STRATEGIC RESPONSES TO ENVIRONMENTAL CHANGES IN
THE PHARMACEUTICAL INDUSTRY IN NAIROBI, KENYA

BY

KHALIF ABDINASIR MOHAMED

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF A MASTER'S
DEGREE IN BUSINESS ADMINISTRATION, SCHOOL OF
BUSINESS, UNIVERSITY OF NAIROBI.

NOVEMBER 2012
DECLARATION

This Strategic Management Project is my original work and has not been presented for the award of a degree in any other university.

Signed ........................................  Date ........................................

Khalif Abdinasir Mohamed

Reg. No: D61/63740/2010

This Strategic Management Project has been submitted for examination with my approval as the university supervisor;

Signed ........................................  Date ........................................

Prof. Evans Aosa.

Lecturer Department of Strategic Management,

School of Business,

University of Nairobi.
ACKNOWLEDGEMENT

I give glory to God for giving me strength to accomplish this study. I would also like to express my gratitude to all those who made it possible to complete this thesis. I am deeply indebted to my supervisor, Prof Aosa, who offered invaluable guidance, support and inspiration throughout the project. His advice, suggestions, positive criticism and encouragement enabled me to come up with a refined research paper. Special thanks are accorded to my beloved wife, Nasra, and our loving son, Jamal, for their support and patience to complete this project, not forgetting Mr. John Omurwa of Jomo Kenyatta University of Agriculture and Technology who provided tremendous advise.
DEDICATION

First and foremost I dedicated this project to the Almighty God whose providence, grace and care has enabled me to complete this thesis. I also dedicate it to my family, who offered me unconditional love and support throughout the course of this thesis. Thank you all and may God bless you abundantly.
ABSTRACT

Strategic responses to the external environment of the organization are key to the success of any company. Every successful business has a plan and knows where it is headed in the future. The study investigated the strategic responses applied by the pharmaceutical industry players to environmental changes in Nairobi, Kenya.

The study was conducted through a cross-sectional survey design and the study population comprised of 31 pharmaceutical companies in Nairobi, Kenya. Data was collected by means of a self-administered questionnaire. The data was subsequently analyzed using quantitative techniques of descriptive statistics, correlation analysis and regression analysis.

The study found that majority of the respondents use product differentiation as a strategic response and cost differentiation. The study also revealed a better understanding of the extent of strategic responses by the pharmaceutical companies in Nairobi to environmental changes. The study therefore recommends that the regulatory authorities enforce the ethical requirement of doctors prescribing using generic names and not brand names of medicines.

From the study it can be concluded that the pharmaceutical companies in Nairobi apply different strategic responses to changes in external environment. The study also revealed that most companies applied more than one strategic response.
# TABLE OF CONTENTS

DECLARATION................................................................................................................... ii  
ACKNOWLEDGEMENTS ............................................................................................... iii  
DEDICATION....................................................................................................................... iv  
LIST OF TABLES............................................................................................ viii  
LIST OF FIGURES............................................................................................................. ix  
ABSTRACT ........................................................................................................................... v  

CHAPTER 1.0 INTRODUCTION......................................................................................... 1  
1.1 Background of the study ......................................................................................... 1  
   1.1.1 Environmental Dependence ............................................................................ 2  
   1.1.2 Strategic Responses ....................................................................................... 3  
   1.1.3 Pharmaceutical Industry in Kenya .................................................................. 5  
1.2 Research Problem .................................................................................................. 8  
1.3 Research Objective ............................................................................................... 10  
1.4 Value of the Study ............................................................................................... 11  

CHAPTER 2.0 LITERATURE REVIEW.............................................................................. 13  
2.1 Introduction ........................................................................................................... 13  
2.2 Concept of Strategy............................................................................................... 13  
2.3 Strategic Management .......................................................................................... 14  
2.4 Organization and Environment ............................................................................ 17  
2.5 Strategic Responses .............................................................................................. 19  

CHAPTER 3.0 RESEARCH METHODOLOGY.................................................................. 21  
3.1 Introduction ........................................................................................................... 21  
3.2 Research Design ................................................................................................... 21  
3.3 Population of the Study........................................................................................ 21  
3.4 Sampling ............................................................................................................... 22  
3.5 Data Collection ..................................................................................................... 23
LIST OF TABLES

Table 1: Distribution of respondents by gender ....................................................... 25
Table 2: Distribution of Respondents by Designation .................................................. 26
Table 3: Nature of Respondents’ Business ................................................................. 26
Table 4: Extent of Use of Strategic Responses ........................................................... 28
Table 5: Frequency of using strategic management .................................................... 28
Table 6: Specific strategic responses taken recently ................................................... 29
Table 7: Use of Cost Differentiation ............................................................................. 30
Table 8: Number of Different Types of Products Stocked .......................................... 31
Table 9: Average lowest and highest prices ............................................................... 32
LIST OF FIGURES

Figure 1: Percentage use of strategic Responses..............................................................................27
Figure 2: Areas where strategic responses are commonly used.......................................................29
Figure 3: Use of Product Differentiation..........................................................................................30
Figure 4: Perceived Enhancement of Value of Use of Strategic Responses. ..........................31
CHAPTER ONE
INTRODUCTION

1.1 Background of the study

Today's business organizations have to contend with the dynamics of a changing competitive environment. The modern trend has shifted from external environmental analysis to more sophisticated internal organizational analysis. All forms of businesses, including those in the pharmaceutical industry, regardless of their size or level of development have embraced strategic management in their practices.

The organizations' decisions depend on the changes in the environment. The environmental changes include shifts in technology, competition, regulation, globalization and increased presence of counterfeits. The strategic responses may include making alliances, price adjustments, product differentiation and a variety of actions that can result in competitive advantage.

Kenya is currently the largest producer of pharmaceutical products in the Common Market for Eastern and Southern Africa (COMESA) region, supplying about 50% of the regions' market. Out of the region's estimated 50 recognized pharmaceutical manufacturers; approximately 30 are based in Kenya. Their products are categorized according to particular levels of outlet as free sales/OTC (Over the Counter) or prescription only (Kenya's Pharmaceutical Industry report, 2005). The pharmaceutical industry in Kenya consists of manufacturers, distributors and retailers, who all actively support the Ministry of Health and other key players in developing the health sector.
Anti-infective products (mainly antibiotics, antimalarial, and sulfonamides), analgesics, antipyretics, bronchial relaxants and cytotoxins account for the bulk of government and private sector purchases of medicines in the country. A high concentration of the pharmaceutical industry players are based in Nairobi. The research studied the various strategic responses to environmental changes in Kenya's pharmaceutical industry and was based in Nairobi because of the high concentration. The study covered the manufacturing companies, wholesalers and retailers in the pharmaceutical industry in Kenya. The results of the study have been generalized to all the companies, wholesalers and retailers in Kenya.

1.1.1 Environmental dependence

The corporation is an open system dependent on contingencies in the external environment (Pfeffer and Salancik, 2003). Pfeffer and Salancik (2003) state that “to understand the behavior of an organization you must understand the context of that behavior i.e. the ecology of the organization”. They further argue that to recognize the influence of external factors on organizational behavior and although constrained by their context managers can act to reduce environmental uncertainty and dependence. Organizations attempt to reduce others’ power over them, often attempting to increase their own power over others. Pfeffer (1987) provides the basic argument of the resource dependence perspective and inter- organizational relations as the fundamental units for understanding inter-corporate relations. Organizations are not autonomous and are interdependent with other organizations hence they take actions to manage external interdependencies. However, such actions are inevitably never completely successful and
produce new patterns of dependence and interdependence and these patterns of
dependence produce inter-organizational as well as intra-organizational power which has
some effect on organizational behavior.

Managers of organizations aspire to gain autonomy or to control the relevant
environments of their organizations. The achievement of autonomy and the gaining of
control may be advanced by the organizational performance. Since the relevant
environment is composed of a number of heterogeneous interests and controlled by a
variety of means, management faces the problem of setting priorities in dealing with the
environment and allocating the necessary resources according to these priorities. Since
the determination of a suitable strategy for an organization begins in identifying the
opportunities and risks in the environment, an essential part of the process of strategic
management is the identification of the pattern of external conditions that will affect the
life of the business. It is also necessary to predict all possible changes in the environment
as well as their probable impact on any given organization. In order to adopt action to a
changing environment it is necessary to institute systems of surveillance on all relevant
factors and trends in the environment and watch for signs of changes that require shifting
priorities or a major revamping of strategy (Pfeffer 1987).

1.1.2 Strategic Responses

The goal of much of business strategy responses is to achieve a sustainable competitive
advantage. Porter (2008) identified two basic types of competitive advantage: cost
advantage and differentiation advantage. When a firm sustains profits that exceed the
average for its industry, the firm is said to possess a competitive advantage over its rivals.
A competitive advantage exists when the firm is able to deliver the same benefits as competitors but at a lower cost (cost advantage), or deliver benefits that exceed those of competing products (differentiation advantage). Thus, a competitive advantage enables the firm to create superior value for its customers and superior profits for itself.

One of the constants of pharmaceutical company strategic responses over the past decade has been increasing scale. Only by growing larger are companies able to afford the considerable costs of drug development and distribution. This is well summarized in the PricewaterhouseCoopers report Analysis and Opinions on M&A Activity (1999).

Within this broad approach at least two business models are discernible: blockbuster model and diversification model. The blockbuster model involves the search for, and distribution of a small number of drugs that achieve substantial global sales. The success of this model depends on achieving large returns from a small number of drugs in order to pay for the high cost of the drug discovery and development process for a large number of candidates and total revenues are highly dependent on sales from a small number of drugs. The diversification model involves a larger number of drugs being marketed to a smaller niche markets. The advantage of this model is that its success is not dependent on sales of a small number of drugs. However without a blockbuster to help pay for the high development costs, the model only works for small markets where distribution costs are low; and an intermediate model which borrows some of each. To date the blockbuster model has been recognized by industry analysts as the dominant model. However interest in alternative models is growing as consideration is being given
to the marketing of biotech drugs with smaller markets and higher treatment costs and the expectation of more personalized medicine.

1.1.3 Pharmaceutical Industry in Kenya

The pharmaceutical industry in Kenya consists of three sectors: the manufacturers, distributors and retailers. All these play a major role in supporting the country’s health sector, which is estimated to have about 4,557 health facilities countrywide (Kenya’s Pharmaceutical Industry report, 2005). There are forty two (42) registered Pharmaceutical manufacturing companies in Kenya. The pharmaceutical products are channeled through pharmacies, health facilities and shops. There are about 700 registered wholesale and 1,300 retail dealers in Kenya, manned by registered pharmacists and pharmaceutical technologists.

Statistics on the demand for medicines in Kenya may be hard to find but an estimate can based on disease incidence in the local population. The incidence of disease causing morbidity in Kenya have mainly been found to be HIV/AIDS, malaria, tuberculosis, diseases of the respiratory system, diseases of the skin, diarrheal diseases, intestinal worms, pneumonia, accidents (including fractures, burns, etc.), rheumatism, joint pains, urinary tract infections and eye infections. The population of Kenya was estimated at 38.3 million in 2008 and has been increasing by around 2.9 per cent annually in recent years with the gross domestic product (GDP) at market prices totaling US$ 27,997 million, giving a GDP (current) per capita figure of US$ 731.93 (Kenya Economic Survey, 2009).
The players in the local pharmaceutical industry are characterized by common product lines, variation in goods manufacturing practices (GMP) standards, shortage of qualified personnel, low production efficiency and difficulties in carrying out bioequivalence studies for local manufacturers due to financial constraints, lack of know-how, and unavailability of national guidelines on this subject. The local pharmaceutical players, particularly the companies, face competition on two fronts, namely competition with each other and collectively face stiff competition from imports (ibid).

A study conducted by UNIDO on the strengths, weaknesses, opportunities and threats of the pharmaceutical industry in Kenya and its environs concluded that there was need to strengthen health institutions as a prerequisite to formulating any meaningful strategy for the strengthening of the pharmaceutical industry (United Nations Industrial Development Organization, UNIDO, 2010). The main strengths were found to be establishment of a competent pharmaceutical manufacturing industry compared to its neighbours, a growing domestic market with a projected Compound Annual Growth Rate (CAGR) of 11.5 per cent between 2008 and 2013, trained and skilled workforce and the know-how to scale up production capacity. Product profiles of the local pharmaceutical companies also matched the regional market disease patterns and achievement of basic international standards by some companies.

The weaknesses included flooding of the local market with imports, ineffective regulation which has resulted in presence of substandard and counterfeit drugs into the market, high levels of competition from cheaper or subsidized products, lack of specialization in
industrial pharmacy and plant management, inadequate facilities for specialized training in industrial pharmacy and management at university level, reliance on imported inputs for manufacturing, high production costs in relation to competitors, and regulator's lack of experience in pharmaceutical production. Other weaknesses include good manufacturing practice (GMP) levels within the sector being uneven, unclear and poorly enforced quality standards (product, plant specific and inspections), lack of a clear policy to promote access to or expansion of external markets, lack of common strategic vision for the pharmaceutical manufacturing industry, administrative hurdles and bureaucracy and lack of awareness of the need for rapid market development.

The opportunities include implementation of a local preference of 15 per cent for public procurement, large and growing regional market in EAC, COMESA and sub-Saharan Africa, trend towards harmonization of standards and drug registration requirements within the EAC which will facilitate exports, potential to serve the regional market in most essential medicines, increased domestic demand from planned introduction of social health insurance, option of new product lines to suit emerging disease patterns and needs for the region and backward linkages and integration to bulk production of starting materials. Other identified opportunities include consolidation of functions within the industry and sectorial solutions to common problems such as environmental issues on disposal and quality standards, strengthening cooperation within the sector to influence government policy, possibility of re-capitalization through joint ventures and partnerships, and increased, aggressive efforts to attract foreign direct investment to the industry.
The threats include increased dominance of imports from Asia particularly India and China which supply both finished and basic ingredients, continued poor regulation of the pharmaceutical market, growing influx of counterfeit and substandard medicines, deterioration of infrastructure and even higher utility costs, unilateral enforcement of non-tariff barriers by regulatory controls and regulations in export markets, domestic political risk and possible donor displacement, bilateral support to other countries in the region to set up pharmaceutical manufacturing, adverse currency exchange rate and deteriorating terms of trade and global financial crisis.

The SWOT analysis points at the need for strategic responses for the pharmaceutical industry. Strategic management provides the framework for the pharmaceutical industry to continually ask the question, “Are we doing the right thing?” It entails attention to the “big picture” and the willingness to adapt to changing circumstances, and consists of the formulation of the organization’s future mission in light of changing external factors such as regulation, competition, technology, development of a competitive strategy and creation of an organizational structure which will deploy resources to successfully carry out its competitive strategy. Strategic management is adaptive and keeps an organization relevant. In these dynamic times it is more likely to succeed than the traditional approach of “if it isn’t broken, don’t fix it” (Afsar, 2011).

1.2 Research Problem

Today’s business organizations have to contend with the dynamics of a changing competitive environment. The modern trend has shifted from external environmental
analysis to more sophisticated internal organizational analysis. All forms of businesses, including those in the pharmaceutical industry, regardless of their size or level of development have embraced strategic management in their practices. The strategic responses that are undertaken by organizations depend on the changes in the environment. The environmental changes include changes in technology, competition, regulation, globalization and increased presence of counterfeits. The strategic responses to these changes include alliancing, price adjustments, product differentiation and a variety of actions that can result in competitive advantage.

According to a survey of the pharmaceutical industry in Kenya by the Cardno (2011) Kenyan companies are producing at between 50-70 percent of their actual capacity which has a significant bearing on the unit costs. As a consequence, this affects the competitiveness of the products on the market. Compared to imports, the prices of generics manufactured in Kenya are much higher. Improving efficiency in this sector is therefore, one of the challenges faced by the Kenyan pharmaceutical industry.

With regards to the Good Manufacturing Practice (GMP) standards, few manufacturers have invested in the necessary plant and equipment in order to meet the World Health Organizations’ standards. For most companies this has not been possible due to lack of finances or technical know-how. The drug regulatory body (the Pharmacy and Poison Board) also has insufficient experience and is short of staff to carry out effective inspections.
Another problem relevant to this industry is counterfeit and parallel imports. Recent studies have put counterfeit incidences in Kenya at 30% (Daily Nation, Oct. 3, 2011). There is also a shortage of trained pharmacists. The number of trained pharmacists in Kenya is still low. Kenya also faces the inability of local manufacturers to undertake bioequivalence studies. The main reasons are financial limitations, limited know how and lack of national guidelines on this subject.

While (Kobrin, 1982) limited his study on political risk management and (Hillman 2002) studied the resource dependence role corporate directors: strategic response, other studies (PWC, 1999; UNIDO, 2010) have been done on the strategic responses of the pharmaceutical industry to changes in the environment creating a gap in research. This study intended to provide additional information to the already existing knowledge. Most of the problems of the pharmaceutical industry in Kenya have only been highlighted by non-governmental organizations such as UNIDO, WHO and other development partners.

With the above information and challenges clearly there is a need for the pharmaceutical industry to embrace strategic responses to environmental changes techniques in order to overcome some of the challenges and stay above their competitors. Therefore, what are the strategic responses applied by the pharmaceutical companies in Nairobi, Kenya to environmental changes?

1.3 Research Objective

The objective of the study was to establish strategic responses to environmental changes in the pharmaceutical industry in Nairobi, Kenya.
1.4 Value of the Study

This study will be of value to various stakeholders. Its findings will be important to the government, policy makers, manufactures, wholesalers, procurement managers and retailers in making important strategic decisions. Results will also contribute to the existing theory and practice. The findings will also enhance our knowledge on aspects like the strategic management techniques used by successful pharmaceutical companies, how those techniques enhance decision making and the various departments within the company that such techniques have a great impact on.

The pharmaceutical industry plays a very big role not only in consuming a good percentage of the country’s budget but also in contributing to the country’s GDP. There are over 14,000 registered pharmaceutical products in Kenya whose market is estimated at KES 8 billion per annum. The government, through Kenya Medical Supplies Agency (KEMSA) is the largest purchaser of drugs manufactured both locally and imported. It buys about 30% of the drugs in the Kenyan market through an open-tender system and distributes them to government medical institutions (Kenya’s Pharmaceutical Industry report, 2005). The findings from the research will assist the government enhance better strategic management practices in the industry in order to gain more revenue from it.

The study is intended to provide guidance for the industry players (Manufacturers, Wholesalers, Procurements Managers and Retailers) in making important strategic decisions. Many companies today are searching for ways to increase productivity, decrease costs, and develop new treatment modalities that will enhance profitability.
The results have contributed to the existing theory and practice especially assisting scholars and academic institutions. The research findings will be used by academicians to answer questions on what strategies seem to be working best for successful pharmaceutical companies that are involved in the manufacturing, distribution and sale of drugs. The research has provided literature on different strategic responses that work for different companies making comparison easier.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews related literature on the subject of strategic management particularly as it applies in the Pharmaceutical Industry. Literature is drawn from several sources but the discussion is limited to the theme and objectives of the study.

2.2 Concept of the Strategy

Strategic reactions to the external environment of the organization are key to success of any company. Every successful business has a plan and knows where it is heading in the future. Taking the time on an ongoing basis to review the company's past performance, and predict its future performance, gives it a road map to follow.

Drucker (1992) mentioned that "the most important elements of development which would influence greatly the strategies, structure and performance of the future companies include: economic relations would be performed in the direction among trade blocs instead of countries, business performance would be more and more a matter of strategic alliancing, which would be integrated into a world economy, restructuring of business would be intensifying and more globalizing, it would be important to have information and knowledge, strategic management of companies would be decisive for a competitive success, intensive market orientation of companies would be a core advantage for achieving a competitive advantage over competitors".
According to Kesič (2008), it is evident that some companies are not able to satisfy long-term and ever-changing market needs and customers' expectations, to invest heavily into R&D and marketing and sales activities in the endeavor to bring new products to the global markets and materialize them properly. It can clearly be seen that the strategic management process enables the companies’ new development circles and their long-term development and growth. The alliancing of partners for the sake of maintaining long-term growth and competitiveness is today one of the most usable strategies in the world of any industry.

Thus companies can make alliances in endeavors to create common synergies and to better exploit their common assets, knowledge, product life cycle and, moreover, to improve their strategic market positions. Thus, the most important and strategic activities of creating common strategies for the companies are: products - to gain market shares and to drive the sales growth; research and development (R&D), to create new products and markets, to create geographic and market expansion; marketing and sales activities, to compete on the global markets; and to create common cost reduction synergies and investment capabilities.

2.3 Strategic Management

Strategic management and the external environment of the organization are paramount for the success of an organization. For organizations to survive in today’s competitive world they must be both internally and externally competitive. Organizations must carry out both the SWOT and PESTEL analyses of their business entities in order to respond
appropriately to changes both in the internal and external environments. SWOT and PESTEL are both tools in strategic management. Cole (1997) states that strategic management is the process directed by top management but engaged in throughout the organization, including the involvement of those concerned with satisfying customers' legitimate needs. It ensures the attainment of those fundamental aims or goals through the adoption of adequate decision making mechanisms, and the provision of adequate resources for the planned direction for the organization over a given period. Strategic management involves strategic analysis, strategic choice, implementation and strategic evaluation and control (John & Scholes, 1997).

Mintzberg, Henry. Lampel&Ahlstrand (2005) identify three different levels of strategy planning, namely, corporate level, business unit level and functional or departmental level. While strategy may be about competing and surviving as a firm, one can argue that products, not corporations compete, and products are developed by business units. The role of the corporation then is to manage its business units and products so that each is competitive and so that each contributes to corporate purposes.

While the corporation must manage its portfolio of businesses to grow and survive, the success of a diversified firm depends upon its ability to manage each of its product lines. Many managers consider the business level to be the proper focus for strategic planning. Corporate level strategy fundamentally is concerned with the selection of businesses in which the company should compete and with the development and coordination of that portfolio of businesses (Mintzberg et al, 2005).
Corporate level strategy is concerned with reach and defining the issues that are corporate responsibilities. These might include identifying the overall goals of the corporation, the types of businesses in which the corporation should be involved, and the way in which businesses will be integrated and managed. Competitive contact entails defining where in the corporation competition is to be localized. Corporate strategy seeks to develop synergies by sharing and coordinating staff and other resources across business units, investing financial resources across business units and using business units to complement other corporate business activities. Corporations decide how business units are to be governed: through direct corporate intervention (centralization) or through more or less autonomous government (decentralization) that relies on persuasion and rewards.

Corporations are responsible for creating value through their businesses. They do so by managing their portfolio of businesses, ensuring that the businesses are successful over the long-term, developing business units, and sometimes ensuring that each business is compatible with others in the portfolio.

A strategic business unit may be a division, product line, or other profit center that can be planned independently from the other business units of the firm (ibid). At the business unit level, the strategic issues are less about the coordination of operating units and more about developing and sustaining a competitive advantage for the goods and services that are produced. At the business level, the strategy formulation phase deals with: positioning the business against rivals; anticipating changes in demand and technologies and adjusting the strategy to accommodate them; influencing the nature of competition
through strategic actions such as vertical integration and through political actions such as lobbying. Michael Porter (2008) identified three generic strategies (cost leadership, differentiation, and focus) that can be implemented at the business unit level to create a competitive advantage and defend against the adverse effects of the five forces.

The functional level of the organization is the level of the operating divisions and departments. The strategic issues at the functional level are related to business processes and the value chain. Functional level strategies in marketing, finance, operations, human resources, and R&D involve the development and coordination of resources through which business unit level strategies can be executed efficiently and effectively.

Functional units of an organization are involved in higher level strategies by providing input into the business unit level and corporate level strategy, such as providing information on resources and capabilities on which the higher level strategies can be based. Once the higher-level strategy is developed, the functional units translate it into discrete action-plans that each department or division must accomplish for the strategy to succeed.

2.4 Organization and Environment

Business environment comprises of various internal and external forces under which the organization operates. It plays a very crucial role in the business. It shapes the ability of the organization to maintain successful relationships with its customers. Successful firms
know the importance of constantly watching and adapting to the changes in the business environment (Kotler et al, 2005).

The organization and environment share a closed loop interaction. Environment affects the organization followed by the generation of a response from the organization, thus completing the cycle. It implies that the effect of environment on the organization cannot be fully understood without evaluating the organizational response.

Although some studies (Chattopadhyay, 2001) of similar nature have been done in past, they related to developed economies like US, thus providing enough room for improvisation. In earlier studies, the relationship between an organization and environment was only seen through the lenses of environmental scanning. There have been many attempts to prove the significance of environmental scanning for strategic purpose (Yunggar, 2005). Other researchers have assessed the role of managerial perceptions in environmental scanning and its effects on the organization. The research, although being effective, has overemphasized on the role of environment neglecting the contribution of the organization in this relationship.

Dibb, Simkin. William & Ferrell (2006) categorize the business environment into macro and micro factors. Macro environmental factors have a universal impact on every organization operating in a particular market e.g. economic environment, political environment etc. Micro environmental factors, on other hand, have an organization specific impact e.g. suppliers, customers etc. The change in the business environment
brings both opportunities and threats for the organization. To overcome this business
dynamism, companies require certain predictability mechanisms which can guard them
against the unanticipated threats or overlooked business opportunities.

2.5 Strategic Responses

The goal of a business strategy response is to achieve a sustainable competitive
advantage. Porter (2008) identified two basic types of competitive advantage: cost
advantage and differentiation advantage. When a firm sustains profits that exceed the
average for its industry, the firm is said to possess a competitive advantage over its rivals.
A competitive advantage exists when the firm is able to deliver the same benefits as
competitors but at a lower cost (cost advantage), or deliver benefits that exceed those of
competing products (differentiation advantage). Thus, a competitive advantage enables
the firm to create superior value for its customers and superior profits for itself.

Organizations respond to external pressures in many ways ranging from outright
resistance through disingenuous support, attempting to influence the environment to
accept goals sought by the organization, to complying by making internal changes. The
relationship between an organization and environment are reciprocal; an organization’s
existence may be dependent on its environment and vice versa. There is a continuum of
influence in organization/environment relations ranging from the organization’s
domination of its environment to its domination in the environment.
Strategic responses lie in environmental scanning which refers to the process of monitoring and evaluating the business environment. It helps in adjusting the business tactics in case of a change in the business environment. The scope of the research was inclusive of the macro environmental forces because the macro forces are not company specific thus it allowed the findings of the research to be generalized. Additionally, the macro forces have a wide scope and tend to influence the micro environment of the business; therefore, it seemed advisable to focus the research on the role of macro environmental forces to reduce the accumulation of irrelevant data.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the researcher’s scope of methodological procedures that have been employed in the study. These include: research design, study locality, target population, sample size and sampling procedure, data collection instruments, pilot study and data analysis techniques.

3.2 Research Design

The study adopted a cross-sectional survey design. The descriptive study method was appropriate because it explored and described the relationship between variables in their natural setting without manipulating them. A cross-sectional research design was chosen over a longitudinal research design. Further, a decision had also to be made as to whether the study was to be a case study or a survey study.

The descriptive study aimed at obtaining information that could be analyzed, patterns extracted and comparison made for the purpose of clarification and provision of basis for making decisions. Both qualitative and quantitative data were obtained for comparison purposes.

3.3 Population of the Study

The target population constitutes all the pharmaceutical industry participants. There are forty two (42) registered pharmaceutical manufacturing companies in Kenya, seven
hundred (700) registered wholesale and one thousand three (1,300) retail dealers (Kenya's Pharmaceutical Industry report, 2005).

3.4 Sampling

According to Mugenda and Mugenda (2003), a representative sample should be at least 10% of the population. Stratified random sampling was used. The population was stratified according to manufacturing companies, wholesalers and retailers. Leedy (1989) states that a purposive sampling procedure is one which individuals or samples thought to be most important and relevant to the issue are targeted for the research. Most of the population of study is based in Nairobi. For this purpose the study was limited to Nairobi and a representative sample was selected as follows. Population was classified into categories and representative sample selected as follows.

<table>
<thead>
<tr>
<th>Category</th>
<th>National Population</th>
<th>Nairobi Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturers Employers</td>
<td>42</td>
<td>42</td>
<td>4</td>
</tr>
<tr>
<td>Wholesalers</td>
<td>1300</td>
<td>650</td>
<td>24</td>
</tr>
<tr>
<td>Retailers</td>
<td>700</td>
<td>350</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2042</strong></td>
<td><strong>1042</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Sample of individuals to be interviewed.

Thus a representative sample of 40 (5%) respondents were selected for the purpose of this study.
3.5 Data Collection

Both primary and secondary data were used in the study. According to Ochola (2007) primary data is the one collected directly by the researcher for the purpose of conducting research while secondary data is information that has been collected by others for their specified use that a researcher intends to use. It’s important because it saves considerable time and effort in solving the research problem at hand. Questionnaires were used to collect primary data.

The research instrument used in the study was self-administered questionnaires involving both structured and unstructured question items that were answered by selected participants. The structured items enabled tabulation and analysis of data with ease, while the unstructured items facilitated in-depth responses and opinions beyond the researcher’s scope of understability.

Self-administered questionnaire is a suitable method in descriptive study since it avoids subjectivity due to absence of interviewer’s influence. It also allows respondents sufficient time on items that require consultation before responding (Bless and Achola, 1987). The questionnaires were serialized to differentiate those to be filled by different categories of respondents.

3.6 Data Analysis

To analyze is to search and identify meaningful patterns in data. Kerlinger (2000) points out that, analysis means categorizing, ordering, manipulating and summarizing of data to
obtain answers to research questions. The data collected in the research was edited, coded, classified on the basis of similarity and then tabulated. Being a descriptive study, descriptive statistics such frequency distributions, percentages, frequency tables and pie charts, were used to summarize and relate variables which were attained from the administered questionnaires.

Kombo & Tromp (2006) asserts that the core function of the coding process is to create codes and scales from the responses, which can then be summarized and analyzed in various ways. A coding scheme is an unambiguous set of prescriptions of how or possible answers are being treated and what (if any) numerical codes are to be assigned to a particular response.

To permit quantitative analysis, data was converted into numerical codes representing attributes or measurement of variables. Code categories in questionnaires or other measuring instruments were exhaustive and mutually exclusive. Only one code was assigned to each response category (Mugenda&Mugenda, 2003).

Descriptive statistics technique was chosen because it makes it possible to show the distribution or the count of individual scores in the population for a specific variable. Columns on frequency gave the proportion of a subgroup of the total population. The Statistical Package of Social Sciences (SPSS) was used to process and analyze the data in order to determine the relationship between the variables.
CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction
This chapter presents the outcomes of the analysis of the data collected during the study. The data collected was mainly nominal and ordinal level data. Both descriptive and inferential statistics was used to analyze data. Descriptive statistics involved the use of frequency tables, percentages and charts while the inferential statistics involved the use of the nonparametric chi-square tests.

4.2 The Response Rate
Out of the 40 questionnaires administered, 31 were successfully filled and returned. This implied that, the response rate for this study was 77.5%. This was considered adequate for analysis.

4.3 Strategic Responses in the pharmaceutical industry in Nairobi.
4.3.1 Distribution of respondents
22 of the respondents were male representing 71% and 9 were female representing 29% of the sample (Table 1).

Table 1: Distribution of respondents by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>71</td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Interviews.
Table 2 shows the distribution of respondents by designation. Majority of the respondents were either pharmacists or managers.

**Table 2: Distribution of Respondents by Designation**

<table>
<thead>
<tr>
<th>Designation</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>7</td>
<td>22.6</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>12</td>
<td>38.7</td>
</tr>
<tr>
<td>Medical Representative</td>
<td>1</td>
<td>3.2</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>35.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Interviews.

35.5% of the respondents were from the wholesale sector, 32.2% were retailers, 6.5% from manufacturing, and 25.8% came from a combined whole sale and retail businesses as shown in the table 3 below.

**Table 3: Nature of Respondents’ Business**

<table>
<thead>
<tr>
<th>Nature of Business</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>2</td>
<td>6.5</td>
</tr>
<tr>
<td>Wholesale</td>
<td>11</td>
<td>35.5</td>
</tr>
<tr>
<td>Retail</td>
<td>10</td>
<td>32.2</td>
</tr>
<tr>
<td>Wholesale &amp; Retail</td>
<td>8</td>
<td>25.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Interviews.
4.3.2 Use of Strategic Responses.

It was found that 93.3% of the respondents used strategic management within their firms while 6.7% did not use strategic management techniques. The results are shown in figure 1.

Figure 1: Percentage use of strategic Responses.

![Bar chart showing percentage use of strategic responses]

Source: Field Interviews.

4.3.3 Extent of use of Strategic Responses

Table 5 shows the extent of the use of strategic management. 19.4% of the respondents showed that they used strategic management to a very great extent while 70.1% used it to a great extent while 6.5% used it to an average extent.
Table 4: Extent of Use of Strategic Responses

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Average extent</th>
<th>Low extent</th>
<th>Very low extent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>6</td>
<td>22</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Percentage</td>
<td>19.35</td>
<td>70.97</td>
<td>6.45</td>
<td>3.22</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Interviews.

4.3.4 Frequency of Using Strategic Responses.

The following table highlights the frequency at which companies use strategic responses to run their businesses.

Table 5: Frequency of using strategic responses

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Very often</th>
<th>Often</th>
<th>Fairly often</th>
<th>Rare</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>4</td>
<td>15</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>31</td>
</tr>
<tr>
<td>Percentage</td>
<td>129</td>
<td>48.4</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Interviews.

4.3.5 Areas Where Strategic Responses is commonly used

The use of strategic responses was more common in some departments' within a company than in others as highlighted by figure 2 below.
4.3.6 Specific Strategic Responses Taken Recently

Some of the companies gave feedback on the most recent strategic responses they had undertaken and the results are highlighted below.

**Table 6: Specific strategic responses taken recently**

<table>
<thead>
<tr>
<th>Strategic Action</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction of new drug</td>
<td>1</td>
<td>5.5</td>
</tr>
<tr>
<td>Follow up on customer feedback</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>Diversification to foreign markets</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Mixing local and imported drugs</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Increasing sales force</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Using state of the art machinery</td>
<td>1</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Source: Field Interviews.
4.3.7 Use of Product Differentiation

Figure 3: Use of Product Differentiation

4.3.8 Use of Cost Differentiation

Table 7: Use of Cost Differentiation

<table>
<thead>
<tr>
<th>Scale</th>
<th>Very great</th>
<th>Great extent</th>
<th>Average extent</th>
<th>Low extent</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>9</td>
<td>22</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Percentage</td>
<td>29</td>
<td>71</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Interviews.
4.3.9 Perceived Enhancement of Value of Use of Strategic Responses

Most of the respondents agreed that the use of strategic responses enhanced their business opportunities; others agreed that the use would enhance their business without actually using any strategic response.

Figure 4: Perceived Enhancement of Value of Use of Strategic Responses.

```
Source: Field Interviews.
```

4.3.10 Number of Different Types of Products Stocked

Table 8: Number of Different Types of Products Stocked

<table>
<thead>
<tr>
<th>Range</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5,000</td>
<td>11</td>
<td>35.5</td>
</tr>
<tr>
<td>5000-10,000</td>
<td>13</td>
<td>41.9</td>
</tr>
<tr>
<td>&gt;10,000</td>
<td>7</td>
<td>22.6</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Interviews.
4.3.11 Average Lowest and Highest Prices

Table 9: Average lowest and highest prices

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Cheapest</th>
<th>Most Expensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50</td>
<td>1200</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>2000</td>
</tr>
<tr>
<td>1</td>
<td>22</td>
<td>5000</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>2000</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>9000</td>
</tr>
<tr>
<td>7</td>
<td>100</td>
<td>2700</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>7500</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1300</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>10000</td>
</tr>
</tbody>
</table>

Source: Field Interviews.

4.4 Discussion of findings

4.4.1 Links to theory

The study is consistent with Porter (2008) basic types of competitive advantage which are identified as cost advantage and differentiation advantage. The research achieved the objective of unearthing if pharmaceutical companies in Nairobi apply strategic responses to environmental changes and what the strategic responses were. From the data collected, there is evidence that, just like any other business, the pharmaceutical companies apply certain strategic responses to environmental changes. The study showed that more than 80% of the respondents used product differentiation as a strategic response. This implied that companies stock as many products as possible to
meet the demand of patients. This could be necessitated by the fact that doctors prescribe medicine using the brand names and not the generic name as required ethically. As a result, the ‘false demand’ forces the companies to use product differentiation.

Another strategic response applied by more than 90% of the respondents is cost differentiation although the extent of using cost differentiation varies among the respondents. This is achieved by importing cheap generics from countries like India and branding the products in the market by using the doctors to prescribe certain brands of medicines more. It can also be achieved by ‘parallel importing’ of products already existing in the market.

The study has also shown that 63% of the respondents stock more than 5000 products to confirm extent of product differentiation in the industry. It has also revealed that the lowest priced product on average is at KES 100 while the highest priced is at KES 2700. This implies an average price of KES 1400 per product.

The product differentiation strategy similarly has led to overstocking of products in order to meet the ‘false demand’ created by competing companies to brand their products. This also increases the cost of operating the business and affects the cash flow of the business. For instance, to stock 10,000 products at an average price cost of KES 1400 requires 14 million shillings.
4.4.2 Links to other studies

The findings are also consistent with other studies (PWC, 1999) that found out that one of the constants of pharmaceutical company strategic responses over the past decade has been increasing scale. It also gave two models that are discernible. The two models are the blockbuster model which involves the search for, and distribution of a small number of drugs that achieve substantial global sales and the diversification model which involves a larger number of drugs being marketed to a smaller niche markets.

The cost differentiation (cost advantage) and product differentiation (differentiation advantage) strategies that Porter (2008) described have implications on the industry. The recent market survey (Daily Nation Oct 13th 2011) that put the level of counterfeit medicines in the market at 30% could be as a result of increased parallel imports in an effort to differentiate cost.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a conclusion of the study. Section 5.2 gives a summary of the study findings, section 5.3 provides the research conclusions and section 5.4 limitations of the study while 5.5 presents recommendations for policy and further research.

5.2 Summary of findings

The study found that majority (93.3%) of the respondents used strategic management within their firms for decision making. This indicated that the use of strategic management by the pharmaceutical industry in Kenya is wide. This was confirmed by the extent and frequency to which the word ‘strategic’ was used as shown by the results. More than 70% of the respondents used strategic management to a great extent. A significant portion of the respondents agreed that strategic management techniques were important for the operation of other businesses. This was confirmed by research findings conducted on the selected sample.

5.3 Conclusion

The study found that strategic management was used in many areas of the pharmaceutical industry including scheduling supplies payment, handling short expiry drugs, product manufacturing sequence, pricing, marketing and cash flow planning. Most respondents indicated the use of strategic responses and management on marketing decisions.
The most widely used types of strategies were customer follow-up, product and cost differentiation. The range of products stocked by the companies under the study was nearly the same for all of them with equivalent price ranges. The cheapest drugs had small price gaps within the sampled pharmaceuticals.

5.4 Limitations of the Study

The study was limited to Nairobi town and only 31 of the targeted 40 respondents filled the questionnaire. In some cases the respondents were managers of the premises but not qualified doctors. It’s possible that some respondents, for fear of divulging strategies, might have not given the right information.

The study findings are also limited by constrained resources to reach to all manufacturers that are based in Nairobi. Only two of the targeted six manufacturers were able to fill the questionnaires. Another limitation was lack of cooperation by some companies as evident in the results.

5.5 Recommendations for Policy and practice

Government and pharmaceutical companies in collaboration with other stakeholders should encourage the use of strategies related to ethics and good governance in pharmaceutical procurement; financing and distribution to make the players and the customers gain maximum benefit from the industry. This will also lead to increased access to medicine even in remote areas of the country.

By ensuring the ethical requirement of ‘generic prescribing’ is followed to the latter rather than using brand names, regulatory authorities and stakeholders will have freed a lot of capital held up in ‘unnecessary’ stocking of all the brands in the market.
5.6 Recommendations for further research

The researcher suggests the following areas for further study:

A study on the extent and impact of over-the-counter prescription and consumption of medicines in Kenya, the factors that hinder growth of pharmaceutical manufacturing in Kenya and how to enforce ethical requirements without killing competition in the industry will add a lot of value to the industry.
REFERENCES


APPENDIX I: QUESTIONNAIRE

I am ___________________________________, a student at the University of Nairobi undertaking a Master’s Degree in Business Administration (MBA) Strategic Management Option. Part of the course requirement is to carry out a research project and the title of my research project is “Strategic Management Responses to Changes in the Environment in the Pharmaceutical Industry in Kenya”.

Kindly respond to the following questions provided in this questionnaire. The information provided shall strictly be used for academic purposes only and shall be treated in strict confidence.

SECTION I: Staff Demographics

i) Name (Optional)........................................................................................................................

ii) Gender: Male [ ]  Female [ ]

iii) Company (Business Name)......................................................................................................

iv) Designation..............................................................................................................................

v) Nature of business

Manufacturing [ ]

Wholesale [ ]

Retail [ ]

Wholesale and retail [ ]

Other (Specify) .............................................................................................................................

SECTION II: Research Questions

1. Do you use strategic management techniques to make decisions in your business?

   Yes | | No | |

   If yes, to what extent? (Tick one)

   (a) Very great extent | (b) Great extent | (c) Average extent | |

   (d) Low extent | (e) Very low extent | |
2. How often do you use strategic management techniques to make decisions in your business? (Tick one)

(a) Very often [ ] (b) Often [ ] (c) Fairly often [ ]
(d) Rare [ ] (e) Never [ ]

3. In what areas of decision making do you use strategic management?

a) ....................................................................................................................................

b) .....................................................................................................................................

c) ....................................................................................................................................

4. State some of the specific strategic actions that your business has implemented recently.

a) ....................................................................................................................................

b) .....................................................................................................................................

c) ....................................................................................................................................

5. To what extent do you use product differentiation strategy? (Tick one)

Very big extent [ ] Big extent [ ] Average extent [ ] Low extent [ ] never [ ]

6. To what extent do you use cost differentiation strategy? (Tick one)

Very big extent [ ] Big extent [ ] Average extent [ ] Low extent [ ] never [ ]

7. Show the level to which you agree with the following statement as it relates to your business "Strategic Management has greatly enhanced value creation in my Business" (Tick one)

(a) Strongly agree [ ] (b) Agree [ ] (c) Disagree [ ]
(d) Strongly disagree [ ] (e) Don’t know [ ]

8. How many different types of products (by brand) do you stock? (Tick one)

Less than 5000 [ ] 5000 – 10,000 [ ] More than 1000 [ ]

9. What is the average price of your
Least expensive products? (KES).................. Most expensive products (KES)......................
10. What is the average number of brands that you stock per specific product? (Tick one)

   Less than 5 [ ]
   5 - 9 [ ]
   10 - 14 [ ]
   More than 14 [ ]

11. Do you stock Omeprazole? Yes [ ] No [ ]

If yes how many brands? (Tick one)

   Less than 5 [ ]
   5 - 9 [ ]
   10 - 14 [ ]
   More than 14 [ ]

Thank for participating in this questionnaire

The End