrative problems of the indicators of strategic stances have been analyzed using the skewness, coefficient of variation, t-value and p-value. The skewness and coefficient of variation test the normality and variability respectively. The t-value shows how statistically significant are the differences in the manifestation of strategic positions across the organizations, while the p-value tests the significance level.

Table 4.10: Manifestation of Strategic Positions

Strategic Stances	Test Value = 3					
	N	Mean	Std. Deviation	Coefficient of Variation	t-value	p-value
Prospectors						
Entrepreneurial Problem	36	3.89	.979	25.16%	5.447	.000
Engineering Problem	36	3.11	.950	30.54%	.702	.487
Administrative Problem	36	3.67	.926	25.23%	4.320	.000
Defenders						
Entrepreneurial Problem	35	3.09	1.269	41.06%	.400	.692
Engineering Problem	36	3.86	.867	22.46%	5.960	.000
Administrative Problem	36	4.28	.779	18.20%	9.846	.000
Analyzers						
Entrepreneurial Problem	36	3.86	.990	25.64%	5.219	.000
Engineering Problem	36	3.50	1.000	28.57%	3.000	.005
Administrative Problem	36	3.39	.994	29.32%	2.348	.025
Reactors						
Entrepreneurial Problem	36	4.08	.967	23.7%	6.720	.000
Engineering Problem	36	3.72	1.003	26.96%	4.320	.000
Administrative Problem	36	3.33	1.095	32.88%	1.826	.076

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1- Extremely unfavorable; 2- Unfavorable; 3- Moderately favorable; 4- Favorable; 5- Extremely favorable.

Table 4.10 illustrates manifestation of strategic positions. The strategic positions include prospectors, defenders, analyzers and reactors. The results show that the test is significant at 95% confidence if $p < 0.05$. Engineering problem of prospectors and entrepreneurial problem of defenders, administrative problem of reactors were not significant ($p > 0.05$).

A construction and allied sector company did not understand the question on the entrepreneurial problem of defender. Strategic positions rank differently. The coefficient of variation report that engineering problem of prospectors (30.54%), entrepreneurial problem of defenders (41.06%), administrative problem of analyzers (29.32%) and reactors (32.88%) have large variability. Administrative problem of defenders and entrepreneurial problem of reactors which had mean scores of 4.28 have the highest ranking. Statistically significance differences of describe administrative problem of defenders ($t = 9.846$, $p < 0.05$). The test confirmed that administrative problem of defenders, prospectors and analyzers; entrepreneurial problem of reactor, prospectors and analyzers; engineering problem of defenders, reactors and analyzers were significant ($p < 0.05$). This indicates that more the statistical differences on the favorability of strategic positions across the companies, the higher the rankings.

The indicators of strategic actions of product development, market penetration, market development, diversification, licensing, research organizations, cost leadership, differentiation and quality have been analyzed using the skewness, coefficient of variation and t-value and p-value. The skewness and coefficient of variation test the normality and variability respectively. The t-value shows how statistically significant are the differences in the manifestation of strategic actions across the organizations, while the p-value tests the significance level of the strategic actions indicators.

Table 4.11: The Normality and Manifestation of the Adopted Strategies

Adopted Strategies	Skweness Test	One-Sample Test					
		Test Value = 3					
		N	Mean	Std. Deviation	Coefficient of Variation	t-value	p-value
Product Development	-0.720	36	3.50	1.089	31.11%	2.755	.009
Market Penetration	-0.744	36	4.04	.721	17.84%	8.635	.000
Market Development	-1.137	36	3.65	.977	26.76%	4.009	.000
Diversification	0.587	36	2.43	1.055	43.41%	-3.239	.003
Licensing	2.776	35	1.24	.668	53.87%	-15.555	.000
Research Organizations	-0.513	36	3.25	1.204	37.04%	1.246	.221
Cost Leadership	-0.849	36	4.08	.806	19.75%	8.062	.000
Differentiation	-0.736	36	3.67	1.146	31.83%	3.489	.001
Quality	-2.112	36	4.44	.877	19.75%	9.888	.000

Source: Research Data, 2014

Table 4.11 shows normality and manifestation of the adopted strategies. The results show that research organizations are not significant ($p < 0.05$). Quality received the highest ranking with a mean score of 4.44. Statistically significance differences describe quality ($t = 9.888$, $p < 0.05$). Licensing (53.87%) has the largest variability followed by diversification (43.41%). The normality test of skewness shows that the frequency distribution of product development, market penetration, market development, research organizations, cost leadership, differentiation and quality are negatively skewed while diversification and licensing has a positively skewed.

The results of the normality test show that the strategic actions are normally distributed. However, the mean scores illustrate that market penetration, cost leadership and quality are the largely adopted strategies. The coefficient of variation reveals that market penetration has the smallest variability.

The sub-indicators of strategic actions have been analyzed using the coefficient of variation and t-value and p-value. The coefficient of variation tests variability, while t-value shows how statistically significant are the differences in the manifestation of strategic actions across the organizations, while the p-value tests the significance level.

Table 4.12: Manifestation of Strategies

Strategic Actions	Test Value = 3					
	N	Mean	Std. Deviation	Coefficient of Variation	t-value	P-value
Product Development						
Creation of new products	36	3.19	1.369	42.91%	.852	.400
Product security maintenance	36	3.81	1.091	28.63%	4.431	.000
Market Penetration						
Market share through quality	36	4.25	.732	17.22%	10.247	.000
Market share through productivity	36	4.00	.956	23.9%	6.275	.000
Market share through marketing	36	3.86	.961	24.89%	5.378	.000
Market Development						
Production of diversified products	36	3.47	1.108	31.93%	2.557	.015
Sales to diversified markets	36	3.83	1.028	26.84%	4.863	.000
Diversification						
Combination of resources	36	3.00	1.309	43.63%	.000	1.000
Combination of capabilities	36	3.19	1.369	42.91%	.852	.400
Allow use of own brand names	35	1.80	1.346	74.77%	-5.274	.000
Allow use of own trademarks	35	1.54	.950	61.68%	-9.074	.000
Licensing						
License foreign companies and provision of rights to products	35	1.31	.867	66.18%	-11.506	.000
License foreign companies and provision of rights to trademark	35	1.17	.568	48.54%	-19.044	.000
Research Organizations						
Search for advice	36	3.25	1.204	37.04%	1.246	.221
Cost Leadership						
Expenses plans and policies	36	4.08	.806	19.75%	8.062	.000
Differentiation						
Produce unique products	36	3.67	1.146	31.22%	3.489	.001
Quality						
Delivery of high quality products	36	4.44	.877	19.75%	9.888	.000

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1-Not at all; 2-small extent; 3- Moderate extent; 4- Large extent; 5-a very large extent.

Table 4.12 illustrates the manifestation of strategies. The results show that the use of the companies brand name and trademark; and licensing was not applicable to a commercial and services sector company. From the table, the test is significant at 95% confidence if $p < 0.05$. Combination of resources, creation of new products, combination of capabilities and search for advice from research organizations were not significant ($p > 0.05$). The critical t-value is greater than the calculated t-value (2.037 > t-value) and so we conclude that these strategies have low t-value.

Delivery of high quality product in quality which had mean scores of 4.44 was the highest ranking. Statistically significance differences describe market share through quality in market penetration ($t = 10.247$, $p < 0.05$). Allowance of own brand names (74.77%) has the largest variability. The adoption of strategies ranks differently. The test confirmed that product security maintenance in product development, market penetration strategy, allowance of the use of own brand names and trademarks in diversification, licensing, cost leadership, differentiation and quality strategies were significant ($p < 0.05$). The study reports that these strategies are highly adopted by companies listed on the Nairobi Securities Exchange.

4.6.3 External Environment

The munificence, dynamism and complexity of the external environment were determined. The external environments consisted of the industry, macro and micro environments. The examined factors of the industry environment were threats of new entrants, competition among rivals, exit barriers and the relative powers of customers and suppliers of the firms. The macro environment factors examined include political, economical, socio-cultural, technological, ecological and legal. The micro environments examined were the relations with labor markets, financial institutions, trading organizations, trade unions and parent companies.

Table 4.13: Normality and Manifestation of the External Environment

External Environment	Skewness Test	One Sample Test					
		Test Value = 3					
		N	Mean	Std. Deviation	Coefficient of Variation	t-value	P-value
Munificence	-0.612	36	3.24	.597	18.42%	2.381	.023
Dynamism	-0.670	35	3.12	.627	20.09%	1.112	.274
Complexity	0.160	35	2.85	.693	24.31%	-1.307	.200

Source: Research Data, 2014

Table 4.13 shows the normality and manifestation of the external environment. The results show that environmental munificence ($t = 2.381$, $p < 0.05$) is significant. Environmental dynamism and complexity are not significant ($p > 0.05$). On the normality test, environmental munificence and dynamism are negatively skewed, while complexity is positively skewed. The coefficient of variation shows that environmental complexity has the greatest variability, while environmental munificence has the least.

The results of the normality test show that the dimensions of external environment are not normally distributed. However, the mean scores illustrate that environmental munificence and dynamism is prevalent. Moreover, coefficient of variation reveals that, environmental munificence has the least variability.

Munificence is judged by the environmental developments to the organizations and the influence of the external environment on the organizations' decision making. The indicators of environmental munificence of threats of new entrants, competition among rivals, exit barriers, relative power of customers, relative power of suppliers, threat of substitute products, political factors, economic variations, social cultural activities, technological changes, ecological effects, legal factors; relations with labor markets, financial institutions, trading organizations, trade unions and parent companies have

been analyzed using the coefficient of variation and t-value and p-value. The coefficient of variation tests the variability. The t-value shows how statistically significant are the differences in the favorability of the external environment development across the organizations, while the p-value tests the significance level.

Table 4.14: Favorability of the External Environment Developments

External Environment Developments	Test Value = 3					
	N	Mean	Std. Deviation	Coefficient of Variation	t-value	P-value
Threats of new entrants in the industry	36	2.97	1.158	38.98%	-.144	.886
Competition among rivals in the industry	36	3.19	1.191	37.33%	.980	.334
Exit barriers in the industry	36	2.53	1.253	49.52%	-2.261	.030
Relative power of customers of the firm	36	3.50	1.056	30.17%	2.842	.007
Relative power of suppliers of the firm	36	2.92	1.105	37.84%	-.452	.654
Threat of substitute products within the industry	35	2.89	1.105	38.23%	-.612	.545
Political factors in the economy	34	3.42	1.251	36.57%	1.999	.053
Economical variations within the economy	36	3.75	1.079	28.77%	4.170	.000
Socio-Cultural activities of the market	36	3.00	.956	31.86%	.000	1.000
Technological changes in the market	36	3.31	1.167	35.25%	1.571	.125
Ecological and geographical effects	35	2.86	1.115	38.98%	-.758	.454
Legal factors in the economy	36	3.14	1.046	33.31%	.797	.431
Relations with labor markets	36	3.17	1.028	32.42%	.973	.337
Relations with financial institutions	36	3.25	1.025	31.53%	1.464	.152
Relations with trading organizations	36	3.36	.990	29.46%	2.188	.035
Relations with trade unions	36	2.94	1.170	39.79%	-.285	.777
Relations with parent company	35	3.17	1.562	49.27%	.649	.521

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1-Not at all; 2-small extent; 3- Moderate extent; 4- Large extent; 5-a very large extent.

Table 4.14 illustrates favorability of external environment developments. The results show that threat of substitute products within the industry and ecological factors like weather and other geographical effects; and the relation with parent company did not apply in given companies in the commercial and services sector.

The results show that the test is significant at 95% confidence if $p < 0.05$. Threats of new entrants in the industry, exit barriers in the industry, relative power of suppliers of the firm, threats of substitute products within the industry, socio-cultural activities of

the market, ecological changes and relations with trade unions are not significant ($p > 0.05$). This indicates that the developments of these environmental factors are not favorable to the companies listed on the Nairobi Securities Exchange. Economical variations within the economy had a mean score of 3.75 while exit barriers in the industry (mean score = 2.53). Exit of barriers in the industry (49.52%) and relations with parent company (49.27%) have the highest variability. Statistically significance differences describe economical variations ($t = 4.170$, $p < 0.05$), exit barriers ($t = -2.261$, $p < 0.05$). Therefore, the test confirmed that economical variations within the economy, relative power of customers of the firm and relations with trading organizations were significant ($p < 0.05$). This indicates that the developments of these environmental factors are favorable.

Table 4.15: The Influence of External Environment in Decision Making

Influence of External Environment in Decision Making	Test Value = 3					
	N	Mean	Std. Deviation	Coefficient of Variation	t-value	P-value
Threats of new entrants in the industry	35	3.57	1.313	36.77%	2.576	.015
Competition among rivals in the industry	35	3.71	1.274	34.33%	3.318	.002
Exit barriers in the industry	35	2.66	1.211	45.52%	-1.675	.103
Relative power of customers of the firm	35	3.66	1.027	28.06%	3.784	.001
Relative power of suppliers of the firm	35	3.09	1.197	38.73%	.424	.675
Threat of substitute products within the industry	34	3.44	1.021	29.68%	2.520	.017
Political factors in the economy	35	3.57	1.092	30.58%	3.095	.004
Economical variations within the economy	35	3.71	.926	24.95%	4.564	.000
Socio-Cultural activities of the market	35	3.11	.993	31.92%	.681	.501
Technological changes in the market	34	3.47	1.187	34.20%	2.312	.027
Ecological and geographical effects	35	3.03	1.200	39.60%	.141	.889
Legal factors in the economy	35	3.40	1.143	33.61%	2.071	.046
Relations with labor markets	35	3.29	1.100	33.43%	1.537	.134
Relations with financial institutions	35	3.49	1.121	32.12%	2.563	.015
Relations with trading organizations	35	3.37	1.060	31.45%	2.074	.046
Relations with trade unions	35	2.83	1.175	41.51%	-.863	.394
Relations with parent company	34	3.03	1.586	52.34%	.108	.915

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1-Not at all; 2-small extent; 3- Moderate extent; 4- Large extent; 5-a very large extent.

Table 4.15 illustrates the influence of external environment in decision making. The results show that a banking sector company found this question too sensitive to their organization and therefore omitted it. In some commercial and services companies, technological factors were sensitive, while threats of substitutes and parent company were not applicable.

The results further show that exit barriers in the industry, relative power of suppliers of the firm, socio-cultural activities of the market, ecological changes and relations with labor markets, trade unions and are not significant ($p > 0.05$). This indicates that these environmental factors do not influence decision making of the companies listed on the Nairobi Securities Exchange.

Economical variations within the economy had a mean score of 3.71. Statistically, significance differences describe economical variations within the economy ($t = 4.564$, $p < 0.05$). Relation with parent company (52.43%) had the largest variability. Therefore, the test confirmed that economical variations within the economy, relative power of customers of the firm, threat of new entrant in the industry, competition among rivals in the industry, threats of substitute product within the industry, technological changes in the market, legal factor in the economy, relations with financial institutions and trading organizations were significant ($p < 0.05$). This indicates that these environmental factors do influence decision making of the companies listed on the Nairobi Securities Exchange.

Environmental dynamism was estimated by the prediction of environment and the environmental changes from 2008 to 2012. The indicators of environmental munificence of threats of new entrants, competition among rivals, exit barriers, relative power of customers, relative power of suppliers, threat of substitute products, political factors, economic variations, social cultural activities, technological changes,

ecological effects, legal factors; relations with labor markets, financial institutions, trading organizations, trade unions and parent companies have been analyzed using the coefficient of variation and t-value and p-value. The coefficient of variation tests the variability. The t-value shows how statistically significant are the differences in the favorability of the external environment development across the organizations, while the p-value tests the significance level.

Table 4.16: Predictability of External Environment

Predictability of External Environment	Test Value = 3					
	N	Mean	Std. Deviation	Coefficient of Variation	t-value	p-value
Threats of new entrants in the industry	35	3.03	1.175	38.77%	.144	.886
Competition among rivals in the industry	35	3.40	1.265	37.20%	1.871	.070
Exit barriers in the industry	35	2.54	1.120	44.09%	-2.414	.021
Relative power of customers of the firm	35	3.23	.973	30.12%	1.390	.174
Relative power of suppliers of the firm	35	3.23	1.060	32.81%	1.276	.211
Threat of substitute products within the industry	34	3.38	.888	26.27%	2.510	.017
Political factors in the economy	35	2.89	1.255	43.42%	-.539	.594
Economical variations within the economy	35	3.09	1.040	33.65%	.488	.629
Socio-Cultural activities of the market	35	2.86	1.089	38.07%	-.776	.443
Technological changes in the market	32	3.47	1.016	29.29%	2.611	.014
Ecological and geographical effects	35	2.77	.973	35.12%	-1.390	.174
Legal factors in the economy	35	3.00	1.111	37.03%	.000	1.000
Relations with labor markets	34	2.88	.946	32.84%	-.725	.473
Relations with financial institutions	34	3.15	1.105	35.07%	.776	.443
Relations with trading organizations	35	3.03	1.043	34.42%	.162	.872
Relations with trade unions	34	2.76	1.046	37.89%	-1.311	.199
Relations with parent company	34	3.21	1.553	48.38%	.773	.445

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1-Not at all; 2-small extent; 3- Moderate extent; 4- Large extent; 5-a very large extent.

Table 4.16 shows predictability of the external environment. The results show that a banking sector company did not answer this question due to its sensitivity to their

company. Threats of substitutes, ecological factors and parent company, the relations with the labor markets, financial institutions and trade unions were not applicable in certain companies in the commercial and services sector.

The results show that statistically significance differences describe exit barriers, threats of substitute products within the industry and technological changes in the market are significant ($p < 0.05$). Relations with parent company (48.38%) have the largest variability. The significant environmental factors are predictable, while those that are not significant are not predictable to the same.

Table 4.17: Changeability of External Environment

Changeability of External Environment	Test Value = 3					
	N	Mean	Std. Deviation	Coefficient of Variation	t-value	P-value
Threats of new entrants in the industry	34	3.53	1.107	31.35%	2.788	.009
Competition among rivals in the industry	34	3.74	1.163	31.09%	3.687	.001
Exit barriers in the industry	34	2.41	1.158	48.04%	-2.963	.006
Relative power of customers of the firm	34	3.65	.981	26.87%	3.846	.001
Relative power of suppliers of the firm	34	3.24	1.103	34.04%	1.244	.222
Threat of substitute products within the industry	33	3.30	1.311	39.72%	1.328	.194
Political factors in the economy	34	3.65	.884	24.21%	4.270	.000
Economical variations within the economy	34	3.76	1.017	27.04%	4.385	.000
Socio-Cultural activities of the market	34	3.09	.933	30.19%	.551	.585
Technological changes in the market	33	3.61	1.197	33.15%	2.908	.007
Ecological and geographical effects	34	2.79	.880	31.54%	-1.364	.182
Legal factors in the economy	34	3.24	.923	28.48%	1.486	.147
Relations with labor markets	32	2.88	.871	30.24%	-.812	.423
Relations with financial institutions	34	3.24	1.046	32.28%	1.311	.199
Relations with trading organizations	34	3.00	.921	30.7%	.000	1.000
Relations with trade unions	33	2.76	.867	31.41%	-1.606	.118
Relations with parent company	34	2.32	1.319	56.85%	-2.990	.005

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1-No change at all; 2-Little change; 3-Moderate change; 4-Great change; 5-Dramatic chang

Table 4.17 shows changeability of external environment. The results show that a commercial and services sector company did not answer this question due to uncertainty and threats of substitutes, ecological factors and parent companies were not applicable. For other companies in the agricultural sector; and commercial and services sector, the relations with labor markets and trade unions were not applicable.

The results further shows that relative powers of suppliers of the firm, threat of substitute products, socio-cultural activities of the market, ecological changes, and legal factors, relations with labor market, financial institutions, trade organizations and trade unions are not significant ($p > 0.05$). The rest of the environmental factors are significant ($p < 0.05$). The changes of the significant environmental factors have been observed to be dramatic by companies listed on the Nairobi Securities Exchange in the last five years of the study, while the not significant environmental factors have had little change.

Economical variations within the economy and political factors in economy had mean scores of 3.76 and 3.65 respectively while relations with parent company had a mean score of 2.32. Statistically significance differences describe economical variations within the economy ($t = 4.385$, $p < 0.05$). Relations with parent company (56.85%) had the largest variability.

Environmental complexity was measured by gauging the difficult business issues caused by the environment and comparing the similarity of the same. The indicators of environmental munificence of threats of new entrants, competition among rivals, exit barriers, relative power of customers, relative power of suppliers, threat of substitute products, political factors, economic variations, socio-cultural activities, technological changes, ecological effects, legal factors; relations with labor markets, financial institutions, trading organizations, trade unions and parent companies have been

analyzed using the coefficient of variation and t-value and p-value. The coefficient of variation tests the variability. The t-value shows how statistically significant are the differences in the favorability of the external environment development across the organizations, while the p-value tests the significance level.

Table 4.18: Difficult Issues in External Environment

Difficult Issues in External Environment	Test Value = 3					
	N	Mean	Std. Deviation	Coefficient of variation	t-value	p-value
Threats of new entrants in the industry	35	2.97	1.248	42.02%	-.135	.893
Competition among rivals in the industry	35	3.20	1.324	41.37%	.894	.378
Exit barriers in the industry	35	2.34	1.162	49.65%	-3.347	.002
Relative power of customers of the firm	35	3.11	.932	29.96%	.725	.473
Relative power of suppliers of the firm	34	3.00	1.015	33.83%	.000	1.000
Threat of substitute products within the industry	34	2.94	1.179	40.10%	-.291	.773
Political factors in the economy	35	3.29	1.100	33.43%	1.537	.134
Economical variations within the economy	34	3.38	.954	28.22%	2.337	.026
Socio-Cultural activities of the market	35	2.83	1.014	35.83%	-1.000	.324
Technological changes in the market	34	3.18	1.218	38.30%	.845	.404
Ecological changes and geographical effects	35	2.91	.951	32.68%	-.533	.597
Legal factors in the economy	35	3.09	.981	31.74%	.517	.609
Relations with labor markets	35	2.57	.917	35.68%	-2.766	.009
Relations with financial institutions	35	2.86	.944	33%	-.895	.377
Relations with trading organizations	35	2.80	.901	32.17%	-1.313	.198
Relations with trade unions	34	2.50	1.022	40.88%	-2.851	.007
Relations with parent company	34	2.32	1.319	56.85%	-2.990	.005

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1-None at all; 2-Very few; 3-Moderate number; 4-Many; 5-Very many.

Table 4.18 shows difficult issues in external environment. The difficult issues may be lead to complications in conducting the businesses. The results show that a banking sector company and a commercial and services sector company did not answer this question due to its sensitivity to their companies. Certain companies in the commercial

and services sector, relative power of supplier of the firm, economical variations within the economy and technological changes were sensitive issue for their organizations. Threats of substitutes, trade unions, and parent companies were not applicable in a certain companies in commercial and services sector.

The results show that exit barriers in the industry, economic variations within the economy, relations with labor markets, trade unions and parent company are significant ($p < 0.05$). The significant environmental factors experience many difficult business issues. Economical variations within the economy variations had means scores of 3.38. Statistically significance differences reports economical variations ($t = 2.337$, $p < 0.05$). Relations with parent company (56.85%) have the largest variability.

Table 4.19: Similarity of Difficult Issues in the External Environment

Similarity of Difficult Issues in External Environment	Test Value = 3					
	N	Mean	Std. Deviation	Coefficient of Variation	t-value	P-value
Threats of new entrants in the industry	33	2.45	1.277	52.12%	-2.454	.020
Competition among rivals in the industry	33	2.58	1.226	47.51%	-1.989	.055
Exit barriers in the industry	34	3.00	1.371	45.70%	.000	1.000
Relative power of customers of the firm	34	2.68	1.296	48.35%	-1.455	.155
Relative power of suppliers of the firm	34	2.82	1.141	40.46%	-.902	.374
Threat of substitute products	33	2.85	1.372	48.14%	-.634	.530
Political factors in the economy	34	2.97	1.193	40.16%	-.144	.887
Economical variations within the economy	34	2.82	1.290	45.74%	-.797	.431
Socio-Cultural activities of the market	33	2.70	1.159	42.92%	-1.502	.143
Technological changes in the market	33	3.12	1.453	46.57%	.479	.635
Ecological and geographical effects	34	2.88	1.250	43.40%	-.549	.587
Legal factors in the economy	34	2.91	.996	34.22%	-.517	.609
Relations with labor markets	34	3.00	1.181	39.36%	.000	1.000
Relations with financial institutions	34	2.76	1.257	45.54%	-1.092	.283
Relations with trading organizations	34	2.82	1.218	43.19%	-.845	.404
Relations with trade unions	33	2.97	1.237	41.64%	-.141	.889
Relations with parent company	32	2.88	1.601	55.59%	-.442	.662

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1-Very similar; 2-Moderately similar; 3-Indifferent; 4-Moderately dissimilar; 5-Very dissimilar

Table 4.19 illustrates the similarity of difficult issues in the external environment. Certain companies from the banking and agricultural sectors did not rank this question due to its sensitivity to their companies. Certain companies in the commercial and services sector did not experience difficult issues in some environmental factors in their organization and therefore the question was not applicable to their company.

The results show that the test is significant at 95% confidence if $p < 0.05$. Relations with parent company (55.59%) had the largest variability. Statistically significance differences describe threats of new entrants in the industry ($t = -2.454$, $p < 0.05$). The rest of the external environment factors are not significant ($p > 0.05$). The environmental factors that are significant deal with dissimilar difficult business issues, while those that are not significant deal with similar difficult issue in the companies listed on the Nairobi Securities Exchange.

4.6.4 Organizational Performance

Organizational performance focused on the sustainable balanced scorecard. The dimensions of organizational performance of financial performance, customer performance, internal business process performance, learning and growth performance and non-market performance have been analyzed using the skewness, coefficient of variation and t-value and p-value. The skewness and coefficient of variation test the normality and variability of the organizational performance respectively. The t-value shows how statistically significant are the differences in the manifestation of organizational performance across the organizations, while the p-value tests the significance level of the organizational performance dimensions.

The financial performance measurements are based on the ratio scale used to measure its indicators. The ratio measurements were then adapted to suite the 5 point likert scale on the SPSS. For earnings per share, measurement ranged between Ksh.0 to 5, 6 to 10, 11to 15, 16 to 20 and 21 and above; translated as 1, 2, 3, 4, and 5 respectively in likert scale. For dividend yield, the measurements ranged between 0 to 5%, 6 to 10%, 11 to 15% and 16% and above; translated as 1, 2, 3, 4, and 5 respectively in likert scale. For return on equity, the measurements ranged between 0 to 20%, 21% to 30%, 31% to 40%, 41% to 60% and 61% and above; translated as 1, 2, 3, 4, and 5 respectively in likert scale.

Table 4.20: Normality and Manifestation of Organizational Performance

Organizational Performance	**Skewness**	**One-Sample Test**					
		Test Value = 3					
		N	Mean	Std. Deviation	Coefficient of Variation	t-value	p-value
Financial Performance	2.107	36	1.43	.615	43%	-15.352	.000
Customer Performance	-0.755	36	3.96	.637	16.08%	9.019	.000
Internal Business Process Performance	-0.371	36	3.65	.823	22.54%	4.710	.000
Learning and Growth Performance	-0.404	36	3.96	.654	16.51%	8.819	.000
Non-Market performance	-0.319	36	4.04	.740	18.31%	8.441	.000

Source: Research Data, 2014

Table 4.20 shows the dimensions of organizational performance. The results show that all these dimensions are significant ($p < 0.05$). Non-market performance received the highest ranking with a mean score of 4.44. Statistically significance differences report for customer performance ($t = 9.019$, $p < 0.05$). The normality test shows that financial performance is positively skewed, while for customer, internal business process, learning and growth and non-market performance are negatively skewed.

The results of normality test show that the data distribution of customer performance, internal business process performance, learning and growth performance and non-market performance are not normally distributed. The coefficient of variation reveals that financial performance has the largest variability. The mean score show that the non-market performance is highly achieved by most of the organizations.

The indicators of organizational performance of distribution time process, quality, service delivery, public relations, branding, innovation, customer management, operations and logistics, competencies, technologies, climate for action, health and safety, social aspects, environmental aspects, earnings per share, dividend yield and return on equity have been analyzed using the coefficient of variation and t-value and p-value. The coefficient of variation test the variability, while the t-value shows how statistically significant are the differences in the measurement of organizational performance across the organizations. The p-value tests the significance level of these indicators of organizational performance.

Table 4.21: Measurements of Organizational Performance

Organizational Performance	Test Value = 3					
	N	Mean	Std. Dev.	Coefficient of Variation	t-value	P - value
Customer Performance						
Distribution Time Process						
Production timetable	36	3.81	1.215	31.88%	3.979	.000
Marketing of products timetable	36	3.64	1.175	32.28%	3.263	.002
Innovation of products timetable	36	3.31	1.064	32.14%	1.723	.094
Quality						
Production of quality products and services	36	4.19	.856	20.42%	8.373	.000
Service Delivery						
Deliver goods and services on time	36	4.11	.887	21.58%	7.513	.000
Accurate delivery forecasts to customers	36	3.89	.708	18.20%	7.531	.000

Measurements of Organizational Performance Cont….

Public Relations						
Provide exceptional service to customers	35	4.06	.802	19.75%	7.795	.000
Complete and suitable solutions to customers	36	4.19	.856	20.42%	8.373	.000
product leadership strategy	36	4.25	.874	20.56%	8.579	.000
Branding						
Delivery of differentiated value proposition	36	3.83	1.108	28.92%	4.511	.000
Internal Business Process Performance						
Innovation						
Innovation to develop products and services	36	3.03	1.298	42.83%	.128	.899
Customer Management						
Use of technologies for market leadership	34	4.06	.952	23.44%	6.488	.000
Operations and Logistics						
Improving supply chain management	35	3.57	1.267	35.49%	2.668	.012
Improving internal processes	36	4.08	.841	20.61%	7.730	.000
Improving asset utilization	35	4.00	.939	23.47%	6.298	.000
Improving resource capacity management	35	4.11	.932	22.67%	7.072	.000
Improving other processes	36	3.92	.906	23.11%	6.068	.000
Learning and Growth Performance						
Competencies						
Definition of employee capabilities and skills	36	3.83	.845	22.06%	5.916	.000
Technologies						
Definition of employee technical infrastructure	35	3.57	.698	19.55%	4.842	.000
Climate for Action						
Work climate conducive to support strategies	35	3.97	.822	20.70%	6.992	.000
Health and Safety						
Look into employee health and safety	36	4.44	.773	17.40%	11.218	.000
Non-Market Performance						
Social Aspect						
Participate in community development	36	4.11	.820	19.95%	8.126	.000
Environmental Aspect						
Eradication of environmental hazards	36	3.97	.971	24.45%	6.010	.000
Financial Performance						
Earnings per share	36	1.61	1.050	65.21%	-7.940	.000
Dividend yield	36	1.25	.500	40%	-21.000	.000
Return on Equity	36	1.42	.996	70.14%	-9.534	.000

Source: Research Data, 2014

Note: Ranking was on a 5-point Likert type scale: 1-Not at all; 2-small extent; 3- Moderate extent; 4- Large extent; 5-a very large extent.

Table 4.21 illustrates measurements of organizational performance. The results show that certain companies from the agricultural sector did not rank the customer management question. A certain company from construction and allied sector omitted technologies, while another from commercial and services sector did not rank climate for action as a result of not being sure of their companies' position with this regard.

The results further reveal that innovation of products timetable in customer performance and innovation in internal business process performance were not significant ($p > 0.05$). The performance measurements that are not significant are less applicable in companies listed on the Nairobi Securities Exchange, while those that are significant are more applicable in these organizations. Health and safety had mean scores of 4.44. Statistically significance differences describe health and safety ($t = 11.218$, $p < 0.05$). Return on equity (70.14%) has the largest variability.

4.7 Inter-correlation of Modes of Knowledge Transfer

This section is not one of the objectives. However, its purpose is to inspect the independent usages of the knowledge transfer constructs. The researcher assessed the knowledge transfer indicators to confirm their correlation among themselves. Table 4.22 illustrates the inter-correlation of knowledge transfer indicators. From the table, the indicators are not profoundly correlated. Most of these indicators are moderately weak, weak and very weak or almost no correlation. A few indicators have strong correlations.

At significance level of 0.05, there are moderately weak correlations between social media, product development and information technology; team working interests and information technology; individual creativity, on job training, product development and non-financial bonuses; on job training and manager flexibility; product development

and information technology; manager flexibility and replication; sharing culture and non-financial bonuses; strategic plan and non-financial bonuses; workshops and non-financial bonuses. All the knowledge transfer correlations are less than 0.5 which indicate independent usages of knowledge transfer indicators. However, the correlation between knowledge sharing culture and team working interest (0.503), individual creativity (0.452), on job training (0.517), product development (0.655), manager flexibility (0.482) and information technology (0.487) are quite strong at the significant level of 0.01.

The inter-correlation of the modes of knowledge transfer is essential for the study since it enables the researcher to detect the possibilities of cases of auto-correlation and heteroskedasticity in the regression analysis. The generation of the data I the regression analysis involve the relations of variables that relate to the objectives of the study. Auto-correlation and heteroskedasticity may adversely affect the results of the study if appropriate measures to earlier detection are not observed.

Table 4.22: Inter -Correlations of Modes of Knowledge Transfer

Knowledge Transfer	Social Media	Team Working Interests	Individual Creativity	On Job Training	Product Development	Manager Flexibility	Information Technology	Sharing Culture	Strategic Plan	Workshops	Replication	Non Financial Bonuses
Social Media	1											
Team Working Interests	.184	1										
Individual Creativity	.226	.448**	1									
On Job Training	.271	.297	.394*	1								
Product Development	.332*	.460**	.398*	.797**	1							
Manager Flexibility	.228	.461**	.274	.359*	.595**	1						
Information Technology	.388*	.402*	.197	.291	.333*	.216	1					
Sharing Culture	.229	.503**	.452**	.517**	.655**	.482**	.487**	1				
Strategic Plan	.192	.190	.051	.263	.302	-.026	.190	.258	1			
Workshops	-.033	.230	.286	.293	.252	-.034	.093	.188	.474**	1		
Replication	.186	.268	.575**	.224	.267	.384*	.053	.175	.051	.147	1	
Non Financial Bonuses	.535**	.321	.395*	.613**	.551**	.234	.270	.421*	.369*	.331*	.317	1

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

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

Source: Research Data, 2014

4.8 Tests of Hypotheses

The tests of hypotheses were based on the conceptual hypotheses of the study. They include the effect of knowledge transfer on organizational performance, the effect of knowledge transfer on strategy content, the moderating influence of external environment on the relationship between knowledge transfer and strategy content, the intervening influence of strategy content on the relationship between knowledge transfer and organizational performance; and the joint effect of knowledge transfer, strategy content, external environment and organizational performance.

4.8.1 The Effect of Knowledge Transfer on Organizational Performance

The first objective was to determine the effect of knowledge transfer on organizational performance of companies listed on the Nairobi Securities Exchange in Kenya. It was tackled by testing hypothesis one which stated that, knowledge transfer has significant effect on organizational performance. Regression analysis was used to analyze the data. The equation of knowledge transfer on organizational performance stated that, $Y_1 = \alpha_0 + \alpha_1 X + \epsilon_0$. The independent effect of knowledge transfer on performance explains the significance effects, the Beta and the t-values that describe the knowledge transfer dimensions on organizational performance.

The tests include the correlation of the effect of knowledge transfer and organizational performance, the significance effect of knowledge transfer on organizational performance, the combined effect of knowledge transfer on organizational performance and the individual knowledge transfer dimensions on organizational performance. The correlation of the effect of knowledge transfer and organizational performance analyzes the knowledge transfer variable and the organizational performance variable to measure their combined strength. The significance effect of

knowledge transfer on performance tests the coefficients, t-value and the p-values. The critical value of t-value from the table with 99 degrees of freedom and a level of significance value of 0.05 is 2.037. The combined effect knowledge transfer on organizational performance explains the correlation coefficient (R), the coefficient of determination (R^2), the overall statistical significance (F-ratio) and level of significance (p-value). The individual effect of knowledge transfer dimensions on performance explains the coefficients, t-value and p-values.

Table 4.23: Correlations between Knowledge Transfer and Organizational Performance

Knowledge Transfer	**Organizational Performance**					
	Financial	Customer	Internal Business Process	Learning and Growth	Non-Market	Overall
Knowledge transfer	-.223	.547**	.667**	.299	.285	.508**

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

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

Source: Research Data, 2014

Table 4.23 shows the correlations between knowledge transfer and organizational performance. The results show that the financial, learning and growth, and non-market performance have no significant correlation with knowledge transfer. However, customer (0.547) and internal business process (0.667) performance have moderately strong and strong correlation respectively at significance level of 0.01. The overall performance (0.508) has moderately strong correlation at significance level of 0.01. Conversely, knowledge transfer has no significant correlation with organizational performance at significance level of 0.05.

Table 4.24: Effect of Knowledge Transfer on Organizational Performance

Organizational Performance	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.990	.417		4.772	.000
Knowledge transfer	.389	.113	.508	3.440	.002

Source: Research Data, 2014

Table 4.24 shows the effect of knowledge transfer on organizational performance. The results show that there is a positive impact on knowledge transfer (β= 0.508). Statistically significance difference described result for the independent effect of knowledge transfer ($t = 3.440$, $p < 0.05$) on organizational performance. The result for the effect of knowledge transfer on organizational performance is significant ($p < 0.05$). In this case, t-value is greater than the critical value ($3.440 > 2.037$), so we conclude that the independent effect of knowledge transfer on organizational performance has increased.

Table 4.25: Combined Effect of Knowledge Transfer on Organizational Performance

Organizational Performance[b]	R	R^2	F - ratio	p-value
Financial Performance[b]	.294[a]	.086	.733	.577
Customer Performance[b]	.593[a]	.352	4.203	.008
Internal Business Process Performance[b]	.703[a]	.494	7.556	.000
Learning and Growth Performance[b]	.407[a]	.166	1.537	.216
Non-Market Performance[b]	.438[a]	.192	1.839	.146
Overall Performance[b]	.508[a]	.258	11.838	.002

a. Predictors: (Constant): Knowledge Transfer.

b. Dependent Variables: Financial Performance, Customer Performance, Internal Business Process Performance, Learning and Growth Performance, Non-Market performance.

Source: Research Data, 2014

Table 4.25 illustrates the combined effect of knowledge transfer on organizational performance. The results show that there is a relationship between knowledge transfer and organizational performance. Correlation coefficient (R) ranges from 0.294 for financial performance to 0.703 for internal business process performance. The results further indicate that there are different variations in organizational performance by knowledge transfer. The coefficient of determination (R^2) ranges from 8.6% for financial performance to 49.4% for internal business performance.

The corresponding F-ratio for the various models, range from 0.733 for financial performance to 7.556 for internal business process performance. The overall results reveal that knowledge transfer has significant effect on organizational performance ($p < 0.05$). Financial performance comprises of the earnings per share, dividend yield and return on equity. The independent effect of knowledge transfer on financial performance is as follows:

Table 4.26: Individual Effect of Knowledge Transfer Dimensions on Financial Performance

Financial Performance	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.248	.659		3.411	.002
Socialization	-.166	.201	-.198	-.827	.414
Internalization	.034	.196	.039	.173	.863
Externalization	-.180	.177	-.219	-1.016	.318
Combination	.078	.183	.099	.426	.673

Source: Research Data, 2014

Table 4.26 shows the individual effect of knowledge transfer dimensions on financial performance. The results show that there is a positive impact for internalization ($\beta = 0.039$) and a negative impact for externalization ($\beta = -0.219$). Internalization and

combination have positive effects on financial performance, while socialization and externalization have negative effects. Statistically significance differences report results for the independent effect of knowledge transfer dimensions on financial performance as low t-values ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.27: Combined Effect of Knowledge Transfer on Financial Performance

Financial Performance[b]	R	R^2	F - ratio	p-value
Earnings Per Share[b]	.281[a]	.079	.663	.623
Dividend Yield[b]	.260[a]	.068	.563	.691
Return On Equity[b]	.558[a]	.311	3.499	.018

a. Predictors: (Constant): Knowledge Transfer

b. Dependent Variable: Earnings per share, Dividend Yield, Return on Equity

Source: Research Data, 2014

Table 4.27 illustrates the combined effect of knowledge transfer on financial performance. The results show that there is a relationship between knowledge transfer and financial performance. Correlation coefficient (R) ranges from 0.281 for earnings per share to 0.558 for return on equity. The results further indicate that there are different variations in financial performance by knowledge transfer. The coefficient of determination (R^2) ranges from 6.8% for dividend yield to 31.1% for return on equity. The corresponding F-ratio for the various models, range from 0.663 for earnings per share to 3.499 for return on equity. The results reveal that Return on Equity has moderately strong correlation, $R = 0.558$, $R^2 = 31.1\%$ of the variations explained by knowledge transfer, 68.9% of the variations are unexplained and are taken care of by the error; $F = 3.499$ and is significant ($p < 0.05$). This shows that return on equity is more effective on financial performance than the earnings per share and dividend yield.

The non- financial performance comprise of customer performance, internal business process performance, learning and growth performance and non-market performance.

Table 4.28: Individual Effect of Knowledge Transfer Dimensions on Customer Performance

Customer Performance	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.793	.575		3.119	.004
Socialization	-.015	.175	-.017	-.085	.932
Internalization	.257	.171	.284	1.504	.143
Externalization	.306	.155	.360	1.983	.056
Combination	.054	.159	.066	.340	.736

Source: Research Data, 2014

Table 4.28 shows the effect of knowledge transfer dimensions on customer performance. The results show that there is a positive impact for externalization (β= 0.360) and a negative impact for socialization (β = -0.017). Internalization, externalization and combination have positive effect while socialization has a negative effect. Statistically significance differences report results for the independent effect of knowledge transfer dimensions on customer performance as low t-values ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.29: Combined Effect of Knowledge Transfer on Customer Performance

Customer Performance[b]	**R**	**R^2**	**F - ratio**	**p-value**
Distribution Time Process[b]	.557[a]	.310	3.489	.018
Quality[b]	.490[a]	.240	2.452	.067
Service Delivery[b]	.374[a]	.140	1.262	.306
Public Relations[b]	.479[a]	.229	2.303	.081
Branding[b]	.457[a]	.209	2.050	.112

a. Predictors: (Constant): Knowledge Transfer

b. Dependent Variable: Distribution Time Process, quality, service delivery, public relations, branding

Source: Research Data, 2014

Table 4.29 illustrates the combined effect of knowledge transfer on customer performance. The results show that there is a relationship between knowledge transfer

and customer performance. Correlation coefficient (R) ranges from 0.374 for service delivery to 0.490 for quality. The results further indicate that there are different variations in customer performance by knowledge transfer. The coefficient of determination (R^2) ranges from 14% for service delivery to 31% for distribution time process. The corresponding F-ratio for the various models, range from 1.262 for service delivery to 3.489 for distribution time process. The overall results reveal that distribution time process has moderately strong correlation, R = 0.557, R^2 = 31% of the variations explained by knowledge transfer, 69% of the variations are unexplained and are taken care of by the error; F=3.489 and $p < 0.05$. The models of distribution time process, quality, service delivery, public relations and branding were run separately to determine the individual effects of knowledge transfer on the dimensions of customer performance.

Table 4.30: Individual Effect of Knowledge Transfer Dimensions on Internal Business Process Performance

Internal Business Process Performance	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.156	.656		.237	.814
Socialization	.300	.200	.267	1.500	.144
Internalization	.432	.195	.370	2.216	.034
Externalization	.273	.176	.248	1.547	.132
Combination	-.058	.182	-.055	-.316	.754

Source: Research Data, 2014

Table 4.30 shows the individual effect of knowledge transfer dimensions on internal business process performance. The results show that there is a positive impact for internalization ($\beta = 0.370$) and a negative impact for combination ($\beta = -0.055$). Socialization, internalization and externalization have positive effect while combination has negative effect. Statistically significance differences describe internalization ($t = 2.216$, $p < 0.05$). The rest of the results for the independent effect of knowledge transfer dimensions on internal business process have low t-value ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.31: Combined Effect of Knowledge Transfer on Internal Business Process Performance

Internal Business Process Performance[b]	**R**	**R^2**	**F - ratio**	**p-value**
Innovation[b]	.598[a]	.358	4.317	.007
Customer Management[b]	.662[a]	.438	5.655	.002
Operations and Logistics[b]	.564[a]	.318	3.615	.016

a. Predictors: (Constant): Knowledge Transfer

b. Dependent Variable: Innovation, Customer management, Operations and Logistics

Source: Research Data, 2014

Table 4.31 illustrates the combined effect of knowledge transfer on internal business process performance. The results show that there is a relationship between knowledge transfer and internal business process performance. Correlation coefficient (R) ranges from 0.564 for operations and logistics to 0.662 for customer management. The results further indicate that there are different variations in internal business process performance by knowledge transfer. The coefficient of determination (R^2) ranges from 31.8% for operations and logistics to 43.8% for customer management. The corresponding F-ratio for the various models, range from 3.615 for operations and logistics to 5.655 for customer management.

The overall results reveal that customer management has strong correlation, R = 0.662, R^2 = 43.8% of the variations explained by knowledge transfer, 56% of the variations are unexplained and are taken care of by the error; F – ratio =5.655 and $p < 0.05$. Innovation, customer management and operations and logistics are significant ($p < 0.05$). This indicates that knowledge transfer has significant effect on the dimensions of internal business process performance.

Table 4.32: Individual Effect of Knowledge Transfer Dimensions on Learning and Growth Performance

Learning and growth performance	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.668	.669		3.987	.000
Socialization	.155	.204	.173	.758	.454
Internalization	.272	.199	.294	1.371	.180
Externalization	-.203	.180	-.232	-1.126	.269
Combination	.102	.186	.122	.549	.587

Source: Research Data, 2014

Table 4.32 shows the individual effect of knowledge transfer dimensions on learning and growth performance. The results show that there is a positive impact for internalization (β= 0.294) and a negative impact for externalization (β= -0.232). Socialization, internalization and combination have positive effect while externalization has negative effect. Statistically significance differences report results for the independent effect of knowledge transfer dimensions on learning and growth performance as low t-values ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.33: Combined Effect of Knowledge Transfer on Learning and Growth Performance

Learning and Growth Performance[b]	R	R^2	F-Ratio	p-value
Competencies[b]	.307[a]	.094	.806	.531
Technologies[b]	.521[a]	.272	2.797	.044
Climate for Action[b]	.444[a]	.197	1.838	.148
Health and Safety[b]	.446[a]	.199	1.925	.131

a. Predictors: (Constant): Knowledge Transfer

b. Dependent Variable: Competencies, Technologies, Climate for Action, Health and Safety

Source: Research Data, 2014

Table 4.33 illustrates the combined effect of knowledge transfer on learning and growth performance. The results show that there is a relationship between knowledge transfer and learning and growth performance. Correlation coefficient (R) ranges from 0.307 for competencies to 0.521 for technologies. The results further indicate that there are different variations in learning and growth performance by knowledge transfer. The coefficient of determination (R^2) ranges from 9.4% for competencies to 27.2% for technologies. The corresponding F-ratio for the various models, range from 0.806 for competencies to 7.556 for technologies. The overall results reveal that technologies has moderately strong correlation, R = 0.521, R^2 = 27.2% of the variations explained by knowledge transfer, 72.8% of the variations are unexplained and are taken care of by the error; F= 2.797 and $p < 0.05$. This indicates that knowledge transfer has significant effect on technologies ($p < 0.05$); however, it has no significant effect on competencies, climate for change; and health and safety ($p < 0.05$).

Table 4.34: Individual Effect of Knowledge Transfer Dimensions on Non-Market Performance

Non-Market Performance	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.631	.746		3.526	.001
Socialization	-.023	.227	-.023	-.103	.919
Internalization	.410	.221	.391	1.851	.074
Externalization	-.235	.201	-.237	-1.171	.251
Combination	.203	.207	.215	.983	.333

Source: Research Data, 2014

Table 4.34 shows the individual effect of knowledge transfer dimensions on non-market performance. The results show that there is a positive impact for internalization (β= 0.391) and a negative impact for externalization (β = -0.237). Internalization and combination have positive effects while socialization and combination have negative effects. Statistically significance differences describe results for the independent effect of knowledge transfer dimensions on non-market performance as low t-values ($p > 0.05$), since the t-value of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.35: Combined Effect of Knowledge Transfer on Non-Market Performance

Non-Market performance[b]	**R**	**R^2**	**F - ratio**	**p-value**
Social Aspect[b]	.435[a]	.189	1.806	.153
Environmental Aspect[b]	.381[a]	.145	1.315	.286

a. Predictors: (Constant): Knowledge Transfer

b. Dependent Variable: Social Aspect, Environmental Aspect

Source: Research Data, 2014

Table 4.35 illustrates the combined effect of knowledge transfer on non-market performance. The results show that there is a relationship between knowledge transfer and non-market performance. Correlation coefficient (R) ranges from 0.381 for environmental aspect to 0.435 for social aspect. The results further indicate that there are different variations in organizational performance by knowledge transfer. The coefficient of determination (R^2) ranges from 14.5% for environmental aspect to 49.4% for social aspect. The corresponding F-ratio for the various models, range from 1.315 for environmental aspect to 1.806 for social aspect. The overall results reveal that the social aspect has moderately weak correlation while the environmental aspect has weak correlation with knowledge transfer. Moreover, the social and environmental are not significant ($p > 0.05$). This indicates that knowledge transfer has no significant effect on social and environmental aspects of organizational performance.

4.8.2 The Effect of Knowledge Transfer on Strategy Content

The second objective was to determine the effect of knowledge transfer on strategy content of companies listed on the Nairobi Securities Exchange. It was tackled by testing hypothesis two which stated that, knowledge transfer has significant effect on strategy content. Regression analysis was used to analyze the data. The equation of the effect of knowledge transfer on strategy content stated that, $M_1 = \alpha_0 + \alpha_1 X + \epsilon_0$. The independent effect of knowledge transfer on strategy content explains the significance effects, the Beta and the t-values that describe the knowledge transfer dimensions on strategy content.

The tests include the correlation of the effect of knowledge transfer and strategy content, the significance effect of knowledge transfer on strategy content, the combined effect of knowledge transfer on strategy content and the individual knowledge transfer dimensions on strategy content. The correlation of the effect of knowledge transfer and strategy content analyzes the knowledge transfer variable and the strategy content variable to measure their combined strength. The significance effect of knowledge transfer on performance tests the coefficients, t-value and the p-values. The critical value of t-value from the table with 99 degrees of freedom and a level of significance value of 0.05 is 2.037. The combined effect knowledge transfer on strategy content explains the correlation coefficient (R), the coefficient of determination (R^2), the overall statistical significance (F-ratio) and level of significance (p-value). The individual effect of knowledge transfer dimensions on strategy content explains the coefficients, t-value and p-values.

Table 4.36: Correlation between Knowledge Transfer and Strategy Content

Knowledge Transfer	**Strategy Content**		
	Strategic Stance	**Strategic Actions**	**Overall**
Knowledge transfer	.690**	.570**	.683**

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

Source: Research Data

Table 4.36 illustrates the correlation between knowledge transfer and strategic content. The results show that strategic stances (0.690) have strong correlation while strategic actions (0.570) have moderately strong correlation at significance level of 0.01. The overall strategy content (0.683) has strong correlation at significance level of 0.01. However, there is no significant correlation between knowledge transfer and strategy content at significance level of 0.05.

Table 4.37: Effect of Knowledge Transfer on Strategy Content

Strategy Content	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.116	.446		2.504	.017
Knowledge transfer	.659	.121	.683	5.448	.000

Source: Research Data

Table 4.37 shows the effect of knowledge transfer on strategic content. The results show that, there is a relatively high positive impact (β= 0.683). Statistically significant difference describe results for the independent effect of knowledge transfer ($t = 5.448$, $p < 0.05$) on strategic content. The results show that knowledge transfer has statistical significant effect on strategy content ($p < 0.05$).

Table 4.38: Combined Effect of Knowledge Transfer on Strategy Content

Strategic content[b]	**R**	**R^2**	**F - ratio**	**p- value**
Prospectors[b]	.609[a]	.371	4.563	.005
Defenders[b]	.401[a]	.161	1.485	.231
Analyzers[b]	.753[a]	.567	10.150	.000
Reactors[b]	.636[a]	.405	5.277	.002
Product Development[b]	.537[a]	.288	3.134	.028
Market Penetration[b]	.491[a]	.241	2.456	.066
Market Development[b]	.567[a]	.322	3.679	.015
Diversification[b]	.487[a]	.237	2.413	.070
Licensing[b]	.360[a]	.130	1.120	.366
Research Organizations[b]	.393[a]	.155	1.419	.251
Cost Leadership[b]	.367[a]	.135	1.210	.326
Differentiation[b]	.554[a]	.307	3.427	.020
Quality[b]	.291[a]	.085	.717	.587
Overall Strategy Content[b]	.683[a]	.466	29.682	.000

a. Predictors: (Constant): Knowledge Transfer

b. Dependent Variables: Prospectors, Defenders, Analyzers, Reactors Product Development, Market Penetration, Market Development, Diversification, Licensing, Research Organizations, Cost Leadership, Differentiation, Quality

Source: Research Data, 2014

Table 4.38 illustrates the combined effect of knowledge transfer dimensions on strategic content. The results show that there is a relationship between knowledge transfer and strategy content. Correlation coefficient (R) ranges from 0.291 for quality to 0.753 for analyzers. The results further indicate that there are different variations in strategy content by knowledge transfer. The coefficient of determination (R^2) ranges from 8.5% for quality to 56.7% for analyzers. The corresponding F-ratio for the various models, range from 0.717 for quality to 10.150 for analyzers. Prospector, reactors, product development, market development and differentiation are significant ($p < 0.05$).

Table 4.39: Individual Effect of Knowledge Transfer Dimensions on Prospectors

Prospector Stance	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.901	.676		1.334	.192
Socialization	.146	.206	.140	.706	.485
Internalization	.164	.201	.153	.819	.419
Externalization	.408	.182	.402	2.247	.032
Combination	.026	.187	.027	.138	.891

Source: Research Data, 2014

Table 4.39 shows the individual effect of knowledge transfer dimensions on prospectors. The results show that, there is a positive impact for externalization ($\beta = 0.402$). Socialization, internalization, externalization and combination have positive effect. Statistically significance differences describe results for the independent effect of knowledge transfer dimension of externalization ($t = 2.247$, $p < 0.05$) on prospectors. The other dimensions of knowledge transfer dimensions have low t-values ($p > 0.05$), since the t-values of these dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.40: Individual Effect of Knowledge Transfer Dimensions on Defenders

Defenders	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.252	.662		3.405	.002
Socialization	.253	.202	.288	1.256	.218
Internalization	.141	.196	.155	.719	.478
Externalization	.077	.178	.089	.432	.668
Combination	-.069	.183	-.083	-.374	.711

Source: Research Data, 2014

Table 4.40 shows the individual effect of knowledge transfer dimensions on defenders. The results show that there is a positive impact for socialization (β= 0.288) and a negative impact for combination (β = -0.083). Socialization, internalization and externalization have positive effect while combination has negative effect. No statistically significance differences described results for the independent effect of knowledge transfer dimensions on defenders as low t-values ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.41: Individual Effect of Knowledge Transfer Dimensions on Analyzers

Analyzers	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.117	.617		.189	.851
Socialization	.376	.188	.329	2.001	.054
Internalization	-.077	.183	-.065	-.421	.677
Externalization	.260	.166	.232	1.565	.128
Combination	.411	.171	.383	2.398	.023

Source: Research Data, 2014

Table 4.41 shows the individual effect of knowledge transfer dimensions on analyzers. The results show that, there is a positive impact for combination (β= 0.383) and a negative impact for internalization (β = -0.065). Socialization, externalization and combination have positive effect while internalization has negative effect. Statistically significance differences describe results for the independent effect of knowledge transfer dimensions of combination ($t = 2.398$, $p < 0.05$) on analyzers. The other dimensions of knowledge transfer on analyzers have low t-values ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.42: Individual Effect of Knowledge Transfer Dimensions on Reactors

Reactor Stance	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.879	.736		1.194	.241
Socialization	.368	.224	.316	1.640	.111
Internalization	-.073	.218	-.060	-.332	.742
Externalization	.509	.198	.447	2.571	.015
Combination	.002	.204	.002	.012	.991

Source: Research Data, 2014

Table 4.42 shows the individual effect of knowledge transfer dimensions on reactors. The results show that, there is a positive impact for externalization (β= 0.447) and a negative impact for internalization (β = -0.060). Socialization, externalization and combination have positive effect while internalization has negative effect. Statistically significance differences describe results for the independent effect of knowledge transfer dimension of externalization ($t = 2.571$, $p < 0.05$) on reactors. Other dimensions of knowledge transfer on reactors have low t-values ($p > 0.05$), since the t-values of they are less than the critical value (2.037).

Table 4.43: Individual Effect of Knowledge Transfer Dimensions on Product Development

Product Development	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.268	1.030		.260	.797
Socialization	.473	.314	.318	1.507	.142
Internalization	.108	.306	.070	.352	.727
Externalization	.446	.277	.306	1.610	.118
Combination	-.127	.286	-.091	-.446	.659

Source: Research Data, 2014

Table 4.43 shows the individual effect of knowledge transfer dimensions on product development. The results show that, there is a positive impact for socialization (β= 0.318) and a negative impact for combination (β = -0.091). Socialization, internalization and externalization have positive effect while combination has negative effect. No statistically significance difference describe results for the independent effect of knowledge transfer dimensions on product development as low t-values ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.44: Individual Effect of Knowledge Transfer Dimensions on Market Penetration

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.256	.704		3.205	.003
Socialization	.030	.214	.030	.139	.890
Internalization	-.043	.209	-.042	-.204	.840
Externalization	.395	.189	.410	2.088	.045
Combination	.135	.195	.147	.694	.493

Source: Research Data, 2014

Table 4.44 shows the individual effect of knowledge transfer dimensions on market penetration action. The results show that, there is a positive impact for externalization (β= 0.410) and a negative impact for internalization (β = -0.042). Socialization, externalization and combination have positive effect while internalization has negative effect. Statistically significance differences described results for the independent effect of knowledge transfer dimension of externalization (t = 2.088, p < 0.05) on market penetration. The other dimensions of knowledge transfer on market penetration have low t-values (p > 0.05), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.45: Individual Effect of Knowledge Transfer Dimensions on Market Development

Market Development	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.365	.902		.404	.689
Socialization	.170	.275	.128	.620	.540
Internalization	.343	.268	.248	1.281	.210
Externalization	.394	.242	.302	1.627	.114
Combination	.000	.250	.000	-.001	.999

Source: Research Data, 2014

Table 4.45 shows the individual effect of knowledge transfer on market development action. The results show that, there is a positive impact for externalization (β= 0.302) and no impact for combination (β = 0.000). Socialization, internalization and externalization have positive effect while combination has no effect. No statistically significance differences describe results for the independent effect of knowledge transfer dimensions on market development as low t-values (p > 0.05), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.46: Individual Effects of Knowledge Transfer Dimensions on Diversification

Diversification	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.372	1.033		.360	.721
Socialization	.061	.315	.043	.195	.847
Internalization	-.353	.307	-.236	-1.150	.259
Externalization	.578	.278	.410	2.081	.046
Combination	.337	.286	.250	1.177	.248

Source: Research Data, 2014

Table 4.46 shows the individual effect of knowledge transfer dimensions on diversification. The results show that there is a positive impact for externalization (β= 0.410) and a negative impact for internalization (β = -0.236). Socialization, externalization and combination have positive effect while internalization has negative effect. Statistically significance differences describe result for the independent effect of knowledge transfer dimension of externalization ($t = 2.081$, $p < 0.05$) on diversification. The other dimensions of knowledge transfer on diversification have low t-values ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.47: Individual Effect of Knowledge Transfer Dimensions on Licensing

Licensing Action	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.553	.700		2.218	.034
Socialization	.179	.222	.197	.808	.425
Internalization	-.423	.208	-.453	-2.032	.051
Externalization	.153	.189	.174	.812	.423
Combination	.033	.202	.039	.166	.870

Source: Research Data, 2014

Table 4.47 shows the individual effect of knowledge transfer dimensions on licensing action. The results show that, there is a positive impact for socialization (β= 0.197) and a negative impact for internalization (β = -0.453). Socialization, externalization and combination have positive effect while internalization has negative effect. Statistically significance differences describe result for the independent effect of knowledge transfer dimension of internalization (t = -2.032, p = 0.05) on licensing. The other dimensions of knowledge transfer on licensing have low t-values (p > 0.05), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.48 Individual Effect of Knowledge Transfer Dimensions on Research Organizations

Research Organizations	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.544	1.241		.438	.664
Socialization	.433	.378	.263	1.145	.261
Internalization	.087	.368	.051	.235	.816
Externalization	.263	.334	.163	.788	.437
Combination	-.036	.344	-.024	-.106	.916

Source: Research Data, 2014

Table 4.48 shows the individual effect of knowledge transfer dimensions on research organizations. The results show that, there is a positive impact for socialization (β= 0.263) and a negative impact for combination (β = -0.024). Socialization, internalization and externalization have positive effect while combination has negative effect. No statistically significance differences describe results for the independent effect of knowledge transfer dimensions on research organizations as low t-values (p > 0.05), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.49: Individual Effect of Knowledge Transfer Dimensions on Cost Leadership

Cost Leadership	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.364	.840		2.813	.008
Socialization	.060	.256	.054	.233	.817
Internalization	.251	.249	.220	1.007	.322
Externalization	-.031	.226	-.029	-.138	.891
Combination	.179	.233	.173	.767	.449

Source: Research Data, 2014

Table 4.49 shows the individual effect of knowledge transfer dimensions on cost leadership. The results show that there is a positive impact for internalization (β= 0.220) and a negative impact for externalization (β = -0.029). Socialization, internalization and combination have positive effect while externalization has negative effect. No statistically significance differences described results for the independent effect of knowledge transfer dimensions on cost leadership as low t-values ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.50: Individual Effect of Knowledge Transfer Dimensions on Differentiation

Differentiation Action	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.245	1.070		.229	.821
Socialization	.065	.326	.041	.199	.844
Internalization	.442	.318	.272	1.393	.174
Externalization	.599	.288	.391	2.083	.046
Combination	-.154	.297	-.105	-.518	.608

Source: Research Data, 2014

Table 4.50 shows the individual effect of knowledge transfer dimensions on differentiation. The results show that there is a positive impact for externalization (β = 0.391) and a negative impact for combination (β = -0.105). Socialization, internalization and externalization have positive effect while combination has negative effect. Statistically significance differences described results for the independent effect of knowledge transfer dimension of externalization (t = 2.083, p < 0.05) on differentiation. The other dimensions of knowledge transfer on differentiation have low t-values (p > 0.05), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.51: Individual Effect of Knowledge Transfer Dimensions on Quality

Quality Action	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.283	.940		3.493	.001
Socialization	-.014	.286	-.012	-.050	.960
Internalization	.325	.279	.262	1.166	.252
Externalization	-.168	.253	-.143	-.663	.512
Combination	.151	.261	.134	.578	.567

Source: Research Data, 2014

Table 4.51 shows the significance effects of knowledge transfer dimensions on quality. The results show that, there is a positive impact for internalization (β= 0.262) and a negative impact for externalization (β = -0.143). Internalization and externalization have positive effect while socialization and combination have negative effect. No statistically significance differences describe results for the independent effect of knowledge transfer dimensions on quality as low t-values (p > 0.05), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

4.8.3 The Moderating Influence of External Environment on the Relationship between Knowledge Transfer and Strategic Content

The third objective was to determine the moderating influence of external environment on the relationship between knowledge transfer and strategy content of companies listed on the Nairobi Securities Exchange. It was tackled by testing hypothesis three which stated that external environment has significant moderating influence on the relationship between knowledge transfer and strategy content. Regression analysis was used to analyze the data. The equation of this hypothesis stated that, $M_2 = \alpha_o + \alpha_1 X + \alpha_2 Z + \alpha_3 (X*Z)$.

The tests include the correlation of the effect of knowledge transfer and external environment, the correlation of the effect of external environment and strategy content, the significance effect of knowledge transfer and external environment on strategy content, the combined effect of knowledge transfer and external environment on strategy content and the combined effect of knowledge transfer and environmental complexity on research organizations. The correlations measure combined strength of the given variables. The significance effects test the coefficients, t-value and the p-values. The critical value of t-value from the table with 99 degrees of freedom and a level of significance value of 0.05 is 2.037. The combined effect knowledge transfer on strategy content explains the correlation coefficient (R), the coefficient of determination (R^2), the overall statistical significance (F-ratio) and level of significance (p-value).

Table 4.52: Correlation between Knowledge Transfer and External Environment

Knowledge Transfer	External Environment			
	Munificence	Dynamism	Complexity	Overall
Knowledge transfer	.414*	.481**	.292	.398*

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
Source: Research Data, 2014

Table 4.52 illustrates the correlation between knowledge transfer and external environment. The results show that knowledge transfer has no significant correlation with environmental complexity. However, knowledge transfer has moderately strong correlation with environmental dynamism (0.481) at significant level of 0.01. However, at significance level of 0.05, knowledge transfer has moderately weak correlation with munificence and the overall external environment.

Table 4.53: Correlations between External Environment and Strategy Content

Strategy Content	External Environment			
	Munificence	Dynamism	Complexity	Overall
Strategic Stance	.574**	.590**	.389*	0.576**
Strategic Actions	.449**	.600**	.415*	0.526**
Strategy Content	0.554**	0.644**	0.435**	0.597**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Source: Research Data, 2014

Table 4.53 illustrates the correlation between and strategy content and external environment. The results show that environmental munificence (0.574), dynamism (0.590) and overall strategic stances (0.526) have moderately strong correlations at significant level of 0.01, while the environmental munificence (0.449) and overall strategic actions (0.526) have moderately strong correlation and environmental

dynamism (0.600) has strong correlation. Overall, environmental dynamism (0.644) has strong correlation with strategy content, while environmental munificence (0.554), complexity (0.435) have moderately strong correlations; and the overall strategy content (0.597) have strong correlations with overall performance at significant level of 0.01. At significance level of 0.05, strategy stances (0.389) and strategic actions (0.415) have moderately weak correlation environmental complexity.

The research used the hierarchical method of regression analysis to examine the significant moderating influence of external environment on the relationship between knowledge transfer and strategy content. The third hierarchy labeled 3 on each table illustrates the results of the external environment influence. Knowledge transfer dimensions were related to external environment dimensions and strategic stances.

Table 4.54: Effect of the Knowledge Transfer and External Environment on Strategy Content

Strategic Content		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.116	.446		2.504	.017
	Knowledge transfer	.659	.121	.683	5.448	.000
2	(Constant)	.404	.455		.888	.381
	Knowledge transfer	.511	.117	.529	4.364	.000
	External Environment	.406	.127	.386	3.188	.003
3	(Constant)	-.107	1.352		-.079	.937
	Knowledge transfer	.669	.410	.692	1.630	.113
	External Environment	.587	.468	.559	1.254	.219
	Knowledge Transfer*External Environment	-.055	.136	-.284	-.402	.690

Source: Research Data, 2014

Table 4.54 shows the effect of knowledge transfer and external environment on strategy content. The results show that there is a positive impact for knowledge transfer (β= 0.692) and a negative impact for the interaction of knowledge transfer and external environment (β = -0.284). Knowledge transfer and external environment have positive effect while the interaction of knowledge transfers and external environment has negative effect. No statistically significance differences describe results for the combined effect of knowledge transfer and external environment on strategy content as low t-values ($p > 0.05$), since the t-values of the dimensions of knowledge transfer are less than the critical value (2.037)

Table 4.55: Combined Effect of Knowledge Transfer and External Environment on Strategy Content

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.683[a]	.466	.42888	.466	29.682	.000
2	.769[b]	.592	.38063	.126	10.165	.003
3	.771[c]	.594	.38556	.002	.162	.690

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, External Environment
c. Predictors: (Constant), Knowledge transfer, External Environment, Knowledge Transfer*External Environment
d. Dependent Variable: Strategic Content

Source: Research Data, 2014

Table 4.55 illustrates the summary of the combined effect of knowledge transfer and external environment on strategy content. The results show that the correlation coefficient (R) of knowledge transfer is 0.683, when the parameter of external environment is added it increases to 0.769, with addition of the parameter of the interaction of knowledge transfer and external environment it increases to 0.771. The results further indicate that there are different variations in strategy content by

knowledge transfer and external environment. The coefficient of determination (R^2) is 46.6%. When parameter of external environment is added, the change of the coefficient of determination (ΔR^2) increases by 12.6%, with a further addition of the parameter of the interaction of knowledge transfer and external environment the % of variability accounted for increases by 0.2%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 29.682. When the parameter of external environment is added, the change in F-ratio is 10.165, with a further addition of the parameter of the interaction of knowledge transfer and external environment the change in F- ratio is 0.162. The corresponding p- value for the various models, knowledge transfer is significant ($p < 0.05$). When the parameter of external environment is added model 2 is significant ($p < 0.05$), with a further addition of the interaction of knowledge transfer and external environment Model 3 is not significant ($p > 0.05$). The result confirms that external environment has no statistically significant relationship between knowledge transfer and strategy content, since the calculated t-values of the dimensions of knowledge transfer are less than the critical value (2.037).

Table 4.56: Combined Effect of Knowledge Transfer and Environmental Complexity on Research Organizations

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.341[a]	.116	1.147	.116	4.335	.045
2	.479[b]	.230	1.088	.114	4.717	.037
3	.605[c]	.366	1.003	.136	6.642	.015

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Complexity
c. Predictors: (Constant), Knowledge transfer, Complexity, Knowledge Transfer*Complexity
d. Dependent Variable: Research Organizations

Source: Research Data, 2014

Table 4.56 illustrates the combined effect of knowledge transfer and environmental complexity on research organizations. The results show that the correlation coefficient (R) of knowledge transfer is 0.341, when the parameter of external environment is added it increases to 0.479, with addition of the parameter of the interaction of knowledge transfer and external environment it increases to 0.605.

The results further indicate that there are different variations in strategy content by knowledge transfer and external environment. The coefficient of determination (R^2) is 11.6%. When parameter of external environment is added, the change of the coefficient of determination (ΔR^2) increases by 11.4%, with a further addition of the parameter of the interaction of knowledge transfer and external environment the % of variability accounted for increases by 13.6%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 4.335. When the parameter of external environment is added, the change in F-ratio is 4.717, with a further addition of the parameter of the interaction of knowledge transfer and external environment the change in F- ratio is 6.642. The corresponding p-value for the various models, model 1, 2 and 3 are significant ($p < 0.05$). The study reported that of the strategy actions factors, environmental complexity has significant moderating influence on the relationship between knowledge transfer and research organizations ($p < 0.05$).

Table 4.57: Effect of Knowledge Transfer and Environmental Complexity on Research Organizations

Research Organizations		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.751	1.233		.609	.547
	Knowledge transfer	.693	.333	.341	2.082	.045
2	(Constant)	-.225	1.252		-.179	.859
	Knowledge transfer	.483	.330	.238	1.466	.152
	Complexity	.612	.282	.352	2.172	.037
3	(Constant)	-8.306	3.341		-2.486	.019
	Knowledge transfer	2.736	.926	1.346	2.957	.006
	Complexity	3.871	1.291	2.230	2.998	.005
	Knowledge Transfer*Complexity	-.896	.348	-2.471	-2.577	.015

Source: Research Data, 2014

Table 4.57 shows the significance effects of knowledge transfer and external environment on research organizations. The results show that there is a positive impact for complexity (β= 2.230) and a negative impact for knowledge transfer*complexity (β = -2.471). Knowledge transfer and complexity have positive effect while knowledge transfers*complexity has negative effect. Statistically significance difference describe result for the combined effect of knowledge transfer ($t = 2.957$, $p < 0.05$) and environmental complexity ($t = -2.577$, $p < 0.05$) on research organizations. The t-values of the dimensions of knowledge transfer on model 3 are greater than the critical value (2.037)

4.8.4 The Intervening influence of Strategy Content on the Relationship between Knowledge Transfer and Organizational Performance

The fourth objective was to determine the influence of strategy content on the relationship between knowledge transfer and organizational performance of companies listed on the Nairobi Securities Exchange. It was dealt with by testing

hypothesis four which stated that, strategy content has significant intervening influence on the relationship between knowledge transfer and organizational performance. Prior to using simultaneous method of regression analysis (Kim et al, 2001), Pearson correlation was examined. The examination of Pearson correlation ensures that knowledge transfer is significantly associated with strategy content; strategy content is significantly associated with organizational performance, and knowledge transfer is significantly associated with organizational performance. The three equations analyzed included $M_1 = \alpha_o + aX + \epsilon_o$ - (1); $Y1 = \alpha_1 + cX + \epsilon_1$ - (2); $Y_2 = \alpha_2 + cX + bM_1 + \epsilon_2$ - (3). Simultaneous entries of knowledge transfer dimensions and strategy content were used.

The tests include the correlations of the variables, the significance effect of knowledge transfer and strategy content on organizational performance, the combined effect of knowledge transfer and strategy content on financial performance and the combined effect of knowledge transfer and strategy content on non-financial performance. The correlations measure combined strength of the given variables. The significance effects test the coefficients, t-value and the p-values. The critical value of t-value from the table with 99 degrees of freedom and a level of significance value of 0.05 is 2.037. The combined effect explains the correlation coefficient (R), the coefficient of determination (R^2), the overall statistical significance (F-ratio) and level of significance (p-value).

Table 4.58: Correlations between Knowledge Transfer and Strategy Content

Knowledge Transfer	Strategic Stances	Strategic Actions	Strategy Content
Knowledge transfer	.690**	.570**	.683**

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

Source: Research Data, 2014

Table 4.58 illustrates the correlation between knowledge transfer and strategy content. The results show that knowledge transfer has strong correlations with strategic stances (0.690) and overall strategy content (0.683) while it has moderately strong correlation with strategic actions (0.570) at significance level of 0.01. At significance level of 0.05, there is no significant correlation between knowledge transfer and strategy content.

Table 4.59: Correlation between Strategy Content and Organizational Performance

	Strategy Content		
Organizational Performance	Strategic Stance	Strategic Actions	Overall strategy Content
Financial Performance	-.403*	-.449**	-.461**
Customer Performance	.625**	.590**	0.658**
Internal Business Process Performance	.750**	.737**	0.805**
Learning and Growth Performance	.221	.323	0.293
Non-Market performance	.159	.160	0.173
Overall Performance	0.448**	0.451**	0.487**

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

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

Source: Research Data, 2014

Table 4.59 shows the correlation between strategy content and organizational performance. The results show that strategy content has strong correlation with customer performance (0.658) and internal business process (0.805); while it has moderately weak negative correlation with financial (-0.461) and moderately positive correlation with overall organizational performance (0.487) at significance level of 0.01.

Table 4.60: Correlation between Knowledge Transfer and Organizational Performance

Knowledge Transfer	Organizational Performance					
	Financial	Customer	Internal Business Process	Learning and Growth	Non-Market	Overall Performance
Knowledge transfer	-.223	.547**	.667**	.299	.285	.508**

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

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

Source: Research Data, 2014

Table 4.60 shows the correlation between knowledge transfer and organizational performance. The results show that the financial, learning and growth, and non-market performance have no significant correlation with knowledge transfer. However, customer (0.547) and internal business process (0.667) performance have moderately strong and strong correlation respectively at significance level of 0.01. The overall performance (0.508) has moderately strong correlation at significance level of 0.01. Conversely, knowledge transfer has no significant correlation with organizational performance at significance level of 0.05.

Strategy content effect is established when the significance effect of knowledge transfer on organizational performance is not significant in equation 3. If the significance effect of knowledge transfer on organizational performance is reduced to zero, there would be strong evidence for single dominant strategy content. If the significance effect of knowledge transfer on organizational performance is not zero, it indicates that multiple strategy content factors are in operation (Kim et al, 2001).

The significance intervening influence of strategy content on the relationship between knowledge transfer and organizational performance explains the Beta and the t-values that describe the knowledge transfer, strategy content and organizational performance. The summary of combined effects explains the correlation coefficient (R), the coefficient of determination (R^2), the overall statistical significance (F-ratio) and level of significance (p-value).

The research used the simultaneous method of regression analysis (Kim et al, 2001) to examine the significant intervening influence of strategy content on the relationship between knowledge transfer and organizational performance. The second hierarchy labeled model *b* for significance influence and labeled 2 for combined influence on each table illustrates the results of the strategy content influence.

Equation 1: $M_1 = \alpha_o + aX + \epsilon_o$

Table 4.61: Effect of Knowledge Transfer on Strategy Content

Strategy Content	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.116	.446		2.504	.017
Knowledge transfer	.659	.121	.683	5.448	.000

Source: Research Data, 2014

Equation 2: $Y1 = \alpha_1 + cX + \epsilon_1$ - (2)

Table 4.62: Effect of Knowledge Transfer on Organizational Performance

Organizational Performance	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.990	.417		4.772	.000
Knowledge transfer	.389	.113	.508	3.440	.002

Source: Research Data, 2014

Equation 3: $Y_2 = \alpha_2 + cX + bM_1 + \epsilon_2$ - (3)

Table 4.63: Effect of Knowledge Transfer and Strategy Content on Organizational Performance

Organizational Performance	**Un-standardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	1.758	.449		3.914	.000
Knowledge transfer	.253	.153	.329	1.647	.109
Strategic Content	.208	.159	.262	1.308	.200

Source: Research Data, 2014

Table 4.61 of equation 1, shows that effect of knowledge transfer and strategy content on organizational performance is significant ($p < 0.05$). Table 4.62 of equation 2, shows that the effect of knowledge transfer on organizational performance is also significant ($p < 0.05$). In equation 3, p-value of strategy content is not reduced to zero. Therefore, there is no strong evidence for single dominant strategy content. However, the p-value of knowledge transfer is not zero ($p = 0.109$). This indicates that there are multiple strategy content factors operating (Kim et al, 2001) in these listed companies.

Table 4.64: Combined Effect of Knowledge Transfer and Strategy Content on Financial Performance

Model Summary[c]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.223[a]	.050	.609	.050	1.774	.192
2	.478[b]	.228	.557	.178	7.627	.009

a. Predictors: (Constant), Knowledge transfer

b. Predictors: (Constant), Knowledge transfer , Strategic Content

c. Dependent Variable: Financial Performance

Source: Research Data, 2014

Table 4.64 illustrates the combined effect of knowledge transfer and strategy content on financial performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.223, when the parameter of strategy content is added, it increases to 0.478. The results further indicate that there are different variations in financial performance by knowledge transfer and strategy content. The coefficient of determination (R^2) of knowledge transfer is 5%. When parameter of strategy content is added, then change of the coefficient of determination (ΔR^2) increases by 17.8%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 1.774. When the parameter of strategy content is added, the change in F-ratio is 7.627. The corresponding p-value for the various models, knowledge transfer is not significant ($p > 0.05$). When the parameter of strategy content is added model 2 is significant ($p < 0.05$). The results show that strategy content has intervening significant influence on the relationship between knowledge transfer and financial performance ($p < 0.05$).

Table 4.65: Combined Effect of Knowledge Transfer and Strategy Content on Non - Financial Performance

Model Summary[c]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.568[a]	.322	1.91785	.322	16.164	.000
2	.644[b]	.415	1.80881	.093	5.223	.029

a. Predictors: (Constant), Knowledge transfer

b. Predictors: (Constant), Knowledge transfer, Strategic Content

c. Dependent Variable: Non - Financial Performance

Source: Research Data, 2014

Table 4.65 illustrates the combined effect of knowledge transfer and strategy content on non-financial performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.568, when the parameter of strategy content is added, it increases to 0.644. The results further indicate that there are different variations in financial performance by knowledge transfer and strategy content. The coefficient of determination (R^2) of knowledge transfer is 32.2%. When parameter of strategy content is added, then change of the coefficient of determination (ΔR^2) increases by 9.3%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 16.164. When the parameter of strategy content is added, the change in F-ratio is 5.223. The corresponding p-value for models 1 and 2 are significant ($p < 0.05$). The results show that strategy content has intervening influence on the relationship between knowledge transfer and non-financial performance.

4.8.5 The Joint Effect of Knowledge Transfer, Strategy Content and External Environment on Organizational Performance

The fifth objective was to determine the joint effect of knowledge transfer, strategy content, and external environment on organizational performance of companies listed on the Nairobi Securities Exchange. It was tackled by testing hypothesis five that stated that, the joint effect of knowledge transfer, strategy content and external environment on performance is significantly different from the independent effect of the variables. Regression analysis and Pearson correlation were used to analyze the data. The equation of this hypothesis stated that, $Y_3 = \alpha_o + \alpha_1 X + \alpha_2 M + \alpha_3 Z + \epsilon_o$

The tests include the correlations of the variables, the significance joint effect of knowledge transfer, strategy content and external environment on organizational performance, the combined effects of knowledge transfer, strategy content and external environment on financial performance, the combined effect of knowledge transfer and strategy content on non-financial performance and the combined effects of knowledge transfer, strategy content and dimensions of external environment on dimensions of performance. The correlations measure combined strength of the given variables. The significance effects test the coefficients, t-value and the p-values. The critical value of t-value from the table with 99 degrees of freedom and a level of significance value of 0.05 is 2.037. The combined effect explains the correlation coefficient (R), the coefficient of determination (R^2), the overall statistical significance (F-ratio) and level of significance (p-value).

Table 4.66: Correlation between Knowledge Transfer, Strategy Content, External Environment and Organizational Performance

Knowledge transfer / Strategy Content/ External Environment	**Organizational Performance**					
	Financial	Customer	Internal Business Process	Learning and Growth	Non-Market	Overall Non-financial Performance
Knowledge transfer	-.223	.547**	.667**	.299	.285	.568**
Strategic Content	-.461**	.658**	.805**	.293	.173	.610**
Munificence	-.427**	.546**	.604**	.264	-.024	.436**
Dynamism	-.378*	.628**	.684**	.444**	.112	.588**
Complexity	-.455**	.293	.435**	.041	.181	.308

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

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

Source: Research Data, 2014

Table 4.66 illustrates the correlation between knowledge transfer, strategy content, external environment and performance. From the table, at the significance level of 0.01, knowledge transfer (-0.223) has no significant correlation, while strategy content (-0.461), environmental munificence (-0.427) and environmental complexity (-0.455) have moderately strong correlation with financial performance. Overall, knowledge transfer (0.568), environmental munificence (0.436) and dynamism (0.588) have moderately strong correlations, while strategy content (0.610) has strong correlation on non-financial performance. However, knowledge transfer, strategy content, environmental munificence and complexity have no significant correlation with learning and growth performance; and non-market performance.

If the significance effect of knowledge transfer on organizational performance is not zero, it indicates that multiple strategy content factors are in operation. The joint effect explains the correlation coefficient (R), the coefficient of determination (R^2), the overall statistical significance (F-ratio) and level of significance (p-value). The research used the hierarchical method of regression analysis to examine the joint effect of knowledge transfer, strategy content, external environment and organizational performance. The third hierarchy labeled *c* for combined joint effect and labeled model 3 for significance joint effect on each table illustrates the results.

Table 4.67: Joint Effect of Knowledge Transfer, Strategy Content, External Environment on Organizational Performance

Organizational Performance		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.990	.417		4.772	.000
	Knowledge transfer	.389	.113	.508	3.440	.002
2	(Constant)	1.758	.449		3.914	.000
	Knowledge transfer	.253	.153	.329	1.647	.109
	Strategic Content	.208	.159	.262	1.308	.200
3	(Constant)	1.699	.486		3.495	.001
	Knowledge transfer	.253	.155	.331	1.630	.113
	Strategic Content	.177	.184	.223	.961	.344
	External Environment	.053	.154	.064	.345	.733

Source: Research Data, 2014

Table 4.67 illustrates the joint effect of knowledge transfer, strategy content, external environment and performance. In model 3, there is a relatively high positive impact for knowledge transfer ($\beta = 0.391$). Knowledge transfer, strategy content and external environment have positive effect. No statistically significance differences describe results for the combined effect of knowledge transfer, strategy content and external environment on organizational performance. The p-value of knowledge transfer is not zero ($p = 0.113$). This indicates that there are multiple strategy content factors

operating. However, the joint effect of knowledge transfer, strategy content and external environment on organizational performance is not significant ($p > 0.05$). No statistically significance differences describe results for the joint effect of knowledge transfer, strategy content and external environment on strategy on organizational performance as low t-values ($p > 0.05$), since their calculated t-values are less than the critical value (2.037)

Table 4.68: Joint Effect of Knowledge Transfer, Strategy Content, External Environment and Financial Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.223[a]	.050	.609	.050	1.774	.192
2	.478[b]	.228	.557	.178	7.627	.009
3	.546[c]	.298	.539	.070	3.186	.084

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, External Environment
d. Dependent Variable: Financial Performance

Source: Research Data, 2014

Table 4.68 illustrates the joint effect of knowledge transfer, strategy content and external environment on financial performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.223, when the parameter of strategy content is added it increases to 0.478, with addition of the parameter of external environment it increases to 0.546. The results further indicate that there are different variations in financial performance by the joint effect of knowledge transfer, strategy content and external environment. The coefficient of determination (R^2) of knowledge transfer is 5%. When parameter of strategy content is added, the change of the coefficient of

determination (ΔR^2) increases by 17.8%, with a further addition of the parameter of the interaction of external environment the % of variability accounted for increases by 7%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 1.774. When the parameter of strategy content is added, the change in F-ratio is 7.627, with a further addition of the parameter of external environment the change in F- ratio is 3.186.

The corresponding p-value for the various models, knowledge transfer is not significant ($p > 0.05$). When the parameter of strategy content is added model 2 is significant ($p < 0.05$), with a further addition of the external environment Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and external environment on financial performance has no statistically significant effect.

Table 4.69: Joint Effect of Knowledge Transfer, Strategy Content, External Environment and Non - Financial Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.568[a]	.322	1.91785	.322	16.164	.000
2	.644[b]	.415	1.80881	.093	5.223	.029
3	.656[c]	.430	1.81337	.015	.834	.368

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, External Environment
d. Dependent Variable: Non – Financial Performance

Source: Research Data, 2014

Table 4.69 illustrates the joint effect of knowledge transfer, strategy content and external environment on non-financial performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.568, when the parameter of

strategy content is added it increases to 0.644, with addition of the parameter of external environment it increases to 0.656. The results further indicate that there are different variations in non-financial performance by the joint effect of knowledge transfer, strategy content and external environment. The coefficient of determination (R^2) of knowledge transfer is 32.2%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 9.3%, with a further addition of the parameter of the interaction of external environment the % of variability accounted for increases by 1.5%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 16.164. When the parameter of strategy content is added, the change in F-ratio is 5.223, with a further addition of the parameter of external environment the change in F- ratio is 0.834. The corresponding p-value for models 1 and 2 are significant ($p < 0.05$), with a further addition of the external environment, Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and external environment on non-financial performance has no statistically significant effect.

Table 4.70: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Complexity on Financial Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.235[a]	.055	.616	.055	1.928	.174
2	.480[b]	.230	.564	.175	7.275	.011
3	.555[c]	.308	.543	.078	3.508	.071

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer , Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Complexity
d. Dependent Variable: Financial Performance

Source: Research Data, 2014

Table 4.70 illustrates the joint effect of knowledge transfer, strategy content and environmental complexity on financial performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.235, when the parameter of strategy content is added it increases to 0.480, with addition of the parameter of environmental complexity it increases to 0.555. The results further indicate that there are different variations in financial performance by the joint effect of knowledge transfer, strategy content and environmental complexity. The coefficient of determination (R^2) of knowledge transfer is 5.5%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 17.5%, with a further addition of the parameter of the interaction of external environment the % of variability accounted for increases by 7.8%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 1.928. When the parameter of strategy content is added, the change in F-ratio is 7.275, with a further addition of the parameter of environmental complexity the change in F- ratio is 3.508.

The corresponding p-value for the various models, knowledge transfer is not significant ($p > 0.05$). When the parameter of strategy content is added model 2 is significant ($p < 0.05$), with a further addition of the external environment Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental complexity on financial performance has no statistically significant effect.

Table 4.71: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Complexity and Customer Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.565[a]	.319	.541	.319	15.490	.000
2	.681[b]	.464	.488	.145	8.653	.006
3	.681[c]	.464	.495	.000	.002	.963

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Complexity
d. Dependent Variable: Customer Performance

Source: Research Data, 2014

Table 4.71 illustrates the joint effect of knowledge transfer, strategy content and environmental complexity on customer performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.565, when the parameter of strategy content is added it increases to 0.681, with addition of the parameter of environmental complexity remains at 0.681. The results further indicate that there are different variations in customer performance by the joint effect of knowledge transfer, strategy content and environmental complexity. The coefficient of determination (R^2) of knowledge transfer is 31.9%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 14.5%, with a further addition of the parameter of environmental complexity the % of variability accounted for increases by 0%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 15.490. When the parameter of strategy content is added, the change in F-ratio is 8.653, with a further addition of the parameter of environmental complexity the change in F- ratio is 0.002.

The corresponding p-value for the various models, knowledge transfer is significant ($p < 0.05$). When the parameter of strategy content is added model 2 is significant ($p < 0.05$), with a further addition of the external environment Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental complexity on customer performance has no statistically significant effect.

Table 4.72: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Complexity on Internal Business Process Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.657[a]	.432	.631	.432	25.098	.000
2	.816[b]	.667	.491	.235	22.509	.000
3	.822[c]	.676	.492	.009	.897	.351

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Complexity
d. Dependent Variable: Internal Business Process Performance

Source: Research Data, 2014

Table 4.72 illustrates the joint effect of knowledge transfer, strategy content and environmental complexity on internal business process performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.657, when the parameter of strategy content is added it increases to 0.816, with addition of the parameter of environmental complexity it increases to 0.822. The results further indicate that there are different variations in internal business process performance by the joint effect of knowledge transfer, strategy content and environmental complexity. The coefficient of determination (R^2) of knowledge transfer is 43.2%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by

23.5%, with a further addition of the parameter of environmental complexity, the % of variability accounted for increases by 0.9%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 25.098. When the parameter of strategy content is added, the change in F-ratio is 22.509, with a further addition of the parameter of environmental complexity the change in F- ratio is 0.897.

The corresponding p-value for models 1 and 2 are significant ($p < 0.05$), with a further addition of environmental complexity Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental complexity on internal business process performance has no statistically significant effect.

Table 4.73: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Complexity and Learning and Growth Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.281[a]	.079	.641	.079	2.822	.102
2	.308[b]	.095	.646	.016	.567	.457
3	.321[c]	.103	.653	.008	.285	.598

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Complexity
d. Dependent Variable: Learning and Growth Performance

Source: Research Data, 2014

Table 4.73 illustrates the joint effect of knowledge transfer, strategy content and environmental complexity on learning and growth performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.281, when the parameter of strategy content is added it increases to 0.308, with addition of the parameter of environmental complexity it increases to 0.321. The results further indicate that there

are different variations in financial performance by the joint effect of knowledge transfer, strategy content and external environment. The coefficient of determination (R^2) of knowledge transfer is 7.9%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 1.6%, with a further addition of the parameter of the interaction of environmental complexity the % of variability accounted for increases by 0.8%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 2.822. When the parameter of strategy content is added, the change in F-ratio is 0.567; with a further addition of the parameter of environmental complexity the change in F- ratio is 0.285.

The corresponding p-value for models 1, 2 and 3 are not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental complexity on learning and growth performance has no statistically significant effect.

Table 4.74: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Complexity and Non - Market Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.223[a]	.050	.694	.050	1.726	.198
2	.223[b]	.050	.705	.000	.004	.948
3	.260[c]	.068	.710	.018	.591	.448

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Complexity
d. Dependent Variable: Non-Market performance

Source: Research Data, 2014

Table 4.74 illustrates the joint effect of knowledge transfer, strategy content and environmental complexity on non-market performance. The results show that the

correlation coefficient (R) of knowledge transfer is 0.223, when the parameter of strategy content is added it remains at 0.223, with addition of the parameter of environmental complexity it increases to 0.260. The results further indicate that there are different variations in non-market performance by the joint effect of knowledge transfer, strategy content and environmental complexity.

The coefficient of determination (R^2) of knowledge transfer is 5%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 0%, with a further addition of the parameter of environmental complexity the % of variability accounted for increases by 1.8%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 1.726. When the parameter of strategy content is added, the change in F-ratio is 0.004, with a further addition of the parameter of environmental complexity the change in F- ratio is 0.591. The corresponding p-value for models 1, 2 and 3 are not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental complexity on non-market performance has no statistically significant effect.

Table 4.75: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Dynamism on Financial Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.235[a]	.055	.616	.055	1.928	.174
2	.480[b]	.230	.564	.175	7.275	.011
3	.492[c]	.242	.569	.012	.500	.485

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Dynamism
d. Dependent Variable: Financial Performance

Source: Research Data, 2014

Table 4.75 illustrates the joint effect of knowledge transfer, strategy content and environmental dynamism on financial performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.235, when the parameter of strategy content is added it increases to 0.480, with addition of the parameter of environmental dynamism it increases to 0.492. The results further indicate that there are different variations in financial performance by the joint effect of knowledge transfer, strategy content and environmental dynamism. The coefficient of determination (R^2) of knowledge transfer is 5.5%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 17.5%, with a further addition of the parameter of environmental dynamism the % of variability accounted for increases by 1.2%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 1.928. When the parameter of strategy content is added, the change in F-ratio is 7.275, with a further addition of the parameter of environmental dynamism the change in F- ratio is 0.500.

The corresponding p-value for the various models, knowledge transfer is not significant ($p > 0.05$). When the parameter of strategy content is added model 2 is significant ($p < 0.05$), with a further addition of environmental dynamism Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental dynamism on financial performance has no statistically significant effect.

Table 4.76: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Dynamism on Customer Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.565[a]	.319	.541	.319	15.490	.000
2	.681[b]	.464	.488	.145	8.653	.006
3	.726[c]	.528	.465	.063	4.166	.050

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Dynamism
d. Dependent Variable: Customer Performance

Source: Research Data, 2014

Table 4.76 illustrates the joint effect of knowledge transfer, strategy content and environmental dynamism on customer performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.565, when the parameter of strategy content is added, it increases to 0.681, with addition of the parameter of environmental dynamism it increases to 0.726. The results further indicate that there are different variations in customer performance by the joint effect of knowledge transfer, strategy content and environmental dynamism. The coefficient of determination (R^2) of knowledge transfer is 31.9%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 14.5%, with a further addition of the parameter of environmental dynamism the % of variability accounted for increases by 6.3%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 15.490. When the parameter of strategy content is added, the change in F-ratio is 8.653, with a further addition of the parameter of environmental dynamism the change in F- ratio is 4.166. The corresponding p-value for models 1, 2 and 3 are significant ($p < 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental dynamism on customer performance has statistically significant effect.

Table 4.77: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Dynamism and Internal Business Process Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.657[a]	.432	.631	.432	25.098	.000
2	.816[b]	.667	.491	.235	22.509	.000
3	.843[c]	.710	.466	.043	4.635	.039

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Dynamism
d. Dependent Variable: Internal Business Process Performance

Source: Research Data, 2014

Table 4.77 illustrates the joint effect of knowledge transfer, strategy content and environmental dynamism on internal business process performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.657, when the parameter of strategy content is added, it increases to 0.816, with addition of the parameter of environmental dynamism it increases to 0.843. The results further indicate that there are different variations in internal business process performance by the joint effect of knowledge transfer, strategy content and environmental dynamism. The coefficient of determination (R^2) of knowledge transfer is 43.2%. When parameter of strategy

content is added, the change of the coefficient of determination (ΔR^2) increases by 23.5%, with a further addition of the parameter of environmental dynamism the % of variability accounted for increases by 4.3%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 25.098. When the parameter of strategy content is added, the change in F-ratio is 22.509, with a further addition of the parameter of environmental dynamism the change in F- ratio is 4.325. The corresponding p-value for models 1, 2 and 3 are significant ($p < 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental dynamism on internal business process performance has statistically significant effect.

Table 4.78: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Dynamism and Learning and Growth Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.281[a]	.079	.641	.079	2.822	.102
2	.308[b]	.095	.646	.016	.567	.457
3	.454[c]	.206	.614	.111	4.340	.046

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Dynamism
d. Dependent Variable: Learning and Growth Performance

Source: Research Data, 2014

Table 4.78 illustrates the joint effect of knowledge transfer, strategy content and environmental dynamism on learning and growth performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.281, when the parameter of strategy content is added, it increases to 0.308, with addition of the parameter of environmental dynamism it increases to 0.454. The results further indicate that there

are different variations in financial performance by the joint effect of knowledge transfer, strategy content and environmental dynamism. The coefficient of determination (R^2) of knowledge transfer is 7.9%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 1.6%, with a further addition of the parameter of the interaction of external environment the % of variability accounted for increases by 11.6%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 2.822. When the parameter of strategy content is added, the change in F-ratio is 0.567, with a further addition of the parameter of environmental dynamism the change in F- ratio is 4.340. The corresponding p-value for models 1 and 2 are not significant ($p > 0.05$), with a further addition of the external environment Model 3 is significant ($p < 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental dynamism on learning and growth performance has statistically significant effect.

Table 4.79: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Dynamism and Non - Market Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.223[a]	.050	.694	.050	1.726	.198
2	.223[b]	.050	.705	.000	.004	.948
3	.224[c]	.050	.716	.000	.005	.944

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Dynamism
d. Dependent Variable: Non-Market performance

Source: Research Data, 2014

Table 4.79 illustrates the joint effect of knowledge transfer, strategy content and environmental dynamism on non-market performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.223, when the parameter of strategy content is added, it remains at 0.223, with addition of the parameter of environmental dynamism it increases to 0.224. The results further indicate that there are different variations in financial performance by the joint effect of knowledge transfer, strategy content and environmental dynamism. The coefficient of determination (R^2) of knowledge transfer is 5%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 0%, with a further addition of the parameter of environmental dynamism the % of variability accounted for increases by 0%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 1.726. When the parameter of strategy content is added, the change in F-ratio is 0.004, with a further addition of the parameter of environmental dynamism the change in F- ratio is 0.005. The corresponding p- value for models 1, 2 and 3 are significant ($p < 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and external environment on financial performance has no statistically significant effect.

Table 4.80: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Munificence and Financial Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.223[a]	.050	.609	.050	1.774	.192
2	.478[b]	.228	.557	.178	7.627	.009
3	.523[c]	.274	.548	.046	2.006	.166

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Munificence
d. Dependent Variable: Financial Performance

Source: Research Data, 2014

Table 4.80 illustrates the joint effect of knowledge transfer strategy content and environmental munificence on financial performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.223, when the parameter of strategy content is added, it increases to 0.478, with addition of the parameter of environmental munificence it increases to 0.523. The results further indicate that there are different variations in financial performance by the joint effect of knowledge transfer, strategy content and environmental munificence. The coefficient of determination (R^2) of knowledge transfer is 5%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 17.8%, with a further addition of the parameter of environmental munificence the % of variability accounted for increases by 4.6%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 1.774. When the parameter of strategy content is added, the change in F-ratio is 7.627, with a further addition of the parameter of external environment the change in F- ratio is 2.006. The corresponding p-value for the various models, knowledge transfer is not significant ($p > 0.05$). When the parameter of strategy content is added model 2 is

significant ($p < 0.05$), with a further addition of environmental munificence Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental munificence on financial performance has no statistically significant effect.

Table 4.81: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Munificence and Customer Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.547[a]	.300	.541	.300	14.546	.001
2	.671[b]	.451	.486	.151	9.086	.005
3	.704[c]	.495	.473	.044	2.814	.103

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Munificence
d. Dependent Variable: Customer Performance

Source: Research Data

Table 4.81 illustrates the joint effect of knowledge transfer, strategy content and environmental munificence on customer performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.547, when the parameter of strategy content is added, it increases to 0.671, with addition of the parameter of environmental munificence it increases to 70.4%. The results further indicate that there are different variations in customer performance by the joint effect of knowledge transfer, strategy content and external environment. The coefficient of determination (R^2) of knowledge transfer is 30%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 15.1%, with a further addition of the parameter of environmental munificence the % of variability accounted for increases by 4.4%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 14.546. When the parameter of strategy content is added, the change in F-ratio is 9.086, with a further addition of the parameter of external environment the change in F- ratio is 2.814. The corresponding p-value for models 1 and 2 are significant ($p < 0.05$), with a further addition of the environmental munificence Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental munificence on customer performance has no statistically significant effect.

Table 4.82: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Dynamism and Internal Business Process Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.667[a]	.444	.622	.444	27.206	.000
2	.821[b]	.673	.484	.229	23.100	.000
3	.840[c]	.706	.466	.033	3.570	.068

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Munificence
d. Dependent Variable: Internal Business Process Performance

Source: Research Data, 2014

Table 4.82 illustrates the joint effect of knowledge transfer, strategy content and environmental munificence on internal business process performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.667, when the parameter of strategy content is added, it increases to 0.821, with addition of the parameter of environmental munificence it increases to 0.840. The results further indicate that there are different variations in internal business process performance by

the joint effect of knowledge transfer, strategy content and environmental munificence. The coefficient of determination (R^2) of knowledge transfer is 44.4%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 22.9%, with a further addition of the parameter of environmental munificence the % of variability accounted for increases by 3.3%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 27.206. When the parameter of strategy content is added, the change in F-ratio is 23.100, with a further addition of the parameter of environmental munificence the change in F- ratio is 3.570. The corresponding p-value for models 1 and 2 are significant ($p < 0.05$), with a further addition of environmental munificence Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental munificence on internal business process performance has no statistically significant effect.

Table 4.83: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Dynamism on Learning and Growth Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.299[a]	.089	.633	.089	3.337	.077
2	.323[b]	.104	.637	.015	.549	.464
3	.343[c]	.117	.642	.013	.476	.495

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Munificence
d. Dependent Variable: Learning and Growth Performance

Source: Research Data, 2014

Table 4.83 illustrates the joint effect of knowledge transfer, strategy content and environmental munificence on learning and growth performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.299, when the parameter of strategy content is added, it increases to 0.323, with addition of the parameter of environmental munificence it increases to 0.343. The results further indicate that there are different variations in learning and growth performance by the joint effect of knowledge transfer, strategy content and environmental munificence. The coefficient of determination (R^2) of knowledge transfer is 8.9%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 1.5%, with a further addition of the parameter of the interaction of external environment the % of variability accounted for increases by 1.3%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 3.337. When the parameter of strategy content is added, the change in F-ratio is 0.549, with a further addition of the parameter of environmental munificence the change in F- ratio is 0.476. The corresponding p-value for models 1, 2 and 3 are not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental munificence on learning and growth performance has no statistically significant effect.

Table 4.84: Joint Effect of Knowledge Transfer, Strategy Content, Environmental Dynamism and Non - Market Performance

Model Summary[d]

Model	R	R Square	Std. Error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
1	.285[a]	.081	.720	.081	3.000	.092
2	.286[b]	.082	.731	.001	.032	.859
3	.327[c]	.107	.732	.025	.889	.353

a. Predictors: (Constant), Knowledge transfer
b. Predictors: (Constant), Knowledge transfer, Strategic Content
c. Predictors: (Constant), Knowledge transfer, Strategic Content, Munificence
d. Dependent Variable: Non-Market performance

Source: Research Data, 2014

Table 4.84 illustrates the joint effect of knowledge transfer, strategy content and environmental munificence on non-market performance. The results show that the correlation coefficient (R) of knowledge transfer is 0.285, when the parameter of strategy content is added, it increases to 0.286, with addition of the parameter of environmental munificence it increases to 0.327. The results further indicate that there are different variations in non-market performance by the joint effect of knowledge transfer, strategy content and environmental munificence. The coefficient of determination (R^2) of knowledge transfer is 8.1%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 0.1%, with a further addition of the parameter of environmental munificence the % of variability accounted for increases by 2.5%.

The corresponding F-ratio for the various models, knowledge transfer F-ratio is 3.000. When the parameter of strategy content is added, the change in F-ratio is 0.032, with a further addition of the parameter of environmental munificence the change in F- ratio is 0.889. The corresponding p- value for models 1, 2 and 3 are not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and environmental munificence on non-market performance has no statistically significant effect.

4.9 Interpretation of Results

The interpretation of the results includes the tests results for hypotheses one, two, three, four and five. The nature and strength of the variable relationships; and the variations explained by the models are interpreted. The F- ratio and p – values are also interpreted.

4.9.1 The Results of the Test of Hypothesis One

The results from the simple regression analysis show that the independent effect of knowledge transfer on organizational performance is significant ($t = 3.440$, $p < 0.05$). Correlation coefficient (R) ranges from 0.294 for financial performance to 0.703 for internal business process performance. The results further indicate that there are different variations in organizational performance by knowledge transfer. The coefficient of determination (R^2) ranges from 8.6% for financial performance to 49.4% for internal business performance. The corresponding F-ratio for the various models, range from 0.733 for financial performance to 7.556 for internal business process performance. The overall results reveal that ($p < 0.05$).

The results reveal that relationship between knowledge transfer and organizational performance is statistically significant (R= 0.508). Besides, knowledge transfer explains the variation in organizational performance (R^2 = 49.4%). The overall results reveal that knowledge transfer has statistically significant effect on organizational performance (F = 11.838 and $p < 0.05$). Therefore, hypothesis one (H_1) is supported.

4.9.2 The Results of the Test of Hypothesis Two

The results show that there is a relationship between knowledge transfer and content. Correlation coefficient (R) ranges from 0.291 for quality to 0.753 for analyzers. The results further indicate that there are different variations in strategy content by knowledge transfer. The coefficient of determination (R^2) ranges from 8.5% for quality to 56.7% for analyzers. The corresponding F-ratio for the various models, range from 0.717 for quality to 10.150 for analyzers.

The overall results reveal that knowledge transfer has statistically significant effect on the strategy content. The results reveal that correlation between knowledge transfer and strategy content is statistically significant (R= 0.683) in the companies listed on the Nairobi Securities Exchange. Besides, knowledge transfer explains the variation in strategy content (R^2 = 46.6%). The overall results reveal that knowledge transfer has statistically significant effect on strategy content (F = 29.682 and $p < 0.05$). Therefore, hypothesis two (H_2) is supported.

4.9.3 Results of the Tests of Hypothesis Three

The results show that the correlation coefficient (R) of knowledge transfer is 0.683, when the parameter of external environment is added, it increases to 0.769, with addition of the parameter of the interaction of knowledge transfer and external environment it increases to 0.771. The results further indicate that there are different

variations in strategy content by knowledge transfer and external environment. The coefficient of determination (R^2) is 46.6%. When parameter of external environment is added, the change of the coefficient of determination (ΔR^2) increases by 12.6%, with a further addition of the parameter of the interaction of knowledge transfer and external environment the % of variability accounted for increases by 0.2%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 29.682. When the parameter of external environment is added, the change in F-ratio is 10.165, with a further addition of the parameter of the interaction of knowledge transfer and external environment the change in F- ratio is 0.162. The corresponding p-value for the various models, knowledge transfer is significant ($p < 0.05$). When the parameter of external environment is added model 2 is significant ($p < 0.05$), with a further addition of the interaction of knowledge transfer and external environment Model 3 is not significant ($p > 0.05$). The result confirms that external environment has no statistically significant relationship between knowledge transfer and strategy content.

Overall, the study further illustrates that the overall external environment has no significant influence on the relationship between knowledge transfer and strategy content ($R^2 = 0.002$, $F = 0.162$ and $p > 0.05$). This means that even though there is correlation between the combined effect of knowledge transfer and external environment on strategy content, there is no significant effect. Moreover, the variations explained by the combined effect of knowledge transfer and external environment on strategy content is not statistically significant on the companies listed on the Nairobi Securities Exchange. Nevertheless, environmental complexity ($R = 0.605$, $R^2 = 13.6\%$, $F = 6.642$, $p < 0.05$) has significant moderating influence on the relationship between knowledge transfer and research organizations. Therefore, hypothesis three (H_3) is not supported.

4.9.4 Results of the Test of Hypothesis Four

The results on financial performance show that the correlation coefficient (R) of knowledge transfer is 0.223, when the parameter of strategy content is added it increases to 0.478. The results further indicate that there are different variations in financial performance by knowledge transfer and strategy content. The coefficient of determination (R^2) of knowledge transfer is 5%. When parameter of strategy content is added, then change of the coefficient of determination (ΔR^2) increases by 17.8%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 1.774. When the parameter of strategy content is added, the change in F-ratio is 7.627. The corresponding p- value for the various models, knowledge transfer is not significant ($p > 0.05$). When the parameter of strategy content is added model 2 is significant ($p < 0.05$). The results show that strategy content has intervening influence on the relationship between knowledge transfer and financial performance.

The results on non-financial performance show that the correlation coefficient (R) of knowledge transfer is 0.568, when the parameter of strategy content is added it increases to 0.644. The results further indicate that there are different variations in financial performance by knowledge transfer and strategy content. The coefficient of determination (R^2) of knowledge transfer is 32.2%. When parameter of strategy content is added, then change of the coefficient of determination (ΔR^2) increases by 9.3%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 16.164. When the parameter of strategy content is added, the change in F-ratio is 5.223. The corresponding p- value for models 1 and 2 are significant ($p < 0.05$). The results show that strategy content has intervening influence on the relationship between knowledge transfer and non-financial performance.

The multiple regression analysis results illustrates in equation 3 that p-value of knowledge transfer is not zero ($p = 0.109$). This indicates that there are multiple strategy content factors operating on the companies listed on the Nairobi Securities Exchange. The results on the combined effect of knowledge transfer and strategy content on both financial and non-financial performance are significant ($p < 0.05$). Knowledge transfer and strategy content explain the variations on organizational performance. Moreover, there exists a relationship between knowledge transfer, strategy content and organizational performance in the companies listed on the Nairobi Securities Exchange. Overall, strategy content has statistically significant intervening influence on the relationship between knowledge transfer and organizational performance. Therefore, hypothesis four (H_4) is supported.

4.9.5 Results of the Test of Hypothesis Five

The results on financial performance show that the correlation coefficient (R) of knowledge transfer is 0.223, when the parameter of strategy content is added it increases to 0.478, with addition of the parameter of external environment it increases to 0.546. The results further indicate that there are different variations in financial performance by the joint effect of knowledge transfer, strategy content and external environment. The coefficient of determination (R^2) of knowledge transfer is 5%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 17.8%, with a further addition of the parameter of the interaction of external environment the % of variability accounted for increases by 7%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 1.774. When the parameter of strategy content is added, the change in F-ratio is 7.627, with a further addition of the parameter of external environment the change in F- ratio is 3.186.

The results on non-financial performance show that the correlation coefficient (R) of knowledge transfer is 0.568, when the parameter of strategy content is added it increases to 0.644, with addition of the parameter of external environment it increases to 0.656. The results further indicate that there are different variations in non-financial performance by the joint effect of knowledge transfer, strategy content and external environment. The coefficient of determination (R^2) of knowledge transfer is 32.2%. When parameter of strategy content is added, the change of the coefficient of determination (ΔR^2) increases by 9.3%, with a further addition of the parameter of the interaction of external environment the % of variability accounted for increases by 1.5%. The corresponding F-ratio for the various models, knowledge transfer F-ratio is 16.164. When the parameter of strategy content is added, the change in F-ratio is 5.223, with a further addition of the parameter of external environment the change in F- ratio is 0.834. The corresponding p- value for models 1 and 2 are significant ($p < 0.05$), with a further addition of the external environment, Model 3 is not significant ($p > 0.05$). The result confirms that the joint effect of knowledge transfer, strategy content and external environment on non-financial performance has no statistically significant effect.

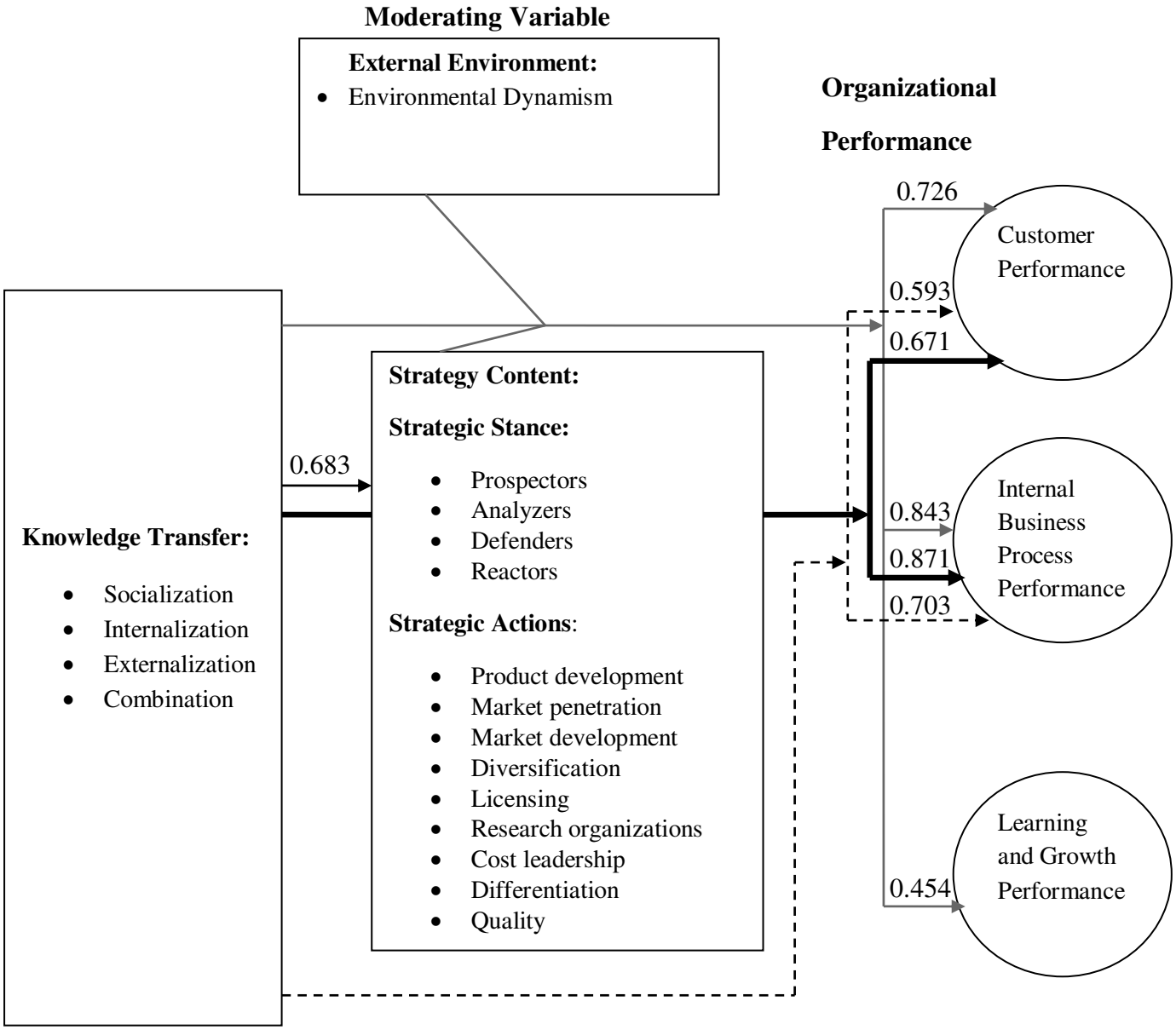
The joint effect of knowledge transfer, strategy content and external environment on organizational performance is statistically different from the independent effect of the variables. Overall, the joint effect of knowledge transfer, strategy content and external environment on organizational performance is statistically not significant. The study further reveals that joint effects of knowledge transfer, strategy content and environmental dynamism on customer performance, internal business performance and learning and growth performance are statistically significant ($p < 0.05$), and have R^2 = 6.3%, 4.3% and 11.1% additional power on performance respectively. The

influence of strategy content and external environment on the relationship between knowledge transfer and financial performance are 17.8% and 7% respectively, while on non-financial performance are 9.3% and 1.5% respectively. Therefore, hypothesis five (H_5) is supported.

4.10 Significant Effects of Regression Results

The researcher evaluated the logical factor that should be considered as part of the explanation of the results of the study. Parsimony was the preferred factor since the organizational performance dimension of financial performance and the external environment dimensions of munificence and complexity added little value to the comprehension of the study and were therefore deleted from the conceptual model. All the dimensions of knowledge transfer and the strategy content added value to the study, therefore, were not deleted. The summary of significant correlation relationship in regression analysis results is interpreted in figure 4.1.

Figure 4.1: Summary of Significant Effects in Regression Results



Key: Supported by Hypotheses in bold type ($p < 0.05$)

- - - - - - - - H1

——— H4

——— H5

——— H2

Source: Researcher, 2014

Figure 4.1 illustrates the summary of significant correlation relationships in regression results. The results of H_1 show that knowledge transfer has moderately strong correlation with customer performance (0.531) and has strong correlation with internal business process performance (0.703). H_2 shows that knowledge transfer has moderately strong correlation with strategy content (0.683). H_3 shows that knowledge transfer and strategy content have moderately strong correlation with customer performance (0.671) and have strong correlation with internal business process performance (0.871). H_5 shows that the joint effect of knowledge transfer, strategy content and environmental dynamism has strong correlation with customer performance (0.726) and internal business process performance (0.843); and moderately weak correlation with learning and growth performance (0.454).

These results illustrate the legitimate theoretical value of the study. It shows the significant results of hypotheses H_1, H_2, H_4 and H_5 that are validated by the study. The strength of correlation of the linkages is explained. Strategy content has significant influence while external environment has a degree of environmental dynamism on the relationship between knowledge transfer and organizational performance. The study reports that environmental dynamism is powerful by 6.3%, 4.3% and 11.1% respectively on the joint effects of knowledge transfer, strategy content and environmental dynamism on customer performance, internal business process performance and; learning and growth performance. Figure 4.1 reveals that modes of knowledge transfer are employed to develop strategy content in dynamic environment by applying balanced scorecard performance.

4.11 Auto-Correlation and Heteroskedasticity Tests

The auto-correlation and the heteroskedasticity test are carried out after the regression models. When serial correlations of errors in regression models are observed as missing Durbin-Watson tests are done (Dufour and Dagenias, 1985). If the observed value of the test is greater than the tabulated lower bound, then there is auto-correlation. If the statistics tests value lies between the lower and the upper bounds or the values are approaching 2 there is no autocorrelation. Heteroskedasticity arises when the variances of the residuals are not constant but are different in different observations (Gupta, 1999), White's test can be used to check this issue. To conduct this test, a regression of the squares of residuals is run on the variables suspected of causing the heteroskedasticity, their squares and cross products. The required value of the results is then calculated by multiplying the sample size by the R^2. Heteroskedasticity is present when the calculated chi-square is higher than the table chi-square. Table 4.85 illustrates the tests for auto-correlation and heteroskedasticity.

Table 4.85: Tests for Auto-Correlation and Heteroskedasticity

Hypotheses	Auto-Correlation (Durbin-Watson Test)	Heteroskedasticity (White Test) Table $\chi^2(36) = 23.3$
H_1	1.731	2.052
H_2	2.020	6.948
H_3	2.155	15.228
H_4	1.638	16.488
H_5	1.581	14.112

Source: Research Data, 2014

Table 4.85 illustrates Durbin-Watson and White tests used to determine the auto-correlation and the heterokedasticity problems in the results of the regression model used in the study. From the table, all the Durbin-Watson test values are approaching 2; H_1, H_3, H4 and H_5 are between the lower and the upper bounds while H_2 is above the tabulated bound. This shows that there are no auto-correlated errors. With regard to heteroskedasticity, the standard table value for χ^2 (36) =23.3 at the recommended level of 95% confidence. The calculated χ^2 are lower than the table value for H_1, H_2, H3, H4 and H_5. Therefore, there is no heteroskedasticity in the regression analysis.

4.12 Objectives, Hypotheses and Results

The researcher compared the objectives, hypotheses and the results of the study. This is essential to ascertain whether the goal of the study was successful or not. The comparison also clarifies the outcome of the objectives. The outcome may either support or not support the hypotheses of the study. Table 4.86 illustrates the summary of the comparison of the research objectives, corresponding hypotheses and results.

Table 4.86: Summary of the Objectives, corresponding Hypotheses and Results

Objectives	Hypotheses	Results
i. To determine the effect of knowledge transfer on organizational performance of companies listed in Nairobi Securities Exchange.	**H_1**: Knowledge transfer has significant effect on organizational performance.	Supported by the Study
ii. To assess the effect of knowledge transfer on the strategy content of companies listed in Nairobi Securities Exchange.	**H_2**: Knowledge transfer has significant effect on strategy content.	Supported by the Study
iii. To establish the influence of external environment on the relationship between knowledge transfer and the strategy content of companies listed in Nairobi Securities Exchange.	**H_3**: External environment has significant moderating influence on the relationship between knowledge transfer and strategy content.	Not Supported by the Study
iv. To determine the influence of strategy content on the relationship between knowledge transfer and organizational performance of companies listed in Nairobi Securities Exchange.	**H_4**: Strategy content has significant intervening influence on the relationship between knowledge transfer and organizational performance.	Supported by the Study
v. To determine the joint effect of knowledge transfer, the strategy content and external environment on organizational performance of companies listed in Nairobi Securities Exchange.	**H_5**: The joint effect of knowledge transfer, strategy content and external environment on organizational performance is significantly different from the independent effect of the variables.	Supported by the Study

Table 4.86 illustrates the objectives corresponding hypotheses and results. There are five objectives and hypotheses. Of the five hypotheses, four of them have been supported by the results of this study while one has not been supported. The study reveals that the overall external environment has no significant moderating influence on the relationship between knowledge transfer and organizational performance. Therefore, H_3 is not supported.

4.13 Chapter Summary

This chapter dealt with the data analysis and findings of the study. It involved the use of descriptive and inferential statistics. Descriptive statistics has been used on the analysis of data on the concepts, while inferential statistics has been used to test hypotheses. The response rate and organizational demographics of the study are presented. The chapter has further analyzed the knowledge transfer, strategy content, the environmental complexity, dynamism and munificence. Measures of performance focusing the perspectives of sustainable balanced scorecard have been tested. The inter-correlations of the knowledge transfer indicators have been tested to establish their independent usages.

The tests of hypotheses and interpretation of results have been done. The hypotheses tests include the relations of the variables based on the objectives of the study. Consequently, summary of significant correlation relationships in regression results has been presented; the auto-correlation and heteroskedasticity have been tested and presented; and a table illustrating the comparison of the objectives and corresponding hypotheses and results has been presented.

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.1 Introduction

This chapter will highlight what was carried out during the research. The results for each hypothesis will be discussed. It will compare the findings with the literature and conclusion expounded. The discussions include knowledge transfer and organizational performance; knowledge transfer and strategy content; knowledge transfer, external environment and strategy content; knowledge transfer, strategy content and organizational performance; and the joint effect of knowledge transfer, strategy content, external environment and organizational performance.

5.2 Knowledge Transfer and Organizational Performance

The results show that knowledge transfer has significant effect on organizational performance and have moderately strong correlation. Knowledge transfer has significant effect on customer and internal business process performance are significant and has moderately strong and strong correlations respectively. Customer performance is featured by the positive effects of internalization, externalization and combination; and the negative effect of socialization. Internal business process performance is featured by positive effects of socialization, internalization and externalization; and negative effects of combination. However, knowledge transfer has no significant effect on financial but has weak correlation; it also has no significant effect on learning and growth and non-market performance but have moderately weak correlations. The study reveals that knowledge transfer has significance effect on return on equity of financial, distribution time process of customer performance; innovation, customer management, operations and logistics of internal business performance and technologies of learning and growth performance.

The results are comparable with empirical studies of Lee and Choi (2003) and Rasula et al (2012). The empirical studies by Lee and Choi (2003) studied knowledge management enablers, processes and organizational performance. The emphasis was on knowledge creation processes such as socialization, internalization, externalization and combination. They established that information technology support has a positive impact on knowledge combination only. Organizational creativity is found to be critical for improving performance; neglecting ideas can undermine a business. Rasula et al (2012) studied the impact of knowledge management on performance and established that there is significant relationship between knowledge and performance.

The study further shows that team working interest, individual creativity, on job training and workshop have the high mean scores of knowledge transfer. Team working interest is comparable with empirical studies of Girotra et al (2009) who posit that in groups where individuals work alone first and then work together are able to generate more and better ideas. Individual creativity is comparable to Schilling (2005) who argues that innovation requires combining a creative idea with resources and expertise to embody the creative idea in a useful form. On job training is weighed against Hornitzky (2009) who posits that individual innovators share knowledge with those they trust and have similar values. Workshops is comparable with Zander and Kogut (1995) who argued that the dilemma to speed the internal transfer of knowledge arises when the capabilities which can be communicated within the firm are more likely to be easily imitated by competitors.

However social media and non-financial bonuses have low mean scores of knowledge transfer. Panahi et al (2012) posits that social media have abilities to comply some of the main requirements of tacit knowledge sharing. With regard to non-financial bonuses, Burgess (2005) argues that employees who perceive greater organizational

rewards for sharing knowledge spend more hours beyond their immediate work group. Organizations need to embrace social media and provide non-financial bonuses to boost their performance as argued by Panahi et al (2012) and Burgess (2005). The study confirms that knowledge transfer has significant effects on organizational performance as stated in the hypothesis. The studies by Lee and Choi (2003) and Rasula et al (2012) support this hypothesis. The most significant results are the relationship between knowledge transfer and customer; and internal business process performance.

5.3 Knowledge Transfer and Strategy Content

The results show that knowledge transfer has significant effect on strategy content. Knowledge transfer has strong correlation with strategy content. Moreover, knowledge transfer has strong and moderately strong correlations with strategic stances and strategic actions respectively. The study further reveals that, knowledge transfer has significant effect on prospectors, analyzers, and reactors of strategic stances. Prospectors are featured by the positive effect of socialization, internalization, externalization and combination. Analyzers are featured by positive effects of socialization, externalization and combination; and negative effects of internalization.

Reactors are characterized by the positive effects of socialization, externalization and combination; and negative effects of internalization. However, knowledge transfer has no significant effect on defenders but has moderately correlation. On the other hand, knowledge transfer has significant effect on product development, market development and differentiation of strategic actions. Product development is attributed by positive effects of socialization, internalization and externalization; and negative effects of combination. Market development is attributed by positive effects

of socialization, internalization and externalization, while differentiation is attributed by positive effects of socialization, internalization and externalization; and negative effects of combination. Conversely, knowledge transfer has no significant effect on market penetration, diversification, licensing, research organizations, cost leadership and quality. Besides, knowledge transfer has weak correlations with licensing, research organizations, cost leadership and quality; and moderately weak correlations with market penetration and diversification.

The results are comparable with empirical studies of Toubia (2006) and Ryan et al (2010). The strategic stances is comparable to Toubia (2006) who argues that idea generation is critical to design and marketing of new product to marketing strategy and to the creation of effective advertising. The strategic actions are weighed against Ryan et al (2010) who argued that the business strategies affect knowledge sharing. The study reveals that knowledge transfer has no significant effect on research organizations; however, Jacobson et al (2005) argued that consulting can be a strategy for transferring knowledge between researchers and decision makers and is effective at promoting the enlightenment and interactive model of knowledge use. The study further reveals that the stakeholders have no significant use of information technology to interact with organizations neither do they practice knowledge sharing culture. However, the empirical studies by Fernandes et al (2006) confirmed that firms do not see improvement in performance or strategy when knowledge is hard to transfer but do see improvement when it is transferred easily.

The study confirms that research organizations have moderately weak correlation with knowledge transfer and are not significant. However, the studies by Fernandes et al (2006) support this hypothesis that knowledge transfer has significant effect on strategy content. Organizations need to embrace the search for advice from research organization and encourage the stakeholders to interact with the organizations and practice knowledge sharing culture as argued by Jacobson et al (2005) and Fernandes et al (2006).

5.4 Knowledge Transfer, External Environment and Strategy Content

Although statistically the study reports that the overall external environment had no significant moderating influence on the relationship between knowledge transfer and strategy content, traces of the external environment moderating influence on strategic actions factor of research organizations were reported. Environmental complexity has significant moderating influence on the relationship between knowledge transfer and research organizations. Environmental complexity has 13.6% additional power on the relationship between knowledge transfer and research organizations and is characterized by positive effects of knowledge transfer.

The result of this study is equivalent to the studies of Babatunde and Adebesi (2012) and Lavis et al (2003). Babatunde and Adebesi (2012) conducted a research on strategic environmental scanning and organization performance in a competitive environment. They established that environmental scanning keeps abreast of change, reveals factors that constitutes threats and opportunities, monitors competitors' activities and gives necessary strategic formulation and implementation inputs. The study reveals that search for advice from research organizations is not significant to organizations; however, Lavis et al (2003) study was based on how research

organizations more effectively transfer research knowledge to decision makers. They confirmed that the directors of the research organizations were not evaluating the knowledge transfer activities. The study further reveals that technological changes in the market is significant in environmental dynamism which is comparable to empirical studies of Alipour and Karimi (2011) who established that in learning organizations, innovation enables organizations to anticipate and adapt to dynamics of changing environment. Therefore, organizations need to scan the environmental dynamism and employ appropriate modes of knowledge transfer to detect sustainable competitive technologies in the market. Lavis et al (2003) supports the finding on research organizations since the business difficult issues have led the organizations to seek for advice on research and development from research organizations.

5.5 Knowledge Transfer, Strategy Content and Organizational Performance

The study shows that strategy content has significant intervening influence on the relationship between knowledge transfer and organizational performance. Knowledge transfer has strong correlation with strategy content and moderately strong correlation with organizational performance, while strategy content has moderately strong correlation with organizational performance. The relationship between knowledge transfer and financial performance reveal that the reactors and market development have 14.6% and 14.4% additional power of influence respectively; while the strategies of prospectors, market penetration and market development had strong correlation on the intervening influence and have 19.2%, 20.3% and 23.7% additional power respectively on the relationship.

Moreover, the strategies of defenders, reactors, product development, market penetration, research organizations and differentiation have strong intervening influence and have 6.9%, 9.7%, 9.1%, 13.4%,7.8% and 17.1% additional power respectively on the relationship between knowledge transfer and internal business process performance. Besides, the strategies of differentiation and quality have moderately strong correlation intervening influence and have 14% and 12% additional power respectively on the relationship between knowledge transfer and learning and growth performance. Overall, the study reveals that strategy content has 17.8% additional power on financial performance, while it has 9.3% additional power on non-financial performance.

This study is comparable to the empirical studies by Porter (1981), Schilling (2005) and Higgins (2005). Porter (1981) conducted a study on the contributions of industrial organization to strategic management. The study reveals that financial performance has negative effect on organizational performance. However, Higgins (2005) posits that strategic performance enables senior management to enact, monitor and assess the cross functional execution of strategies.

The innovation timetable and strategy is not significant, however, Hassan et al (2011) reveal that strategy is one of the critical factors to enhance innovation to improve performance. Strategy content influence is dominant on the relationship between knowledge transfer and internal business process performance, which confirms Schillings (2005) suggestion on strategies and internal development of organizations. However, organizations need to embrace innovation.

5.6 Knowledge Transfer, Strategy Content, External Environment and Organizational Performance

The study reveals that the overall joint effect of knowledge transfer, strategy content and external environment on organizational performance is not significant. The influence of strategy content and external environment on the relationship between knowledge transfer and financial performance are 17.8% and 7% respectively, while on non-financial performance are 9.3% and 1.5% respectively. Furthermore, the joint effect of knowledge transfer, strategy content and environmental dynamism is statistically significant on customer performance, internal business process performance and; learning and growth performance.

This study is comparable with studies by Osteloh and Frey (2000), Miles and Snow (1978), Dess and Beard (1984) and Pearce and Robinson (2005). Osteloh and Frey (2000) conducted a study on motivation, knowledge transfer and organizational forms. They established that knowledge generation and transfer is essential source of firm's competitive advantage. Miles and Snow (1978) suggested that strategic stances generally describe organizations' position and how they interact with their environment by improving performance, while strategic actions engage the organizations with generic strategies. Dess and Beard (1984) conducted a study on dimensions of organizational tasks environment. They integrated strategic management and organizational theory literature and provided theoretical and empirical support for munificence, dynamism and complexity. Consequently, Pearce and Robinson (2005) suggested that the balanced scorecard is a set of measures that are directly linked to the company's strategies. However, Nonaka (1994) argued that transferred knowledge can reside in design, production, operation, sales and distribution, operation and maintenance or management.

The study reports the overall joint effects of knowledge transfer, strategy content and external environment on organizational performance is not significant. However, the study reveals that strategy content has statistical influence while external environment has a degree of environmental dynamism on relationship between knowledge transfer and organizational performance.

5.7 Chapter Summary

This chapter dealt with the discussions of the findings obtained from the data analysis. The discussions of the tests of hypotheses involved the relations of knowledge transfer and organizational performance; knowledge transfer and strategy content; knowledge transfer, external environment and strategy content; knowledge transfer, strategy content and organizational performance; knowledge transfer, strategy content, external environment and organizational performance. The literature review has been used to compare the results and conclusions have been made.

The interpretations of the results of hypotheses 1, 2, 3, 4 and 5 tests have been explained. The findings of the specific objectives have been compared with the literature. Finally, the conclusion obtained from each hypothesis has been expounded.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter evaluates the outcome of the study. It is comprised of the summary of the findings, conclusion, implications of the study, limitations of the study and area for further research. The implications of the study include the theoretical, methodological and managerial values of the study.

6.2 Summary

The main objective of the study was to examine the influence of strategy content and external environment on the relationship between knowledge transfer and organizational performance. The specific objectives included the determination of knowledge transfer on performance and strategy content; the influence of external environment on the relationship between knowledge transfer and strategy content; the influence of strategy content on the relationship between knowledge transfer and organizational performance; and the joint effect of knowledge transfer, strategy content, external environment and organizational performance.

The study reveals that knowledge transfer has significant effect on performance and strategy content. However, the external environment has no moderating relationship with knowledge transfer and strategy content. Nevertheless, strategy content has intervening relationship with knowledge transfer and organizational performance. However, the relationship between knowledge transfer, strategy content, external environment and organizational performance are significantly different from the independent relationships of the variables.

The findings of the study reveal that the most companies apply knowledge transfer practices. They mostly identify knowledge and encourage the sharing of this knowledge in teams as individuals are encouraged to analyze ideas that are worth pursuing, on job training procedures are documented and applied in these organizations and also employees are encouraged to attend educational workshops**.** However, most of these organizations do not encourage individuals to interact using social media, stakeholders do not use information technology to interact with the organizations neither do they provide non-financial bonuses on knowledge sharing to relevant employees. The study further reveals that organizations avail adequate resources and expertise in innovation and their managers are flexible in accommodating suggestions to staff. The organizations also encourage their stakeholders to adapt to their strategic plans. Consequently, replication of relevant knowledge is encouraged within these organizations.

The study reports that companies normally transfer organization and group explicit knowledge to individuals; articulate, extract and translate tacit knowledge to others; and they also convey knowledge to others in documents, email, data base as well as through meetings and briefings. Internalization, externalization and combination are the frequently used. Socialization, internalization and combination are vastly applied.

The strategic stances of defenders and reactors have favorable position in most organizations. However, prospectors, defenders and analyzers have preferences. Most companies emphasize on the use of cost control systems for monitoring performance. They also articulate their strategies. The strategies of market penetration, cost leadership and quality are vastly adopted, while product development, market penetration, diversification, research organizations, cost leadership and differentiation are preferred.

The developments of economic variations in the economy, the relative power of customers of the firm and the relations of the trading organizations have been favorable to most companies and also influence decision making of these organizations. Although the developments of exit barriers in the industry and technological changes in the market become more predictable, most companies observe that, exit barriers in the industry have little change while technologies have great change. Moreover, exit of barriers in the industry, economical variations within the economy and relations with labor markets, trade unions and parent companies are the difficult issues that these companies deal with, conversely threat of new entrants in the industry and competition among rivals in the industry do not have similar issues. Industry and macro environments influence decision making.

The study further reports that, companies listed on the Nairobi Securities Exchange apply the sustainable balanced scorecard perspectives of financial, customer, internal business process, learning and growth and non-market performance. However, innovation is not significantly applied in these organizations. The study reveals that innovation timetables of customer performance and innovation to develop products and services of internal business performance are not significant. However, health and safety, quality, public relations, service delivery, social aspect, customer management; and operations and logistics are vastly applied. In general the non-financial performance is more effective than the financial performance.

6.3 Conclusion

The main objective of the study was to examine the influence of strategy content and external environment on the relationship between knowledge transfer and organizational performance of companies listed on the Nairobi Securities Exchange.

This was achieved by first, assessing knowledge transfer on performance. Secondly, knowledge transfer on strategy content was evaluated. Thirdly, the moderating influence of external environment was tested on the relationship between knowledge transfer and strategy content. Next, the intervening influence of strategy content was tested on the relationship between knowledge transfer and organizational performance. Finally, the joint effect of knowledge transfer, strategy content, external environment and organizational performance were evaluated.

The study reveals that knowledge transfer has significant effect on the organizational performance and strategy content. Moreover, overall external environment has no significant moderating influence on the relationship between knowledge transfer and strategy content. However, environmental complexity has significant moderating influence on the relationship between knowledge transfer and research organizations. Nevertheless, strategy content has significant intervening influence on the relationship between knowledge transfer and organizational performance. Furthermore, overall joint effect of knowledge transfer, strategy content and external environment on organizational performance is significantly different from the independent effect of the variables.

The independent effects of knowledge transfer on organizational performance and strategy content were observed. Externalization has significant effect on customer performance, prospectors, reactors, market penetration, diversification, and differentiation. Internalization has significant effects on internal business process performance and licensing. Combination has significant effects on analyzers. However, knowledge transfer has no significant effects on financial, learning and growth, non-market performance; defender stance, product development, market development, research organizations, cost leadership and quality.

The study further reveals that knowledge transfer has significant effect on return on equity of financial performance; distribution time process of customer performance; innovation, customer management, operations and logistics of internal business process performance and technologies of learning and growth performance. With regard to strategy content, knowledge transfer has significant effects on prospectors, analyzers, defenders, product development, market development and differentiation.

The joint effect of knowledge transfer, strategy content and external environment on performance is significantly different from the independent effect of variables. The study reports the there was joint effect of knowledge transfer, strategic stances and environmental complexity on financial performance; joint effect of knowledge transfer, strategic stances and environmental dynamism on customer performance; internal business performance; and learning and growth performance; joint effect of knowledge transfer, strategic actions and environmental dynamism on customer performance; internal business performance; and learning and growth performance are statistically significant.

The study fully supports the dynamic theory of organizational knowledge creation (Nonaka, 1994), the discipline of learning organization (Senge, 1990) in the process of knowledge transfer. Miles and Snow (1978) strategy typology, generic strategies by Ansoff (1965) and Porter (1985) are supported in the strategic positions and strategy adoption respectively. The external environment is supported by contingency theory (Lawrence and Lorsch, 1967) and environmental dynamism (Dess and Beard, 1984). Finally, organizational performance is supported by stakeholders' theory (Kaplan and Norton, 1992; Figge et al, 2002).

However, the knowledge based theory of the firm regarding the existence of common knowledge for operation (Grant, 1996) is contradicted by some organizations. Common language is fundamental for integration of organization mechanism; however most organization do not practice knowledge sharing culture. Other forms of symbolic communications such as use of information technology to interact with stakeholders are minimal. Most organizations do not use the social media as a commonality of specialized knowledge. The mode of externalization whereby tacit knowledge of others is made explicit knowledge is minimal or do not apply in most organizations. Furthermore, most organizations do not recognize individual knowledge domain as they do not provide non-financial bonuses to individuals who share knowledge in their organizations. Managers should adapt the knowledge based theory to enable them coordinate mechanism within and around their organizations.

The study further reveals that the strategic stances of defenders and reactors are popular in these organizations. Miles and Snow (1978) argued that defenders are engineering oriented and focus to maintain secure niche in relatively stable market segments while reactors lack stable strategy and are highly responsive to shorter term environmental demands. Boyne et al (2006) confirmed that organizations that adopt defender stance are likely to face a rocky path to service improvement. They further argued that reactors are likely to result in performance that lags both defenders and prospectors.

The study shows that the strategic actions of diversification and licensing have negative effects on organizational performance. Market penetration, cost leadership and quality are popular. Porter (1985) argued that competitive advantage arises out of a firm creating value for its customers and later developed three generic strategies two of which are popular in these organizations.

The study reveals that these organizations are operating in dynamic environment and are aware of their exit barriers in the industry though they possess business continuity. However, threat of substitute products within the industry and technological changes in the market are predictable in the business environment. Most companies experience great change in threat of new entrants in the market, competition among rivals in the industry, relative power of customer in the firm, political factors in the economy, economic variation within the economy and technological changes in the market. However, most companies experience little change in their relations with parent company.

Miles et al (2000) suggested that environmental dynamism impacts the strategies chosen. Four of Porter's (1980) five forces on industry environment are evident in this study. However the fifth force on the relative power of suppliers of the firm is not evident. However, the theories on environmental munificence and complexity are not manifested. Nevertheless, the study confirms Machuki (2011) argument that external environment has varying degrees of environmental dynamism, munificence and complexity.

The study reports that most organizations have adopted the stakeholders' theory of balanced scorecard (Kaplan and Norton, 1992) that measures the four financial, customer, internal business process and learning and growth perspectives of the organizational performance. A few organizations have adopted the sustainable balanced (Figge, 2002) that further measures additional non-market perspective of the social aspect and the environmental aspect of the organization. The study further reveals that the independent effect of knowledge transfer on financial performance; and the joint effect of knowledge transfer, strategy content and external environment on financial performance are not statistically significant.

Furthermore, the study confirmed that the non-market performance was not significant with other variables. The study supports Kaplan and Norton (1992) balanced scorecard with emphasis on customer, internal business process and learning and growth perspective, although, the financial perspective is not evident. The sustainable balance scorecard is yet to be prevalent in this context.

6.4 Implications of the Study

The implications of the study are categorized into theoretical, methodological and managerial. Theoretical implications include the additional knowledge on theories and the academic implication. The additional knowledge on theories contributes to the existing theories. The academic implication enhances empirical knowledge.

Methodological implication includes the relevance of the methodology used and the managerial implication describes the policy and practice. The relevance of the methodology used confirms it accomplishment of the findings of the study. The managerial implications focus on the decision making of the organizations.

6.4.1 Theoretical Implications

Theoretically, this study contributes to the advancement the dynamic theory of knowledge creation (Nonaka, 1994); organizational learning Senge (1990), industrial organizational economics theory (Porter, 1981), Porter's 5 forces industry model (Porter, 1980), stakeholders' theory (Kaplan and Norton, 1992; Figge et al, 2002) and contingency theory (Lawrence and Lorsch, 1967). The study links the theories of knowledge transfer and organizational performance and confirms that knowledge transfer has significant effects on organizational performance. On the relations of knowledge transfer and strategy content, the study ascertained that knowledge transfer has significant effect on strategy content. The study confirms that the dynamic theory

of organizational knowledge creation (Nonaka, 1994) and the discipline of learning organization (Senge, 1990) are supported by the socialization, internalization, externalization and combination as modes of knowledge transfer. However, the knowledge based theory of the firm (Grant, 1996) is not supported by the modes of knowledge transfer. Therefore, the aforesaid theories are confirmed to be relevant. However, the knowledge based theory of the firm on fundamental common language for integration of organization mechanism is not supported by this study.

The relations between knowledge transfer, external environment and strategy content reveal that the overall external environment has no significant moderating influence on the relationship between knowledge transfer and strategy content. However, environmental complexity has significant moderating influence on the relationship between knowledge transfer and research organizations. For the industrial organization economic framework (Porter, 1981) of structure-conduct-performance, conduct is supported by the strategy content based on Miles and Snow (1978) strategic stance typology, Ansoff (1965) and Porter (1985) generic strategies. The linkage of knowledge transfer, strategy content and organizational performance is relevant, but the linkage between knowledge transfer, external environment and strategy content is irrelevant.

The overall joint effect of knowledge transfer, strategy content and external environment on organizational performance is significantly different from the independent effect of the variables. However, the joint effect of knowledge transfer, strategy content and environmental dynamism has significant effect on customer performance, internal business process performance and learning and growth performance. Porter's (1980) industry forces are supported by threat of new entrants, competition among rivals, exit barriers and relative power of customers. However, the

force on the relative power of suppliers of the firm is not supported in this dynamic environment. Moreover, (Lawrence and Lorsch, 1967) contingency theory and Dess and Beard environmental dynamism theories are supported. The stakeholders' theory on balanced scorecard (Kaplan and Norton, 1992) is more evident than the sustainable balanced scorecard (Figge, 2002). The study may be a data bank to the academicians, researchers and students, in reference to knowledge transfer empirical information.

6.4.2 Methodological Implications

The study confirmed the use of cross sectional survey when carrying out a survey on the concepts of knowledge transfer, strategy content, external environment and organizational performance. The simple regression analysis is relevant in analyzing the hypotheses on the independent effect of knowledge transfer on organizational performance and strategy content respectively. However, multiple regression analysis of hierarchical method is appropriate in analyzing the moderating and joint variables, while simultaneous method is appropriate for intervening variables. Pearson correlation is relevance in correlation of the variables, while regression analyses provide inferential statistics.

The one sample t-test and the skewness test are appropriate in the data analysis. The one sample test provides the mean and the t-value to measure the statistical description of the data. The skewness tests provide the normality test of given data. Both the one sample t-test and skewness test are useful in the descriptive statistics.

The operationalizations of knowledge transfer, external environment, strategy content and organizational performance as independent, moderating, intervening and dependent variables respectively. The non-financial and financial indicators of the variables were measured using the likert scale and the ratio scale respectively.

6.4.3 Policy Implications

Knowledge transfer policies may be applied in given organization to ensure efficient and effective performance. The study further reveals that socialization, internalization and externalization have positive effect of defender stance, product development, market development and research organizations. Socialization, internalization and combination have positive effect on cost leadership. Internalization and externalization have positive effect on quality. These policies are applicable to knowledge transfer on strategy content. The study additionally revealed that organizations that need to succeed must have a clear understanding of the balanced scorecard by examining the financial and non-financial performance.

The policy makers of the organizations in the public and private sectors in Kenya and other countries may use the information obtained from this study to articulate their policies. The study reveals that internalization and combination have positive effects on financial performance and non-market performance; whereas, socialization, internalization and combination have positive effect on learning and growth performance. These policies are applicable to knowledge transfer on organizational performance.

6.4.4 Managerial Implications

The managerial practices of most companies reveal that externalization is applied on customer performance mostly by companies whose strategic stances are prospectors and reactors and adopted the strategies of market penetration, diversification and differentiation. Moreover, internalization is applied on internal business process performance on licensing strategies. Nevertheless, companies which use analyzer stance normally use combination as a mode of knowledge transfer.

A more ample sustainable balanced scorecard that measures financial performance, customer performance, internal business process performance, learning and growth performance and non-market performance will enable organizations to adopt stakeholders' view of value rather than simple shareholders performance. Organizations that embraced the balanced scorecard performance employ the modes of knowledge transfer to develop strategy content of strategic stances and actions within their industry in dynamic environment.

6.5 Contributions to Knowledge

Generally, the study has highlighted that strategy content has significant influence on relationship between knowledge transfer and organizational performance while the environmental dynamism has significant effect in the joint effect of knowledge transfer and strategy content on organizational performance. This explains that the external environment has degrees of environmental dynamism.

Moreover, the study reveals that knowledge transfer has significant effect on organizational performance and strategy content. Besides, strategy content has significant intervening influence on the relationship between knowledge transfer and organizational performance. However, external environment has no significant moderating influence on the relationship between knowledge transfer and strategy content.

6.6 Limitations of the Study

First, the study was limited to modes of knowledge transfer of the knowledge management. The modes of knowledge transfer used in the study socialization, externalization, combination and internalization. Socialization transfers tacit knowledge in one person to another. Externalization composes tacit knowledge

explicit. This involves articulation, eliciting and translating tacit knowledge of others. Combination conveys knowledge in documents, email, data bases, as well as through meetings and briefings. The internalization transfers organization and group explicit knowledge to the individual. Secondly, the study was limited to the strategy content of strategy stances of prospectors, analyzers, defenders and reactors; and the strategic actions of product development, market penetration, market development, diversification of products, diversification of markets, licensing, collective research organizations, cost leadership in production, differentiation and quality of products and services. The research investigated the adoption of these strategies.

Thirdly, the study limited to the survey of 36 companies listed on the Nairobi Securities Exchange in Kenya as at 31st December, 2013. These companies represent the agricultural, commercial and services, telecommunications and technology, automobile and accessories, banking, insurance, investment, manufacturing and allied, construction and allied; petroleum and energy; and growth enterprise market segment companies in Kenya.

Subsequently, the study limited to the cross sectional survey method of research. The Cross-sectional study was carried out once and represented a snapshot of one point in time. It described the incidence of trends of companies and explained how the factors were related in different organizations. In conclusion, the study was limited to the regression and Pearson's correlation methods of data analyses. Multiple regression analysis captured the relationships of performance and modes of knowledge transfer, strategy content and external environment on organizational performance. Pearson's correlation measured the nature and strength of variable relationships while the coefficient of determination measured the amount of variation explained by model variables.

6.7 Areas for Further Research

Future research should consider, first a research on knowledge transfer, the process of strategy, industry environment and performance. This may provide different results on knowledge transfer. The distinction would arise from the strategy and the environmental aspects. Secondly, studies on other organizations distinct from the companies listed on the Nairobi Securities Exchange in Kenya should be surveyed using the concepts of knowledge transfer, strategy content, external environment and performance. Such studies will add value to the theory of knowledge of the organizations. Future finding may debate on the current finding of the study.

Thirdly, other aspects of knowledge management such as knowledge retention could be studied with the concepts of strategy, external environment and organizational environment. Such studies could distinguish the results obtained from the aspects of knowledge retention and knowledge transfer. The distinctions would be informative to the policy makers of given organizations. Next, apart from the cross sectional survey, other survey such as the longitudinal and case studies could be used in future research to distinguish the outcome of this study. Such survey could provide other information that would be significant to managerial decisions. It could also contribute to the theory of the knowledge of the firm.

Finally, apart from the regression and Pearson correlation methods of data analysis, other techniques could be used to test the same research. These include other dependency techniques such as discrminant analysis, MANOVA, Structural equation modeling and independency techniques such as factor analysis, cluster analysis and multidimensional scaling. The results obtained from the application of these techniques could be compared and analyzed.

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APPENDICES

Appendix 1: Questionnaire

Dear Respondent,

This questionnaire is aimed at collecting information on the knowledge transfer, strategy content, external environment and performance of companies listed on the Nairobi Securities Exchange in Kenya.

Section A: Background Information

1. Name of the Organization (Rubber stamp) _____

Please tick (√) as appropriate.

2. Number of Employees
    a) 500 and under
    b) 501 to 1000
    c) 1001 and above
3. Organization's age of business in years
    a) 5 and under
    b) 6 to 10
    c) 10 and above
4. Designation
    a) Chief Executive Officer
    b) Branch Manager
    c) Head of Department
5. Years that you have worked in this organization
    a) 1 to 5
    b) 6 to 10
    c) 11 to 15
    d) 15 and over

Section B: Knowledge Transfer

6. Knowledge transfer practices are enlisted below. Please indicate the extent to which each statement applies in your organization. Use the scale below to tick (√) as appropriate. 1= Not at all, 2 = Small extent, 3 = Moderate extent, 4= Large extent and 5 = A very large extent.

Knowledge Transfer Practices	1	2	3	4	5
a. To what extent are individuals encouraged to interact using social media?					
b. To what extent does your organization identify knowledge and encourage the sharing of this knowledge in relevant teams?					
c. To what extent are individuals encouraged to analyze ideas that are worth pursuing?					
d. To what extent is on job training procedures documented and applied in your organization?					
e. To what extent does your organization avail adequate resources and expertise in innovation?					
f. To what extent are your managers flexible in accommodating suggestions from other staffs?					
g. To what extent do your stakeholders use information technology to interact with your organization?					
h. To what extent is knowledge sharing culture practiced by all the stakeholders of your organization?					
i. To what extent are stakeholders encouraged to adapt your organization's strategic plan?					
j. To what extent are the employees encouraged to attend educational workshops?					
k. To what extent is successful replication of relevant knowledge encouraged within your organization?					

Knowledge Transfer Practices	1	2	3	4	5
l. To what extent does your organization provide non-financial bonuses on knowledge sharing to the relevant employees?					

Section C: Strategy Content

7. Strategy attempts to achieve a long term sustainable advantage in any business by responding properly to the opportunities and threats in the firm's environment and the strengths and weaknesses of the organization. Using 1= Extremely Unfavorable, 2 = Unfavorable, 3 = Moderately Favorable, 4= Favorable and 5 = Extremely Favorable. Kindly choose the appropriate answer below by ticking (√) the applicable box. How favorable are the following strategic positions to your organization?

Strategic Positions	1	2	3	4	5
a. How favorable is the search for new products and market opportunities?					
b. How favorable is the avoidance of long term commitments to a single technological process?					
c. How favorable is the facilitation and coordination of numerous and diverse business operations?					
d. How favorable is the close up of a portion of the total market to create a stable set of products and customers?					
e. How favorable is the production and distribution of goods and services?					
f. How favorable is the emphasis to use cost control systems for monitoring performance?					
g. How favorable is the search for new product and market opportunities while simultaneously maintaining original products and customers?					

Strategic Positions	1	2	3	4	5
h. How favorable is the stability of influence and flexibility in changing environment?					
i. How favorable is the segregation of the organization's structure and processes to accommodate both stable and dynamic areas of operation?					
j. How favorable is the articulation of the organization's strategy?					
k. How favorable is the mapping of organization's structure and processes to given strategies?					
l. How favorable is the maintenance of organization's current strategy-structure relationship despite environmental changes?					

8. Using 1= Not at all, 2 = Small extent, 3 = Moderate extent, 4= Large extent and 5 = A very large extent. Please answer the following by ticking (√) the applicable box. To what extent is your organization adopting these strategies?

Adopted Strategies	1	2	3	4	5
a) To what extent does your organization create new or improved products to replace existing ones?					
b) To what extent does your organization maintain the security of present markets while changing products or developing new ones?					
c) To what extent does your organization gain market share through improving quality?					
d) To what extent does your organization gain market share through improving productivity?					

Adopted Strategies	1	2	3	4	5
e) To what extent does your organization gain market share through improving market activities?					
f) To what extent does your organization produce diversified products from the same resources to the customers?					
g) To what extent does your organization sell goods and services to diversified market segments?					
h) To what extent does your organization combine some of the firm's resources with those of other firms to create a competitive advantage?					
i) To what extent does your organization combine some of the firm's capabilities with those of other firms to create a competitive advantage?					
j) To what extent does your organization produce private label goods to foreign companies and allow them to attach their own brand names?					
k) To what extent does your organization produce private label goods to foreign companies and allow them to attach their own trademarks?					
l) To what extent does your organization license foreign companies and give them the rights to manufacture products for a fee?					
m) To what extent does your organization license foreign companies and give them the rights to use trademark for a fee?					

Adopted Strategies	1	2	3	4	5
n) To what extent does your organization search for advice on research and development from research Organizations?					
o) To what extent does your organization provide plans and policies aimed at managing the organization's expenses?					
p) To what extent does your organization produce unique goods and services to customers?					
q) To what extent does your organization deliver high quality products to customers					

Section D: External Environment

9. Using 1= Not at all, 2 = Small extent, 3 = Moderate extent, 4= Large extent and 5 = A very large extent. Please answer the following by ticking (√) the applicable box. To what extent have developments in each of the factors below been favorable to your organization?

External Environment Developments	1	2	3	4	5
a. Threats of new entrants in the industry					
b. Competition among rivals in the industry					
c. Exit barriers in the industry					
d. Relative power of customers of the firm					
e. Relative power of suppliers of the firm					
f. Threat of substitute products within the industry					
g. Political factors in the economy					
h. Economical factors within the economy					
i. Socio – Cultural activities of the market					
j. Technological changes in the market					
k. Ecological changes / geographical effects					

External Environment Developments	1	2	3	4	5
l. Legal factors in the economy					
m. Relations with labor markets					
n. Relations with financial institutions					
o. Relations with trading organizations					
p. Relations with trade unions					
q. Relations with parent company					

10. Using 1= Not at all, 2 = Small extent, 3 = Moderate extent, 4= Large extent and 5 = A very large extent. Please answer the following by ticking (√) the applicable box. To what extent do the following factors influence decision making in your organization?

The Influence in Decision Making	1	2	3	4	5
a. Threat of new entrants in the industry					
b. Competition among rivals in the industry					
c. Exit barriers in the industry					
d. Relative power of customers of the firm					
e. Relative power of suppliers of the firm					
f. Threat of substitute products within the industry					
g. Political factors in the economy					
h. Economical factors within the economy					
i. Socio – Cultural activities of the market					
j. Technological changes in the market					
k. Ecological changes / geographical effects					
l. Legal factors in the economy					
m. Relations with Labor markets					
n. Relations with financial institutions					
o. Relations with trading organizations					
p. Relations with trade unions					
q. Relations with parent companies					

11. Using 1= Not at all, 2 = Small extent, 3 = Moderate extent, 4= Large extent and 5 = A very large extent. Please answer the following by ticking (√) the applicable box. To what extent have the developments in each of these factors become more predictable?

Predictability of External Environment	1	2	3	4	5
a. Threat of new entrants in the industry					
b. Competition among rivals in the industry					
c. Exit barriers in the industry					
d. Relative power of customers of the firm					
e. Relative power of suppliers of the firm					
f. Threat of substitute products within the industry					
g. Political factors in the economy					
h. Economical factors within the economy					
i. Socio – Cultural activities of the market					
j. Technological changes in the market					
k. Ecological changes / geographical effects					
l. Legal factors in the economy					
m. Relations with Labor markets					
n. Relations with financial institutions					
o. Relations with trading organizations					
p. Relations with trade unions					
q. Relations with parent companies					

12. Using 1= Not change at all, 2 = little change, 3 = Moderate change, 4= Great change and 5 = Dramatic change. Please answer the following by ticking (√) the applicable box. In each set of factors, how much changes have you observed in your organization in the last 5 years?

Changeability of External Environment	1	2	3	4	5
a. Threat of new entrants in the industry					
b. Competition among rivals in the industry					
c. Exit barriers in the industry					
d. Relative power of customers of the firm					
e. Relative power of suppliers of the firm					
f. Threat of substitute products within the industry					
g. Political factors in the economy					
h. Economical factors within the economy					
i. Socio – Cultural activities of the market					
j. Technological changes in the market					
k. Ecological changes like the weather and any other geographical effects					
l. Legal factors in the economy					
m. Relations with Labor markets					
n. Relations with financial institutions					
o. Relations with trading organizations					
p. Relations with trade unions					
q. Relations with parent companies					

13. How many difficult business issues does your organization deal with in each of these environmental aspects? Use the scale below to tick (√) as appropriate. 1= None at all, 2= Very few, 3= Moderate number, 4= Many and 5= Very many

Difficult Issues in External Environment	1	2	3	4	5
a. Threat of new entrants in the industry					
b. Competition among rivals in the industry					
c. Exit barriers in the industry					
d. Relative power of customers of the firm					
e. Relative power of suppliers of the firm					
f. Threat of substitute products within the industry					
g. Political factors in the economy					
h. Economical factors within the economy					
i. Socio – Cultural activities of the market					
j. Technological changes in the market					
k. Ecological changes like the weather and any other geographical effects					
l. Legal factors in the economy					
m. Relations with Labor markets					
n. Relations with financial institutions					
o. Relations with trading organizations					
p. Relations with trade unions					
q. Relations with parent companies					

14. How similar are the difficult business issues that your organization deals with in each of these environmental aspects? Use the scale below to tick (√) as appropriate. 1= Very similar, 2= Moderately Similar, 3= Indifferent, 4= Moderately Dissimilar and 5= Very Dissimilar

Similarity of Difficult Issues	1	2	3	4	5
a. Threat of new entrants in the industry					
b. Competition among rivals in the industry					
c. Exit barriers in the industry					
d. Relative power of customers of the firm					
e. Relative power of suppliers of the firm					
f. Threat of substitute products within the industry					
g. Political factors in the economy					
h. Economical factors within the economy					
i. Socio – Cultural activities of the market					
j. Technological changes in the market					
k. Ecological changes like the weather and any other geographical effects					
l. Legal factors in the economy					
m. Relations with Labor markets					
n. Relations with financial institutions					
o. Relations with trading organizations					
p. Relations with trade unions					
q. Relations with parent companies					

Section E: Performance

15. The following are some of the measures of performance. Please indicate the extent to which your organization applies these statements. Use the scale below to tick (√) as appropriate. 1= No extent, 2 = Small extent, 3 = Moderate extent, 4= Large extent and 5 = A very large extent.

	Measurement of Organizational Performance	1	2	3	4	5
a.	To what extent does your organization produce scheduled timetables for production of its products?					
b.	To what extent does your organization produce scheduled timetables for marketing of its products?					
c.	To what extent does your organization produce scheduled timetables for innovation of its products?					
d.	To what extent does your organization create value for its customers through producing quality products and services?					
e.	To what extent does your organization deliver goods and services to its customers on time?					
f.	To what extent are your company's delivery forecasts to its customers accurate?					
g.	To what extent does your organization provide exceptional service to customers?					
h.	To what extent are individual customers offered with complete and suitable solutions?					
i.	To what extent does your organization pursue product leadership strategy?					
j.	To what extent does your organization deliver differentiated value propositions such as customer segments?					
k.	To what extent does your organization build franchise by encouraging innovation to develop new products and services?					
l.	To what extent does your organization use critical technologies to enable continued market leadership?					

	Measurement of Organizational Performance	1	2	3	4	5
m.	To what extent does your organization achieve operational achievement by improving supply chain management?					
n.	To what extent does your organization achieve operational achievement by improving internal processes?					
o.	To what extent does your organization achieve operational achievement by improving asset utilization?					
p.	To what extent does your organization achieve operational achievement by improving resource capacity management?					
q.	To what extent does your organization achieve operational achievement by improving other processes?					
r.	To what extent do your managers define employee capabilities and skills?					
s.	To what extent do your managers define employee technical infrastructure?					
t.	To what extent is work climate conducive to support strategies?					
u.	To what extent does your organization look into employee health and safety?					
v.	To what extent does your organization participate in community development?					
w.	To what extent does your organization contribute to eradication of environmental hazards such as pollution?					

Thank you for taking your time to respond

Appendix 2: Companies Listed on the Nairobi Securities Exchange

Agricultural Sector

1) Eaagads Limited
2) Kapchorua Tea Company Limited
3) Kakuzi
4) Limuru Tea Company Limited
5) Rea Vipingo Plantations Limited
6) Sasini Limited
7) Williamson Tea Kenya Limited

Commercial and services Sector

8) Express Limited
9) Kenya Airways Limited
10) Nation Media Group
11) Standard Group Limited
12) TPS East Africa (Serena) Limited
13) Scan Group Limited
14) Uchumi Supermarket Limited
15) Hutchings Biemer Limited
16) Longhorn Kenya Limited

Telecommunications and technology Sector

17) Safaricom Limited

Automobiles and accessories Sector

18) Car and General Kenya Limited
19) CMC Holdings Limited
20) Sameer Africa Limited
21) Marshalls East Africa Limited

Banking Sector

22) Barclays Bank Limited
23) CFC Stanbic Holdings Limited
24) I & M Holdings Limited
25) Diamond Trust Bank Kenya Limited
26) Housing Finance Company Limited
27) Kenya Commercial Bank Limited
28) National Bank of Kenya Limited
29) NIC Bank limited
30) Standard Chartered Bank Limited
31) Equity Bank Limited
32) The Cooperative Bank of Kenya Limited

Insurance Sector

33) Jubilee Holdings Limited
34) Pan Africa Insurance Holdings Limited
35) Kenya Re-Insurance Corporation Limited
36) Liberty Kenya Holdings
37) British American Investments Company Kenya Limited
38) CIC Insurance Company Limited

Investment Sector

39) Olympia Capital Holdings Limited
40) Centum Investment Company Limited
41) Trans-Century Limited

Manufacturing and Allied Sector

42) BOC Kenya Limited
43) British American Tobacco Kenya Limited
44) Carbacid Investments limited
45) East African Breweries Limited
46) Mumias Sugar Company Limited
47) Unga Group Limited
48) Eveready East Africa Limited

49) Kenya Orchard Limited

50) A Baumann Company Limited

Construction and Allied Sector

51) Athi River Mining

52) Bamburi Cement Limited

53) Crown Berger Limited

54) E A Cables Limited

55) E A Portland Cement Limited

Energy and Petroleum Sector

56) Kenol Kobil Limited

57) Total Kenya Limited

58) KenGen Limited

59) Kenya Power and Lighting Company Limited

60) Umeme Limited

Growth Enterprise Market Segment

61) Home Afrika Limited

Source: (Nairobi Securities Exchange, 2014)

Appendix 3: Letter of Introduction

P O Box 12784 – 00400,

Nairobi

Mobile No. 0723541114

joan_lilian@hotmail.com

21/04/2014

Dear Respondent,

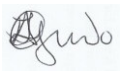
RE: SEARCH FOR RESEARCH DATA

I am a post graduate student at the University of Nairobi, School of Business. In partial fulfilment of the requirements for the award of Doctor of Philosophy in Business Administration, I am conducting management research thesis on, '*Knowledge Transfer, Strategy Content, External Environment and Performance of companies listed on the Nairobi Securities Exchange in Kenya*.

The information collected will strictly be used for academic purposes and will be treated in strict confidence. A copy of the thesis will be made available to you on request. Attached, please find a questionnaire that will be used to enable me complete the research. The targeted respondents are the Chief Executive Officer or Branch Manager and the Heads of Departments in your organization.

Your cooperation will be highly appreciated.

Yours Faithfully



CPA, Joan Lilian Ogendo

PhD Candidate (Researcher)

Supervisors:

Dr. Vincent Machuki, PhD; Dr. Zachary B Awino, PhD; Dr. James Njihia, PhD,

School of Business, University of Nairobi, P O Box 30197 – 00100, Nairobi

Appendix 4: Authority Letter to Conduct Research

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

12th May, 2014

TO WHOM IT MAY CONCERN

RE: JOAN LILIAN OGENDO:D80/72043/2011

This is to certify that, **JOAN LILIAN OGENDO: D80/72043//2011** is a Ph.D candidate in the School of Business, University of Nairobi. The title of her study is: "**Knowledge Transfer, Strategy Content, External Environment and Performance of Listed 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.

Graduate Studies Co-ordinator P. O. Box 30197 NAIROBI University of Nairobi

PROF. MARTIN OGUTU
FOR: ASSOCIATE DEAN
GRADUATE BUSINESS STUDIES
SCHOOL OF BUSINESS

JM/nwk