

**STRATEGIC RESPONSES BY MANUFACTURING  
PHARMACEUTICAL FIRMS TO CHANGES IN THE  
PHARMACEUTICAL INDUSTRY IN KENYA**

**BY**

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## DECLARATION

I declare that this is my original work and that it has not been presented for any award at the University.

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This research project has been submitted for examination with my approval as University supervisor.

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## **DEDICATION**

To my dear wife Jacky and my lovely children Darren and Sasha for your support and encouragement throughout my studies. Thank you and God bless you abundantly.

To my late parents Joash and Rebbah Murule, thank you for nurturing and guiding me during my childhood. The values you instilled in me will forever remain. May the Lord rest your souls in eternal peace.

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## **LIST OF ABBREVIATIONS**

ACT-	Artemesinin based Combination Therapies
ARV's-	Anti Retroviral Drugs
COMESA -	Common Market for Eastern and Southern Africa
GMP-	Good Manufacturing Practice
GSK-	GlaxoSmithKline
HMO-	Health Management Organizations
ICT –	Information Communication and Technology
KCB-	Kenya Commercial Bank
KEMSA-	Kenya Medical Supplies Agency
KNH-	Kenyatta National Hospital
MNC -	Multi National Corporations
MSF -	Medicines Sans Frontiers
OTC -	Over the Counter
PPB-	Pharmacy and Poisons Board
R & D-	Research and Development
WHO-	World Health Organization



## **ABSTRACT**

This research was designed to investigate the strategic responses adopted by local pharmaceutical manufacturers to changes in the pharmaceutical industry. The objectives of the study were to identify the environmental challenges facing local pharmaceutical manufacturers and to establish the strategic responses that have been adopted to mitigate the environmental changes.

The organizations that were studied were Cosmos, Laboratory & Allied, Elys and Dawa pharmaceuticals. The data was collected from the directors and senior managers through a questionnaire. The local pharmaceutical manufacturing firms have adversely been affected by the changes in the business environment in the past five years. This has led to adoption of new strategies in order to remain competitive.

The findings of the study indicate that local pharmaceutical manufacturing firms have adopted response strategies such as pricing, marketing, strategic alliances and information, communication and technology response strategies.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background

Strategic management has long been viewed as the concept and process that link an organization and its environment together. It consists of the analysis, decisions and actions an organization undertakes in order to create and sustain competitive advantages. In today's rapidly changing global economy it is essential that the organization is prepared to adapt to these changes and realizes the need for the strategic management to be pro-active (Taylor, 2005).

Pharmaceutical companies are experiencing many changes which have contributed to the uncertainty of their competitive business environment. The uncertainty is underlined by the abundance of players within the industry. Pharmaceutical companies are affected by the actions of pharmaceutical industry regulators, government institutions, financiers, insurance companies, healthcare organizations, licensees, clinical service organizations, physicians, hospitals, end-users, patent authorities, registration officials and competitors. Strategically, one of the most important issue is to provide vital information and create a perceived value to the gate keepers of the system- pharmaceutical regulators, marketing authorization officials and medical doctors- and consequently, to influence the changing environment and consumer purchasing behavior in a more favorable direction (Chaudry and Dacin 1997).

The changing environment has also seen the patient who is the consumer, put a premium on convenience and freedom of choice as far as their own medical care is concerned (Wyke 1997). The survivors in the pharmaceutical industry will be providers who constantly monitor the changing needs of increasingly demanding and well educated patients, and develop and commercialize their products accordingly. This could be described as a shift from a doctor-centered, disease-oriented to patients-oriented, problem-oriented approach (Proenca and Moutinho 1997).

### **1.1.1 Strategic Responses**

Strategic responses are the set of decisions and actions that result in the formulation and implementation of plans designed to achieve a firm's objectives (Johnson and Scholes, 2002). Firms operate in an environment, which is characterized by political, economic, social, and technological factors, which may impede the achievement of their objectives. These factors are obdurate and dynamic hence risky and therefore pose several challenges to the firms. The uncertainties and risks associated with them force firms to undertake strategic responses in reaction to these challenges. Strategic responses enable firms to put strategies in place to gain a competitive advantage over their peers. Such concepts may strengthen a firms' ability to scan and analyze the environment critically and prepare appropriate actions necessary for the business to prosper.

Firms face an increasingly dynamic, complex and unpredictable environment, where technology, globalization, knowledge and rapidly changing competitive approaches affect overall performance (Asch and Salaman, 2002). The degree and complexity of the current

changing environment is driving both large and small organizations to seek new ways of conducting business to remain profitable. More and more firms are turning to a strategic approach as the way forward. One of the ways through which they are doing this is by trying to achieve a “fit” or balance between the firm’s internal environment and its external-operating environment.

Trim (2002) defines scanning the environment as the activity of acquiring information through formal means such as newspapers and conferences and also through informal means such as informal contacts in the industry. The importance of scanning derives from the importance of the decisions involved. Strategic information is useful for making decisions about strategy and long-range plans. External information is strategic when it refers to information about events or relationships in the firm’s outside environment that unveil opportunities to exploit the firm’s strength, accentuate the firm’s weaknesses, or highlight potential threats facing the firm.

Environmental scanning is conceived of as a key step in the process of organizational adaptation. However, executives can only interpret, disseminate, analyze and politicize information that enters the organization. Wood (2001) suggests that if competitors in an industry have unequal information, they differ in their abilities to formulate cogent responses to the environment. Additionally, if they have generally equal information, then any difference in their responses or accompanying performance is attributable to differences in their abilities (or their own perceptions of their abilities) to implement a response, that is, to change or modify their strategy.

### **1.1.2 Kenya Pharmaceutical Industry Overview**

The pharmaceutical industry consists of three segments namely 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 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 of 50 recognized pharmaceutical manufacturers; approximately 30 are based in Kenya. It is approximated that about 9,000 pharmaceutical products have been registered for sale in Kenya. These are categorized according to particular levels of outlet as free sales / OTC (Over the Counter), pharmacy technologist dispensable, or pharmacist dispensable/ prescription only.

The pharmaceutical sector consists of about 30 licensed concerns which include local manufacturing companies and large Multi National Corporations (MNCs), subsidiaries or joint ventures. Most are located within Nairobi and its environs. These firms collectively employ over 2,000 people, about 65% of who work in direct production. The industry compounds and package medicines, repacking formulated drugs and processing bulk drugs into doses using predominantly imported active ingredients and excipients. The bulk of locally manufactured preparations are non-sterile, over the- counter (OTC) products.

The number of companies engaged in manufacturing and distribution of pharmaceutical products in Kenya continue to expand, driven by the Government's efforts to promote local and foreign investment in the sector. The pharmaceutical industry is highly complex. The technologies leading to drug discovery and development are at the limits of human knowledge. The huge size of the companies and the complexities of their processes and technologies presents many organizational and management challenges. The development and management of the distribution system is highly costly (Agarwal, 2001).

## **1.2 Research Problem**

The business environment within which the manufacturing pharmaceutical industry operates has been very volatile. The political anxiety, competition from the entrants, social reforms, technological advancement and global changes are some of the challenges that have greatly affected the growth of the industry. The dynamism of the pharmaceutical industry in the current times is posing a lot of challenges to all pharmaceutical companies. It is only those pharmaceutical companies that are able to adapt to the changing pharmaceutical industry and adopt new ideas and ways of doing business that can be guaranteed of survival. Agarwal (2001) asserts that the forces of change that have greatly influenced the pharmaceutical industry are intense competition, globalization and technological advancement.

However, misdiagnosing the industry factors critical to long-term competitive success greatly raises the risk of misdirected strategy. Issue management in the pharmaceutical industry demand that companies should have effective systems in place to counter unpredictable events that can sustain their operations and minimize the risks involved. Therefore venturing in this area, it is hoped that, areas of interest for further research can be identified for further understanding of the strategic responses to competition within the industry. The business operation strategies for most pharmaceutical firms in Kenya are structured so that they take advantage of their market position, especially at the beginning and the end of the R&D process (compound analysis, drug toxicity, clinical studies).

Locally, some studies have been done on strategic responses. Githendu (2004) investigated on strategic response of pharmaceutical industry to bargaining power of Health Management Organizations (HMOs). She found out that Pharmaceutical companies have put in place strategies to counter the bargaining power of HMOs. The measures highlighted were strategic mergers and alliances and also product differentiation. Mungai (2004) researched on strategic responses of GlaxoSmithKline (GSK) following liberalization of the pharmaceutical industry.

Other local studies have been carried by out by various Scholars on strategic responses to changing environment. Gitau (2010) researched on the strategic response to environmental changes by World Health Organization (WHO) in Kenya and found that WHO employs a combination of different strategies across the organization, maybe because of it being a nonprofit making organization. The other strategies being employed

at the country offices include organizational learning, focus and differentiation strategies. Angara (2010) researched on strategic responses adopted by Kenya Commercial Bank (KCB) to changes in the environment and found out that the bank has put strategies such as improvement in human resource management, establishment of a research and development department to create and review product and services and adoption of a marketing system to reach out to its clients alongside use of modern information technology. All the above studies by local scholars were done under different context and (in different organizations) but none on local pharmaceutical manufacturers hence creating a gap. This study therefore seeks to fill the gap by answering the following questions. What challenges do manufacturing pharmaceutical firms face from the changes in the pharmaceutical industry? What strategic responses are manufacturing pharmaceutical firms applying in the changing business environment?

### **1.3 Objectives of the study**

- i) To determine the challenges pharmaceutical firms in Kenya face from changes in the pharmaceutical industry.
- ii) To establish the strategic responses of pharmaceutical manufacturing firms to the changing business environment.

### **1.4 Value of the study**

This study will be of value to the Management team of pharmaceutical firms in Kenya as a reference point for competitive strategy being put in place, both present and future, that will ensure that most pharmaceutical firms in Kenya adopt and implement different competitive strategies.



The findings of this study will also be of significance to the pharmaceutical industry in Kenya, which is directly affected by the dynamic business environment and competition.

The government and corporate policy makers interested to know the impact of a dynamic environment in respect to the competitiveness of manufacturing pharmaceutical companies will also find this study useful in that respect.

Scholars will use this study as a basis for further research in the same area/or related field and for teaching in universities and other institutions of higher learning.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The purpose of this chapter is to highlight the work that other scholars and researchers have done in regards to pharmaceutical business model. Theoretical and empirical reviews are done leading to the study conceptualization that guides the study and finally the research gives a critical review of the chapter.

### **2.2 Environment Changes and Business**

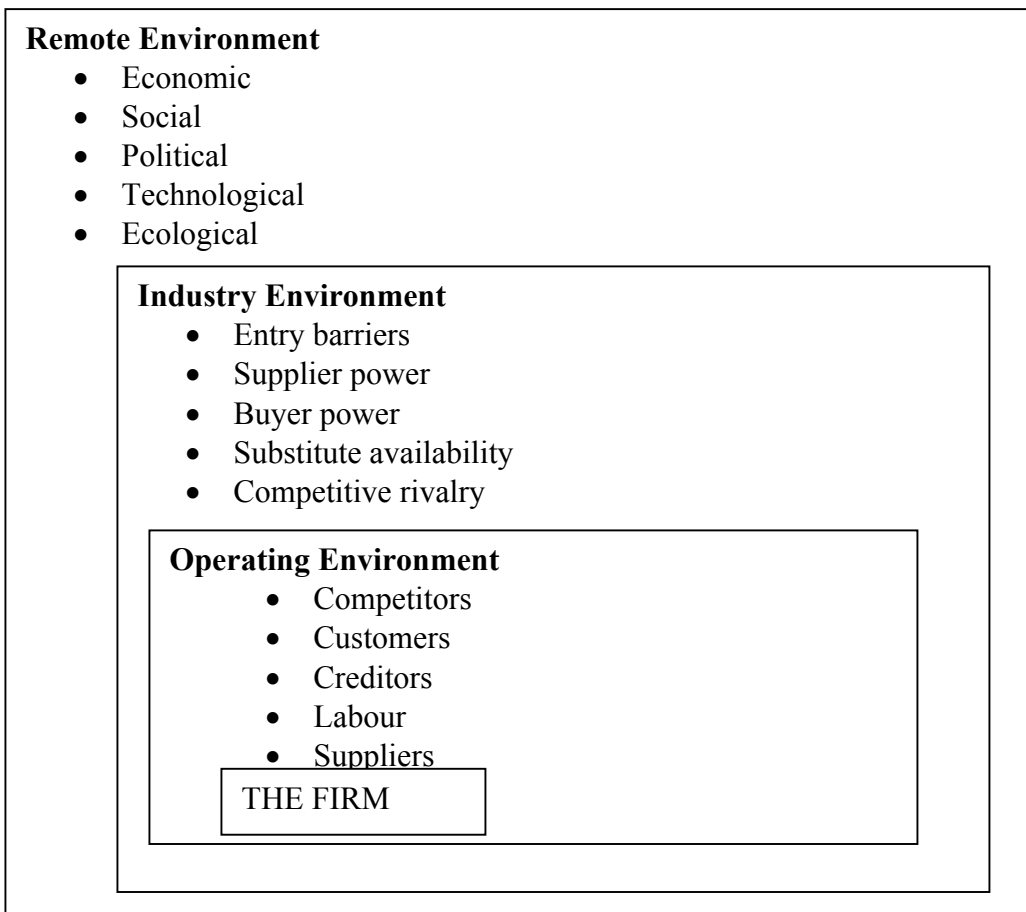
A host of factors influence a firm's choice of direction and action, and ultimately its organizational structure and internal processes. These factors which constitute the external environment can be divided into three interrelated categories: factors in the remote environment, factors in the industry environment, and factors in the operating environment (Pearce and Robinson, 2002).

The remote environment comprises factors that originate beyond, and usually irrespective of, any single firm's operating situation – economic, social, political, technological, and ecological factors. This environment presents firms with opportunities, threats and constraints but rarely does a single firm exert any meaningful reciprocal influence (Pearce and Robinson, 2002). The scholars also point out that factors that more directly influence a firm's prospect come from the environment of its industry including; competitive rivalry, the availability of substitutes, the bargaining power of buyers and suppliers and entry barriers. The operating environment includes factors that influence a

firm's immediate competitive situation- competitive position, customer profiles, supplier's creditors and the labor market.

Pharmaceutical firms generally operate in open systems. A system is a set of components which relate in the accomplishment of some objectives. The components relate and interact within a boundary and can be closed or open. A closed system does not depend on the environment for survival. On the other hand, an open system crucially depends on its external environment and releases resources to the environment (Ansoff, 1993)

**Figure 1.1: The Firm's External Environment**



**Source: Pearce & Robinson (2002)**

The Porters Five Forces Model is a strategy tool that can be used to analyze how changes in the micro-environment may affect the firms operations (Porter, 1980). The forces include the possibility of new entrants, bargaining power of customers, threat posed by substitute products, the bargaining power of suppliers and the rivalry within the industry. Porter's essential message is that when these five forces are high, then industries are not attractive to compete in. There will be too much competition, and too much pressure to allow reasonable profits (Johnson and Scholes, 2002).

The Macro-environment involves all factors and influences outside the company's boundaries. These factors such as the economy, government policy and social change can have a significant effect on the success of a firm. The decisions of managers in the organization are usually shaped by the macro-factors. Political factors refer to government policy such as the degree of intervention in the economy e.g. the goods and services that the government wants to provide, subsidies to firms and business support. Political decisions can impact on many vital areas such as the education of the workforce, the health of the nation and the quality of the infrastructure of the economy such as the road and rail system.

Firms must adapt their new strategies to new environments. The changes in the competitive environment will require new strategies, which in turn call for reformed organizational capability (Ansoff, 1990). Thompson and Strickland (1998) argue that one way to predict future driving forces is to utilize environmental scanning techniques. Such scanning involves studying and interpreting social, political, economic, ecological and

technological events in an effort to spot budding trends and conditions that could eventually affect the industry. Environmental scanning raises a manager's awareness of potential developments that could have an impact on industry conditions posing new opportunities and threats.

## **2.3 Strategic Responses**

Strategy is the direction and scope of an organization over the long term, which achieves advantage in a changing environment through its configuration of resources and competences with the aim of fulfilling stakeholder expectations (Johnson and Scholes, 2002). Due to scarcity of resources, the strategy that is chosen should be one that optimizes these resources in the pursuit of the organizational goals and objectives. Aosa (1992) asserts that modern approach to strategic planning has developed as a response to increasing challenges caused by high levels of environmental turbulence. According to Ansoff and McDonnell (1990), when firms are faced with unfamiliar changes, they should revise their strategies to match the turbulence level.

Porter (1980) has described a category scheme consisting of three general types of strategies that are commonly used by businesses. The three generic strategies are: cost leadership, differentiation, and market segmentation (or focus). Market segmentation is narrow in scope while both cost leadership and differentiation are relatively broad in market scope. Porter (1980) further expounds that there are four possible corporate strategies: market penetration, product development, market development and

diversification as strategies that managers could consider as ways to grow the business via existing and/or new products, in existing and/or new markets.

A diversification strategy stands out from the other three strategies (Porter, 1980). The first three strategies are pursued with the same technical, financial, and merchandising resources used for the original product line, whereas diversification usually requires a company to acquire new skills, new techniques and new facilities. Therefore diversification is meant to be the riskiest of the four strategies to pursue for a firm.

Defensive strategies arise out of the desire by an organization to be secure and have a stable niche in the market place (Johnson and Scholes, 2002). According to Boseman and Phatak (1989) there are four types of defensive strategies: joint venture, retrenchment, divestiture and liquidation. Retrenchment occurs when an organization regroups through cost and asset reduction to reverse declining sales and profits (Johnson and Scholes, 2003). Johnson and Scholes (2003), state that selling a division or part of an organization is called divestiture. Divestiture is usually used to raise capital for further strategic acquisitions or investment. This strategy is useful in getting rid of unprofitable activities in the firm. Liquidation is the selling of all the firm's assets, in parts for their worth. Liquidation is recognition of defeat and consequently can be an emotionally difficult strategy.

Offensive strategy or diversification is a strategy, which takes the organization away from its current markets or products or competencies (Johnson and Scholes, 2002). Diversification will increase the diversity that a corporate centre must oversee. According to Ansoff (1971), for organizations to diversify, there are three objectives - growth, stability, and flexibility. Gleuk (1980) noted that diversification is also used to change corporate direction. Galbraith (1998) suggested that there are three types of product diversification. They are related, linked, and unrelated diversification. In related diversification, there is evident potential synergy between the new business and the core one, based on a common facility, asset, channel, skill, even opportunity (Mintzberg, 1998). Linked diversification involves moving into new industries and operating at different centres of concern in those industries, however, there is a chaining of some type among various businesses. Unrelated diversification entails spreading of an investment portfolio over a wide range of unrelated products by the business group, so the common features are generally limited to finance and business management.

Differentiation strategy focuses on a firm's unique product attributes or perceived uniqueness other than cost. The firm pursuing differentiation seeks to be unique in its industry along some dimension that is valued by customers, which means investing in product Research and Development and marketing (Porter, 1980). It is the ability to sell its differentiated product at a price that exceeds what was spent to create it that allows the firm to outperform its rivals and earn above-average returns. According to Porter (1980) a firm may obtain a competitive advantage by creating a higher value for its customers than the cost of creating it, either by adopting a differentiation strategy or an efficiency

strategy. Firms pursuing a differentiation strategy try to differentiate themselves from their competitors using a variety of sales, marketing and other related activities or product and technology innovations.

A cost leadership strategy is based on lower overall costs than rivals. A cost leadership strategy is designed to produce goods or services more cheaply than competitors by stressing efficient scale of operation. Porter (1980) noted that firms often drive their cost lower through investments in efficient-scale facilities, tight cost and overhead control, and minimizations in such areas as service, selling and advertising.

Focus strategy has its competitive advantage in either lower costs than competitors serving that market or an ability to offer niche members something different from competitors. Focusing is based on selecting a market niche where buyers have distinctive preferences. The niche is defined by geographical uniqueness, specialized requirements in using the product or by special attributes that appeal to members. A focus strategy based on low cost depends on there being a buyer segment whose needs are less costly to satisfy than the rest of the market. On the other hand, a focus strategy based on differentiation depends on there being a buyer segment that demands unique product attributes.

Wheelen and Hunger (1998) define research and development as a process that deals with products and processes innovation and improvement. R & D helps firms come up with new product and services and keep up with the changing technology. Pearson (1988)



argues that outstanding companies are constantly innovating in every area of business, pursuing changes which create value for their customers and consumers. Their approach is to search for new opportunities and package or present them in such a way that they deliver consumer satisfaction.

Although innovation mainly result from internal development as a result of research and development, changes in external environment and ideas from other parties can form the basis for innovations in a firm. Nayak (1991) argues that most golden ideas do not come from marketing, sales or competitors but from customers. Thompson (1994) argues that the aim of R & D is to add value for the customer or consumer by reducing cost, differentiating product or service in some sustainable way hence creating a competitive advantage for the concerned firm.

## **CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY**

### **3.1 Introduction**

This chapter specifies the nature of the research design and the population to be studied. The chapter has adopted the following structure: Research Design, Target Population, Sampling Technique, Data Collection Techniques and data Analysis methods that will be followed in the research process.

### **3.2 Research Design**

A research design is the general plan of how one goes about answering the research questions (Saunders et al., 2007). Both detailed quantitative and qualitative analysis are required for in-depth insights into the temperament of strategic responses by pharmaceutical firms towards managing the ever changing business environment.

In this research, a survey approach was adopted since the study aimed at investigating the strategic responses by pharmaceutical firms to the changing business environment in Kenya. A survey design is the most appropriate for investigating the behaviour under study (Mugenda and Mugenda, 1999). Many studies in the past have utilized this design in wide surveys to derive their evidence on various strategic management issues affecting the pharmaceutical industry. For instance, Owuoth (2010) surveyed on critical success factors for multinational pharmaceutical companies in Kenya.

### **3.3 Data Collection**

Data was collected from top level managers of local Pharmaceutical Manufacturing Companies. To achieve the objectives of this study, fifteen respondents were targeted. These included Managing directors, ICT managers, Research and Development heads and Business Development Managers. These respondents were resourceful enough in providing the required data.

Both primary and secondary data was used to obtain information for the study. Primary data was obtained through an interview guide. Secondary data was extracted from the organization's documents such as annual reports, audited financial reports, existing and previous strategic plans and newsletters.

### **3.4 Data Analysis**

Data collected was analyzed by use of content analysis and descriptive analysis. Kothari (2004) described content analysis as a method of analyzing contents of documentary materials such as books, journals, magazines, newspapers and most importantly content of verbal materials whether spoken or written.

The data was then cross-tabulated. After tabulation, the data was coded to facilitate statistical analysis. Descriptive statistics such as frequency, distribution, percentages, tables, pie charts as well as bar graphs were used for data presentation. Qualitative data was presented through narratives.

## **CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION**

### **4.1 Introduction**

This chapter presents analysis and findings of the study as set out in the research methodology. The data was gathered through interview guide as the research instrument. The data findings were on the strategies adopted by local manufacturing pharmaceutical firms to the changing business environment.

The data collection targeted 15 respondents from 5 pharmaceutical manufacturing firms. However, only 12 were available for personal interviews. The firms studied were Cosmos, Elys, Laboratory & Allied and Dawa Pharmaceuticals limited. This represents a response rate of 80% which is significant enough to provide a basis for valid and reliable conclusion. The local pharmaceutical firms manufacture generic drugs. Most of the leading firms have similar product portfolios, in that they all produce the same categories of pharmaceutical products.

Because generic drug manufacturers do not have to recoup high R&D costs, prices of their products are usually much lower than those of multinational pharmaceutical companies; as a result, after patent expiration, generic drug manufacturers capture significant market share, dramatically decreasing revenues of the big pharmaceutical companies. Generic drug manufacturers represent a significant threat to research-based pharmaceutical companies. For example, Schering-Plough's Claritin patent expired in 2002; as a result of generic drug competition, sales of Claritin by Schering-Plough

declined from \$3.2 billion in 2001 to \$1.8 billion in 2002 and to \$0.37 billion in 2003. Moreover, generic drug manufacturers sometimes start production of patent-protected drug analogues even before a patent expires. Although research-oriented companies in many cases are able to protect their patents, they do suffer from lost revenues.

## **4.2 Demographic Information**

The study established that majority of the respondents were male and were aged mostly between 40-55 years. The study, in an effort to ascertain the interviewees' competence and conversance with matters regarding the local pharmaceutical industry asked questions on the highest level of education. According to the data findings, most of the interviewees had at least a University degree while others had a Masters degree. The respondents were also requested to indicate the position they held in the organization. From the study findings, most of the interviewees' were managers while others were directors. The researcher also asked a question on the number of years that the interviewees' had worked for the organization. According to the interviewees' response, majority of them had worked for the pharmaceutical firm for at least five years. This implied they were confident enough to respond to broad issues on the firm's strategies.

## **4.3 Challenges**

The interviewees were asked some of the challenges that have faced the local manufacturing pharmaceutical firms in the last 2-5 years and how the challenges have impacted on firms. The study sought to find out how changes in the regulation framework, competition, rapid development in ICT and R & D has affected business

performance in the local manufacturing pharmaceutical industry. Further the findings indicated that the increase in cheaper imported generic products from India and china pose a major challenge to local manufacturing pharmaceutical firms.

The interviewees agreed that local manufacturing pharmaceutical firms faced a number of challenges from the changing external and internal environment and some of the main challenges they highlighted included the following:

The interviewees were asked whether increased competitive environment was a major challenge faced by local manufacturing pharmaceutical firms. Competition was not only coming from other local manufacturing companies but also from multinational companies and imported cheap generics drugs from India and China. The multinational companies mainly target the high end users while the imported generics are targeted towards the low end users. The multinational companies employ aggressive marketing campaigns and with some of their drugs still under patency, they have a significant market share. The distributors of cheap generic products from India and China focus on cost advantage. Faced with stiff competition, local pharmaceutical manufacturing companies have put up a strong fight to retain their market share and also expand their businesses into other markets. The respondents were also in agreement that companies are running their production lines at low capacity of between 50 per cent and 66 per cent. Since companies are not operating at optimal capacity, production costs per unit are relatively higher and this impacts negatively on their ability to be competitive.

The study sought to find out how advancement in modern information and communication technology (ICT) affected the local manufacturing firms performance. The interviewees were asked some of the changes that had taken place over the last 2-5 years. The interviewees agreed that pharmaceutical firms had to re-evaluate their ICT system every now and then to remain competitive in the very dynamic environment.

The interviewees were asked whether changing customer preferences and increased levels of awareness had influenced business performance. The local manufacturing companies have been faced with the challenge of meeting the customer's changing needs and expectations. For example, with the emergency of lifestyle diseases such as diabetes, hypertension and cancer, pharmaceutical companies have had to adjust and set up facilities to manufacture drugs for these diseases.

The interviewees also indicated that local pharmaceutical manufacturers have been faced with challenges from the regulatory authorities such as world health organization (WHO) and pharmacy and poisons board (PPB). The phasing out of single anti-malarial therapies in 2009 to combination therapies meant that local manufacturers had to stop the production and marketing of these drugs which led to lost revenue.

## **4.4 Response Strategies**

The study sought to establish the responses by local pharmaceutical manufacturers to remain competitive and the respondents were in agreement that the firms had put strategies in place to gain competitive advantage and increase their market share.

### **4.4.1 Research and Development**

The study found that the strategic responses undertaken by local pharmaceutical manufacturing firms included new product development which involved replacing existing products with new ones through innovation and product improvement. The data obtained indicated some of the new products launched included artemisinin based combination therapies (ACT's) for treatment of malaria, antihypertensives for treatment of hypertension and antidiabetics for treatment of diabetes. The respondents agreed that improving products has helped the firms to concentrate on a given segment of the market and hence acquiring new clientele and retaining existing ones as the products introduced are intended for the mass market.

The study sought to find out the aim of R & D which was found to come up with new and innovative products that meet customer expectations and satisfaction. All the local manufacturing pharmaceutical firms have an R & D department which is headed by a pharmacist working with a team of scientists. These group works closely with the physicians to identify the latest molecules for treatment of various diseases which are manufactured and availed into the market. This ensures that molecules which are no



longer effective in treatment of certain diseases are phased out and replaced with newer molecules which are more effective.

#### **4.4.2 Information and Communication Technology**

The study set to establish the changes that ICT development had brought in the local pharmaceutical manufacturing. The data revealed that local manufacturers had adopted modern information and technology system to increase their efficiency and effectiveness. Local manufactures have been able to deal with counterfeits through technology. The packs are made with special logos and symbols which cannot be imitated by counterfeits. This has resulted in increased revenue as the number of counterfeit drugs in the market has reduced greatly. Through technology, firms have been able to manage their stocks quite well. The respondents concurred that stock outs have been dealt with and processing of customer orders is extremely fast. These findings are similar to what Pearce and Robinson, (1997) indicated that strategic response to the environment challenges has been identified as a major source of competitive advantage for numerous firms in today's intensely competitive global economy.

The study further revealed that all respondents agreed that there had been improvements in performance owing to adoption of technology. The respondents were of the idea that local pharmaceutical manufacturers are still in the process of improving their I.T systems in various areas with the aim of offering the best service to the customer and at the same time roll out some I.T based products and services that will ensure the local manufacturers have a competitive advantage

#### **4.4.3 Marketing Development Strategy**

The study sought to establish the marketing strategy by local pharmaceutical manufacturers to expand their business. The respondents indicated that the local pharmaceutical manufacturers have adopted extensive strategies. There is a team of medical representatives who market the ethical products and sales representatives who market over the counter (OTC) products. The medical representatives detail the products to the physicians in the various hospitals highlighting the advantages of their products for the physicians to prescribe. They also organize congresses and symposiums for doctors and use the opportunity to market their products. On the other hand, sales representatives are charged with the responsibility of negotiating for orders at the wholesale and retail chemists. The respondents agreed that this form of marketing is quite effective as the firms are constantly in touch with the customers to maintain customer loyalty. The local manufacturers have also set up an export division which oversees marketing and distribution of pharmaceutical products in the Common Market for East and Southern African States (COMESA).

#### **4.4.4 Pricing Strategy**

The study further revealed that local manufacturers have adopted a pricing strategy to match cheap generic drugs imported from India and China. Since the local pharmaceutical companies manufacture generic drugs, the high cost of production means that they cannot price their products cheaply. The respondents agreed that local manufacturers have special prices for organizations which purchase through the tender system such as Kenya Medical Supplies Agency (KEMSA), Kenyatta National Hospital

(KNH) among others. This ensures that local manufacturers are awarded tenders to supply these agencies and lock out imported cheap generic drugs.

According to the respondents, the local manufacturers have also reduced prices of their products to protect their market and expand into newer markets in eastern Africa. The respondents agreed that the low prices have made it easier for them to penetrate into other markets in eastern and southern Africa and increase their market share in these regions.

#### **4.4.5 Strategic Alliance**

The study set to establish whether strategic alliance has been employed as a strategy by local pharmaceutical manufacturers. The respondents ascertained that strategic alliances have been adopted by local firms for example in the manufacture of anti retroviral drugs (ARV's). Cosmos pharmaceuticals manufacture ARV's for Glaxo Smithkline which are then distributed in the region. This accounts for 10% of their total revenue.

The strategic alliances are on going as other local companies are upgrading their facilities to take advantage of the alliances. For example, Laboratory and Allied is in the process of upgrading the plant to meet WHO's good manufacturing practice (GMP) guidelines. The project to be completed in 2012 should open doors for strategic alliances with multinational companies such as Sanofi, Astra Zeneca and Novartis. Once the facilities are approved by the WHO, the local firms will now be able to tender internationally for organizations such as Medicines Sans Frontiers (MSF) and CHMP.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary, conclusions, and recommendations from the findings. The overall purpose of the study was to identify the strategic responses of the local pharmaceutical manufacturers to changes in the business environment. From the findings, it was observed that local pharmaceutical manufacturers have adopted various responses to the changing environment.

### **5.2 Summary**

The first objective of the research project was to establish the challenges faced by local pharmaceutical manufacturers. The study found that the manufacturers faced several challenges. The influx of cheap imported products from India and China has impacted negatively as the local manufacturers have had to reduce prices to remain competitive. This has been made worse by the high cost of production forcing pharmaceutical firms to seek alternative sources of raw material.

It was clear from the study that regulatory authorities are a big challenge to the local pharmaceutical manufacturers. The phasing out of single malaria drugs popularly known as monotherapy by PPB also affected local manufacturers. This forced them to upgrade their manufacturing facilities in order to remain competitive and retain their market share. The PPB has also licensed too many generic drugs into the market leading to price wars thus heavily affecting the local manufacturers. Emergency of lifestyle diseases such as

diabetes and hypertension have pushed pharmaceutical companies to change their business model and establish manufacturing facilities for drugs to cater for this growing market segment.

The second objective was to determine the strategic responses to the changing business environment. Local manufacturers have adopted marketing strategies to retain customers and increase their market share. The aggressive marketing has seen pharmaceutical firms expand the marketing of their products in neighboring countries such as Uganda, Tanzania, Burundi, Rwanda, Ethiopia and Eritrea. This has led to increased revenue.

The study also found that there had been improvements in performance owing to use of I.T. Strategic responses were both proactive and reactive to the changes in the business environment. Use of technology has enabled local manufacturers to curb counterfeits, manage stock levels and also process orders quickly to ensure just on time deliveries.

The study further established that some local manufacturers have adopted the strategic alliances with multinational companies to boost their revenue. Others are upgrading their facilities in order to enter into alliances with big pharmaceutical companies.

### **5.3 Conclusion**

The objectives of this study were; to identify the environmental challenges facing local pharmaceutical manufacturers and to establish what strategic responses the firms have adopted to address changes in the business environment. The two objectives the study sought to meet were achieved. It is evident from the study that local pharmaceutical

manufacturers have experienced various challenges in the environment ranging from changing disease patterns, influx of cheap generics, counterfeit products and stringent regulations from the regulatory authorities.

Secondly, a number of response strategies were identified to the changing business environment. The marketing response strategies, pricing response strategies, strategic alliance response strategies and information, communication and technology response strategies have been adopted by the local manufacturers. Based on this, objective number two was satisfactorily achieved.

#### **5.4 Recommendations**

From the discussions and conclusions in this chapter, the study recommends that although local manufacturers have dealt effectively with challenges in the business environment, local pharmaceutical manufacturers should engage in more cost reduction as a response to the imported cheaper generic drugs. They should cut operational costs, source cost effective raw materials and improve customer service to gain a competitive advantage. In view of this, more in-depth analysis needs to be done to identify ways of making production more efficient.

Besides providing products at lower cost, local manufacturers should focus on quality to gain advantage over the cheap imported pharmaceutical products. By investing in quality, the firms will retain its loyal customers and quickly penetrate into new markets. Local manufacturers need to carry out bioavailability/bioequivalence studies to prove that the

quality of their generics match the original brands. This will built confidence in the physicians to prescribe their brands as well wholesale and retail chemists to stock up, distribute and dispense the brands.

The study also recommends that local manufacturing pharmaceutical firms should hire skilled personnel as the process of manufacturing pharmaceutical products requires trained pharmacists, biochemists, microbiologists and analytical chemists. This will ensure quality products which will give the firms a competitive advantage.

The local manufacturers should also take advantage of COMESA and open distribution channels in member countries to increase their market share.

## **5.5 Limitations of the study**

The study being a survey focused only on five local pharmaceutical manufacturers. There are fifteen local pharmaceutical manufacturers and the data collected might differ from strategic responses that other firms in the industry have adopted to match the changing business environment. This is because different companies adopt different strategies that differentiate them from competitors. The study however constructed an effective research instrument that sought to elicit general and specific information on the strategic responses that companies adopt to match the changing environment.

During the study, a number of limitations were encountered. The amount of time spend with the respondents was not adequate to get in-depth information as only few minutes were allocated owing to the respondents tight schedules.

## **5.6 Recommendations for Further Research**

The study recommends that further research should be done on more local manufacturing companies to gain deeper insights on how they have responded to the changing business environment. The study can also be conducted in a different industry facing similar challenges such as local sugar manufacturers.



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# APPENDICES

## APPENDIX I: INTRODUCTION LETTER



### UNIVERSITY OF NAIROBI SCHOOL OF BUSINESS MBA PROGRAMME

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

P.O. Box 30197  
Nairobi, Kenya

DATE... 21.09.2011

#### TO WHOM IT MAY CONCERN

The bearer of this letter... JOSEPH MURULE

Registration No... D61/70657/2008

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.

  
**JUSTINE MAGUTU**  
ASSISTANT REGISTRAR  
MBA OFFICE, AMBANK HOUSE

UNIVERSITY OF NAIROBI  
SCHOOL OF BUSINESS  
MBA OFFICE  
P. O. Box 30197  
NAIROBI

## APPENDIX II: INTERVIEW GUIDE

### SECTION A: Respondent's Profile

1. Name of respondent .....
2. Name of organization .....
3. Position held .....
4. Total work experience .....
5. Work experience in the organization .....

### SECTION B: Questions

1. Kindly highlight some of the changes that have taken place in the Kenyan Pharmaceutical industry over the last 2-5 years.
2. Which of the changes have had an effect on your organization?
3. What are some of the specific challenges your organization has faced as a result of these changes?
4. How does your organization anticipate and prepare for environmental changes?
5. How does competition in the industry impact on your organization's choice of strategy?
6. How does the customer needs influence policy and strategy?
7. Have there been any strategic alliances in your organization in the last 2-5 years?
  - a) What was the objective of the changes?
  - b) To what extent have the objectives been met?
  - c) What is the status of the current strategic alliance response?



8. Has your organization undertaken R & D changes in the last 2-5 years?
  - a) What was the objective of the changes?
  - b) To what extent have the objectives been met?
  - c) What is the status of the current R & D response?
  
9. Have there been any changes in your organization's I.T in the last 2-5 years?
  - a) What was the objective of the change?
  - b) To what extent have the objectives been met?
  - c) What is the current status of the I.T response?
  
10. Has there been any change in your organization's human resource management strategy in the last 2-5 years?
  - a) What was the objective of the launch?
  - b) To what extent have the objectives been met?
  - c) What is the status of the current human resource management response?
  
11. What are the other strategies your firm is currently using to address the changes in the pharmaceutical manufacturing industry?

### **SECTION C: Questions on Responses of Pharmaceutical firm**

1. Kindly highlight the responses of your firm to competition in the pharmaceutical industry?
2. What are the responses of your firm to challenges posed by political-legal factors?
3. How does your firm respond to economic changes?
4. Kindly state the responses of your firm to technological challenges?
5. Which are the responses of your firm to social-cultural challenges?

## APPENDIX III: WORK PLAN

### Research timetable beginning April 2011 to October 2011

	Research task/activities	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT
I	Proposal writing and discussion with supervisor	x	x	x	x	x		
2	Oral presentation to SOB committee						x	
3	Data collection and analysis						x	
4	Report writing							x
5	Presentation of final report							x

Source: Author 2011