

**STRATEGIC AGILITY AND COMPETITIVENESS OF PHARMACEUTICAL
COMPANIES IN KENYA**

BY

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DECLARATION

This project is my original work and has not been presented for examination in this or any other university.

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This project has been submitted for examination with my approval as a University Supervisor.

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DEDICATION

To my Father Ezekiel Ng'ang'a who started my education dream and keeps reminding me that Education is the key, my late mum Margaret Njeri who would have been more than happy to witness this unbelievable academic milestone, my wife Rosemary Njeri who stood by me all through the hard times, my brother Raymond, my sister Sophy, and my baby boy Ethan Ng'ang'a who means the world to me.

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ABBREVIATIONS & ACRONYMS

ARIPO: African Regional Industrial Property Organization

CEO: Chief Executive Officer

SCA: Sustainable Competitive Advantage

UNIDO: United Nations International Development Office

RBV: Resource based view

ABSTRACT

Despite the fact that the pharmaceutical sector in Kenya is the largest in East and Central Africa, it is exposed to fast and complex changes ranging from price volatility to radical changes in regulation. This study focused on investigating the effect of strategic agility on firm competitiveness among pharmaceutical firms in Kenya. Descriptive research design was applied in the study. The specific objectives of the study were: to examine the various strategic agility practices adopted by pharmaceutical firms in Kenya; and to establish the association between strategic agility and firm competitiveness of pharmaceutical firms in Kenya. The population included 22 selected pharmaceutical firms in Nairobi. The study establishes a statistically significant association between strategic agility and firm competitiveness among pharmaceutical companies in Kenya as evidenced by the high coefficient of determination in the regression model (R^2) at 0.86. The study concludes that the adoption of various strategic agility practices: clarity of vision, core capabilities, selected strategic targets, shared responsibilities, and implementation of strategic agility have had a significant influence on firm competitiveness of pharmaceutical companies in Kenya. The study recommends that firms in Kenya adopt strategic agility practices to enhance their performance since it has a significant impact on firm competitiveness. On clarity of vision, the study recommends that pharmaceutical firms establish a clear sense of purpose which guides decision making. With regards to selected strategic targets, the study recommends that pharmaceutical companies in Kenya endeavor to identify and focus on the various business units' core capabilities to exploit market opportunities to a large extent. On shared responsibilities, the study recommends that firms in Kenya endeavor to incorporate all the project teams including the clients to be part of the final outcome and results. Owing to the sensitivity of the subject of the study, a number of respondents were non-committal with a number of the respondents fearing victimization in case they filled the questionnaires. Possibly, the study could have adopted a census approach to cover all the manufacturing firms in Kenya. However time and material resources did not make this feasible and for this reason the study was confined to pharmaceutical firms in Kenya. The study suggests that future research efforts should unravel various factors that should be put in place to create an enabling environment for the implementation of strategic agility in Kenya. Moreover, future researchers should consider determining the role of national policy on industrialization in facilitating agility among Kenyan firms in enhancing firm and national competitiveness. At policy level, the findings of the study imply that policies aligned to enhancing firm and national competitiveness can bear fruits if they focus on enhancing strategic agility in both the public and private sector in Kenya. At the theoretical level, the findings of the study offer a critique of the existing theoretical models on strategic management. The results further imply that it's possible to develop a conceptual model that can be used to analyze the effect of strategic agility on firm competitiveness and performance in Kenya. To practice, the findings of the study imply that firms in Kenya can greatly enhance their core competence by establishing various mechanisms that foster their responsiveness to stimuli in the macro-environment.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The need for strategic agility cannot be overstated with the dynamics of globalization like shortened lead time, advances in technology and complex customer demands (Kettunen, 2009; Mason, 2010). Mason (2010) further argues that only agile companies can thrive in such uncertain and dynamic environments. Towards this end, Tikkanen (2014) postulates firm agility to the capability of a firm to effectively respond to both proactive and reactive needs and opportunities in the face of uncertainty, hence making the firm more competitive.

The present study will be informed by the dynamic capability theory, evolutionary model and the resource –based view model. According to the dynamic capability theory (Teece, Pisano & Shuen, 1997), a firm should endeavor to build its core competency in times of rapid change in the market. Filling the shortcomings of past theoretical models, the current study borrows the concept of sustainable competitiveness even under dynamic environmental changes. The RBV theory (Barney, 1991; Penrose, 1995; Wernerfelt, 1984) predisposes that firm competitiveness arises from the heterogeneity of firm-specific resources and variations in efficiency and capabilities.

Two factors motivated this research; first, there is scant literature on the impact of strategic agility in enhancing firm competitiveness in Kenya. Prior research emphasizes the importance of strategic planning in building the core competence of firms in Kenya (Njeru, 2015; Onyango, 2012). There is ambivalence as to whether conventional strategic implementation always influences firm performance.

Second, research on strategic management are only able to identify the critical success factors to strategic implementation and firm competitiveness but cannot explain how various strategic management practices respond to the dynamics in the macro-environment. Therefore, an opportunity exists to understand various dimensions of strategic agility as well as the interplay between strategic agility practices and firm competitiveness.

Despite the fact that the pharmaceutical sector in Kenya is the largest in East and Central Africa, it is exposed to fast and complex changes ranging from price volatility to radical changes in regulation (Gok, 2016). There is need therefore for more studies to investigate the various strategic approaches that pharmaceutical firms can adopt to face the real challenge of speed and complexity while building their core competency.

1.1.1 Strategic Agility

According to Doz and Kosonen (2015), strategic agility has to do with the process through which a firm gradually adjusts its overall strategy in tandem with the market forces, so as to innovate new products, services and even new models to add business value. Tallon and Pinsonneault (2011) concurs by arguing that conventional strategic planning may not make a firm agile, hence strategic agility which enables a firm cope with uncertainty and turbulent conditions. As Shepherd and Sutcliffe (2011) posit, strategic agility enables a firm become adaptive to the changes in the macro-environment in tandem with Pinsonneault who posits that such an agile firm is able to survive turbulence in the market. Strategic agility thus enables a firm proactively react to turbulence in the environment while fixing its internal drawbacks (Tallon & Pinsonneault, 2011).

In corroboration to the above thesis, Oyedijo (2012) contends that strategically agile firms tend to swiftly take corrective measures in tandem with the market forces including short term strategic plans to counter radical changes in the market. Liu (2010) further expounds on the concept of strategic agility by asserting that strategic agility is seen as an alternative to conventional planning with a central focus on strategic thinking and vision.

Ren, Toor and Ofori (2010) argue that firms that adopt strategic agility become more competitive and innovative since they innovatively and promptly respond to customer needs while adjusting to the business environment. Despite attention and agreement, the concept of organizational agility has received neither a consistent treatment in the literature nor a coherent typology or theory of its meaning (what it is) nor significance (why it matters) to guide a systematic program of research. Instead, agility has remained an elusive ‘faddish’ concept with broad and sometimes disparate definition and application across a wide range of organizational contexts (Shepherd & Sutcliffe, 2011).

1.1.2 Firm Competitiveness

Going by Liu (2010), capabilities which act as indicators of effectiveness of strategic agility constitute firm competitiveness. Oyedijo (2012) concurs with the above argument by associating firm competitiveness to its capacity to implement strategies that meet customer expectations by adopting not only unique resources, but also interactive customer relationship and the employees. Other dimensions of firm competitiveness include market positioning (Day & Westley, 2013), inimitability of firm products and services (Barney, 1991; Grant, 1991); and unique capabilities (Hall, 1993). Ren (2007) contends that strategically agile firms should focus on customer satisfaction, innovation and continuous learning.

Towards this end, Ren asserts that aspects like timeliness, flexibility, and value addition constitute the key guiding principles in the satisfaction of customer demands for a firm to remain competitive. Corroborating Ren; Toor and Ofori (2010) outline four main competitive capabilities; responsiveness, competency, flexibility and speed. According to Shepherd and Sutcliffe (2011), in order to stay ahead of its competitors, a firm must continually apply best practices in the performance of its key functions while incorporating the dynamic customer requirements and opinions through top notch public relations. Towards this end, operational efficiency can be seen as a firm's capacity to contribute strategically in the resolution of its core obstacles, the need for clarity of vision, purpose and concern for performance.

As Hallgren and Ohager (2009) contend, sustained competitiveness can be achieved through strategic thinking, hence proactive management practices. Thus, strategic thinking enables management avoid complacency and ultimately satisfy customer needs. Towards this end, companies whose strategies are practically achievable in terms of resource availability, possession of unique skill sets, and expertise are more competitive. Supporting the above thesis, Scheepers and Hobbs (2016) asserts that in the context of aspiring to meet or even exceed customer demands, strategic thinking makes the firm stay focused on the overall organizational vision.

1.1.3 Strategic Agility and Firm Competitiveness

New technology absorption and innovative ideas to design and create new products and services is a key performance driver for competitive firms. Strategically agile firms proactively adjust to changes in the environment (Doz & Kosonen, 2010) by adjusting their strategies faster than their competitors in the market (Scheepers & Hobbs, 2016).

Diverting slightly from the above proposition, Ren (2007) views strategic agility as a critical success factor for successful change management which requires top management support and the creation of impetus to conform to radical changes among the members. To remain agile, a firm needs to scan the environment and keep pace with changing customer demands, threats and opportunities to foster innovation and learning (Ren, 2007). Toor and Ofori (2010) further explain that agile firms operate from the customers' perspective on quality, timeliness, flexibility and information sharing.

The role of strategic agility in enhancing firm performance can be viewed from the firm's productivity perspective (Day & Westley, 2013) which predisposes that organizational productivity arises from the firm's ability to undertake market forecasting and make predictions that guide it in making readiness for disruptions in the market by optimizing production and operation processes. In this context, a firm's competitive advantage acts as a comparator between itself and the main rivals in the market. Ultimately, the core competency of the firm then depends on how well it's able to outperform its key competitors in terms of production and operations efficiency from the customer's lens (Liu, 2010).

1.1.4 Pharmaceutical Sector in Kenya

Kenya's pharmaceutical industry is the biggest in the COMESA region taking up to 50% of the regional market (Gok, 2016). The sector has well over 30 firms which can be categorized into three main streams; manufacturers, distributors and retailers composed of local and multinational firms, subsidiaries and joint ventures (GoK, 2016). The pharmaceutical sector in Kenya is central to the economic development of the country employing about 2000 people, 65% of whom are engaged in direct production of drugs.

According to GoK (2016), the key operations in the sector include; compounding, packaging and repackaging, and processing of bulk drugs with most of the local pharmaceutical manufacturers focusing on over-the counter (OTC) products. The rapid growth of the pharmaceutical industry in Kenya is further reinforced by the local and foreign investments. The robustness of the pharmaceutical sector is supported by the existence of over 9,000 products having been patented in Kenya going by the Africa Regional Industrial Property Organization (ARIPO) patent data base (GoK, 2016).

The Kenya national pharmaceutical policy (KNPP) envisages the pharmaceutical sector being a critical to the economic and social development of Kenya and its core objective is to facilitate local research and development in the sector by creating an enabling environment for innovation. Its ultimate aim is to offer a regulatory mechanism with proper inspections to produce quality products and services. As the biggest regional market, the ministry of health plays a key role in ensuring self-sufficiency in quality medicines to specifically reduce common epidemics like malaria and HIV.

1.2 Research Problem

Strategic management studies have not exhausted the inter play between dynamics in the business environment and strategic planning (Whittington, 2014). While strategic agility is knowledge-based and proactive (Alpiq, 2011), manufacturing agility is flexibility – based and reactive (Toor & Ofori, 2010). So both forms of agility must concurrently exist for a firm to be as responsive as possible to market changes. Towards this end, competitive firms are in continuous improvement and search for new opportunities with adequate market intelligence.

The pharmaceutical industry plays a key role in Kenya's health sector in the provision of drugs. An array of competitive forces ranging from; the aftermath of the recent financial crisis to volatility in interest rates have reconfigured the drugs market in Kenya. Complexes in the strategic management process in emerging sectors like the pharmaceutical sector in Kenya motivate the current study. Specifically, challenges arising from the direct linkages between industry-specific factors, market dynamics, and agency issues pose significant obstacles to strategic management in Kenya's pharmaceutical industry. The centrality of the pharmaceutical industry in Kenya underpins the need for the facilitation of strategic management due to its involvement in effective health system reform.

Numerous studies have been conducted on strategic management and firm competitiveness. Shropshire (2010) carried out a cross-sectional survey on Swiss electric companies and found out that in situations of instability in the market, decision outcomes and future environment conditions become key determinants in strategic planning. The study however falls short of investigating the role of strategic responsiveness in enhancing firm competitiveness, hence the current study.

Applying Vector Auto Regression (VAR) Modelling research design, Alpiq (2011) established a conceptual model that articulates strategic change management in stable and turbulent times through collaboration between top management and board members among big manufacturing firms in Europe. As per the study results, conventional strategic planning is fast becoming irrelevant due to volatility in the market ranging from high risks to dynamic customer demands. The study thus reiterates the need for firms to be risk averse through agility in strategic formulation.

In their study, Engau and Hoffman (2011) investigated the conformity of corporate strategy to regulatory framework in Tokyo. Multiple case study research method was used for the study. The study revealed that institutional and environmental factors are key determinants in successful strategic management in emerging industries. Their study is however limited to the extent that it does not factor the neo-institutional context in strategic planning.

Westphal (2016) while studying ambivalence among oil firms in South Africa found out that most oil firms focus on short-term strategic adjustments which are in most cases mere reactive measures. The study applied a cross-sectional survey technique of 60 firms. While they provide vital insights into strategic management, their study fails to demonstrate the direct linkages between strategic planning and turbulent macro-environmental factors.

Locally, Githinji (2014) conducted a cross-sectional survey on Strategic management practices adopted by the directorate of veterinary services in Kenya. The study found out that the directorate of veterinary services has embarked on strategic planning but requires strategic management for firm effectiveness. However, the study is limited to the extent that she ignores the dynamics in the turbulent market in which organizations operate today.

Njeru (2015) carried out multiple case studies to explore the role of strategic management in enhancing firm performance of Kenyan SMEs. The findings were that strategic management has significantly determined firm performance in the SME sector but the study falls short of investigating the direct linkages between superior strategic approaches and respective dimensions of firm competitiveness, a focus of the current study.

Onyango (2012) in a case study on strategic management practices by Kenya bureau of standards revealed that KEBS has adopted a planning mode of strategy formulation. The study is limited to the extent that the direct linkage between strategic agility and firm competitiveness is not unraveled. Marangu (2012) conducted a case study exploring the association between strategic change management and performance at the Kenya power and lighting company. The study revealed that strategic change management practices have had significant influence on employee behavior to the company's product innovation. The study however fails to determine the effect of specific aspects of strategic change management process to firm competitiveness, a domain of the current study.

The fact that it was a case study implies that the findings may not be generalizable to other state corporations in Kenya. This study diverges from past studies by conceptualizing both direction and range thus allowing seemingly counter-intuitive agility performances such as intentional reduction in rate of variety change for competitive diversion. Despite the fact that literature on agility abound, most of them have been biased towards manufacturing agility and agility as a quality factor rather than a key component of strategic management, hence the present study.

Literature on the association between specific dimensions of strategic agility and firm competitiveness in Kenya remains shallow. To fill this gap, this study focused on unravelling the direct linkages between strategic agility (clarity of vision, core capabilities, selected strategic targets, shared responsibilities, and implementation of strategic agility) and firm competitiveness among pharmaceutical firms in Kenya. The study aimed at addressing the question; what is the effect of strategic agility on the competitiveness of pharmaceutical companies in Kenya?

1.3 Research Objectives

The general objective of the study was to investigate the link between strategic agility and firm competitiveness in Kenya's pharmaceutical sector. The specific objectives of the study were:

- i. To outline the main strategic agility aspects applied by firms in Kenya's pharmaceutical sector; and
- ii. Develop a conceptual model demonstrating the association between strategic agility and competitiveness in Kenya's pharmaceutical sector.

1.4 Value of the Study

At firm level, this study may help firm managers identify critical strategic agility practices and the enabling environment for flexibility, adaptive and agile strategic planning. Towards this end, the findings of this study may be instrumental in environmental scanning and market intelligence.

Moreover, the study will provide vital insights on proactive approaches in dynamic and turbulent business macro-environments. At the theoretical level, this study makes a maiden attempt to develop a framework indicating the linkages between strategic agility and firm competitiveness.

At policy level, this study may provide backstopping to healthcare policy makers with regards to the role of strategic management in the health sector. In particular, this study aims at developing the theoretical foundations to propose that organizational agility is neither appropriately defined by strategic flexibility nor to be confused with one or more organizational (dynamic) capabilities for organizational change. A review of the theoretical and empirical literature is presented in the next chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

A review of past studies associating strategic agility with firm competitiveness is presented in this chapter. The key sections of this chapter are: theoretical foundation of the study, past studies, a hypothetical framework of the study, and finally a summary of the chapter. Thus, the chapter outlines the theoretical basis of the study by providing an understanding of the relevant theoretical models. The chapter aims at synthesizing various theories while precisely connecting each of the theoretical models to the current study.

This chapter can be decomposed into two main parts. The first part of the chapter covers key concepts of variables in the study while the second part connects the various theories to the study. A critical literature review on strategic agility theory is extensively outlined with particular emphasis on linking each of the elements to firm competitiveness. Through the same horizon, literature on the centrality of the dynamic capability theory in the current study is reviewed as a compliment to the strategic agility model.

To further explain the interplay between strategic agility and firm competitiveness, the evolutionary and resource-based view of the firm informed the study. The three theories corroborate Nilchiani and Farr (2010) who from a contingency viewpoint postulates that organizational forms fall into continuum ranging from static forms to flexible organizational forms with the latter form being more adequate in turbulent environments. Ultimately, agile firms have higher propensity to adopt strategies geared towards making them more proactive in addressing customer demands in the market.

2.2 Theoretical Foundation

The theory of dynamic capability and strategic agility remain vital in the current study. According to Alpiq (2011), dynamic capability provides the foundation of strategic agility. Corroborating Alpiq, Marangu (2012) relates strategic agility to dynamic capability. The dynamic capability theory, the RBV and the evolutionary theory are relevant to the current study given the fact that they border on turbulent business environments such that capability is built on adaptability of the firm to the dynamics in the macro-environment.

The relevance of the dynamic capability approach in the current study stems from the fact that clarity of vision which is a key variable in the present study is critical in the exploitation of valuable knowledge assets (Engau & Hoffman, 2011) such that pharmaceutical firms will be assumed to build and exploit valuable knowledge to remain agile, hence more competitive. It's however worth noting that the limitations of the dynamic capability model with regards to rigidity issues may arise with a highly developed capability in a given area. Despite the above shortcomings, the dynamic capability model supersedes the resource-based view of the firm, hence preferable to the RBV model.

Advanced by Barney (1991), the resource –based theory of the firm argues that a firm; should utilize both physical and intellectual assets in building their core competency. They further explain that such physical and intellectual assets should be uniquely valuable and difficult to substitute. The centrality of resource – based view model to the current study can be traced back to (Engau & Hoffman, 2011) assertion that firms accumulate knowledge during their existence and command a portfolio of unique skill sets.

2.2.1 Dynamic Capability Theory

Dynamic capability theory (Teece, Pisano & Shuen, 1997) suggests that the competitive advantage of a firm arises from exploiting unique firm-specific physical and intellectual assets. Diverting from the resource –based model, the dynamic capability theory incorporates the dynamics in the business environment in the process of configuring and renewing firm specific resources (Barney, 1991; Penrose, 1995; Wernerfelt, 1984). Another related theory supporting the dynamic capability model is the behavioral theory and transact cost theory by the same authors which attributes the role of dynamic capabilities to operational capability.

The dynamic capability model views a strategically agile firm as; that which is able to re-align its day to day routines to match the changes in the macro-environment. Dynamic capability focus on continuous change while adapting to the environmental stimuli. In line with Penrose (1995), strategic agility enables a firm respond to both opportunities and threats in the market. The model is thus biased towards swift and prompt response to disruptions in the market.

The dynamic capabilities theory fits into the present study and can be pegged on the fact that pharmaceutical firms will be assumed to incorporate managerial decisions in resources allocation for capability development. The dynamic capability model rides on the existence of costs associated with resource transfers under dynamic conditions. Complementing the above notion, Allen and Wright (2007) distinguishes dynamic capabilities from other approaches by positing that they represent a more practical approach to change management by laying emphasis on firm-specific capabilities.

2.2.2 Evolutionary Theory of the Firm

Proposed by Nelson & Winter (1982), the evolutionary view of the firm argues that firms accumulate substantial knowledge during their tenure, building a portfolio of unique skill sets which are then incorporated in their operational routines. Corroborating Nelson and Winter, Lewin and Volberda (1999) contends focuses on tacit knowledge which according to their thesis enables firms identify novel solutions adaptive to the dynamics in the macro-environment.

Wright (2007) concurs with the above arguments by asserting that the interaction between the structure of the routine and specific aspects of the given routine facilitates permanent variations that make the firm more responsive and adaptable to changes in the environment. Thus from the contingent view point, organizational forms fall into a continuum from static to more flexible organizational structures which are more agile and responsive to the dynamics in the business environment. From the perspective of the evolutionary theory, a firm's evolution follows a path which involves the firm as a knowledge processor.

The firm's knowledge is then assumed to continually improve due to social interactions, hence the competencies can be said to be rooted in historical processes that the firm goes through. This theory however suffers from the limitation of ignoring both internal and external elements of strategic formulation. Moreover, the evolutionary theory extends to factor in the external environment like public institutions and markets. Explaining the above notion further, Hall (1993) contends that the outside-inside approach along with the inside-outside perspective must be considered while crafting the organizational design.

2.2.3 Resource-based View of the Firm

In his model, Barney (1998) contends that; the ability of a firm to acquire, develop, combine, and effectively deploy its physical and human capital enables it become more competitive. In a rejoinder, Newbert (2008) outlines the central tenets of the RBV as; the possession of unique, non-substitutable resources. Expounding further, Barney (1991) views firm value as constituting of resources that enable a firm either exploit or neutralize threat to the firm.

In the same context, Barney defines inimitability as the impossibility of other firms to duplicate the firm's unique resources. Towards this end, rarity is defined as any resource in a firm that is not available among the firm's current and future competitors. Tracing the evolution of resource based model, Allen and Wright (2007) postulates that the dominant strategic management thinking hitherto; concentrated on external factors. According to the RBV model, competitive firms aim at exploiting the differences in resource endowments among competing firms in the market or industry.

Such firms use the variation in resources capability to build their core competencies in the industry. The critiques of the RBV theory include the phenomenon of circular reasoning as espoused by the RBV model. The lag period between idea conceptualization and operationalization of a given project forms another limitation of the RBV model since it does not account for the transition period in the conversion of capabilities into core competency. Non-imitability of unique skill sets equally enhances firm competitiveness since human capital is critical in any competitive firm (Barney, 1991). The lag period, thus determines the product cycle time; particularly the period between idea conception to product launching (Newbert, 2008).

2.3 Forms of Strategic Agility

According to Allen and Wright (2007), for a firm to achieve strategic agility, it must evolve and gradually change from mechanistic to a more flexible organizational structure. Roth further argues that such an organizational approach will enable the firm leverage value chain resources for strategic advantages. Towards this end, the firm is then capable of gradually shifting from manufacturing to more flexible operations. Corroborating Allen and Wright, Prahad and Hamel (1993) suggests a three faceted model of strategic agility incorporating several aspects of strategic agility. The main components of strategic agility include; clarity of vision, shared responsibilities, core competencies, selected strategic targets, and implementation of strategic agility (Hall, 1993).

Long further argues that for a firm to acquire speed and responsiveness, it must ensure clarity of vision and mechanisms to understand its core capabilities. Long further portends that lack of strategic agility makes a firm ill prepared for turbulent dynamics in the market leading to pursuing elusive opportunities. Moreover, agility is a key value driver with regards to creating customer relationships. It is worth noting that strategic agility focuses on both the individual and team level in any organization. Towards this end, strategic agility relies on the agility of the respective organization.

Thus, the workforce of a firm can be viewed as a core source of firm competitiveness as long as it meets the criteria of being valuable and rare. But it's imperative to ensure that team agility is in place to foster individual agility. Innovativeness and collaboration are some of the critical success factors for successful implementation of strategic agility. For instance, integration along the supply chain is an example of the effect of collaboration on competitiveness (Alpiq, 2011).

2.4 Influence of Strategic Agility on firm Competitiveness

Going by Westphal (2016), strategic agility has to do with a firm's endeavor to adopt a more flexible organizational structure more so in strategic planning in tandem with market dynamics. Roth further asserts that strategically agile firms utilize inter-firm resources and capabilities to replenish its knowledge base, hence biased towards working on a clear vision rather than conventional strategic planning.

According to Goh (2003), a clear vision enables a firm incorporate its customers in critical projects to enhance mutual benefit. Moreover, sharing responsibilities fosters employee involvement, empowerment, and self-directed cross-functional teams (Goh, 2003). Zelbst (2010) corroborates Goh by asserting that organizations can expand their territory faster than competitors through strategic agility.

As Wright (2007) argues, the goal of strategic agility is to gain competitive advantage with speed and creativity. In an agile organization, teams are committed to the strategy with full knowledge of the organization's goals and values. Innovation and agility enables a firm become proactive and creative enough to tap into opportunities while responding to threats, thus stay ahead of its competitors.

2.5 Empirical Studies and Knowledge Gaps

Githinji (2014) carried out a survey on the Strategic management practices adopted by the directorate of veterinary services in Kenya. The study adopted a cross-sectional survey research design. The target population included 56 managers from the directorate of veterinary services in Kenya. The study found out that the directorate of veterinary services has embarked on strategic planning but requires strategic management for firm effectiveness.

While her study shades light on the role of strategic management in enhancing firm performance, the study is limited to the extent that she ignores the dynamics in the turbulent market in which organizations operate today. Njeru (2015) examined the association between strategic formulation and firm performance of SMEs in Kenya. A multiple case study research design was adopted in the study. The study revealed that the strategic management practices adopted by SMES in Kenya have positively influenced their performance. His study however falls short of investigating the direct linkages between superior strategic approaches and respective dimensions of firm competitiveness, a focus of the current study.

Marangu (2012) investigated the association between strategic change management and performance at the Kenya power and lighting company. The study adopted a Case study research design and found out that strategic change management practices have had significant influence on employee behavior to the company's product innovation. Though the study findings concur with past empirical studies on the centrality of strategic management in enhancing firm performance, it fails to determine the effect of specific aspects of strategic change management process to firm competitiveness, a domain of the current study. The fact that it was a case study implies that the findings may not be generalizable to other state corporations in Kenya.

Onyango (2012) explored the strategic management approaches adopted by the Kenya bureau of standards (KEBS). The study assumed a case study research design. According to the study, KEBS has successfully adopted a number of strategic practices which have enhanced the organization's performance over the study period. Too (2014) investigated globalization and corporate real estate strategies among real estate firms in Kenya. The study adopted a descriptive research design.

The study found out that most of the real estate firms in Kenya have not been able to synchronize the effect of globalization to their strategic response to that macro-environment in Kenya. The study however falls short of determining the effect of strategic agility on firm competitiveness. Kambi (2017) explored the role of strategic agility on the perceived performance of hospitals in Kenya. The study adopted a descriptive survey design with a sample of 31 major hospitals from across the country. The study found out that indeed strategic agility has moderately influenced the performance of hospitals in Kenya. The study however falls short of establishing the direct linkages between the various strategic agility dimensions and firm performance.

Mumo (2016) carried out a survey on alternative forms of fit into their distribution flexibility strategies among food processing firms in Kenya. The study adopted a descriptive survey research design. The study revealed that firms end up choosing strategic fit depending on the context of the market they are operating in and the complexes of their supply chains. The study however falls short of establishing whether such responsive approaches constitute strategic agility and to what extent the strategies can impact on firm competitiveness.

In his study, Noor (2015) sought to examine the drivers and critical success factors for integrated agile manufacturing among motor vehicle firms in Kenya. Descriptive research design was used as the research design. The study found out that indeed they apply integrated agile and adaptive techniques to meet customer demands. The study, however fails to demonstrate how strategic agility can enable manufacturing firms achieve better operational, market, and financial performance. Besides, the results of the study cannot be applicable to firms in other sectors.

Internationally, Bernard et al (2009) undertook a descriptive survey on flexibility, agility and responsiveness among manufacturing firms in Europe and found out that; radical and permanent expansion, stiff competition between manufacturing and service industries, technological change, reduced product cycles, and customer willingness as the main strategies for building a firm's core competency. Their study however contradicts past models on operations management which are ambiguous with regard to the use of responsiveness construct.

Zelbst (2010) investigated the interplay between JIT, market orientation and agility. The study adopted a multiple case study research design and found an association between key strategic agility attributes like total quality and market orientation and operations and logistics performance. The empirical analysis of the study revealed a statistically significant positive association between market orientation and agility. The study however falls short of empirically testing the direct linkages between various aspects of strategic agility to firm competitiveness.

Using a cross-sectional survey research design, Oyedijo (2012) investigated the behavioral dynamics of corporate governance in Nigeria. The study established team empowerment as a source of team effectiveness. The study further revealed that the ability of a firm to sense opportunities in the environment such as dynamic customer needs enables an organization to read and interpret the customer needs, thus becoming more competitive in the market. Though the study provides vital insights into the role of the environment in strategic formulation, the study fails to show how firms can adapt to dynamic market forces and uncertainty using strategic agility.

Scheepers and Hobbs (2016) conducted a study on the identification of the elements of dynamic capabilities and agility among IT providers in China. The study used a survey of 34 organizations and adopted a descriptive survey research and developed a conceptual model for analysing the role of dynamic capabilities in the creation of agile systems. The study further revealed that the application of VSM mechanisms demonstrated the extent to which IT function can foster agility. The study is however limited given that it takes a narrow approach to strategic agility.

Xenophon (2009) examined competitive capabilities of 144 firms in Germany. The study adopted a multiple case study and found out that keeping royal customers depends on a company's ability to acquire and utilize some unique competitive capabilities Vis a Vis competitors. The results however fall short of developing a conceptual framework for research on competitive capabilities and test relations amongst relevant constructs. Hallgren and Olhager (2009) unraveled manufacturing agility in Europe. Data from 211 manufacturing plants was collected from seven countries.

The study assumed a cross-sectional survey research design. The study identified lean manufacturing, cost leadership and differentiation as the key drivers of cost performance among the firms in Europe. Her study however fails to connect strategic agility to firm performance. Nassimbeni (2017) carried out a study in Italy on product development challenges facing SMEs in the country using a descriptive survey design. The target population was 49 SMEs. The study highlighted poor project specification, mapping and lack of SWOT analysis as the main obstacles facing SMEs in Italy. The study is limited to the extent that it fails to indicate the role of strategic agility and responsiveness to changes in the market.

Davoudi (2012) conducted a study on the role of agility in firms' performance among chemical firms in Pakistan. The study adopted a multiple case study on a sample of 12 firms. The study established that willingness to change and internal readiness are the most important factors in adopting strategic agility. The study falls short of expounding on the linkages between agility and value creation in turbulent business environments.

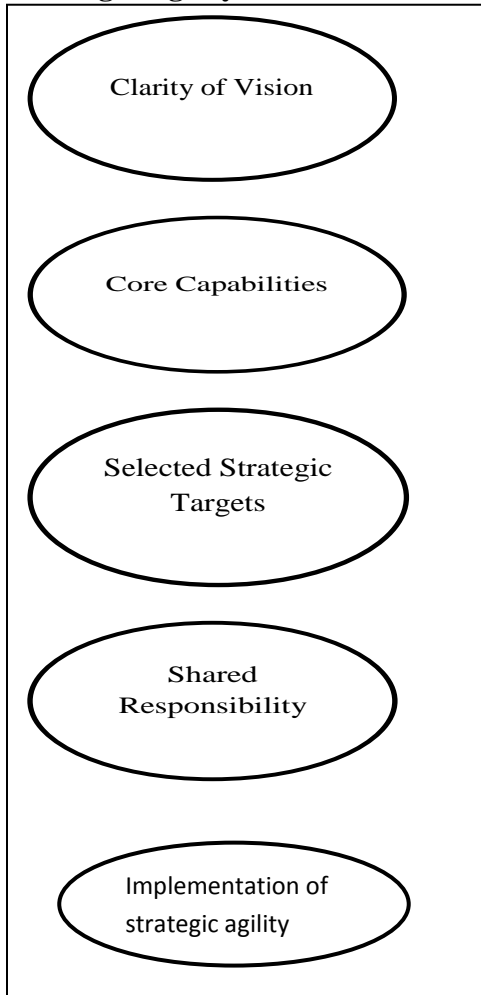
2.6 Conceptual Framework of the Study

A conceptual framework illustrates the structure which the investigator believes can best explain the natural progression of the subject under study. The structure thus, must be linked to the various constructs, empirical outcomes of related past studies, and the main theoretical models to enhance the rendition and presentation of the knowledge contribution of the study. The framework plays a critical role in explaining the path through which the researcher will follow in addressing the research questions to meet the objectives of the study. In an integrated way, a conceptual framework gives a general presentation of the interplay between the predictor and dependent variables in any study.

Statistically, a conceptual framework describes the association between the main concepts of a study. Therefore, a conceptual framework is a series of actions that a researcher intends to undertake in a research undertaking. Towards this end, a conceptual framework aids a researcher in the specification and definition of the concepts within the problem of the study. A conceptual framework can assume the form of a graph, or narrative indicating the key variables or constructs to be investigated and the presumed association between them. The theoretical framework designed for this study elaborates the interplay between all the major variables to test the actual effect of strategic agility on competitiveness among the pharmaceutical firms in Kenya. In the context of the research hypotheses, Figure 2.1 presents the conceptual framework of the study.

Independent Variables

Strategic Agility



Dependent Variable

Firm Competitiveness

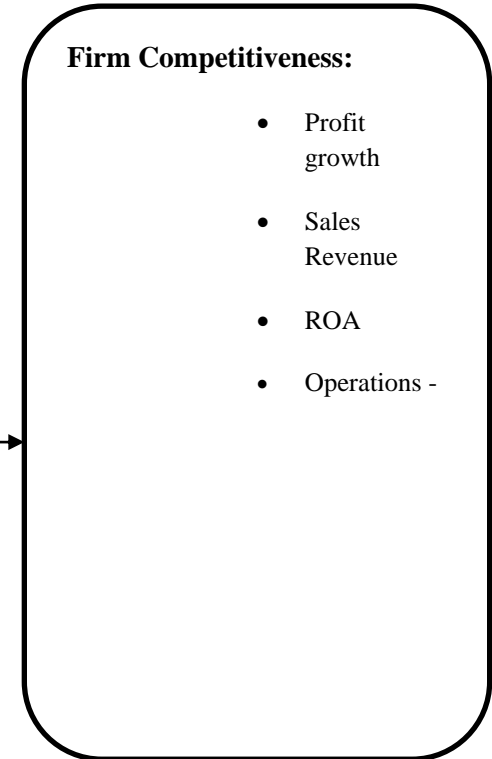


Figure 2.1 Conceptual Model

Ensuring clarity of vision will enable the pharmaceutical firms combine speed and stability, hence strategic agility. This is in tandem with Engau and Hoffman (2016) who articulates the ill preparedness of most firms to the poor understanding of their core competencies. Shropshire (2010) concurs with Engau and Hoffman by arguing that a firm can either create or destroy its relationship along a value chain. Shared responsibility facilitates the empowerment of employees through cross-functional teams, decentralized decision making, reward and compensation.

As per Roth (1996), having close relationships with the suppliers, collaboration with customers, and continuous improvement and learning constitutes other key attributes of shared responsibility. According to Sambamurthy et al (2003), taking action involves not only the speed at which the firm adapts to market dynamics, but also the strategies the firm adopts under turbulent circumstances in the macro-environment. Towards this end, it's clear that such a firm is able to not only provide vital information to its customers, but also to incorporate them in the strategic planning process. The next chapter presents discussions on the research philosophy and methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The study sought to apply a descriptive survey research design with a semi-structured questionnaire as the main research instrument. The study utilized data collected by semi-structured questionnaires, and analysis of existing background provided by the pharmaceutical firms in Kenya. Quantitative methods often involve the use of numerical manipulations based specified functions or models (Testa et al., 2003).

Quantitative techniques develop and apply conceptual models which are then operationalized using probabilistic or functional models. Such manipulations rely on well-defined hypotheses and a priori theory. Therefore, quantitative approaches enable a researcher test and prove hypotheses proving or disapproving existing theoretical predispositions (Mumo, 2016).

As Alpiq (2011) argues, the type of survey method depends on the scope of a given research understanding. In cases where the researcher is out to analyze a number of opinions and practices, the cross-sectional survey design becomes the best option. On the other hand where the researcher aims at comparing the differences in opinion, then longitudinal survey becomes appropriate.

The research methodology plays a critical role in explaining the procedures through which the researcher will follow in addressing the research questions to meet the objectives of the study. In an integrated way, the methodology describes the research philosophy, research design, the nature of data, the research instruments, data reliability and validity, and the analysis approaches to be adopted by a study.

3.2 Research Design

According to Westphal (2016), a research design consists of a set of logical procedures which when followed enables a researcher obtain evidence in order to test a hypothesis.

Descriptive research design was used in this study with both descriptive and inferential statistics. In a descriptive survey, sampling is a very vital process and must be done using the right method to avoid bias (Onwuegbuzie & Leech, 2005).

The choice of this research design was informed by the fact that, a descriptive design allows an individual obtain huge amounts of data using a cheap and relatively simple technique. Another salient feature of a descriptive survey arises from the fact that it enables a researcher apply descriptive and inferential statistics in drawing conclusions. Marangu (2012) corroborates Onwuegbuzie and Leech by arguing that the main objective of a descriptive survey is to recast large populations using sampling techniques.

In tandem with the above notion, Westphal (2016) asserts that while adopting a descriptive research design, a battery of questions are fronted to the respondents to obtain huge amount of data in an economic way. The research design equally allows for several data manipulations including summary or responses, frequencies, and many more statistical methods to unravel relationship between the study factors.

3.3 Population of the Study

Onyango (2012) asserts that all the elements that share a given set of features constitute the population in any study. The population dictates the research design and methodology applied in any given study. In this study, the population included selected pharmaceutical firms in Nairobi to be used as a sample. A total of 22 selected pharmaceutical companies were on the roll (see Appendix III).

Bordering Onyango's definition, Githinji (2014) views a population of study as constituting all the units from which data is obtained in a given study. Engau and Hoffman (2011) further elaborates by describing the population of a study as constituting all the elements that meet the set criteria of inclusion in any given study with the eligibility criteria including all the characteristics required in the target population.

According to Goh (2003), a population can be seen as a group to which an investigator would like to generalize the findings of his study, hence a set of all case of interest. Shropshire (2010) corroborates Goh by arguing that such cases of interest may be of any size or even cover almost any geographical area. Diverging from the rest of the definitions, Alpiq (2011) asserts that it's the prerogative of the researchers to distinguish between the general population and the population of the study.

3.4 Sample Frame

The purpose of the study determines the magnitude and nature of the sample frame. Towards this end, sample frames enable a researcher select the particular members of the target population to be incorporated into the study. However, in multi-stage surveys, more than one category of elements may be incorporated during the determination of the sampling frame (Mumo, 2016).

A critical factor when deciding on the sample frame is the nature of association between the target population and unit of analysis. It is the latter which determines the frame. The unit of selection is what determines the probability of selection. The sample frame consisted of 22 selected pharmaceutical firms in Nairobi. In the present study, the sampling list was constituted from the ministry of health online data base.

The sampling frame must capture the target population in a statistical sense and thus a perfect sample frame is one that is complete and up-to-date. However, these are ideal properties that are unattainable in some surveys like household surveys. Nevertheless, it is essential to strive for either constructing a frame from scratch or using one that already exists. The quality of a frame may be assessed in terms of how well its idealized properties relate to the target population.

3.5 Data Collection

The study utilized both primary and secondary data. A semi-structured questionnaire was used to collect quantitative data. The semi-structured questionnaire consisted of three sections. Questions in section 1 focused on demographic data while section 2 and 3 consisted of questions geared towards obtaining data on the strategic agility practices and firm competitiveness.

Strategic and operations managers were the respondents in the study with a 5-point Likert type scale applied to collect data on the opinions of the respondents. According to Whittington (2014), a questionnaire enables a researcher gather responses in a standardized way making them more objective. Consequently, Data obtained from questionnaires enables analysis of data by inferential and descriptive statistics feasible.

In addition, questionnaires enables a researcher obtain data from a large portion of a group. Questionnaires allow for the collection of both subjective and objective data. Hence questionnaires are the most appropriate for large population samples in order to obtain results that are statistically significant.

3.6 Data Analysis

Both descriptive and inferential statistics were applied in analyzing the quantitative data on the various strategic agility practices adopted by the firms in the context of the first objective of the study. To address the second objective of the study, linear regression was applied to determine the association between strategic agility and firm competitiveness among the pharmaceutical companies in Kenya.

The rationale for applying multivariate regression in the analysis was based on the fact that it enables a researcher draw conclusions (Barton, 2015). Barton further argues that it's the best technique to apply when the researcher aims at getting tests of specific effects for a single dependent variable over various levels of analysis. The regression analysis was computed as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$$

In which case;

Y = Competitiveness of the firm (ROA)

β_0 = Constant

$\beta_1, \beta_2, \dots, \beta_5$ = Coefficients of the independent variables

X_1 = Clarity of vision

X_2 = Core capabilities

X_3 = Selected strategic targets

X_4 = Shared responsibility

X_5 = Implementation of strategic agility

According to Westphal (2016), a competitive scale of ten performance criteria may be used to operationalize competitive performance. Westphal (2016) goes further to outline the ten criteria as including: profit margin, sales revenue, financial performance, sustained expansion, publicity, employee commitment, environmental concern, and innovation. To make this feasible, a Likert scale was applied to measure the opinions of the respondents on various constructs regarding strategic agility and firm competitiveness.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION OF THE RESULTS

4.1 Introduction

The influence of various aspects of strategic agility on a number of dimensions of firm competitiveness constituted the domain of the study. Investigating the various strategic agility practices adopted by pharmaceutical companies in Kenya; and the need to come up with a conceptual model showing the link between strategic agility and firm competitiveness of pharmaceutical companies in Kenya were the specific objectives of the study. This chapter presents the research findings including; demographic data and data analysis by objectives. Inferential and descriptive statistics were used in the study.

Oyedijo (2012) opines that descriptive statistics as an analysis using SPSS is one of the most common analysis technique in social science today. Preliminary steps included data cleaning and entry after field work. Three different areas were under investigation; demographic characteristics, adoption and implementation of strategic agility practices, and the influence of such practices on firm competitiveness among the companies.

The Likert scale was used to enable the researcher examine the extent to which various aspects of strategic agility have impacted on firm competitiveness. Thus, the Likert scale was applied to capture the opinions representing five scales (No extent, small extent, moderate extent, large extent, and very large extent), 1,2,3,4 and 5 respectively were used to represent the scores. Frequencies were used to describe the characteristics of the samples responded in the questionnaire. To determine the departure of the responses from the mean response, a standard deviation was generated for the study.

4.2 Response Rate

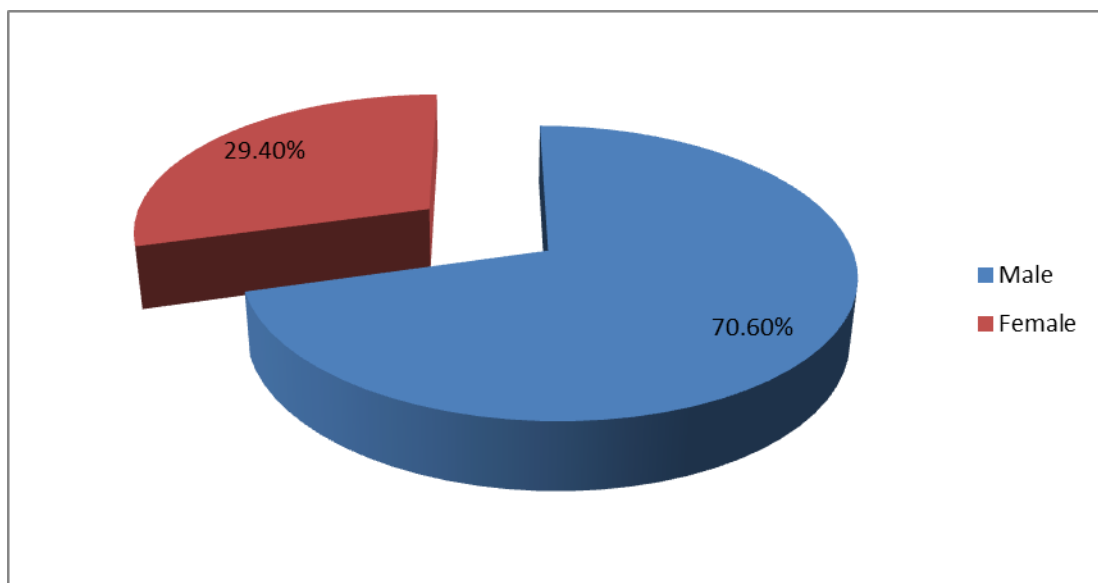
A response rate of 77.3 percent was registered with 17 out of the 22 questionnaires initially administered to the respondents returned. A response rate of 50% is viewed as the threshold for analysis. They further assert that a response rate of over 70% is excellent (Mugenda & Mugenda, 2008).

4.3 Demographic Information

Gender, academic qualification and age of the firm were some of the demographic data collected during the study.

4.3.1 Gender of the Respondents

In order to get a balanced view, the study sought information on the gender of the respondents. The findings are shown in Figure 4.1.



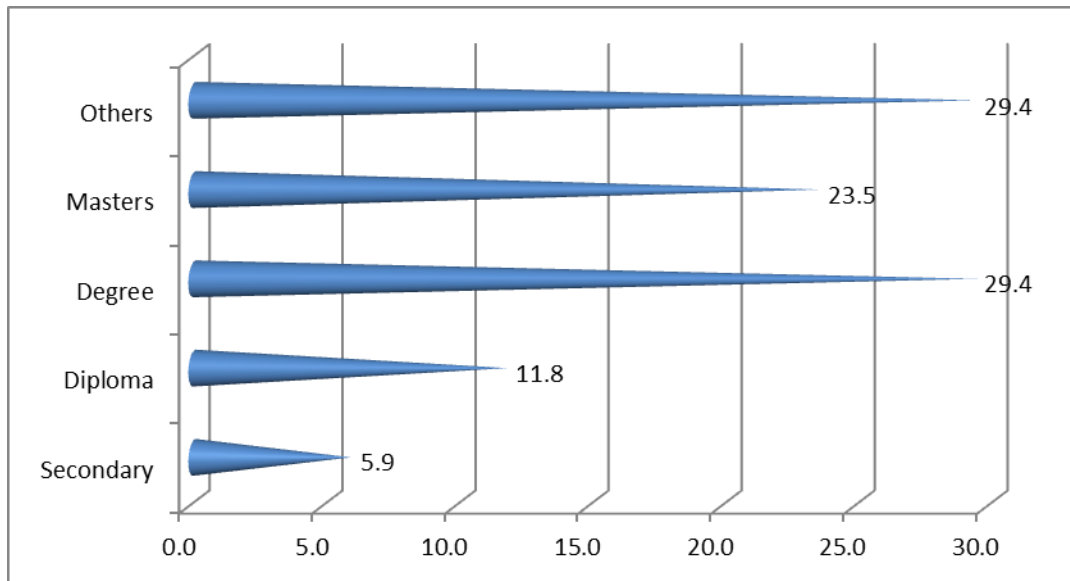
Source: Researcher (2018).

Figure 4.1 Gender of Respondents

The results in figure 4.1 show that 70.6% of the respondents were male while only 29.4% of the respondents were female. The findings imply that gender parity issues still prevail in the private sector despite the ongoing clamor for gender equity in both the public and private sector.

4.3.2 Academic Qualification

In the quest to unravel the competency of the respondents, the study sought to investigate the highest academic qualification obtained by the respondents. The findings are shown in Figure 4.2.



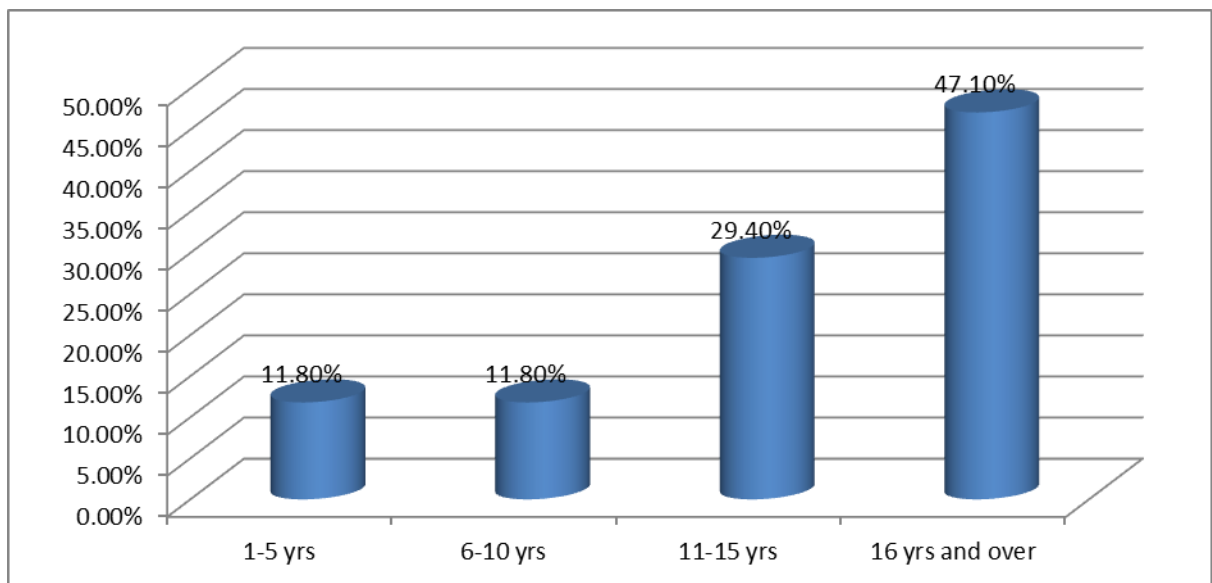
Source: Researcher (2018).

Figure 4.2 Academic Qualification

In line with the outcome in figure 4.2, 29.4 percent of the managers were degree holders, while up to 23.5% of the respondents had master's degree. The same findings indicate that 11.8% of the respondents were diploma holders and only 5.9% of the respondents were secondary graduates. The fact that up to 52.9 percent had obtained a degree implies that the data was collected from individuals with substantial knowledge of strategic planning. The findings equally imply that most of the firms in Kenya's private sector are now appreciating the role of having qualified persons in strategic positions given the fact that only 17.7% of the respondents had college education and less.

4.3.3 Age of the Firm

Strategic agility has to do with the responsiveness of a firm's strategy to disturbances in the macro environment. The number of years a firm has operated in a given macro-environment correlates with the extent to which the firm is able to adjust to changes in the business environment. Thus, the researcher explored the number of years the firms had been operating in Kenya. Figure 4.3 illustrated the findings.



Source: Researcher (2018).

Figure 4.3 Age of the Firm

Going by the results in figure 4.3, most of the firms (47.1%) had operated in Kenya for over 16 years followed by those who have operated in the market between 11-15 years at 29.4%. According to the results, only 11.8% of the firms had operated in Kenya five years and below. The findings above imply that the data was collected from firms which have substantial experience on strategic planning and responsiveness in response to the socio-economic conditions that have faced Kenya in the recent past, hence reliable.

4.4 Descriptive Analysis

The study was confined to exploring the influence of strategic agility on competitiveness in Kenya's pharmaceutical sub-sector. Specifically, the study aimed at; identifying the various strategic agility practices implemented by firms in Kenya's pharmaceutical sector; and developing a model showing the relationship between strategic agility and firm competitiveness.

4.4.1 Clarity of Vision

Firms that lack clear understanding of their core capabilities makes them to end up pursuing unattainable opportunities. Thus clarity of vision enhances a firm's ability to forecast and monitor the environment for any disturbances and respond accordingly. The study investigated the nature and extent to which the firms had adopted a number of practices associated with clarity of vision. The findings are presented in Table 4.1.

Table 4.1 Descriptive Statistics for Clarity of Vision

Aspects of Clarity of vision	Mean	Std. Dev	Skewness	Kurtosis
The firm has a clear sense of purpose which guides decision making.	2.3529	1.27187	.477	1.063
The firm has put in place mechanisms that clearly and effectively explain the company's overall goals.	3.6471	1.16946	-.801	1.063
The firm has established adequate principles that guide its operations.	2.0588	1.02899	.651	1.063
The various functional units in the firm are content with the endeavor to achieve	2.1176	1.16632	1.084	1.063
The firm understands her core capabilities	2.1176	1.40900	1.133	1.063

Source: Researcher (2018).

From the results in table 4.1, the firms have established systems that clearly elaborate the firm's overall goals to a large extent with a mean score of 3.6471 and that to a small extent; most of the pharmaceutical companies in Kenya have a clear sense of purpose which guides decision making with a mean of 2.3529.

Other practices that have been adopted by pharmaceutical firms to a small extent are: the various functional units in the firm are content with the endeavor to achieve; the firm understands her core capabilities; and the firm has established adequate principles that guide its operations with a mean score of 2.1176, and 2.0588 respectively.

A standard deviation was generated to show the extent to which the responses had departed from the mean. The responses regarding the firm's understanding of her core capabilities had the largest departure from the mean score with the highest standard deviation at 1.409 followed by the firm's clear sense of purpose which guides decision making at 1.27181. Responses regarding the firm's establishment of adequate principles that guide its operations had the least departure from the mean with the lowest standard deviation at 1.02899. Other aspects of clarity of vision such as the establishment of mechanisms that clearly and effectively explain the company's overall goals and ensuring the functional units of the firm are content with the endeavor to achieve and understanding of the firm's core competency showed notable divergence from the mean score with a standard deviation of 1.6946 and 1.16632 consecutively.

The other statistics on the table are skewness and kurtosis. Skewness is a measure of the asymmetry of the probability distribution of a real-valued random variable. Other than the firm's establishment of mechanisms that clearly and effectively explain the company's overall goals, all the responses with respect to questions regarding clarity of vision had a positive skewness. A negative skewness indicates that the tail on the left side of the probability function is longer than the right side and the bulk of the values (possibly including the median) lie to the right of the mean. Kurtosis on the other hand is a measure of the peakedness of the probability distribution of a real-value random variable.

The distributions of responses regarding all the aspects of clarity of vision had positive kurtosis. Skewness and kurtosis are an ideal measurement that tries to provide information with regards to the severity of departure from normal distribution. The values in this case are modest and we can deduce that the departure from normality was insignificant and thus not severe.

The findings above corroborate Goh (2003) who argues that a clear vision can be viewed as being pivotal in effective change management since successful change management calls for a shared vision and commitments by all functional units of an organization. Towards this end, a clear vision enables a firm to incorporate customers in critical projects to enhance mutual benefit. Moreover, sharing responsibilities fosters employee involvement, empowerment, and self-directed cross-functional teams.

4.4.2 Core Capabilities

Competitive firms aim at exploiting the differences in resource endowments among competing firms in the market or industry. Strategically agile firms utilize inter-firm resources and capabilities to replenish its knowledge base, hence biased towards working on a clear vision rather than conventional strategic planning. With the above in mind, an investigation was made into how various pharmaceutical firms in Kenya have adopted practices that aim at building their core competencies. The findings are depicted in Table 4.2.

Table 4.2 Descriptive Statistics for Core Competencies

Aspects of Core competencies	Mean	Std. Deviation	Skewness	Kurtosis
The firm utilizes its special skill sets, knowledge and knows –how that constitutes its core competency.	3.3529	1.49755	-.437	-1.191
The firm uses its knowledge and know- how to maintain its competitive advantage	2.0588	1.02899	1.431	3.123
The firm is able to identify and allocate its resources to value adding processes	2.0588	1.39062	.989	-.503
The firm focuses on skills and knowledge sets that are most critical to meeting customer demands	2.1176	1.11144	1.290	1.750
The firm is aware of its market position with regards to its reputation among its customers	2.0000	1.32288	1.101	.030

Source: Researcher (2018).

As per the results in table 4.2, most of the pharmaceutical companies in Kenya are not aware of their market position with regards to its reputation among its customers as shown by the low mean of 2.0. According to the results, most of the pharmaceutical firms in Kenya have not been able to identify and allocate their resources to value adding processes; utilize knowledge and know-how to maintain its competitive advantage; identify and allocate their resources to value adding processes; and use knowledge sets that are most critical to meeting customer demands with a mean of 2.0588, 2.0588 and 2.1176 consecutively. However, most of the pharmaceutical companies in Kenya have utilized their special skill sets, knowledge and know–how that constitutes its core competency to a moderate extent as shown by the highest mean at 3.3529 based on the Likert scale.

To appreciate the extent to which various responses had departed from the mean, a standard deviation was generated. The responses regarding the extent to which the firms had utilized its special skill sets, knowledge and know–how that constitutes its core competency had the largest deviation from the mean with a standard deviation of 1.49755 followed by the firm’s ability to identify and allocate its resources to value adding processes at 1.39062.

Other aspects of core competency that displayed notable divergence from the mean are: the firm's awareness of their market position with regards to its reputation among its customers and focus on the skills and knowledge sets that are most critical to meeting customer demands at 1.32288 and 1.1144 respectively. Apart from the responses regarding the firm's utilization of special skill sets, knowledge and know-how that constitutes its core competency which was negatively skewed at -.437, all the responses with respect to questions regarding all the aspects of core competencies were positively skewed.

Towards this end, responses regarding the firms' utility of their knowledge and know-how to maintain their competitive advantage was the most skewed at 1.431 followed by responses regarding the firm's' focus on skills and knowledge sets that are most critical to meeting customer demands at 1.29. According to the findings in table 4.2, responses regarding the firm's awareness of its market position with regards to its reputation among its customers were least skewed at 0.03.

To measure the peakedness of the probability distribution density, Kurtosis was applied. The distribution of responses regarding the firm's utility of its special skill sets, knowledge and know-how that constitutes its core competency; and the firm's ability to identify and allocate its resources to value adding processes showed a negative Kurtosis. On the other hand, the distribution of responses regarding the firm's application of its knowledge and know-how to maintain its competitive advantage, the firm focuses on skills and knowledge sets that are most critical to meeting customer demands, and the fact that the firm is aware of its market position with regards to its reputation among its customers had a positive Kurtosis.

Skewness and kurtosis are an ideal measurement that tries to provide information with regards to the severity of departure from normal distribution. The values in this case are modest and we can deduce that the departure from normality was insignificant and thus not severe. The results above concur with Newbert (2008) who asserts that the ability of a firm to acquire, develop, combine, and effectively deploy its physical and human capital enables it become more competitive. A firm's core competence emanates from the firm's possession of resources that enable firms to either exploit or neutralize threats to the firm. Towards this end, rarity is defined as any resource in a firm that is not available among the firm's current and future competitors.

4.4.3 Selected Strategic Targets

An organizational approach to strategic planning enables a firm leverage value chain resources for strategic advantages. Strategic agility allows a firm to benefit from collaborative processes along the supply chain. In the context above, an inquiry was made into the extent to which pharmaceutical companies in Kenya select strategic targets in a bid to enhance their competitiveness. Table 4.3 shows the results.

Table 4.3 Descriptive Statistics for Selected Strategic Targets

Aspects of selected strategic agility	Mean	Std. Dev	Skewness	Kurtosis
The company is able to map out market segments in which the firm's products are highly rated.	1.8824	1.16632	1.594	2.298
The firm is able to identify and focus on the various business units' core capabilities to exploit market opportunities.	3.5882	1.32565	-.763	-.219
The firm has identified specific competencies and processes that require development to better meet customer demands	1.8235	1.33395	1.437	.763
The firm has established processes to identify and develop products that match its capabilities to market opportunities.	1.7059	1.21268	1.835	2.702

Source: Researcher (2018).

Results presented in table 4.3 reveal that most of the pharmaceutical companies in Kenya have been able to identify and focus on the various business units' core capabilities to exploit market opportunities to a large extent as shown by the mean of 3.5882. According to the findings, the ability to map out market segments in which the firm's products are highly rated; the firm's possession of specific competencies and processes that require development to better meet customer demands; and the establishment of processes to identify and develop products that match its capabilities to market opportunities are some of the practices that the pharmaceutical firms in Kenya have adopted to a very small extent with a mean of 1.8824, 1.8235, and 1.7059 respectively.

The table also includes statistics that describe how the responses depart from the normal distribution with skewness determining the lack of symmetry. A distribution is symmetric if it looks the same to the left and right of the center point. While all the responses with respect to questions regarding selected strategic targets were positively skewed, responses regarding the firms' ability to identify and focus on the various business units' core capabilities to exploit market opportunities were negatively skewed. Kurtosis on the other hand was applied to determine the peakedness of the probability distribution function. The distribution of responses regarding the firms' ability to identify and focus on the various business units' core capabilities to exploit market opportunities assumed negative Kurtosis. The distribution of responses regarding the company's ability to map out market segments in which the firm's products are highly rated; ability of the firm to identify specific competencies and processes that require development to better meet customer demands; and the firm's ability to establish processes to identify and develop products that match its capabilities to market opportunities assumed positive Kurtosis.

The results above are in conformity with previous studies of Oyedijo (2012) who associates firm competitiveness to its capacity to implement strategies that meet customer expectations by adopting not only unique resources, but also interactive customer relationships as well as the employees. The findings further support Hall (1993) who contends that selecting strategic targets, shared responsibility, and implementation of strategic agility constitutes the key processes of strategic agility. In this context, for a firm to acquire speed and responsiveness, it must ensure clarity of vision and mechanisms to understand its core capabilities.

4.4.4 Shared Responsibilities

Strategic agility focuses on both the individual and team level in any organization. Towards this end, strategic agility relies on the agility of the respective organization. Thus, the workforce of a firm can be viewed as a core source of firm competitiveness as long as it meets the criteria of being valuable and rare.

The study therefore sought to investigate the extent to which pharmaceutical firms in Kenya have embraced shared responsibility as a key approach to foster their strategic agility over the recent past. The findings are depicted in Table 4.4.

Table 4.4 Descriptive Statistics for Shared Responsibility

Aspects of Shared Responsibility	Mean	Std. Deviation	Skewness	Kurtosis
The firm's project teams learn from mistakes and improve on its product quality.	3.4706	1.50489	-.684	-1.011
The company ensures seamless flow of data between the clients and key stakeholders.	1.8824	1.16632	1.594	2.298
The firm incorporates all the project teams including the clients to be part of the final outcome and results.	1.9412	1.19742	1.364	1.406
The firm engages its full clients in the planning and executions of key projects.	1.7647	1.20049	1.740	2.494

Source: Researcher (2018).

Going by the findings in table 4.4, it's clear that most of the pharmaceutical firms in Kenya ensure that their project teams learn from mistakes and improve on its product quality to a moderate extent as shown by the mean of 3.4706. The results show low adoption of all the other aspects of shared responsibility among the pharmaceutical firms in Kenya: the ability of the firm to incorporate all the project teams including the clients to be part of the final outcome and results; the ability of the firm to ensure seamless flow of data between the clients and key stakeholders; and the firm's engagement of its full clients in the planning and executions of key projects are some of the practices that have been adopted to some extent (with a mean of 1.9412, 1.8824, and 1.7647 concurrently).

Variation regarding shared responsibility was assessed using standard deviation which shows how much variation is apparent in responses of the participants in a study. Responses regarding the extent to which the firms' project teams learn from mistakes and improve on its product quality had the highest departure from the mean as indicated by a standard deviation of 1.50489 followed by the ability of the firm to engage its full clients in the planning and executions of key projects at 1.2. Responses with respect to the firm's ability to incorporate all the project teams including the clients to be part of the final outcome and results; and ensure seamless flow of data between the clients and key stakeholders also indicated considerable departure from the mean as shown by a standard deviation of 1.9742 and 1.6632 respectively.

To appreciate the distribution of the responses to questions regarding shared responsibility, the study generated a Skewness and Kurtosis to help determine the nature of the probability density function. All the responses with regard to shared responsibility were negatively skewed other than those regarding the firm's project teams.

On the other hand, all the responses with regards to shared responsibility assumed positive Kurtosis apart from those regarding the firm's ability to incorporate all the project teams including the clients to be part of the final outcome and results. The findings above corroborate Alpiq (2011) who established a conceptual model that articulates strategic change management in stable and turbulent times through collaboration between top management and board members. The findings however contradict Engau and Hoffman (2011) who investigated the conformity of corporate strategy to regulatory framework in Tokyo and identified institutional and environmental factors as key determinants in successful strategic management in emerging industries.

4.4.5 Implementation of Strategic Agility

Successful change management calls for a shared vision and commitment by all functional units of an organization. Clearly, an agile firm should thus be able to not only provide vital information to its customers, but also incorporate them in the strategic planning process. In view of the above, the extent to which pharmaceutical firms in Kenya have implemented strategic agility was a major focus of the study. Table 4.5 shows the outcome of the study.

Table 4.5 Descriptive Statistics for Implementation of Strategic Agility

Aspects of implementing strategic Agility	Mean	Std.Dev	Skewness	Kurtosis
The firm ensures that the key stakeholders are familiar with the firm's strategy and purpose.	1.8235	1.23669	1.500	1.509
The firm's strategic formulation and implementation matches the dynamic forces in the macro-environment.	2.0000	1.17260	.791	-.863
The firm incorporates key stakeholders in its strategic planning process to solicit their ideas and opinions.	3.5882	1.37199	-.785	-.502
The firm often discusses with the key stakeholders the kind of actions needed to best carry out its business strategy.	1.9412	1.08804	1.449	2.634

Source: Researcher (2018).

Results obtained in table 4.5 shows that to a large extent, the incorporation of key stakeholders in its strategic planning process to solicit their ideas and opinions has been adopted by pharmaceutical firms with a mean of 3.5882. According to the same findings, the most unpopular practice associated with implementing strategic agility is ability of the firm to ensure that the key stakeholders are familiar with the firm's strategy and purpose as shown by the low mean of 1.8235.

Other practices that have been adopted to a very small extent include: the firm's strategic formulation and implementation matches the dynamic forces in the macro-environment; and the ability of the firm to often consult key stakeholders during strategic formulation. Variation in responses regarding implementation of strategic agility was determined using the standard deviation. Responses regarding the firm's ability to often consult during strategic formulation had the lowest standard deviation at 1.08804 implying that the data point were closest to the mean response followed by the fact that the firm's strategic formulation and implementation matches the dynamic forces in the macro-environment at 1.17260. Responses to the statement regarding the extent to which the firm incorporates key stakeholders in its strategic planning process to solicit their ideas and opinions exhibited the largest standard deviation with standard deviation of 1.37199, hence the largest departure from the mean response. The other statistics in the table are Skewness and Kurtosis. All the responses with respect to the aspect of implementation of strategic agility had a positive skewness implying that the bulk of the values (possibly including the median) lie on the left of the mean. Kurtosis on the other hand was applied to measure the peakedness of the probability distribution.

Responses with respect to the firm's strategic formulation and implementation matches the dynamic forces in the macro-environment; and those with respect to the statement that the firm incorporates key stakeholders in its strategic planning process to solicit their ideas and opinions had a negative Kurtosis. Responses regarding the statements that the firm ensures that the key stakeholders are familiar with the firm's strategy and purpose; and whether the firm often consults the key stakeholders during the strategic formulation process assumed a positive Kurtosis. In sum, the values in this case are modest and we can deduce that the departure from normality was insignificant.

The findings above compliment Sambamurthy et al (2003), who argue that implementation of strategic agility involves not only the speed at which the firm adapts to market dynamics, but also the strategies the firm adopts under turbulent circumstances in the macro-environment. The results also support Ren, Toor and Ofori (2010) who posit that firms that adopt strategic agility become more competitive and innovative since they innovatively and promptly respond to customer needs while adjusting to the business environment.

4.4.6 Strategic Agility and Firm Competitiveness

Operational efficiency can be seen as a firm's capacity to contribute strategically in the resolution of its core threats and challenges. Thus the firm's strategic making process is dictated by the clarity of vision, purpose and the concern for performance. In this context, a firm's competitive advantage acts as a comparator between itself and the main rivals in the market. This study therefore sought to examine the extent to which various aspects of strategic agility had impacted on the competitiveness of pharmaceutical companies in Kenya.

The study considered four key elements of firm competitiveness as key indicators; innovation, service quality, cost leadership and process flexibility. Respondents were required to give their opinions on the extent to which strategic agility has impacted on various dimensions of firm competitiveness. The results are presented in Table 4.6.

Table 4.6 Descriptive Statistics for Strategic Agility & Firm competitiveness

Agility and firm competitiveness	Mean	Std. Deviation	Skewness	Kurtosis
Innovation	3.7647	1.30045	-.666	-.616
Service quality	3.8824	1.26897	-1.001	.075
Cost leadership	3.9412	1.19742	-1.112	.781
Process Flexibility	3.8824	.99262	-.609	-.399

Source: Researcher (2018).

Following the results in table 4.6, strategic agility has affected various aspects of firm competitiveness among the pharmaceutical firms to a large extent with all the variables assuming a mean of more than 3.5. As per the results in table 4.7, strategic agility has had the most impact on cost leadership with the highest mean at 3.98824 followed by service quality and process flexibility at 3.8824 respectively. The same results reveal that strategic agility has affected innovation to the least extent with the lowest mean at 3.7647.

A standard deviation was generated to show how much the measures of firm competitiveness have deviated from the mean. The responses regarding process flexibility had the lowest standard deviation at 0.99262 implying that the data points on the variable tended to be close to the mean response. The other three indicators had a degree of departure from the mean with opinions on innovation, service quality and cost leadership assuming a standard deviation of 1.30045, 1.26897, and 1.19742 respectively.

Skewness is a measure of the asymmetry of the probabilistic distribution of a real-valued random variable. All the responses with respect to questions regarding various indicators of firm competitiveness were negatively skewed implying that the tail of the probability density function is longer on the right side and the bulk of the values (possibly including the median) lie to the right of the mean. Kurtosis on the other hand was applied to show the peakedness of the probability distribution function. Responses regarding innovation and process flexibility assumed negative Kurtosis while responses with respect to statements on service quality and cost leadership assumed positive Kurtosis. Skewness and kurtosis are ideal measurements that try to provide information with regards to the severity of departure from a normal distribution. The values in this case are modest and we can deduce that the departure from normality was insignificant and thus not severe.

The results above are in line with Doz and Kosonen (2015) who opines that strategic agility has to do with the process through which a firm gradually adjusts its overall strategy in tandem with the market forces, so as to innovate new products, services and even new models to add business value. The results above, further compliment Day and Westley (2013) who views the role of strategic agility in enhancing firm performance from the firm's productivity perspective. Thus, organizational productivity arises from the firm's ability to undertake market forecasting and make predictions that guide it in making readiness for disruptions in the market by optimizing production and operation processes. The findings equally corroborate Liu (2010) in his assertion that in the long-run, the core competency of the firm then depends on how well it's able to outperform its key competitors in terms of production and operations efficiency from the customer's lens.

4.5 Regression Analysis

The main objective of the study was to determine the association between strategic agility and firm competitiveness in Kenya's pharmaceutical sector. Regression analysis was applied to develop a model for analyzing the link between strategic agility and firm competitiveness. Clarity of vision, core capabilities, selected strategic targets, shared responsibility, and implementation of strategic agility on firm competitiveness among pharmaceutical companies in Kenya were regressed on firm competitiveness. Regression analysis allows a researcher understand how the typical values of the dependent variables change when one of the independent variables is varied. A multiple regression analysis was applied to establish the interplay between various aspects of strategic agility on firm competitiveness.

4.5.1 Correlation Analysis

Correlation analysis shows the magnitude and direction of the relationship between two or more variables or sets of variables. In the study, the Pearson Product moment correlation was applied to determine the relationship between clarity of vision, core capabilities, selected strategic targets, shared responsibilities, implementation of strategic agility and firm competitiveness among pharmaceutical companies in Kenya. Pearson's correlations analysis was conducted at 95% confidence level 1-tailed. Generally, correlation is a bivariate measure which determines the strength of the association between two variables and the direction of the relationship.

In terms of the strength of the relationship, the value of the correlation coefficient ranges from -1 to +1. When the correlation coefficient lies around ± 1 , then it is said to be a perfect degree of association between the two variables. The outcome of the correlation analysis is presented in Table 4.7.

Table 4.7 Correlation Analysis

Variables		Firm Competitiveness (% Change in ROA)	Clarity of Vision	Core Capabilities	Selected Strategic Targets	Shared Responsibilities	Implementation of strategic agility
Firm Competitiveness (% Change in ROA)	Pearson Correlation Sig. (1- tailed) N	1					
Clarity of Vision	Pearson Correlation Sig. (1- tailed) N	-.762* 0.000 17	1				
Core Capabilities	Pearson Correlation Sig. (1- tailed) N	-.754* 0.000 17	.932* 0.000 17	1			
Selected Strategic Targets	Pearson Correlation Sig. (1- tailed) N	-.747* 0.000 17	.949* 0.000 17	.928* 0.000 17	1		
Shared Responsibilities	Pearson Correlation Sig. (1- tailed) N	-.804* 0.000 17	.953* 0.000 17	.976* 0.000 17	.918* 0.000 17	1	
Implementation of strategic agility	Pearson Correlation Sig. (1- tailed) N	-.880* 0.000 17	.878* 0.000 17	.927* 0.000 17	.897* 0.000 17	.917* 0.000 17	1

*. Correlation is significant at the 0.05 level (1-tailed).

Source: Researcher (2018).

The findings in table 4.7 indicate a near perfect significant negative correlation between Clarity of vision and firm competitiveness among pharmaceutical firms in Kenya ($r=0.762$; $Sig=0.000$). The findings further reveal that core capabilities have a statistically significant strong negative correlation with firm competitiveness ($r = -0.754$; $Sig. = 0.000$) while it positively correlates with clarity of vision at ($r=$; $Sig=0.000$).

As per the findings there was a statistically significant strong positive correlation between selected strategic targets, clarity of vision ($r=0.932$; $Sig=0.000$) and core capabilities ($r=0.932$; $Sig=0.00$). The same findings indicate that there exists a near perfect positive correlation between shared responsibilities, clarity of vision ($r=0.953$; $Sig=0.000$), core capabilities ($r=0.976$; $Sig=0.000$) and selected strategic targets ($r=0.918$; $Sig=0.000$). On the other hand, the results indicate that shared responsibilities negatively correlates with firm competitiveness ($r=-0.747$; $Sig=0.000$).

The association between implementation of strategic agility and firm competitiveness was strong and negatively correlated ($r=-0.88$; $Sig=0.000$) while the variable indicated a near perfect positive correlation with core capabilities ($r=0.927$; $Sig=0.000$); clarity of vision ($r=0.878$; $Sig=0.000$); selected strategic targets ($r=0.897$; $Sig=0.000$); and shared responsibilities ($r=0.917$; $Sig=0.000$).

4.5.2 Model Specification

The model summary table provides the regression equation's ability to account for the total variation in the dependent variable. The findings are presented in Table 4.8.

Table 4.8 Model Specification

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson	
					R Change	Square Change	F Change	df1	df2	Sig. Change	F
1	.927 ^a	.860	.797	1.01769	.860	13.539	5	11	.000	2.633	

a. Predictors: (Constant), Implementation of strategic agility, Clarity of Vision, Selected Strategic Targets, Core Capabilities, Shared Responsibilities

b. Dependent Variable: Firm Competitiveness (% Change in ROA)

Source: Researcher (2018).

From the results in table 4.8, the Coefficient of Multiple Determination (R^2) is 0.86 implying that the regression line is of “*high goodness of fit*” explaining up to 86% of the variation in the competitiveness of pharmaceutical firms in Kenya. The p-value of 0.000 indicates that the independent variables implementation of strategic agility, clarity of vision, selected strategic targets, core capabilities, and shared responsibility have had statistically significant impact on the competitiveness of the pharmaceutical firms. This implies that factors not studied in this research have contributed to 14% of the competitiveness of pharmaceutical firms in Kenya.

4.5.3 Analysis of Variance (ANOVA)

To prove whether there were mean differences in perceptions among the different respondents; Analysis of Variance tests were conducted. Analysis of Variance (ANOVA) is a statistical tool used to split the aggregate variability found inside a data set into two parts: systematic factors and random factors. The systematic factors in this case have a statistical influence on the given dataset, but the random factors do not.

ANOVA thus assesses the potential differences in a scale-level dependent variable by a nominal level variable having two or more categories. In this study, the Analysis of Variance (ANOVA) aimed at determining the combined effect of the independent variables on the dependent variable. The results are depicted in Table 4.9.

Table 4.9 Analysis of Variance (ANOVA)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	70.110	5	14.022	13.539	.000 ^b
1 Residual	11.393	11	1.036		
Total	81.502	16			

a. Dependent Variable: Firm Competitiveness (% Change in ROA)

b. Predictors: (Constant), Implementation of strategic agility, Clarity of Vision, Selected Strategic Targets, Core Capabilities, Shared Responsibilities

Source: Researcher (2018).

Results in table 4.9, indicate that the F static was 13.539 with a p-value of 0.000. This implies that the combined impact of strategic agility on firm competitiveness among the pharmaceutical firms in Kenya is statistically significant given the fact that the p-value is less than the alpha level. Thus, the model is statistically significant in predicting how Implementation of strategic agility, clarity of vision, selected strategic targets, core capabilities, and shared responsibilities impact on firm competitiveness. Therefore, the regression model has a confidence level of above 95%, hence high reliability of the results.

4.5.4 Regression Coefficients

Regression analysis is used as a form of predictive modelling technique to forecast the causal effect relationship between variables. In this study, regression analysis was applied to assist the researcher eliminate and evaluate the best set of variables to be used for building predictive models that govern the association between strategic agility and firm competitiveness among pharmaceutical companies in Kenya. The findings are illustrated in Table 4.10.

Table 4.10 Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
1 (Constant)	7.497	1.079		6.946	.000	5.121	9.872
Clarity of Vision	-.028	.956	-.014	-.029	.977	-2.132	2.077
Core Capabilities	2.072	.884	1.375	2.344	.039	.127	4.017
Selected Strategic Targets	.158	.718	.093	.220	.830	-1.423	1.739
Shared Responsibilities	-1.663	.976	-1.109	-	.116	-3.811	.484
Implementation of strategic agility	-1.988	.526	-1.208	-	.003	-3.146	-.829
				3.776			

a. Dependent Variable: Firm Competitiveness (% Change in ROA)

Source: Researcher (2018).

As per the model coefficients in table 4.10, the equation $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \dots + \beta_5X_5$ becomes;

$$Y = 7.497 - 0.028X_1(\pm 0.956) + 2.072X_2(\pm 0.884) + 0.158X_3(\pm 0.718) - 1.663X_4(\pm 0.976) - 1.988X_5(\pm 0.526)$$

Based on the regression line above, holding all the independent variables constant, the competitiveness of pharmaceutical firms in Kenya will be 7.497. The data findings analyzed also shows that keeping all other variables constant, a unit increase in clarity of vision will lead to a 0.028 decline in the competitiveness of pharmaceutical firms in Kenya. The regression line also indicates that holding all the other variables constant, a unit increase in core capabilities will lead to a 2.072 increase in the competitiveness of pharmaceutical firms in Kenya. On the other hand, taking all the other variables at zero, a unit increase in selected strategic targets will lead to a 0.158 increase in the competitiveness of pharmaceutical firms in Kenya.

The same findings indicate that taking all other predictor variables constant, a unit increase in shared responsibilities will lead to a 1.663 decline in the competitiveness of pharmaceutical firms in Kenya. Finally, taking all the other variables constant, a unit increase in Implementation of strategic agility will lead to a 1.988 decline in the competitiveness of pharmaceutical firms in Kenya.

Of all the predictor variables, core capabilities and Implementation of strategic agility had a p-value of 0.039 and 0.003 respectively ($p < 0.05$). This implies that the impact of the variables on the competitiveness of the pharmaceutical firms is statistically significant since the p-value is less than the Alpha level at 95% confidence level.

On the other hand, the rest of the predictor variables: clarity of vision, selected strategic targets, and shared responsibilities had p-values of 0.977, 0.830, and 0.116 respectively ($p > 0.05$). This implies that the impact of these variables on the competitiveness of pharmaceutical firms in Kenya is statistically insignificant since the p-value is greater than the Alpha level at 95% confidence level.

4.6 Discussion of the Results

The main objective of the study was to explore the effect of strategic agility on firm competitiveness among pharmaceutical firms in Kenya. The study attempted to examine the impact of strategic agility (clarity of vision, core capabilities, selected strategic targets, shared responsibilities, and implementation of strategic agility) on firm competitiveness (% change in ROA). The study establishes a statistically significant relationship between strategic agility and competitiveness among the pharmaceutical companies in Kenya.

The study identifies clarity of vision, core capabilities, selected strategic targets, shared responsibilities, and implementation of strategic agility as the main strategic agility practices that have influenced firm competitiveness among pharmaceutical firms in Kenya. Although the study findings showed that there was significant impact of some strategic agility dimensions on firm competitiveness among pharmaceutical firms ($p < 0.05$), that corroborate Oyedijo (2012), which demonstrates direct linkages between strategic agility and firm performance in Nigeria and corresponds with Njeru (2015), the impact of core capabilities, selected strategic targets, and shared responsibilities is statistically insignificant ($p > 0.05$). Pharmaceutical firms in Kenya have gained a competitive edge in terms of ROA; hence have utilized strategic agility for value creation even in turbulent environments.

On clarity of vision, the study revealed that most firms have established systems that clearly elaborate the firm's overall goals to a large extent. The findings of the study corroborate Kambi (2017) who supported the notion that the implementation of strategic sourcing enhanced a firm's supply chain agility; hence respond deeply to changing customer demands. The results further compliment Hall (1993) who postulates that, for a firm to acquire speed and responsiveness it must ensure clarity of vision and mechanisms to understand its core capabilities.

However, most of the practices associated with clarity of vision had been adopted to a small extent implying that pharmaceutical firms in Kenya are yet to exhaustively utilize clarity of vision as a key competitive strategy. The findings above are in line with Scheepers and Hobbs (2016) who assert that; in the context of aspiring to meet or even exceed customer demands, strategic thinking makes the firm stay focused on the overall organizational vision. The study findings above imply that pharmaceutical firms with clarity of vision are able to employ strategies that are practically achievable in terms of resource availability, possession of unique skill sets, and expertise.

With regards to core capabilities, the study established that most pharmaceutical firms in Kenya are not aware of their market position with regards to reputation among their customers. The study thus contradicts Hallgren et al (2011) who developed a cumulative model that can be viewed as having consequences of building competitive capabilities in a firm in support of market needs. The study also contradicts Nassimbeni (2017) who argues that the ability to sense and respond effectively to market changes has become imperative to creating and maintaining a competitive advantage.

The study however demonstrated that most of the pharmaceutical companies in Kenya have utilized their special skill sets, knowledge and know-how that constitutes its core competency to a moderate extent. The study thus acknowledges the need for a hybrid approach to managing capability progression among Kenyan firms. In this respect, the study concurs with Westphal (2016) who asserts that strategic agility enables a firm adopt a more flexible organizational structure in tandem with market dynamics. Roth further asserts that strategically agile firms utilize inter-firm resources and capabilities to replenish its knowledge base, hence biased towards working on a clear vision rather than conventional strategic planning.

On selected strategic targets, the study revealed that pharmaceutical companies in Kenya have been able to identify and focus on the various business units' core capabilities to exploit market opportunities to a large extent. The study findings are in tandem with Xenophon (2009) who examined competitive capabilities of 144 firms in Germany and found out that keeping loyal customers depends on a company's ability to acquire and utilize some unique competitive capabilities in comparison with their competitors.

According to the findings of the study, most of the pharmaceutical firms in Kenya are unable to map out market segments in which the firm's products are highly rated and their possession of specific competencies and processes that require development to better meet customer demands. At managerial level, the findings of the study imply that if firms in Kenya focus on selected targets in their strategic planning process they can significantly become more competitive particularly in volatile markets.

With regards to shared responsibilities, the study revealed that most of the pharmaceutical firms in Kenya ensure that their project teams learn from mistakes and improve on its product quality to a moderate extent. Other notable practices that have been adopted by the firms to a small extent are: the ability of the firm to incorporate all the project teams including the clients to be part of the final outcome and results; the ability of the firm to ensure seamless flow of data between the clients and key stakeholders; and the firm's engagement of its full clients in the planning and executions of key projects. The findings above corroborate Shropshire (2010) who postulates that a firm can either create or destroy its relationship along a value chain. In light of the above, shared responsibility facilitates the empowerment of employees through cross-functional teams, decentralized decision making, reward and compensation.

On implementation of strategic agility, the study found out that most of the pharmaceutical firms in Kenya ensure that their project teams learn from mistakes and improve on its product quality to a moderate extent. However, the study revealed low adoption of all the other aspects of shared responsibility among the pharmaceutical firms in Kenya: the ability of the firm to incorporate all the project teams including the clients to be part of the final outcome and results; and the ability of the firm to ensure seamless flow of data between the clients and key stakeholders. The findings above support Alpiq (2011) who argues that the workforce of a firm can be viewed as a core source of firm competitiveness as long as it meets the criteria of being valuable and rare. But it's imperative to ensure that team agility is in place to foster individual agility. The findings of the study thus concur on the notion that innovativeness and collaboration are some of the critical success factors for successful implementation of strategic agility.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study sought to examine the role of strategic agility as a key driver of competitiveness in Kenya's pharmaceutical sector. A summary of the findings, conclusions, and recommendations of the study are presented in this chapter. The analysis of the demographic data indicates that gender parity issues still prevail in the private sector.

Analysis of data on the academic qualification of the respondents on the other hand revealed that most of the respondents were graduates implying that the data was collected from individuals with substantial knowledge of strategic planning and the various strategic agility practices adopted by firms in the pharmaceutical industry. With regards to age, the study revealed that most of the pharmaceutical firms have been operating in Kenya for over sixteen years indicating that the data was collected from firms which have substantial experience on strategic planning and responsiveness in response to the socio-economic conditions that have faced Kenya in the recent past, hence reliable.

The second part of the study outlines the extent to which the pharmaceutical firms in Kenya have adopted various practices and agility aspects. Clarity of vision, core capabilities, selected strategic targets, shared responsibilities and implementation of strategic agility were singled out as some of the key thematic practices that pharmaceutical companies in Kenya have adopted in a bid to enhance their strategic agility over the recent past. The study aimed at determining the interplay between strategic agility and competitiveness.

5.2 Summary

Exploring the various strategic agility dimensions and practices adopted by firms in Kenya's pharmaceutical sector was the first objective of the study. For easier analyzability, practices associated with strategic agility were clustered into five thematic areas (clarity of vision, core capabilities, selected strategic targets, shared responsibilities, and Implementation of strategic agility). The study revealed that the firm's endeavor to put in place mechanisms that clearly and effectively explain the company's overall goals is the most common aspect of clarity of vision that has been adopted to a large extent by pharmaceutical firms in Kenya. Other practices associated with clarity of vision that have been adopted to a small extent are: establishing a clear sense of purpose which guides decision making; ensuring that the various functional units in the firm are content with the endeavor to achieve; and understanding the firm's core capabilities.

With regards to core capabilities, the study outlined, possession of special skill sets, knowledge and know-how, and the extent to which a firm constitutes its core competency as some of the key agility practices that have been adopted to a moderate extent by pharmaceutical firms in Kenya. According to the study, most of the pharmaceutical companies in Kenya are not aware of their market position with regards to its reputation among its customers nor have they been able to identify and allocate their resources to value adding processes; utilize knowledge and know-how to maintain its competitive advantage; identify and allocate their resources to value adding processes; and use knowledge sets that are most critical to meeting customer demands. On selected strategic targets, the study established that most of the pharmaceutical companies in Kenya have been able to identify and focus on the various business units' core capabilities to exploit market opportunities to a large extent.

The study further revealed the ability to map out market segments in which the firm's products are highly rated; the firm's possession of specific competencies and processes that require development to better meet customer demands; and the establishment of processes to identify and develop products that match its capabilities to market opportunities are some of the practices that the pharmaceutical firms in Kenya have adopted; though to a very small extent.

With respect to shared responsibilities, the study found out that most of the pharmaceutical firms in Kenya ensure that their project teams learn from mistakes and improve on its product quality to a moderate extent. However, the study established low adoption of all the other aspects of shared responsibility among the pharmaceutical firms in Kenya: the ability of the firms to incorporate all the project teams including the clients to be part of the final outcome and results; the ability of firms to ensure seamless flow of data between the clients and key stakeholders; and the firm engagement of its full clients in the planning and executions of key projects.

On Implementation of strategic agility, the outcome of the study indicates that the incorporation of key stakeholders in its strategic planning process to solicit their ideas and opinions has been adopted by pharmaceutical firms to a large extent. According to the same findings, the most unpopular practice associated with implementation of strategic agility is the ability of the firm to ensure that the key stakeholders are familiar with the firm's strategy and purpose. Putting in place mechanisms to ensure the firm's strategic formulation and implementation matches the dynamic forces in the macro-environment; and the ability of the firm to often consult with key stakeholders on strategic actions are some of the strategic agility practices which have been adopted to a very small extent.

With regard to the opinion of the respondents on the interplay between strategic agility and various indicators of firm competitiveness, the study established that strategic agility has influenced various elements of firm competitiveness among the pharmaceutical companies in Kenya to a large extent. The study further found out that strategic agility has had the most impact on cost leadership followed by service quality and process flexibility. The same results reveal that strategic agility has affected innovation to the least extent.

5.3 Conclusion

The study establishes a statistically significant association between strategic agility and firm competitiveness among pharmaceutical companies in Kenya as evidenced by the high coefficient of determination in the regression model. The study therefore concludes that clarity of vision, core capabilities, selected strategic targets, shared responsibilities, and Implementation of strategic agility are some of the main strategic agility approaches that pharmaceutical firms in Kenya have adopted to enhance their competitiveness.

On clarity of vision, the study concludes that the pharmaceutical firms have generally adopted the practice to a very small extent with the firm's endeavor to put in place mechanisms that clearly and effectively explain the company's overall goals being the only aspect of clarity of vision that has been adopted to a large extent. Other practices associated with clarity of vision that have been adopted to a small extent include: establishing a clear sense of purpose which guides decision making; ensuring that the various functional units in the firm are content with the endeavor to achieve; and understanding the firm's core capabilities. With regards to core capabilities, the study concludes that only the utilization of a firm's special skill sets, knowledge and know-how that constitutes its core competency has been adopted to a moderate extent.

Given that all the other practices related with core capabilities have been adopted to a very small extent, the study concludes that most of the pharmaceutical companies in Kenya are not aware of their market position with regards to its reputation among its customers nor have they been able to identify and allocate their resources to value adding processes; utilize knowledge and know-how to maintain its competitive advantage; identify and allocate their resources to value adding processes; and use knowledge sets that are most critical to meeting customer demands.

On selected strategic targets, the study concludes that most of the pharmaceutical companies in Kenya have been able to identify and focus on the various business units' core capabilities to exploit market opportunities to a large extent. The study further concludes that the ability to map out market segments in which the firm's products are highly rated; the firm's possession of specific competencies and processes that require development to better meet customer demands; and the establishment of processes to identify and develop products that match its capabilities to market opportunities are some of the practices that the pharmaceutical firms in Kenya have adopted to a very small extent. With respect to shared responsibility, the study concludes that most of the pharmaceutical firms in Kenya ensure that their project teams learn from mistakes and improve on its product quality to a moderate extent. The study also concludes that all the other aspects of shared responsibility among the pharmaceutical firms in Kenya: ability of the firms to incorporate all the project teams including the clients to be part of the final outcome and results and the ability of firms to ensure seamless flow of data are lowly adopted. On Implementation of strategic agility, the study concludes that the incorporation of key stakeholders in its strategic planning process to solicit their ideas and opinions has been adopted by pharmaceutical firms to a large extent.

The study further concludes that pharmaceutical firms in Kenya have generally adopted all the practices associated with implementation of strategic agility (the firm's strategic formulation and implementation matches the dynamic forces in the macro-environment; and the ability of the firm to often consult the key stakeholders during strategic formulation) to a very small extent with ability of the firm to ensure that the key stakeholders are familiar with the firm's strategy and purpose being the most unpopular.

5.4 Recommendations

In view of the above, the study recommends that firms in Kenya adopt strategic agility practices to enhance their performance since it has a significant impact on firm competitiveness. On clarity of vision, the study recommends that pharmaceutical firms should establish a clear sense of purpose which guides decision making; put in place mechanisms to ensure that the various functional units in the firm are content with the endeavor to achieve; and understanding the firm's core capabilities as some of the main avenues to build their core competencies.

In the context of the RBV model, the study recommends that pharmaceutical firms invest in building their core capabilities including ensuring they are aware of their market position with regards to its reputation among its customers; put in place mechanisms to facilitate rational identification and allocation of their resources to value adding processes; utilize knowledge and know-how to maintain its competitive advantage; identify and allocate their resources to value adding processes. With regards to selected strategic targets, the study recommends that pharmaceutical companies in Kenya endeavor to identify and focus on the various business units' core capabilities to exploit market opportunities to a large extent.

The study underpins the need for firms in Kenya to endeavor to acquire and sustain unique competencies which cannot be imitated by their rivals in the market. Other areas to focus on are the establishments of processes to identify and develop products that match its capabilities to market opportunities. On shared responsibilities, the study recommends that firms in Kenya endeavor to incorporate all the project teams including the clients to be part of the final outcome and results. The need for establishing systems to ensure there is seamless flow of data between the clients and key stakeholders is another major recommendation of the study. Thus firms need to establish systems to ensure they fully engage their full clients in the planning and executions of key projects.

With regards to Implementation of strategic agility, the study recommends that firms in Kenya endeavour to incorporate key stakeholders in its strategic planning process to solicit their ideas and opinions as adopted by pharmaceutical firms to a large extent. The study further recommends that firms in Kenya ensure that their strategic implementation maps the dynamic forces in the macro-environment into their corporate strategies.

5.5 Implication of the Study to Policy, Theory and Practice

At policy level, the findings of the study imply that policies aligned to enhancing firm and national competitiveness can bear fruits if they focus on enhancing strategic agility in both the public and private sector in Kenya. Going by the study findings, if the national policy through the line ministries concentrate on providing the critical success factors for the implementation of strategic agility among Kenyan firms, their firm competitiveness will be significantly enhanced, culminating into national competitiveness. By constantly changing and reconfiguring their capabilities, Kenyan firms can be more adaptive to their uncertain environment and stay ahead of their competitors.

At the theoretical level, the findings of the study imply that taking a holistic perspective on agility offers a critical path in explaining and illustrating the relationship between strategic agility attributes and firm competitiveness. The results further imply that it's possible to develop a conceptual model that can be used to determine the direct linkages between strategic agility aspects and firm competitiveness in the Kenyan context. The study findings not only support existing theoretical models (Long, 200; Roth, 1996; & Sambamurthy et al., 2003), but also critique past theoretical models with regards to role of strategic agility in strategically adjusting to uncertainty and changing market demands.

To practice, the findings of the study imply that adopting agile approaches to strategic planning and day to day operations can significantly enhance the competitiveness and performance of Kenyan firms. Based on the study, it's clear that strategic managers who can successfully leverage on internalizing their corporate vision and develop policies and corresponding procedures can greatly fortify their success, hence firm competitiveness. Moreover, the study outcome implies that if firms in Kenya can be able to invest in unique skill sets and knowledge, they can greatly determine the rate at which they can innovate and come up with new products and services in the market.

5.6 Limitations of the Study

The study was limited to unraveling the effect of strategic agility on firm competitiveness. The study thus, ignored other critical factors that may affect firm competitiveness in Kenya. Given that the study was confined to the pharmaceutical sector, the findings may be less generalizable to firms in other sectors in Kenya. Another setback of the study was its focus on managers and heads of departments only.

To get a balanced view of the subject, the study should have involved all the manufacturing firms in Kenya across various sectors. Possibly the study could have adopted a census approach to cover all the manufacturing firms in Kenya. Scope-wise, the study focused on establishing the direct linkages between five key strategic agility practices. The study might have ignored other dimensions of strategic agility that may be determining firm competitiveness.

Despite the usefulness of the study findings particularly with regards to the practical and theoretical goals, the study focused on the pharmaceutical sector alone. Moreover, the use of the Likert scale to measure the opinions of the respondents coupled with the fact that the study was subjective in nature, the interpretations of the study may suffer from low generalizability. The above limitations do not however significantly affect the validity and reliability of the study.

5.7 Suggestions for Further Research

Future studies should focus on the legal and institutional framework that may foster the implementation of strategic agility in Kenya's manufacturing sector. Moreover, future researchers should consider determining the role of national policy on industrialization in facilitating agility among Kenyan firms in enhancing firm and national competitiveness.

Future research efforts should consider investigating the impact of strategic agility on firm performance using other variables not included in this study. Studies on the role of national policy in promoting competitiveness at the micro-level remain scant. Consequently, future studies need to determine the input of the government in building firm competitiveness across all sectors in Kenya.

Given that implementing strategic agility is people oriented, future studies should investigate the role of corporate culture, employee relations and attitudes towards change management that arise from strategic agility implementation. In this context, future researchers need to establish the extent to which the state through policy formulation and implementation has fostered competitiveness in the private sector. Studies on developing benchmarks for measuring firm competitiveness arising from strategic agility need to be undertaken.

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APPENDICES

APPENDIX I: Letter of Introduction


UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 19 April 2018

TO WHOM IT MAY CONCERN


The bearer of this letter KEVIN NDUNGIU NG'ANGA
Registration No. D61/77368/2015

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.


20 JUL 2018
→ **PROF. JAMES M. NJIHIA**
DEAN, SCHOOL OF BUSINESS

APPENDIX II: Research Questionnaire

INSTRUCTIONS

Please respond to the questions genuinely.

PART A: DEMOGRAPHIC DATA

I. Gender

Male () Female ()

II. Academic qualification

Secondary ()

Diploma ()

Degree ()

Masters ()

Others (Please specify.....)

III. How old is your firm in the market?

1-5 years ()

6-10 years ()

11-15 years ()

16 years and over ()

PART B: STRATEGIC AGILITY

IV. Strategic agility practices fall into a continuum ranging from selecting strategic targets to implementation of strategic agility. In your own opinion, how can you rate the level at which your firm has adopted the following strategic agility practices?

On a scale of 1-5 please indicate the extent to which the following practices have been adopted by your firm where: 1= No Extent; 2= Small Extent; 3=Moderate Extent; 4= large Extent; and 5= Very large Extent

Item	Strategic Agility	(1)	(2)	(3)	(4)	(5)
	A. Clarity of Vision					
i.	The firm has a clear sense of purpose which guides decision making.					
ii.	The firm has put in place mechanisms that clearly and effectively explain the company's overall goals.					
iii.	The firm has established adequate principles that guide its operations.					
iv.	The various functional units in the firm are content with the endeavor to achieve					
v.	The firm understands her core capabilities					
	B. Core capabilities					
vi.	The firm utilizes its special skill sets, knowledge and know-how that constitutes its core competency.					
vii.	The firm uses its knowledge and know how to maintain its competitive advantage					
viii.	The firm is able to identify and allocate its resources to value adding processes					
ix.	The firm focuses on skills and knowledge sets that are most critical to meeting customer demands					
x.	The firm is aware of its market position with regards to its reputation among its customers					
	C. Selected Strategic Targets					
xi.	The company is able to map out market segments in which the firm's products are highly rated.					
xii.	The firm is able to identify and focus on the various business units' core capabilities to exploit market opportunities.					
xiii.	The firm has identified specific competencies and processes that require development to better meet customer demands					
xiv.	The firm has established processes to identify and develop products that match its capabilities to market opportunities.					
	D. Shared responsibility					
xv.	The firm's project teams learn from mistakes and improve on its product quality.					

xvi.	The company ensures seamless flow of data between the clients and key stakeholders.					
xvii.	The firm incorporates all the project teams including the clients to be part of the final outcome and results.					
xviii.	The firm engages its full clients in the planning and executions of key projects.					
E Implementation of Strategic Agility						
xix.	The firm ensures that the key stakeholders are familiar with the firm's strategy and purpose.					
xx.	The firm's strategic formulation and implementation matches the dynamic forces in the macro-environment.					
xxi.	The firm incorporates key stakeholders in its strategic planning process to solicit their ideas and opinions.					
xxii.	The firm often discusses with the key stakeholders the kind of actions needed to best carry out its business strategy.					

PART C: STRATEGIC AGILITY AND FIRM COMPETITIVENESS

I. How can you rate the effect if any of the various strategic agility practices on the competitiveness of your company in the last five years on a scale of 1-5. Where; **1= No Extent; 2= Small Extent; 3=Moderate Extent; 4= large Extent; and 5= Very large Extent**

Innovation	[1]	[2]	[3]	[4]	[5]
Service quality	[1]	[2]	[3]	[4]	[5]
Cost leadership	[1]	[2]	[3]	[4]	[5]
Process flexibility	[1]	[2]	[3]	[4]	[5]

II. Please indicate the percentage change in your firms' ROA

Sales..... % **OR** Decline

III. Please indicate the average annual percentage change in your company's profit over the last three years

Sales..... % **OR** Decline

APPENDIX III: Pharmaceutical Firms in Nairobi

1. **Alpha Medical Manufacturers** – Nairobi
2. **Aventis Pasteur SA East Africa** – Nairobi
3. **Bayer East Africa Limited** – Nairobi
4. **Beta Healthcare (Shelys Pharmaceuticals)** – Nairobi
5. **Cosmos Limited** – Nairobi
6. **Dawa Pharmaceuticals Limited** – Nairobi
7. **Didy Pharmaceutical** – Nairobi
8. **Diversey Lever** – Nairobi
9. **Eli-Lilly (Suisse) SA** – Nairobi
10. **Elys Chemical Industries Ltd** – Nairobi
11. **Glaxo SmithKline** – Nairobi
12. **High Chem East Africa Ltd** – Nairobi
13. **Mac's Pharmaceutical Ltd** – Nairobi
14. **Manhar Brothers (Kenya) Ltd** – Nairobi
15. **Novartis Rhone Poulenc Ltd** – Nairobi
16. **Novelty Manufacturers Ltd** – Nairobi
17. **Pfizer Corp (Agency)** – Nairobi
18. **Pharmaceutical Manufacturing Co (K) Ltd** – Nairobi
19. **Pharmaceutical Products Limited** – Nairobi
20. **Phillips Pharmaceuticals Limited** – Nairobi
21. **Regal Pharmaceutical Ltd** – Nairobi
22. **Universal Pharmaceutical Limited** – Nairobi

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APPENDIX IV: Plagiarism Report

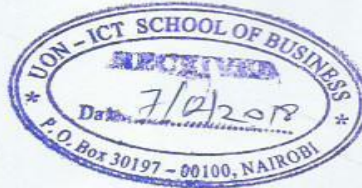
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