

" **THE STRATEGIC RESPONSES OF GLAXOSMITHKLINE  
PHARMACEUTICALS TOWARDS COMPETITION IN KENYA** "

*BY*

*MARETE NJOKA CLIFTON*

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**A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR AWARD OF THE  
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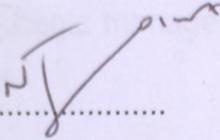
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**DECLARATION**

This research project is my original work and has not been presented for a degree in any other University.

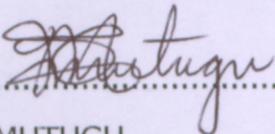
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Date..... 12/11/2007

**MARETE NJOKA CLIFTON**

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This project has been submitted for examination with my approval as the University Supervisors,

Signed.....

Date..... 12-11-2007

MR. T.M MUTUGU  
SENIOR LECTURER  
DEPARTMENT OF BUSINESS ADMINISTRATION

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# DEDICATION

To my beloved wife Mercy and our children Brian and Evans for their inspiration, moral support and enduring my absence even as I struggled to get this work completed.

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## 1.0 CHAPTER INTRODUCTION

### ABSTRACT

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 environment in the current times is posing a lot of challenges to all pharmaceutical companies. This study was designed to investigate the strategic response to competition by GSK. The research design was a case study and the population consisted of the 300 employees in GSK. The study used a sample of 10 managers and forty other employees not in the management team. This sample was selected using systematic random sampling technique. Primary data was collected using questionnaires while secondary data was collected from published records in the pharmaceutical industry. The collected data was then analyzed using descriptive statistics such as mean and percentages. The results were then presented in form of frequency tables.

The study found out that GSK is faced with a myriad of challenges but the most pronounced challenge was competition. This competition was seen in terms of supplies, the supply chain, marketing of products and selling to the final consumer. The company has responded to the challenges of competition by putting up production facilities in many countries across the world to be able to compete effectively with others in the industry. The company also introduced a management accounting system in all its divisions as a response to the kind of accounting systems employed by other companies. The spate of mergers also brought with it challenges that the company has had to deal with such as integrating the separate identities, integrating different strategies and integrating packaging and manufacturing operations of the other partners that formed the merger. These findings have important implications to GSK, the pharmaceutical industry and the policy makers in the pharmaceutical industry in Kenya.

## 1.0 CHAPTER ONE: INTRODUCTION

### 1.1 Strategic Responses

Ansoff and McDonnell (1990) see strategic management as a systematic approach to position and relate the firm to its environment in a way that will assure its continued success and make it secure from environmental surprises. Hamamel and Prahalad (1989), perceived an organization as a foundation for sustained competitive advantage when it poses skills or resources that provide superior value to customers and that are difficult to imitate. In a turbulent environment, the more enduring advantage is ability to anticipate evolving customer needs and to generate new values creating capabilities based on that knowledge. And unless there is an advantage over competitors that is not easily duplicated or connected, long term profitability is likely to be elusive

Aosa (1992) noted that the action of competitors have a direct impact on a firm's strategy. He further stated that strategy will only make sense if the markets to which it relates are known; and pointed out that the nature of the industry in which the company operates needs to be understood. The structure of an industry and trend in that industry will help the current and future attractiveness of that industry.

In the 1990's, many companies have acknowledged the critical importance of being customer oriented, customers pay attention to after sales services, and responsiveness of employers (Kotler, 1997). Hamamel and Prahalad (1989), noted that restructuring and re-engineering – "while both are legitimate and important tasks, they have more to do with sharing today's business than with building tomorrow's industry". According to Aarker (1989), long - term success involves creating, managing and exploiting assets and skills that competitors find difficult to match or counter. This involves three steps:

- i. Identifying relevant skills and assets by observing successful and unsuccessful firms, key customer motivations, large value added items, and mobility barriers,
- ii. selecting those skills and assets that will provide an advantage over competitors, will be relevant and appropriate for the future, and will be feasible, sustainable and appropriate for the future, and
- iii. Develop and maintain those of competitors. He further observed that there are three basic ways to compete, namely, on the basis of delivery, quality and price.

Porter (1980) noted that competitive advantage is the ability of the firm to outperform rivals on the primary performance goal profitability. Hines (1996) also argues that there is essence of business to create competitive advantage that comes in a number of ways such as low-cost production or market differentiation. Collies et al (1998) identified three elements that collectively lead to competitive advantage that creates value and they have called these elements the corporate strategic triangle: resource (company assets, skills and capabilities). Strategic business units and other key segment of the society: structure, systems and processes. They argue that these three sides of vision, goal and objectives to produce competitive advantage that could lead to value creation. Bennet (1983), also emphasizes the importance of improving a company's image and points out that the first step in doing this is finding out where you are currently; which can be done by determining the target audience, especially the employees.

## 1.2 Global Pharmaceutical Industry

As defined by its Standard Industrial Classification (SIC Code), the pharmaceuticals industry (SIC 283) consists of establishments that are primarily involved in fabricating or processing medicinal chemicals and pharmaceutical products. The industry also includes establishments that formulate pharmaceutical products and are involved in grinding, grading, and milling of botanical products. The Census of Manufacturers defines an establishment as a single physical location or a facility where manufacturing occurs. If more than one distinct line of manufacturing occurs at the same location, the Bureau of Census requires separate reports for each activity.

Although the industry is part of the two-digit SIC code 28 for Chemicals and Allied Products, it differs significantly from the rest of the chemicals industry in its industrial processes and regulatory requirements. For example, in its industrial processes, the pharmaceuticals industry uses more batch operations than the chemicals industry as a whole. Since some of the bulk manufacturing operations involve extracting relatively small, highly concentrated quantities of active ingredients from much larger volumes of raw material, the industry's production yield for these operations is correspondingly low.

The pharmaceuticals industry also receives extensive regulatory oversight by the U.S. Food and Drug Administration (FDA). In 1996, the Center for Drug Evaluation and Research, FDA approved 131 new drug applications (NDAs), of which 53 were new molecular entities. According to the Congressional Office of Technology Assessment (OTA) in 1993, it costs an average of \$359 million to develop a new drug and complete the drug approval process. Total drug development and agency review time averaged 15.3 years for drugs approved from 1990 through 1995. More information on the typical industrial processes

and regulatory requirements of this industry is provided in Sections III and VI, respectively.

When a pharmaceutical company discovers a compound that may have medical potential, the company usually applies for a patent. Patents are valid for 20 years from the date of application. Any drug made from the compound may be marketed only after approval by the federal Food and Drug Administration (FDA). The drug development process, beginning with initial toxicology testing, followed by clinical trials for safety and effectiveness, and review of the application by the FDA averages fifteen years. When the company's patent or period of exclusivity has expired, other companies may rely on the original manufacturer's data on safety and effectiveness to obtain approval to market a generic version of the drug. Companies wanting to manufacture the same drug once it is off-patent are required to obtain FDA marketing approval, based on evidence that the generic version is "bioequivalent," i.e., differs in the rate and extent of drug absorption by no more than 25 percent nor less than the 20 percent from the original drug (FDA, 1996). While companies that specialize in the development and marketing of brand-name, innovator drugs<sup>1</sup> may have subsidiaries that manufacture generic products, most generic drug companies do not conduct research intended to identify and develop innovator drugs (PhRMA, 1997).

Because of the high cost and time to approval, effective patent protection is an essential component in the decision to invest in drug development and marketing. This is especially true for international companies interested in marketing drugs in several countries, each with its own approval procedure and marketing requirements. While the International Conference on Harmonization is proposing harmonized rules for drug registration and approval for Europe, Japan and the United States, each country retains its own approval system. In other countries, especially developing countries, the issue of adequate patent protection is a central concern of pharmaceutical manufacturers (PhRMA, 1997).

Discovery of new compounds followed by further research and development (R&D) is one of the primary functions of the industry. The pharmaceutical production process starts with an extensive research stage, which can last several years. Following the discovery of a new drug that appears to have efficacy in treating or preventing illness, pre-clinical tests and clinical trials are conducted. Then a New Drug Application (NDA) is submitted to the FDA for approval. According to a primary trade association for pharmaceutical companies producing brand name drugs, the Pharmaceutical Research and Manufacturers of America (PhRMA), it takes an average of 15 years to bring a new drug to market, from time of discovery to approval (PhRMA, 1996). It is only after FDA approval has been secured that market distribution in the U.S. can begin.

The competition for discovering new drugs and bringing them to market is extremely high. As a result, a significant proportion of the industry's sales are reinvested into research and development (R&D). According to PhRMA, total R&D expenditures, both domestically and abroad, by its members, will be close to \$19 billion dollars in 1997. PhRMA estimates that over 21% of total sales will be reinvested into R&D by its members (PhRMA, 1997).

Competition between existing players in an industry increased as various pharmaceuticals companies positioned themselves using various competitive practices to obtain and retain their customers. High competitive pressure results in pressure on prices, margins, hence, on profitability for every single company in the industry (Porter, 1985).

### **1.3 Pharmaceutical Industry in Kenya**

The pharmaceutical industry consists of three segments namely the manufacturers, distributors and retailers. All these play a major role in supporting the regions health sector, which is estimated to have about 4,557 health facilities

in Kenya alone. 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 freesales/OTC (Over The Counter), pharmacy technologist dispensable, or pharmacist dispensable/ prescription only. The pharmaceutical sector consists of about 30 licensed concerns include local manufacturing companies and large Multi National Corporations (MNCs), subsidiaries or joint ventures. Most are located within Nairobi and its environs.

The industry compounds and packages 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 patent protection of pharmaceuticals in Kenya is based on the African Regional Industrial Property Organization (ARIPO) patent system. Kenya's patent laws have been revised from the traditional British based format to the ARIPO system, which was created by the Lusaka agreement in 1976. ARIPO is based in Harare, Zimbabwe; the organization was mainly established to pool the resources of its member countries in industrial property matters together in order to avoid duplication of financial and human resources. Additionally, the Kenyan government passed the Kenya Industrial Property Bill in 2001. This bill allows Kenya to import and to produce more affordable medicines for HIV/AIDS and other diseases.

The market for pharmaceutical products in Kenya is estimated at KShs 8 billion per annum. The government, through Kenya Medical Supplies Agency (KEMSA) is the largest purchaser of drugs manufactured both locally and imported, in the country. It buys about 30% of the drugs in the Kenyan market through an open-tender system and distributes them to government medical institutions. There are about 700 registered wholesale and 1,300 retail dealers in Kenya, manned by registered pharmacists and pharmaceutical technologists. These pharmacies are accorded a 25% mark-up on retail drugs. Anti-infective products (chiefly antibiotics, antimalarials, sulfonamides), analgesics, antipyretics, bronchial relaxants and cytotoxins account for the bulk of government and private sector purchases of medicines in the Country, (Economic Survey 2006 by Central Bureau of Statistics and Ministry of Planning)

How do pharmaceutical companies respond to competition within the Kenyan pharmaceutical industry with a decrease in their ability to price discriminate? Multinational firms, such as GSK in particular, often rely on trade barriers or intellectual property rights to charge different prices in different countries in response to local market conditions. Changes in trade or intellectual property law can therefore have important effects on market segmentation. This paper examines how GSK responds to increased competition within the Kenyan pharmaceutical industry and how such competition has affected the product market strategies of GSK. In particular, it illustrates the importance of non-price responses by GSK, such as adjustments in product offerings or characteristics, to maintain price differences among competitors. Differences in pharmaceutical prices are the topic of much discussion in the press and in policy circles.

The issue of parallel imports is at the intersection of competition law, intellectual property (IP) law, and trade law, and therefore is an important policy issue for governments and international organizations. In addition, nongovernmental organizations have lobbied extensively for a policy of "international exhaustion"

of patent rights, which would remove the current barrier of IP rights to parallel trade in Kenya. Both the law and the strategies firms use in response to competition are relevant not only to the pharmaceutical industry, but to all IP-intensive firms that are active in multiple countries, some of which contend with illegal pirating that is not well-policed in addition to legal parallel trade, (New York Times, Sept. 22, 2005).

### **1.5 Statement of the 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 environment in the current times is posing a lot of challenges to all pharmaceutical companies. Following the background of this study, it is only those pharmaceutical companies that are able to adapt to the changing environment and adopt new ideas and ways of doing business that can be guaranteed of survival. Some of the forces of change that have greatly influenced the pharmaceutical industry include 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 and further understanding of the strategic responses to competition within the industry, adopted by such pharmaceutical companies with a focus on GSK in Kenya.

Previous research on strategic responses by Kenyan companies have been undertaken, for example, Abdullahi (2000), carried a research on strategic responses adopted by Kenyan Insurance companies and found that most companies do not have a clear cut strategic approach. Numerous other studies have also been carried out in the area of strategic responses but non of them have specifically centered on GlaxoSmithKline company (Njau, 2000; Kandie, 2001; Thiga, 2002; Goro, 2003; Kiptugen, 2003; Mugunde, 2003; Mugambi, 2003). It is in this light that the researcher seeks to fill the existing gap in this area of study by answering the question: what strategic responses to competition from other manufacturing pharmaceutical companies does GSK adopt in Kenya.

### **1.6 Research Objectives**

The research objective will be to establish the strategic responses towards competition from other manufacturing pharmaceutical companies, adopted by GSK in Kenya.

### **1.7 Importance of the Study**

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

The findings of this study will be of significant to the following groups:

- Pharmaceutical industry which is directly affected by the dynamic business environment and competition in Kenyan.

- Scholars who will use it for further research in the same area/or related field and for teaching in universities and other institutions of learning.
- The government and corporate policy makers who might be interested to know the impact of a dynamic environment in respect to the competitiveness of manufacturing pharmaceutical companies in Kenya.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Strategic Responses

Ansoff and McDonnell (1990) noted that strategic responses involve changes in the firm's strategic behaviors to assure success in transforming future environment. Pearce and Robinson (1997) defined strategic responses as the set of decisions and actions that result in the formalization and implementation of plans designed to achieve a firm's objectives. Therefore it is a reaction to what is happening in the economic environment of organizations. Porter (1998), views operational responses as part of a planning process that coordinates operational goals with those of the larger organization. Hence operational issues are mostly concerned with certain broad policies and policies for utilizing the resources of a firm to the best support of its long term competitive strategy

Pearce and Robinson (2000), says that there is need to adopt new strategies that match the challenges from the environment. Reengineering, downsizing, self-management and outsourcing are some of the dominant strategies that have been used for restructuring in the 1990's. Ansoff and McDonnell (1990) asserts that the management system used by a firm is a determining component of the firm's responsiveness to environment changes because it determines the way that management perceives the environment, diagnosis their impact on the firm, decides what to do and implements the decisions.

Burnes (1998) the concern in real time responses is to minimize the sum to total losses and restore profitability to ensure organization's success in a turbulent and surprising environment. He also observed that unstable and unpredictable conditions in which organizations have to operate today means that the ability to think strategically and manage strategic change successfully is key competitive strength for a sustainable competitive advantage. Real time strategic issue

responses are necessary to facilitate the firm's preparedness in handling the impending issue, which may have profound impact on the firm.

## 2.2 Competition

Competition does not necessarily have to be between companies. For example, business writers sometimes refer to "internal competition". This is competition within companies. The idea was first introduced by Alfred Sloan at General Motors in the 1920s. Sloan deliberately created areas of overlap between divisions of the company so that each division would be competing with the other divisions. For example, the Chevy division would compete with the Pontiac division for some market segments. Also, in 1931, Procter & Gamble initiated a deliberate system of internal brand versus brand rivalry. The company was organized around different brands, with each brand allocated resources, including a dedicated group of employees willing to champion the brand.

Each brand manager was given responsibility for the success or failure of the brand and was compensated accordingly. This form of competition thus pitted a brand against another brand. Finally, most businesses also encourage competition between individual employees. An example of this is a contest between sales representatives. The sales representative with the highest sales (or the best improvement in sales) over a period of time would gain benefits from the employer.

It should also be noted that business and economical competition in most countries is often limited or restricted. Competition often is subject to legal restrictions. For example, competition may be legally prohibited as in the case with a government monopoly or a government-granted monopoly. Tariffs, subsidies or other protectionist measures may also be instituted by government in order to prevent or reduce competition. Depending on the respective

economic policy, the pure competition is to a greater or lesser extent regulated by competition policy and competition law. Competition between countries is quite subtle to detect, but is quite evident in the World economy, where countries like the US, Japan, the European Union and the East Asian Tigers each try to outdo the other in the quest for economic supremacy in the global market, harkening to the concept of Kiasuism. Such competition is evident by the policies undertaken by these countries to educate the future workforce. For example, East Asian economies like Singapore, Japan and South Korea tend to emphasize education by allocating a large portion of the budget to this sector, and by implementing programmes such as gifted education, which some detractors criticize as indicative of academic elitism, (Kohn, 1986).

### **2.3 Pharmaceutical Industry structure in Kenya**

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. The pharmaceutical sector consists of about 30 licensed concerns 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 packages 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 Kenya Medical Suppliers Agency (KEMSA), a division of the Ministry of Health, largely carries out the distribution of pharmaceutical products in Kenya.

It distributes drugs to government public health facilities and private health facilities. KEMSA has been an autonomous body. Its policy is to make available essential drugs and equipment primarily but not exclusively, to public facilities. KEMSA competes with other suppliers, e.g. the mission based medical supply facility (MEDS) and private wholesalers.

Pharmaceutical products in Kenya are channeled through pharmacies, chemists, health facilities and shops. There are about 700 registered wholesale and 1,300 retail dealers in Kenya, manned by registered pharmacists and pharmaceutical technologists. The drugs on sale in Kenya are sold according to the outlet categorization, which can be described as free-sales/OTC, pharmacy technologist dispensable, or pharmacist dispensable/prescription only.

The country continues to have remarkable expansion in the number of health facilities in all provinces. This is in line with the government's effort to avail accessible health facilities and services to all Kenyans. The number of health institutions in Kenya has experienced steady growth for the past five years.

#### **2.4 Competition within the Pharmaceutical industry**

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. However while excellence in managing all these aspects of the industry is a necessary condition for the survival of the global pharmaceutical companies, with a focus on GSK, the uncertainty of the discovery process and the potentially huge returns from the discovery of a single drug means that like drilling for oil or randomly choosing the black beans from a jar of overwhelmingly white ones, success in the industry

depends on a high measure of luck. Much of the thinking about business strategy in the industry is how best to cope with this uncertainty, (Burgelman, 2001)

This has not always been the case. Colonel Ely Lilly gained his initial competitive advantage, in manufacturing, by producing 'true to label' products in competition with the various 'snake oils' and other dubious concoctions of the era. The highly skewed nature of the returns from the drug discovery and development process means that a single drug can deliver corporate success at least in the short to medium term. In these conditions the normal principles of large numbers in which diversified portfolios produce predictable returns does not apply to this industry. Returns from pharmaceuticals are highly volatile. For the established pharmaceutical companies the response to the discovery uncertainties has been to build scale through mergers and acquisitions so that the latter stages of their product pipelines have at least a handful of highly prospective blockbuster drugs. Scale offers the capacity to both fund in house research and draw in external research through a variety of licensing arrangements and alliances. It has also provided the necessary marketing resources in an industry in which these costs absorb some 35% of revenues, (Agarwal, 2001).

However since the numbers of companies at latter stage are so small and returns so uncertain these 'solutions' may be of very short duration with gaps in the pipeline re-emerging as existing blockbuster patents expire and expected blockbusters fail to materialize – producing another round of M&A. At this stage there seems to be no limit to this pressure to consolidate. The growth rates demanded by the market to sustain current valuations require a significant and questionable expansion in the number of new large selling drugs. One other strategy has been for pharmaceutical companies to diversify their business activities into lower risk activities. Another diversification strategy is to focus on a comparatively large number of niche market drugs rather than blockbusters. Whether by accident or design a number of pharmaceutical companies appear to

have followed this strategy. While their total sales of pharmaceuticals place them in the first rank of pharma companies they have perhaps only one or two drugs of blockbuster status. Selling a broad range of drugs clearly lessens dependence on the discovery of new blockbusters, but development and marketing costs need to be watched for the smaller markets to be economic. While large pharmaceutical companies have sought survival in larger enterprises, these agglomeration tendencies has not stopped other firms using a discovery breakthrough to 'chance their arm' at developing a blockbuster of their own, ultimately perhaps through a marketing alliance with a global pharma. These are largely biotech firms that have funded independent drug discovery through direct access to the venture capital market. In other cases their research has been supported by large pharmaceutical companies through alliances and licensing. Such is the return from a single successful blockbuster that a small number of these companies have been catapulted into the first rank, (Harvard Business School (HBS), 1999).

On the other hand many biotech companies fail to realize these ambitions and languish as contract research houses or go out of business. Given the instability and apparent unsustainability of current pharmaceutical business strategies and structure, other models have been suggested. There are those who argue that the real added value of the global pharmaceutical company is its capacity to organize, coordinate and finance the various parts of the drug development and distribution pipeline (Kettler, 2001).

This would see a more limited role for the global pharma in which most research and perhaps a large part of the distribution was contracted out. This presupposes that specialization in various aspects of the drug development and distribution process could achieve significant economies. In addition there is an increasing technical capability (e.g. genomics) to provide personalized medicine. This gives an opportunity for companies specializing in particular therapeutic

areas to target smaller patient groups in which the massive distribution machinery of the global pharmaceutical companies becomes less relevant. If the economics of smaller patient markets was improved through the greater selectivity offered by genomics then size would be less critical, (Malknight, 1999).

Evolution of the industry along the lines suggested above has implications for developments in Kenya. Kenyan R&D, at least in biology, is seen as world class, but constrained in gaining the attention of large pharma by 'tyranny of distance', and limited in funding opportunities from risk averse Kenyan capital markets. In a continuing world of big pharmaceutical companies perhaps the best that can be hoped for is to gain research and drug development support at an early stage on a project by project basis from large pharma by more actively pursuing overseas links. There may also be an opportunity for domestic companies that specialize in a particular aspect of the drug development process to contract out their specializations on a regular basis to global pharmaceutical companies, (Kenya Factbook 2001 by Kul Burshan).

## **2.5 Reasons of increased competition between manufacturing pharmaceutical companies in Kenya**

Kenya is one of the most stable democracies in Africa. The Government welcomes, promotes and protects private enterprise. In addition, Kenya's competitive advantage for the health and pharmaceutical sector investment is supported by various investor friendly factors that include:

## **Trademark and patent protection**

Kenya is a member of most major international and regional intellectual property conventions – the World Intellectual Property Organization (WIPO), the African Regional Industrial Property Organization, the Paris Convention on the Protection of Industrial Property, and the Berne Convention on the Protection of Literary and Artistic Works.

## **Access to the regional market**

Exports from Kenya enjoy preferential access to world markets under a number of special access and duty reduction programmes. These include regional markets (EAC, COMESA), EU-African-Caribbean-Pacific/Lome Convention and the African Growth & Opportunity Act (AGOA).

## **Stable political climate**

Kenya has been one of the very stable countries in Africa since independence. The country has had three presidents with smooth transition taking place from one government to the next and peaceful elections held regularly. This is also manifested in the number of international and regional organizations headquartered in Nairobi including the UN, IGAD etc.

## **Investment insurance**

The Constitution of Kenya provides guarantees against expropriation of private property. In addition, capital repatriation, remittance of dividends and interest are guaranteed to foreign investors under the Foreign Investment Protection Act (FIPA) (Cap 518). Kenya as a member of MIGA (Multilateral Investment Guarantee Agency) provides investors with an opportunity to insure their investment in Kenya against a wide range of non-commercial risks. Kenya is also a member of the African Trade Insurance Agency (ATI), a multilateral export credit and political risk agency for COMESA member states as well as the International Council for Settlement of Investment Disputes (ICSID).

## **Strategic location**

Located on the East African coast and having the port of Mombasa, Kenya is strategically located for investors wanting to access the East and Central African market. Kenya is also a regional hub for airlines allowing for easy access from and to any part of the world.

## **Investor friendly arrangements**

The Kenya government can guarantee investor friendly arrangements such as: the Export Processing Zones (EPZ) program which offers attractive incentives to export-oriented investors and EPZ Authority to provide one-stop-shop service for facilitation and aftercare, the Investment Promotion Centre (IPC) to promote all other investment in Kenya including in Manufacturing under Bond (MUB) program, the Tax Remission for Export Office (TREO), a program for intermittent imports for export production, generous investment and capital allowances, and double taxation, bilateral investment and trade agreements

## **Availability of affordable labour**

Kenya provides potential investors with an abundant supply of affordable labour. Kenya also has a well-trained labour force that is capable of handling all sorts of pharmaceutical procedures.

## **Good quality of life**

Kenya hosts a number of international organizations and foreign embassies and provides very good and up to standard living conditions for foreign investors wishing to reside in Kenya. With recognized international hotels, airports and entertainment centers, Kenya provides as much comfort for foreigners as in any European capital.

## 2.6 Concept of Strategy

According to Grant, (2000) there is no agreed all embracing definition of strategy. Indeed, strategy is an elusive and somewhat abstract concept. He argues that this is expected when dealing with an area that is constantly developing. Strategy is the direction and scope of an organization over a long term. Strategies are systematic choices about how to deploy resources to achieve goals (Safford 2005) A strategy is a long term plan of action designed to achieve a particular goal, most often "winning" (Thompson, 2007). Strategy is differentiated from tactics or immediate actions with resources at hand by its nature of being extensively premeditated, and often practically rehearsed.

Strategy is a deliberate search for a plan of action that will develop a business's competitive advantage and compound it. For any company, the search is an iterative process that begins with recognition of where you are now and what you have now. Your most dangerous competitors are those that are most like you. The differences between a firm and its competitors are the basis of its advantage. If a firm is in business and is self-supporting, then it already has some kind of advantage, no matter how small or subtle. The objective is to enlarge the scope of the advantage, which can only happen at some other firm's expense (Thompson, 2007).

Strategy development is a multidimensional process that must involve rational analysis and intuition, experience, and emotion. But, whether strategy formulation is formal or informal, whether strategies are deliberate or emergent, there can be little doubt as to the importance of systematic analysis as a vital input into the strategy process. Without analysis, the process of strategy formulation, particularly at the senior management level, is likely to be chaotic with no basis for comparing and evaluating alternatives. Moreover, critical

decisions become susceptible to the whims and preferences of individual managers, to contemporary fads, and to wishful thinking (Henry, 1978).

According to Collis (1995) concepts, theories, and analytic frameworks are not alternatives or substitutes for experience, commitment, and creativity. But they do provide useful frames for organizing and assessing the vast amount of information available on the firm and its environment and for guiding decisions, and may even act to stimulate rather than repress creativity and innovation. The benefit of strategy is not just offering simplification and consistency to decision making, but the identification of strategy as the commonality and unity of all the enterprises decisions also permits the application of powerful analytical tools to help companies create and redirect their strategies. Strategy can help the firm establish long term direction in its development and behavior (Gary&Prahalad, 1993). Strategy is forward looking. A fundamental concern is what the firm (or the individual or the organization more generally) wants to be in the future. Such a view is often made explicit in a statement of company vision. The purpose of such goal setting is not just to establish a direction to guide the formulation of strategy, but also to set aspirations for the company that can create the motivation for outstanding performance. Hamel and Prahalad (1989) argue that a critical ingredient in the strategies of outstandingly successful companies is what they term "strategic intent"—an obsession with achieving leadership within the field of endeavor.

### 2.7.1 Corporate Level Responses

Strategy process in facilitating communication and coordination must recognize the importance of intuition, tacit knowledge, and learning-by-doing in complementing more "scientific" analysis. However Unlike mathematics, chemistry, or even economics, strategic management lacks an agreed-upon, internally consistent, empirically validated body of theory. Though it employs theory and theoretical concepts, these are drawn mainly from economics,

psychology, ecology and sociology—principally on an ad hoc basis (Gary&Prahalad, 1993).

## 2.7 Strategic Responses

Burnes (1998) the concern in real time responses is to minimize the sum to total losses and restore profitability to ensure organization's success in a turbulent and surprising environment. He also observed that unstable and unpredictable conditions in which organizations have to operate today means that the ability to think strategically and manage strategic change successfully is key competitive strength for a sustainable competitive advantage. Real time strategic issue responses are necessary to facilitate the firm's preparedness in handling the impending issue, which may have profound impact on the firm.

Hill and Jones (2001), states that by planning, an organization is able to identify the problems and plan how to solve them by using appropriate strategies. In the strategic decision making process of organizations, there are three levels of strategy under the strategic responses: - that is, corporate –level strategy, Business –level strategy, and operational – level strategy. At each level of strategy there are responses that have to be adopted to ensure organizational success as follows:

### 2.7.1 Corporate Level Responses

The company's corporate strategy should help in the process of establishing a distinctive competence and competitive advantage at the business level. There is a very important link between corporate-level and business level. According to Johnson and Scholes (2002), corporate level responses is the first level of strategy at the top of the organization, which is concerned with the overall purpose and scope of the organization to meet the expectations of owners or major stakeholders and add value to different parts of the enterprise. This

includes issues of geographical coverage, diversity of product / services or business units and how resources are to be allocated between the different parts of the organization. At a general strategic level Ansoff and Mc Donnell (1990), suggests three reasons why firms diversify. The objectives can not be achieved by continuing to operate in their existing market.

The most frequent reason for diversification in the part of individual business is the achievement of growth and risk reduction. With regards to growth, any firm that attempts to expand within an industry immediately faces two limitations: The rate of growth of the market its self and reactions of its market competitors. Any business seeking to achieve a growth rate about the aggregate rate of expansion of the market which it is currently confined is implicitly or explicitly envisaging an increase in its market share.

### **Vertical Integration**

The company is producing its own input (backward or upstream integration) or is disposing its own output (forward or downward integration). Backward integration means moving into intermediate manufacturing and raw material production. Forward integration means moving into distribution at each stage in the chain, value is added to the products. Vertical integration presents companies with a choice about which value-added stages of the raw material-to customer chain to compete in. A company achieves full integration when it produces all of a particular input needed for its processes or when it disposes off all its output through its own operation (Hill and Jones,2001).

### **Taper integration**

Occurs when a company buys from an independent supply in addition to a company's own supplier, or when it disposes off all its output through independent outlets in addition to company owned outlet. A company pursuing

vertical integration is normally motivated by the desire to strengthen the competitive position of its original, or core business (Hill and Jones, 2001).

## **Acquisition and Mergers**

It is feasible to use acquisition as a means of achieving several possible business objectives. Those considered are growth, market entry, diversification, improved efficiency and profitability (Hamel and Prahalad, 1991).

## **Growth**

Acquisition is a particularly attractive means of growth because of the rapidity with which this can be achieved through the external route of acquiring an existing business as opposed to the internal route of building up capacity by purchasing the necessary assets such as premises, plants, among others. Providing appropriate 'victim' businesses are available, acquisition not only secure for the expanding for the necessary working plan and equipment but may also avoid for the firm the growth problems access to scarce raw materials and distribute networks (Hamel and Prahalad, 1991)

### **2.7.2 Business Level Responses**

According to Hill and Jones (1999), argue that focus strategy concentrates on serving particular market niche, which can be defined geographically, type of customer or by segment of the product line. It differs from the first two because it is directed towards serving the needs of a limited customer group or a segment. Hence the company is specialized in some way. A focus strategy provides an opportunity for an entrepreneur to find and then exploit the gap in the market by developing an innovate product that a customer cannot do without. The company has enormous opportunity to develop its own niche and compete against low-cost and differentiated enterprises which tend to be larger. It differs from corporate strategy in that whereas corporate strategy involves decisions about the entire organization, strategic decision under the business

units are basically concerned with how customers' or clients' needs can best be met. According to Johnson and Scholes (2002) "Business unit strategy is about how to compete successfully in particular markets".

### 2.7.3 Operational Responses

#### **Cost-leadership Strategy**

A company's goal in pursuing a cost leadership strategy is to outperform competitors by doing everything it can to produce goods or services at a cost lower than theirs. The cost leader chooses a low level of product differentiation. The cost leader aims at a level of differentiation not markedly inferior to that of a differentiator, but to maintain a level obtainable at low cost (Hill and Jones, 1999).

Strategic management is therefore wide and complementary. Other types of management are like operations management and financial

#### **Differentiation Strategy.**

The objective of differentiation strategy is to achieve a competitive advantage by creating a product (goods and services) that is perceived by customers to be unique in some important way. The differentiated company's ability to satisfy a customer's need in a way that the competitors cannot means that it can charge a premium price (Johnson and Scholes, 2002).

Operational strategies are concerned with how parts of an organization deliver effectively the corporate and business

#### **Cost-Leadership and Differentiation**

Recent changes in production techniques, particularly development of flexible manufacturing technologies which have made the choice between cost leadership and differentiation strategies less clear-cut. With technological development, companies can now easily obtain the benefits of both strategies. As the new flexible technologies allow firms to pursue a differentiation strategy at a low cost, since the two strategies can be combined. A company can also reduce both production and marketing cost, if it limits the number of models in the product line by offering packages of options rather than letting the consumer decide exactly what options they require. Just-in-time inventory system, too, can

help reduce cost, as well as improve on the quality and reliability of a company's products (Hill and Jones, 1999).

### **2.7.3 Operational Responses**

This is the third level of strategy is at the operating end of the organization, concern with how component part of the organization delivers effectively the corporate and business level strategies in terms of resources, processes and people. Thus operational strategy looks at how corporate/business level strategies can be translated into concrete operational functions and processes in areas like marketing, research and development (R&D), manufacturing, personal and finances. Strategic management is therefore wide and complementary. Other types of management are like operations management and financial management, which are basically in the operational level of the organization. They focus on the short-term and aim at achieving efficiency in the use of resources and maximizing the returns for the stakeholders in the organization (Hill and Jones, 1999).

According to Johnson and Scholes (2002), operational strategies are concerned with how parts of an organization deliver effectively the corporate and business level strategies in terms of resources, process and people. Companies adopt strategies directed at improving, the effectiveness of basic operations within the company, such as production, marketing, materials management, research and development, and human resources. Even though strategies may be focused on a given function, as often as not they embrace two or more functions and require close co-operation among functions to attain companywide efficiency, quality innovation, and customer responsiveness goals.

#### **Production and Efficiency**

According to Johnson and Scholes (2002), new flexible manufacturing technologies hold out the promise of allowing small manufacturers to produce at

unit costs comparable to those of large assembly line operations. Flexible manufacturing technologies allow the company to produce a wider variety of end products at a unit cost that at one time could be achieved only through the mass production of a standardized output. According to Hill and Jones (1999), recent research suggest that the adoption of flexible manufacturing technologies may actually increase efficiency and lower unit costs relative to what can be achieved by the mass production of a standardized output, while at the same time enable the company to customize its product offering to a greater extent than was once thought possible.

### **Marketing and Efficiency**

The marketing strategy that a company adopts can have a major impact upon the efficiency and cost structure of an enterprise. The marketing strategy refers to the position that a company takes with regards to pricing, promotion, advertising, product design and distribution. It plays a major role in boosting a company's efficiency. One of the important aspects of the marketing strategy is the relationship between customer defection rate and unit cost (Johnson and Scholes, 2002). Customer's defection rates are the percentage of a company's customers that defect every year to competitors. Defection rates are determined by customer loyalty, which in turn is a function of the ability of a company to satisfy its customers (Hill and Jones, 1999).

Another economic benefit of a long term customer loyalty is the free advertising that customers provide for a company. Loyal customers do a lot of talking, and they can dramatically increase the increase in the volume of business through referrals. (Hill and Jones, 1999).

### **Materials Management, JIT and Efficiency**

Hill and Jones (1999), state that material management encompasses the activities necessary to get material to a production facility (including the cost of

purchasing material inputs), through the production process, and out through a distribution system to the end user. The potential for reducing costs through more efficient materials management is enormous. In the average manufacturing enterprise, the materials and transportation costs account for 50% to 70% of revenue. Even smaller reduction in these costs can have a substantial impact on profitability.

Improving the efficiency of the materials management function typically requires the adoption of just-in-time (JIT) inventory systems. The basic philosophy behind JIT system is to economize inventory holding cost by having materials arrive at a manufacturing plant just in time to enter the production process; and not before. The major cost saving comes from increasing inventory turnover, which reduces inventory holding costs such as warehousing and storage costs (Johnson and Scholes, 2002).

### **R & D Strategy and Efficiency**

Hill and Jones (1999) noted that the role of superior research and development in helping company achieve greater efficiency is two fold; first, the R & D function can boost efficiency by designing products that are easy to manufacture. R & D function can help a company achieve greater efficiency through pioneering process innovation. A process innovation is an innovation in the way production processes that improves their efficiency. The process innovation has often been a major source of competitive advantage.

### **Human Resource Strategy and Efficiency**

Johnson and Scholes (2002) emphasized that employee productivity is one of the key determinant of an enterprise's efficiency and cost structure. The more productive the employees, the lower will be unit cost. However, the challenge for a company's human resources function is to diverse ways to increase employee

productivity. It has three main choices: training employees, organizing the work force into self-managing teams, and linking pay to performance.

### **Self Managing Teams**

According to Hill and Jones (1999), self-managing teams are relatively recent phenomenon. Few companies used them until the mid 1980's. But since then they have spread rapidly. With the introduction of flexible manufacturing cells which group workers into teams, the growth has undoubtedly facilitated the spread of self-managing teams among manufacturing enterprises. The typical team comprises five to fifteen employees who produce an entire product or undertakes an entire task. Teams' members learn all team tasks and rotate from job to job. A more flexible work force is one result. Team members can fill in for absent co-workers. Teams also take over managerial duties such as work and vacation scheduling, ordering materials and hiring new members. The greatest responsibility thrust on teams members and empowerment it implies is seen as motivators. Performance bonuses linked to team production and quality targets works as an additional motivator (Johnson and Scholes, 2002).

### **Paying for Performance**

According to Hill and Jones (1999), people work for money, therefore it is hardly surprising that linking pay to performance can help to increase employee productivity. However, if the issue is not quite so simple as just introducing incentive pay systems; it is also important to define what kind of performance is to be rewarded and how some of the most efficient companies in the world, mindful of that co-operation among employees is necessary to realize productivity gains, do not link pay to individual performance. Instead they link pay to group or team performance. This link creates a strong incentive for individuals to co-operate with each other in pursuing of team goals; hence, it facilitates teams work.

## **Information System, the Internet and Efficiency**

According to Hill and Jones (1999), the rapid spread of computers, the explosive growth of internet and corporate internet and spread of high – band width communication conduits from fiber optics to digital wireless technology, the information, and the information system functions of enterprises are moving to center stage in the quest for operating efficiencies. The impact of information systems on productivity is wide ranging and potentially affects all other activities of an enterprise.

## **Infrastructure and Efficiency**

According to Johnson and Scholes(2002), the infrastructure sets the context within which all other values creation activities take place. It therefore follows that the infrastructure can help in achieving efficiency goals. Above all the commitment to efficiency and promote corporation among different functions in pursuit of efficiency goals. Hex and Mali (1996), states that the primary role that various functions must be take account in order to achieve superior efficiency, which is not something that can be tackled on a function by function basis, but requires an organization wide commitment and an ability to ensure close co-operation among functions. Top management, by exercising leadership and influencing the infrastructure plays a major role in this process. There are various steps that a company can take to boost the efficiency and thus lower their unit costs. However, much emphasis is on achieving superior quality which plays a major role in achieving superior efficiency.

### **2.7.4 Marketing strategy responses**

#### **a) Response strategies to personal selling challenges**

Technology as well as demand has presented opportunities for drug makers to sell direct to these new segments – segments in search of lower cost, better

service and better information. Two trends that will dramatically affect the future of pharmaceutical fulfillment are smaller batch production driven by genomics and customer demand, and the addition of retailer, provider and consumer direct to manufacturers' customer base (Matravesm, 1998). Both of these point toward an inevitable shift from distributing larger pallet quantities to wholesalers to distributing smaller package-to-pallet quantities across a more diverse customer base. Technology as well as demand has presented opportunities for drug makers to sell direct to these new segments – segments in search of lower cost, better service and better information. The benefits to drug makers are golden: access to real-time demand and access to actual consumers.

Creating the ability to meet this emerging demand is not so golden. The order and service needs of hospital systems, pharmacists and consumers are dramatically different from those of large-scale wholesalers. The one thing they have in common is the need for accurate delivery. What they don't have in common are needs such as more frequent delivery – perhaps daily or multiple times a week, smaller packaging with lower quantities in each package, combinatory delivery – literature, complementary devices and/or complementary drugs to provide complete treatment kits, smaller size pick/pack and delivery – including quantities of one, and exponential delivery destinations – the numbers will explode quickly (Matraves, 1998).

## **b) Response strategies to supply chain management and physical distribution issues**

Supply chains have improved drastically in the past ten to fifteen years. The revolution can be attributed to companies' shift in focus to efficiency. This applies both to the supply and manufacturing operations. GlaxoSmithKline is an example in case. Its efforts in improving production processes and packaging

and enhanced supply to meet demand better are proof enough (Koester and Rash, 2005).

The winning pharmaceutical companies will build differentiating capability in five supply chain areas (Koester and Rash, 2005): Production, fulfillment, customer management, forecasting & planning, and procurement. Organizations that do so not only will be able to meet financial expectations despite falling margins, but also will be in a position of financial and operational strength. This will lead to attractive acquisition and in-licensing deals possible because pharmaceutical companies with suboptimal supply chains will be forced to divest or seek business suitors.

Today's manufacturing plants were typically designed for a specific drug or therapeutic class. Therefore, asset utilization and fulfilling high-demand products are systemic problems. Additionally, future genomic innovation will allow pharmaceutical companies to develop profile-specific drugs, and some market analysts predict drug tailoring for custom batches of one. The pharmaceutical environment is necessitating faster changeovers and smaller production runs. Simplifying changeovers and gearing down batch sizes will likely require changes to plant layout as well as material and inventory storage. Similar to forecasting and planning, reconfiguring manufacturing processes and facilities to build changeover competence and to run smaller batches will take time. Manufacturers should begin addressing change overs and future shifts in demand since it could take two to three years to ramp-up to consistent, reliable changeover performance (Koester and Rash, 2005).

Successful pharmaceutical companies will actively seek to position their organizations for future profitability by anticipating increased competition and the demise of high margins (Koester and Rash, 2005).

### **c) Response strategies to advertising strategies**

In industries in which vertical differentiation matters, advertising or R&D expenditure is effective in increasing consumers' willingness to pay. Various structural changes have occurred in the pharmaceutical industry in recent years (Matraves, 1998). These include increased international regulatory harmonisation, governmental attempts to control rising healthcare costs combined with rapidly ageing populations, and a substantial increase in the cost of innovation. These structural changes have had an important impact on the competitive process, and given the observed increase in advertising and R&D expenditure and the toughness of price competition, we predicted that concentration would increase. This increase would take place not at the national level, but at the global level (Matraves, 1998).

Over the past decade, leading firms have been competing more and more at a 'global' level. Moving out of their home markets, particularly European firms entering the US in the 1980s, these firms produce and market their products worldwide, though access to the Japanese market remains relatively more difficult due to extensive non-tariff barriers (Thomas, 1996). Most of the world's Top 20 firms, with approximately 50% of global pharmaceutical sales and 85% of R&D expenditure, operate in the key markets of North America, Europe and Japan (Grabowski and Vernon, 1994a). The main driving forces of this globalization trend are outlined below.

First, competition is tougher due to the emergence of new technologies at the global level, and higher R&D costs. Even if the pricing choice remains region specific, a firm's sunk cost decision may be taken with the global market size in mind, depending on the transferability of the sunk cost across borders (Davies and Rondi, 1996). The results from R&D, unlike advertising expenditure, which is typically dependent on national culture, media and language, are relatively easily transferable across national borders.

Once an innovation has been made, it can be exploited anywhere in the world, although some modification or additional testing of the new product may be necessary to conform to local regulations. Additionally, in order to market a product effectively, reinforced by the increase in the demand for OTC products, the leading firms have a presence in all key markets, either through their own marketing and distribution networks, or via a marketing joint venture. Multinational is thus one indicator, rather than a more conventional trade measure, of the extent of integration (Matraves, 1998).

Secondly, although the pharmaceutical industry remains very highly regulated in the key markets following the thalidomide disaster in the 1960s, there have been important movements towards increased international market harmonization (Matraves, 1998). In the EU, the legislation removed technical barriers to trade, and allowed firms to more easily access the regional markets. From 1st January 1995, the European Medicines Evaluation Agency (EMEA) recommended drugs for EU-wide circulation, reported any adverse reactions, and coordinated inspections.

Thirdly, the common mounting governmental concern over increasing healthcare costs is having a negative impact on pharmaceutical prices, via reducing reimbursement rates and increasing the 'limited lists'. This increases the incentive to market the product globally. Price competition has recently been influenced by the rapid expansion of health care maintenance organisations (HMOs) which has concentrated drug purchasing, and had the effect of reducing the number of drugs prescribed to only one or two per indication. Virtually all HMOs use limited lists, or so-called formularies, and by 1995, such organisations accounted for 75% of US drug purchases (Matraves, 1998). In the EU and Japan, on the other hand, where the government is the main purchaser, there is substantial price intervention of one form or another.

As the globalization process continues, this increases effective market size as leading firms have access to new geographical markets. Table 1 shows the increase in actual market size due to factors such as rapidly ageing populations in most advanced industrialized nations, and the substitution of drugs for more expensive forms of healthcare such as hospitalization/surgery. EU pharmaceutical production, for example, increased at an average annual growth rate of 9.7% (5% in real terms) between 1987 and 1993. Between 1984 and 1993, the increase in the value of production (when measured in constant prices) was 46% for the EU, compared with 30% for the US, and 21% for Japan (Panorama, 1995). As market size increases, this raises the incentive to escalate advertising and/or R&D expenditure (Sutton, 1991).

#### **d) Response strategies to supplies (inputs) and production facilities management**

The pharmaceutical industry traditionally has been constrained by rigid global manufacturing with specialized production equipment, long lead times for materials and extensive regulatory requirements. This has led to inflexibility and an inability to react quickly to changes and facilities that are either capacity constrained or underutilized (Radjou, 2001). Additionally, competition and the race towards gene profiling for therapeutic drugs may well push big pharmaceutical companies into niche drugs and smaller-batch production. The sum total of these trends and characteristics makes the drug manufacturing environment ripe for significant improvement.

What takes to turn production into a supply chain capability worthy of future success are rationalized global production networks, changeover competence and smaller batch production, and compliance management. Winning pharmaceutical companies will recognize the need for competence in global siting and production network rationalization (Bhandari et al, 1999).

Over the past decade, improving the purchasing function has become an important and strategic part of the goals of most organizations – primarily because of the recognition that increased profitability can be equally accomplished by spending less. A dollar saved in operating expense may have the same effect on profit as a \$10 gain in sales. In the pharmaceutical industry, e-procurement has been heavily embraced because of its association with lower transaction costs, lower unit price and a drive toward contract compliance (Bhandari et al, 1999). Often these concessions were achieved with little regard to quality, total cost and productivity and resulted in modest to minimal gains in cost savings. There are significantly greater benefits to be gained in the area of procurement. The focus here is however on strategic sourcing and supplier management.

Both position an organization to more adeptly respond to changes in demand and to more strategically manage overall costs throughout the supply chain. While e-procurement may lower the costs within the four walls of procurement, it is most effective when led or supported by strategic sourcing or supplier management so that cost structures and productivity are also enhanced downstream (Radjou, 2001).

Strategic sourcing is the aggregating of goods and service needs to devise and execute a procurement strategy that optimizes and balances total cost of acquisition, working capital, productivity and service (Koester and Rash, 2005). Benefits often include reduced total costs for buyer and supplier, higher quality, ongoing reduction in working capital and lead times, and strategic supplier partnerships. The focus in supplier partnerships shifts from one of price reduction to relationship value and total cost management.

Strategic sourcing inherently focuses on both direct and indirect material items that make up the lion's share of costs and productivity problems (Koester and Rash, 2005). The more strategic aspects include in-sourcing/outsourcing and the management of contract manufacturing. Total cost management evaluates unit price, logistics and freight costs, import/export fees, taxes, service models and the cost of poor quality. A pharmaceutical manufacturer's approach to strategic sourcing and speed of adoption should be based on the organization complexity and current level of process standardization.

Supplier management programs proactively manage supplier relationships and performance to ensure supply objectives are achieved. Proactive supplier management typically yields 10 to 15 percent savings for the purchasing categories addressed and then additional year-over-year savings of 3 to 5 percent (Koester and Rash, 2005). Moreover, the goals of a supplier management program may be critical to operations and sales. The pharmaceutical industry has been plagued with penalties, fines and subsequent negative publicity – some of which could be resolved with a compliance-focused supplier management program. The success of supplier management programs is highly dependent upon executive sponsorship, cross-functional input, measurable performance metrics and process enablement. The focus in supplier partnerships shifts from one of price reduction to relationship value and total cost management.

### 3.0 CHAPTER THREE: RESEARCH METHODOLOGY

#### 3.1 Research Design

This research problem can best be studied through the use of a case study. This is because from the underlying literature above, pharmaceutical companies in Kenya operate in the same competitive environment coupled with common internal and external factors. The case study method will give an in-depth information on the strategic responses of GSK towards competition from other pharmaceutical companies as well as the challenges of environmental change.

A case study according to Kothari (1990) is a powerful form of quantitative analysis. Young (1960) also pointed out the same to be a comprehensive study of a social unit. The unit of study could be an institution, family, district, community, or person. Kandie (2001) argues that a case study is a form of qualitative analysis where studies are done on institutions and from the study, data generalization and inferences are drawn. In general, a case study is a qualitative study that has been narrowed down to a specific unit but comprehensive enough to give representative information for similar units operating in the same environment. The use of case study in research is of particular importance taking in to account the advantages that come along with it. It is the easiest research free from material bias and enables one to intensively study a particular unit. This may not be possible with other methods of study. Nevertheless, scientific generalizations with respect to similar units operating in the same environment but in different geographical regions may be done with minimum complexity.

The method suffers from disadvantages such as time consumption in collecting data, and at times, one may become his/her own respondent. The element of false generalization is often prevalent when the operational environment is

dynamic. GSK is the largest pharmaceutical company in Kenya. This makes the study look like an overall industry study. In the light of this the generalizations drawn are to some extent free from material bias.

### **3.2 Population**

For the case study, the research population will consist of all the 300 employees and management of GSK.

### **3.3 Sample Selection**

This section refers to a research plan that indicates how cases are to be selected for observation or as respondents. The sample will be picked from the current list of all employees from GSK. Ten of the respondents will be selected from the management team of GSK, while another forty respondents from other employees not in management positions. All of the above respondents will be selected using a systematic random approach. This sample size will be adequate for GSK as it represents more than 10% of the total population size.

The list will be used because it is systematic, consistent and updated and will enable me to use systematic random sampling design. The design involves selecting subjects from an available population list in a systematic rather than random fashion. Respondents have to be interviewed from all the departments of GSK. This will make the research findings to be all inclusive and not biased in any way.

### **3.4 Data Collection Methods**

Emphasis is given to both primary and secondary data. In an effort to establish the strategic responses towards competition from other pharmaceutical

companies adopted by GSK, questionnaires will be used. Such questionnaires will be designed to give a brief knowledge of such responses adopted by GSK. The main instrument in Data collection will be through semi structured questionnaires targeting at least ten senior managers among Chief Executive, General Manger, Finance Manager, Marketing Manager, Front Office Manager or the Executive Manager. Questionnaires will either be dropped and picked later or emailed to the respondents.

For the secondary data documents, sources will be employed whereby use of previous document or materials to support the data received from questionnaires and information from interviews that includes book and magazines available in the libraries which will be visited as well as information from relevant websites. GSK's financial reports, management circulars and minutes to their meetings will be sources of our secondary data.

### 3.5 Data Analysis

Data collected will be analyzed based on primary statistics. The quantitative data will be analyzed by the use of descriptive statistics and then presented through percentages, means, standard deviations, frequencies and charts.

4.0. DATA ANALYSIS AND FINDINGS

4.1. Introduction

This chapter presents the analysis and findings from the data collected from the field based on the specific objectives. The analysis was presented in percentages. From the study population targets of 40 respondents, 30 respondents responded to the questionnaire, constituting 75% response rate.

4.2 Rivalry indicators

The degree of competition faced by an organization in its market relates to its competitiveness. The respondents were asked to rate the rivalry indicators in order of importance where 1 was very high importance and 5 was very low importance. The findings of the study are as presented in the table below;

Rivalry Indicators	Very high importance	High importance	Neutral	Low importance	Very low importance
Market concentration	63.3	26.7	6.7	3.3	0
Market share	83.3	16.7	0	0	0
Market growth rate	80	20	0	0	0
Price elasticity	60	26.7	13.3	0	0
Demand elasticity	80	13.3	6.7	0	0
Supply elasticity	76.7	16.7	6.7	0	0
Economies of scale	73.3	16.7	10	0	0
Ease of entry	80	13.3	6.7	0	0
Exit barriers	56.7	16.7	10	10	6.7
Government policy, such as tariff reduction	66.7	30	3.3	0	0
Degree of innovation	83.3	16.7	0	0	0

Number of major competitors	86.7	13.3	0	0	0
Absolute size of competitors	86.7	13.3	0	0	0

From the findings as presented in the above table, it was clear that number of major competitors and absolute size of competitors as rivalry indicators were rated as higher than the others in terms of importance. They were rated at 86.7% each. Market share and degree of innovation with were rated 83.3% each; at and market growth rate, demand elasticity and ease of entry were rated 80%. As rivalry indicators, supply elasticity, economies of scale, Government policy, such as tariff reduction, market concentration and price elasticity were also found to be of high importance

#### 4.3 Competitiveness indicators

The researcher also requested the respondents to state the degree of importance of the competitive indicators and the findings were as shown in the table below,

Competitiveness indicators	Very high importance	High importance	Neutral	Low importance	Very low importance
Macro and market dynamism	73.3	13.3	10	3.3	0
Financial dynamism	83.3	16.7	0	0	0
Infrastructure and investment climate	86.7	13.3	0	0	0
Human resources	73.3	16.7	10	0	0
Product range	60	16.7	10	10	3.3
Product diversity	66.7	20	13.3	0	0
Degree of price competitiveness	80	20	0	0	0

The above table above shows that infrastructure and investment climate are highly important as competitive indicators in the industry this was shown by

86.7%, financial dynamism and degree of price competitiveness were rates as 83.3% and 80% respectively.

Other factors, such as Macro and market dynamism human resources, product diversity and product range were also found to be of high importance as competitive indicators in GSK. above 50%

#### 4.4 Manager's use of mass information

A number of criteria exist for comparing an organisation with its competitors. The researcher requested the respondents to indicate the extent to which their organisation/division uses the following information for decision-making.

Items	Very high use	High use	Neutral	Low use	Very low use
I use information that compa organisations in the industry	86.7	13.3	0	0	0
I use information on fluctuations in the Performance of my organisation/division in Previous years	80	16.7	3.3	0	0

From the study, the researcher established that managers highly use both the information that compares their organization with similar organizations in the industry (86.7%) and the information on fluctuations in the performance of their organization/division in previous years (80%) to a very high extent.

#### 4.5 Business unit performance

The performance of an organisation/division may be viewed as the extent to which it has been successful in attaining its planned targets. The researcher also

sought to establish the degree of importance of the performance criteria to GSK.

The findings of the study were shown in the table below;

Performance criteria	Very high importance	High importance	Neutral	Low importance	Very low importance
Return on investment	66.7	20	13.3	0	0
Return on sales	90	10	0	0	0
Percentage of orders to call for each sales territory	90	10	0	0	0
Product leadership	60	20	13.3	6.7	0
Innovation, flexibility and inventory reduction measures	86.7	13.3	0	0	0
Marketing performance measures	93.3	6.7	0	0	0
Quality (incoming materials, in-process controls, customer satisfaction)	83.3	16.7	0	0	0
Delivery performance	76.7	16.7	6.7	0	0
Economic value added	73.3	16.7	10	0	0
Cycle time	80	16.7	3.3	0	0

The findings from all the performance criteria were above 50% ranging from 60%-93.3%. Of the performance criteria, marketing performance measures was rated as the highest with 93.3%, followed by return on sales and percentage of orders to call for each sales territory with 90% each. Innovation, flexibility and inventory reduction measures were rated third with 86.7%, while quality (incoming materials, in-process controls, customer satisfaction) was rated fourth.

#### 4.6 Analysis of open-ended questions

The respondent indicated that the major competition of the organization originates from the exported drugs from outside Kenya. Some of the respondent also showed that the current threat to their business originates from the herbal drugs which have gained prominence as being free from the feared side effects of the manufactured drugs.

The respondents were asked to state what their sources of major competition were. From the responses, it was clear that the company faces a lot of competition from other pharmaceutical companies that operate globally. The competition is observed in the competition for supplies (raw materials, the supply chain, marketing of the products and final selling to the final consumer.

The respondents were also asked to state the ways in which they handled competitive situation of the nature they described. The findings show that GSK has responded to all the challenges. For the raw materials, the supplies issue, the company has put up production facilities in many countries across the world strategically to be able to compete effectively with other industry players.

On whether the competition has any effect on the use of management accounting information system, all the respondents said that competition has had an impact on the accounting information system. The study also found out that competition has had an impact on the performance and profitability of GSK. This was a response to the question on whether competition has had an impact on performance or profitability of the organisation.

The respondents were also asked whether market competition influenced the use of management accounting systems in the organisation as a whole or in the divisions. All the respondents said that competition had indeed influenced the

use of management accounting systems in the divisions and the organisation as a whole. This is seen as a response strategy to the accounting systems that have been adopted by other firms in the industry that have been proven to lead to greater efficiency and profitability of the firms.

The study also wanted to find out whether the management accounting systems information has an impact on the performance of GSK. From the responses, it was clear that all the respondents affirmed the fact that management accounting systems influence performance of organisations. The respondents affirmed that the adoption of an accounting management information system in their divisions had improved their divisional performance and overall performance of the company.

The respondents were also asked to explain whether the level of competition had been triggered by factors such as price, product and marketing channel competition as independent variables or as a combination of various factors. The study found out that what triggers the level of competitive response from the company is not attributable to one factor. A number of marketing issues make the company to respond to competition. These challenges include the spate of mergers and acquisitions, which have made GSK to face three major integration challenges: integrating the separate identities, integrating different strategies and integrating the packaging and manufacturing operations of Glaxo, Burroughs Wellcome, Beecham, SmithKline Beckman and Block Drug Co.

The study also found out that market dynamics and short life expectancy of patients have tilted the demand in favour of specialised drugs. GSK, like its competitors has to combat the need for specialised drugs continuously and reaping quick rewards. Such market forces alongside a changing industry make creative marketing and innovative products crucial. Frequent merger and acquisition activity implies complicated paper work (re-registration and labelling)

compliance with regulatory frameworks of different countries. With over 250 legal entities across the world, printing and other associated challenges emerge with different names that have to appear on different products distributed in different countries. The complexity increased manifold with the mergers owing to labelling changes. Moreover, different markets have different schedules on when GSK must incorporate the labelling changes.

Different departments always make different packaging design changes. Communicating packaging specifications, graphics and artwork changes across the entire pharmaceutical organization was challenging if not an insurmountable task.

Competition has also been triggered by outsourcing and supplier challenges. One of GSK's products, Aquafresh Floss'N'Cap (AFNC) is symbolic of the typical outsourcing challenges. AFNC has a flip top containing dental floss and toothpaste in the tube. AFNC had three custom designed sub assemblies outsourced to three different suppliers. The suppliers worked in sequence on the custom designed cap. Once the package reaches GSK, only filling of the tube with toothpaste remained. Coordinating with these three cross Atlantic suppliers, especially outside GSK's manufacturing facilities was a challenging task.

The other challenge that has led to the company responding to competition is finding alternate or multiple suppliers. The respondents said that GSK had a bad experience early on with supply disruptions from a single source supplier. Almost a decade ago, one of its sole resin supplier's plants exploded. It had no alternate suppliers and consequently had to lose market share not to mention customer goodwill, as customers have to do without critical drugs or life saving devices. GSK wanted to eliminate such situations. The challenge was not only to find alternate suppliers but ones who complied with the FDA regulations and supplied in time. On the major machinery and equipment side, GSK's goals were different

though. It wanted to limit the number of machinery suppliers to better familiarize with the manufacturer's equipment and establish partnerships with machine suppliers who offered total packages when compared to independent system integrators.

The other challenge that has elicited response from the company is operational and production challenges. The foremost challenge in production operations is synchronizing with different manufacturing locations and multiple suppliers. With different packaging and assembly lines, implementing automation and advanced technology or process improvement programmes was a huge challenge. Other considerations were quick machine setup, minimum production stoppages, better equipment availability and flexibility besides handling innumerable design changes.

Technological challenges were also identified by the respondents as one of the factors that determine response from the company. The respondents said that technologies, for example RFID in anti-counterfeiting are largely untested or simply not the best. GSK has RFID supply chain projects planned but faces a tough test with respect to being the first mover in investing huge sums into the technology or adopt a wait and watch policy. GSK may lose out in both cases owing to failure of the relatively new technology or lose out to competitors who can gain significantly by adopting the technology faster.

Asked on their opinion of Porter's 1985 assertion that competition is the core of the success or failure of firms, the responses were varied but pointed to the fact that competition is healthy as a way of self-mechanism for checking on the firms in the industry. Competition ensures that that companies in the industry produce quality products and that customers are not charged way above market prices. Competition ensures that clients have a voice in the whole market system.

The study also sought to find out if the organisation had been faced with competition that threatened its existence, growth or market share. From the responses, it was clear that the company had never faced such a scenario.

The study sought to establish the strategic responses to competition from other pharmaceutical firms by GlaxoSmithKline. The study findings indicate that the number of major competitors and absolute size of competitors were the most important rivalry indicators, market share and degree of innovation, market growth rate, demand elasticity and ease of entry were also important. As rivalry indicators, supply elasticity, economies of scale, Government policy, such as tariff reduction, market concentration and price elasticity were also found to be of high importance.

Infrastructure and investment climate are highly important as competitive indicators in the industry, financial dynamism and degree of price competitiveness were also rated as important. Other factors, such as macro and market dynamism, human resources, product diversity and product range were also found to be of relative importance as competitive indicators in GSK.

From the study, the researcher established that managers highly use both the information that compares their organization with similar organizations in the industry and the information on fluctuations in the performance of their organization/division in previous years to a high extent. The findings from all the performance criteria were above 50%, of the performance criteria, marketing performance measures was rated as the highest, followed by return on sales and percentage of orders to call for each sales territory, innovation, flexibility and inventory reduction measures followed by quality (incoming materials, in-process controls, customer satisfaction).

## CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Summary

The study sought to establish the strategic responses to competition from other pharmaceutical firms by GlaxoSmithKline. The study findings indicate that the number of major competitors and absolute size of competitors were the most important rivalry indicators, market share and degree of innovation market growth rate, demand elasticity and ease of entry were also important. As rivalry indicators, supply elasticity, economies of scale, Government policy, such as tariff reduction, market concentration and price elasticity were also found to be of high importance.

Infrastructure and investment climate are highly important as competitive indicators in the industry, financial dynamism and degree of price competitiveness were also rated as important. Other factors, such as macro and market dynamism human resources, product diversity and product range were also found to be of relative importance as competitive indicators in GSK.

From the study, the researcher established that managers highly use both the information that compares their organization with similar organizations in the industry and the information on fluctuations in the performance of their organization/division in previous years to a high extent. The findings from all the performance criteria were above 50%, of the performance criteria, marketing performance measures was rated as the highest, followed by return on sales and percentage of orders to call for each sales territory innovation, flexibility and inventory reduction measures followed by quality (incoming materials, in-process controls, customer satisfaction).

The respondent indicated that the major competition of the organization originates from the exported drugs from outside Kenya. Some of the respondent also showed that the current threat to their business originates from the herbal drugs which have gained prominence as being free from the feared side effects of the manufactured drugs.

The study also found out that the company had been faced with challenges brought about by competition which had elicited strategic responses from the company. These challenges not only include prices and supply chains but also issues of mergers, integrations and production challenges.

## **5.2 Conclusions**

This study was designed with the aim of establishing the strategic responses to competition from other manufacturing pharmaceutical companies adopted by GSK in Kenya. The study found out that the strategies that the company had adopted include mergers and acquisitions, setting up production facilities in many strategic areas to manage the supply chain, product design changes to respond to the challenges of regulations (labeling of products), outsourcing and finding multiple suppliers to tackle supplier challenges, automation of production process to tackle operational challenges, and setting up a global pack management section to deal with packaging complexities.

GSK limits the number of equipment suppliers to minimise downtime. For instance, on one packaging line it has one supplier Schubert's four robotic systems. The robots do the cartooning and case packing as well. In response, Schubert offers GSK the benefit of assigning a dedicated team that works for GSK alone. The team also has an office in GSK's plant itself. Healthy supplier relationships have helped GSK minimise downtime. Moreover, all equipment from a single supplier facilitates a better understanding of the equipment functioning, than having disparate machines for same tasks. Thus training costs are also less.

Furthermore, GSK uses a central TIPS production management system that minimizes downtime. The system tracks downtime data allowing for ongoing production improvements. GSK is able to maintain product quality with vision cameras and online inspection using bar code scanners. GSK prefers to be the rapid follower instead of being bleeding edge with respect to technology adoption. Instead of using 'packaging only' lines, GSK uses lines, which are integrated to do final assembly and packaging also.

From the study it can be concluded that infrastructure and investment climate are highly important as competitive indicators in the industry, other factors, such as macro and market dynamism human resources, product diversity and product range are also importance as competitive indicators in GSK.

It can also be concluded that managers, use both the information that compares their organization with similar organizations in the industry and the information on fluctuations in the performance of their organization/division in previous years to a high extent.

## **5.2 Recommendations**

The study recommends that for effective response to competition, a firm must take into account the environmental variables that exist. Competition in the industry is framed by the level of rivalry and competition that exist in that particular industry. Strategy is important in addressing the issues that arise, in the environment a properly structured plan to implement responses is particularly unavoidable by a given firm.

The study therefore recommends a proper strategic plan to respond to competition to be able to counter side effects that might accrue. When responses are properly drafted, the returns to the firm are bound to be expounded.

GSK's efforts as illustrated above have been successful. Organisations can follow its Supply Chain Management strategies as they truly extend the value of product, packages, plants and people.

Desai, V.A. (1999) Manufacturing Assets and Skills: The key to sustainable competitive Advantage, California Management Review, pg 91-106

Abdullah O.S. (2000), A Study of The Strategic Responses by Kenyan Insurance Companies following liberalization, Unpublished MBA Thesis, University of Nairobi

Agarwal, S., Desai, S., Holcomb, M. and Oberoi, A. (2001), Unlocking the value of Bio Pharma, The McKinsey Quarterly, No. 2, pp. 65-73

Ansoff, H. and Mc Donnell, E. (1990) Implanting Strategic Management, Prentice Hall Cambridge, UK, 2nd Edition

Aosa, E. (1992) An Empirical Investigation of aspects of strategy formulation and implementation within large private manufacturing companies in Kenya, University of Strathclyde Scotland.

Bennet, R. (1983) Management Research: Management Development Series, 20, International Labour Office, Geneva.

Bhandari, M. et al (1999) "A Genetic Revolution In Healthcare" McKinsey Quarterly, Quarter 4

Burgelman, R., Maidique, M. and Wheelwright, S. (2001), Strategic Management

## REFERENCES

- Aaker, D.A (1989) Managing Assets and Skills: The key to sustainable competitive Advantage, California Management Review, pg 91-106
- Abdullahi O.S. (2000), A Study of The Strategic Responses by Kenyan Insurance Companies following liberalization", Unpublished MBA Thesis, University of Nairobi
- Agarwal, S., Desai, S., Holcomb, M. and Oberoi, A. (2001), Unlocking the value of Big Pharma, The McKinsey Quarterly, No. 2.pp. 65-73
- Ansoff , H and Mc Donnell E, (1990) Implanting Strategic Management, Prentice Hall Cambridge, UK, 2nd Edition
- Aosa, E. (1992) An Empirical investigation of aspects of strategy formulation and implementation within large, private manufacturing companies in Kenya. University of Strathclyde Scotland.
- Bennet, R. (1983) Management Research: Management Development Series, 20 International Labour Office, Geneva.
- Bhandari, M. et al. (1999) "A Genetic Revolution in Healthcare" McKinsey Quarterly, Quarter 4
- Burgelman, R., Maidique, M. and Wheelwright, S. (2001), Strategic Management

of Technology and Innovation, McGraw Hill, Boston

Henry, H.W. (1978) Formal Planning in Major US Corporation, Long-Range

Burnes, B. (1998) Managing Change: Strategic Approach to Organizational Dynamics. Pitman publishing 2nd edition

Hamel, G. & Prahalad, C.K. (1989) Strategic Intent, Harvard Business Review

Davies, S. W. and Rondi, L., (1996), Intra-EU Multinationality of Industries, in Davies, S. W. and B. R. Lyons et al, Industrial Organisation in the European Union: Structure, Strategy and the Competitive Mechanism, Oxford University Press.

James, G. (1991) Competition for Competence and Inter-Partner Learning within Internal Strategic Alliance; Strategic Management Journal, Summer Special Issue no. 12 PP 83 – 103

Economic Survey (2006) by Central Bureau of Statistics and Ministry of Planning

Hill, G.W.L. & Jones, G-R (2001) Strategic Management Theory: An Integrated

Goro, R.W. (2003) Strategic Responses Of Commercial Banks To The Threat Of Substitute Products, Unpublished MBA Project, University of Nairobi

Johnson, G. & Scholes, K. (2002) Exploring Corporate Strategy, Prentice Hall

Grant, R.M. (1998) Contemporary Strategy Analysis, Concepts, Techniques & Application, 3rd Edition, Blackwell, Massachusetts, USA

Kiprotich, P. (2001) Analysis of the Strategic Responses of Telkom Kenya Ltd. in a

Competitive Environment. Unpublished MBA project of the University of Nairobi

Grabowski, H. and J. Vernon, (1994), Innovation and Structural Change in Pharmaceuticals and Biotechnology, Industrial and Corporate Change, 3, 435-449

Kiptuhen, E.J. (2003) Strategic Responses To A Changing Competitive

Environment. The Case Study of KCB. Unpublished MBA project of the University of Nairobi

Harvard Business School (HBS) (1999), From the Field: Inside Biotechnology and Pharmaceuticals, Harvard Business School Press, Boston.

Koester, L. and Pash, R. (2005) Building Supply Chain Capabilities in the

Hax, A.C. & Majluf, N.S. (1996) The Strategy Concept & Process; a Pragmatic Approach, Prentice Hall NJ

Henry, H.W. (1978) Formal Planning in Major US Corporation, Long-Range Planning, Vol. 10

Hamel, G. & Prahalad, C.K. (1989) Strategic Intent, Harvard Business Review  
PP 63-73

Hamel, G. (1991) Competition for Competence and Inter-partner Learning within Internal strategic Alliance; Strategic Management Journal, Summer Special Issue no. 12 PP 83 – 103

Hill, C.W.L. & Jones, G.R (2001) Strategic Management Theory, An Integrated Approach, 5th Edition

Johnson, G. & Scholes, K (2002) Exploring Corporate Strategy, Prentice Hall

Kandie, P. (2001) A Study of the Strategic Responses by Telkom Kenya Ltd, in a Competitive Environment. Unpublished MBA project of the University of Nairobi

Kiptugen, E.J (2003) Strategic Responses To A Changing Competitive Environment. The Case Study of KCB, Unpublished MBA project of the University of Nairobi

Koester, L and Rash, K (2005) Building Supply Chain Capabilities in the Pharmaceutical industry, Atlanta, UPS

Kohn, Alfie (1986). No Contest – The Case Against Competition. Boston New York London: Houghton Mifflin Co.

Kothari, C.R, (1990). Research Methodology: Methods and Techniques. 2nd Edition, Wishira Prakashan.

Kotler, P. (1997) Marketing Management. Analysis, Planning, Implementation & Control, Prentice Hall of India, Private Limited New Delhi.

Malknight, T. (1999), 'Eli Lilly, 1998 (A): Strategic Challenges', Harvard Business School Publications and IMD International, Boston.

Matraves, C (1998) Marketing Structure, R&D and Advertising in the Pharmaceutical Industry, Discussion Paper FS IV 98-17, Wissenschaftszentrum Berlin

Migunde, F.A (2003) Strategic Responses By The Kenya Broadcasting Corporation To Increased Competition, Unpublished MBA Project, University of Nairobi

MOTI, (2006), Ministry of Trade & Industry annual report

Mugambi, M.G. (2003) The Strategic Responses Of Tourist Hotels To The Changes In The Environment A Case Of Tourist Hotels In Nairobi, Unpublished MBA Project, University Of Nairobi

New York Times, Sept. 22, 2005

Sutton, J. (1991) Sunk Costs & Market Structure: Price Competition, Advertising,

Njau, M.G (2000) Strategic Responses By Firms Facing Changed Competitive Conditions – E.A.B. LTD, Unpublished MBA Project, University of Nairobi

Thiga, S.W. (2000) Strategic Responses Of Airlines Operating in Kenya In The

Panorama of EC Industry, (1995), Commission of the European Communities, Brussels

Pearce, J.A. & Robinson, R. (1997) Strategic Management Formulation & Implementation, Richard D. Irwin Inc, USA, 3rd Edition

Industry, Helms, R. (ed), American Enterprise Institute for Public Policy Research, Washington.

Pearce, J.A. & Robinson, R. (2002) Strategic Management : Strategy formulation and Control; A. I. T. b. S. Publishers and Distributors, 3rd Ed

Thompson, & Strickland, A.J. (2003) Strategic Management: Context & Cases, Richard D. Irwin, Inc. New York

Pharmaceutical Research and Manufacturers of America (PhRMA), "Annual Report, December 1997."

Porter, M. (1985) Competitive Strategy, Free Press, New York USA

Porter, M.E. (1998) Cluster & the New Economics of Competition, Harvard Business Review, Nov/Dec

Prahalad and Gary (1993) Collaborate with your competitors and win, Harvard Business Review, 67(1), PP133 – 139

Radjou, N. (2001) "The Pharma Apps Prescription" Forrester Report

Appendix 1: Survey questionnaire

Sutton, J., (1991) Sunk Costs & Market Structure: Price Competition, Advertising, and the Evolution of Concentration, MIT Press

Thiga, S.W. (2002) Strategic Responses Of Airlines Operating In Kenya In The Face Of Changing Environmental Conditions, Unpublished MBA Project, University of Nairobi

A - Very high importance D - Low importance

Thomas, L. G., (1996) Industrial Policy and International Competitiveness in the Pharmaceutical Industry, in Competitive Strategies in the Pharmaceutical Industry, Helms, R. (ed), American Enterprise Institute for Public Policy Research, Washington.

A. Rivalry	Indicators	A	B	C	D
1	Market concentration				
2	Market share				
3	Market growth rate				
4	Price elasticity				
5	Demand elasticity				
6	Supply elasticity				
7	Economies of scale				
8	Ease of entry				
9	Exit barriers				
10	Government policy, such as tariff reduction				
11	Degree of innovation				
12	Number of major competitors				
13	Absolute size of competitors				

## Appendix 1: Survey questionnaire

### Part A: Level of competition

The degree of competition faced by an organisation in its market relates to its competitiveness, the rivalry in the industry and a number of indicators of each.

Rank these indicators (by marking them with an X) in order of importance, as perceived by your organisation, where;

A - Very high importance D - Low importance

B - High importance E - Very low importance

C – Neutral

**Table A-1**

<b>A. Rivalry</b>		<b>Indicators</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
	<b>1</b>	Market concentration				
	<b>2</b>	Market share				
	<b>3</b>	Market growth rate				
	<b>4</b>	Price elasticity				
	<b>5</b>	Demand elasticity				
	<b>6</b>	Supply elasticity				
	<b>7</b>	Economies of scale				
	<b>8</b>	Ease of entry				
	<b>9</b>	Exit barriers				
	<b>10</b>	Government policy, such as tariff reduction				
	<b>11</b>	Degree of innovation				
	<b>12</b>	Number of major competitors				
	<b>13</b>	Absolute size of competitors				

<b>B. Competitiveness Indicators</b>						
	<b>14</b>	Macro and market dynamism				
	<b>15</b>	Financial dynamism				
	<b>16</b>	Infrastructure and investment climate				
	<b>17</b>	Human resources				
	<b>18</b>	Product range				
	<b>19</b>	Product diversity				
	<b>20</b>	Degree of price competitiveness				

### Managers use of mass information

A number of criteria exist for comparing an organisation with its competitors.

Please indicate the extent to which your organisation/division uses the following information for decision making, where:

A-Very high use D-Low use

B-High use E-Very low use

C-Neutral

**Table A-2**

	<b>Items</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
1	I use information that compares my organisation with similar organisations in the industry					
2	I use information on fluctuations in the performance of my organisation/division in previous years					

**Business unit performance**

The performance of your organisation/division may be viewed as the extent to which it has been successful in attaining its planned targets. Please indicate the degree of importance of these performance criteria to your organisation, where;

A - Very high importance D - Low importance

B - High importance E - Very low importance

C - Neutral

**Table A-3**

	<b>Performance criteria</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
1	Return on investment					
2	Return on sales					
3	Percentage of orders to call for each sales Territory					
4	Product leadership					
5	Innovation, flexibility and inventory reduction Measures					
6	Marketing performance measures					
7	Quality (incoming materials, in-process controls, Customer satisfaction)					
8	Delivery performance					
9	Economic value added					
10	Cycle time					

Part B: Open-ended questions

1. Provide a brief description of the major competition of your organisation/division.

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2. How does your organisation attempt to handle a competitive situation of this nature?

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3. Does this competition have any effect on the use of management accounting systems information (benchmarking and monitoring)?

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4. Does this competition have an impact on the performance or profitability of your organisation?

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5. Does market competition influence the use of management accounting systems in your organisation/division?

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6. Does the use of management accounting systems information have an impact on the performance of your organisation?

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7. Is competition in your organisation triggered by factors such as price, product and marketing-channel competition, independent of everything else or by the collective strength of various factors?

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8. What is your opinion of Porter's 1985 assertion that "Competition is the core of the success or failure of firms".

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9. Has your organisation ever been faced with competition that threatened its existence, growth, market share, etc.? If yes, how was this handled?

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