

**" THE ROLE OF INTANGIBLE ASSETS IN SUSTAINING COMPETITIVE
ADVANTAGE AMONG THE KENYAN PHARMACEUTICAL
MANUFACTURERS "**

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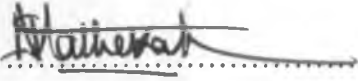
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DECLARATION

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



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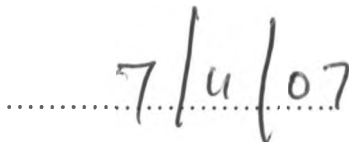


DATE

This project has been submitted for examination with my approval as a university supervisor.



MR. JACKSON MAALU



DATE

DEDICATION

To God for the gift of knowledge

And

To my mother; Kalee, my brothers; Ben, Dun and Fred

And

My fiancée; Zippy for their support and encouragement.

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I am especially indebted to Mr. Jackson Maalu, my supervisor for his guidance and constructive criticism without whom this research would not have been realized. I am also indebted to those pharmaceutical manufacturers' managers and their organization for affording me their time and information for this study. Without their participation, this research could not be accomplished.

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ABSTRACT

Sustaining a competitive advantage is imperative for firms that are in dynamic industries, which require effective strategic implementation to manage such changing situations. The pharmaceutical company, which is a business that competes in the knowledge economy for discovering and commercializing therapeutic agents, must continually develop strategies to protect its intellectual capital and improve performance. In order to sustain competitive advantage, pharmaceutical manufacturers operate on the basis of their intangible assets.

The study sought to examine how, in the framework of resource-based view of the firm, Kenyan pharmaceutical manufacturers use intangible assets to build organizational capability to sustain competitive advantage and to determine the challenges facing intangible assets' potential as sources of sustainable competitive advantage among them. As a research setting, the study comprised of all pharmaceutical manufacturers situated in Nairobi.

The respondents were asked to indicate, from a list of intangible assets, roles and challenges, the extent of use, role played and challenges faced by their firms. The result of the study showed majority of the respondents felt that intangible assets had a significant role in sustaining pharmaceutical manufacturers' competitive advantage. Findings suggest a strong usage of intangible assets among the firms with over 50% of the firms reporting a great extent use of company reputation, brand reputation,

customer service reputation, human resource management policies and patents. The result also showed that intangible assets played significant role in enabling customers to easily recognize firm's product as well as being source of revenue through franchising. Proliferation of counterfeit products was cited by majority of the respondents as the greatest challenge facing the pharmaceutical manufacturers with generics and weak property law cited as significant threats.

CHAPTER ONE: INTRODUCTION

1.1 Background

1.1.1 Overview of Competitive Advantage of the Firm

The challenge in discovering the ways through which firms develop and maintain competitive advantage in their respective industries is one of the central research streams in strategic management theory. The new competitive landscape emphasizes flexibility and speed in responding to fast-changing environments. The new factors of competitiveness such as brands, quality, innovation, design activities and service to customers and suppliers are in the center of companies' strategic thinking. The pharmaceutical company, which is a business that competes in the knowledge economy for discovering and commercializing therapeutic agents, must continually develop strategies to protect its intellectual capital and improve performance. In order to sustain competitive advantage such organizations operate on the basis of intangible assets and require unique implementation strategies as more are learning to develop drugs more expeditiously.

Products and services that were previously unique in nature are now being imitated, strategic alliances are increasing, technological processes are improving astronomically and companies are investing more in their intangible assets. Consequently to remain competitive in this millennium, organizations will have to sustain organizational capabilities to enhance their implementation strategy (Klein, 1997). The essence of formulating a competitive strategy is relating a company to its environment (Porter, 1998). Porter (1980) also argues that competitive advantage is the ability of the firm to

outperform its rivals on the primary performance goal. Notably, the essence of business is to create competitive advantage in a number of ways e.g. low-cost production or market differentiation.

Competitive advantage can only be sustainable if customers consistently perceive positive differences e.g. in quality, uniqueness e.g. between the product or services offered by a company and those of its competitors, wherein, such perceived differences results in the company's greater capability over time (Porter, 1980). The need for firms to remain competitive and successful in the long term has created the concept of sustainable competitive advantage. A body of literature has therefore emerged to address sources and different types of strategies that may be used to attain a sustainable competitive advantage. The term sustainable competitive advantage (SCA) emerged in 1985, when Porter (1985) discussed the basic types of competitive advantages firms can possess to achieve sustainable competitive advantage. He argued that competitive advantage could be achieved through low-cost and differentiation strategies. Barney (1991) defines SCA as follows: "a firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by current or potential competitor or when these other firms are unable to duplicate the benefits of this strategy". Sustainable competitive advantage is only achievable where the firm's capabilities are valuable, rare, costly to imitate, and non-substitutable. According to Thomas Peter & Robert Waterman, in Kramer et al (1998), corporate values can be a source of sustainable competitive advantage.

The resources that are available to a company are considered in much broader terms than in the traditional definition of resources; that is, land, labor and capital. The new broader definition of resources includes many more factors within the company's operating environment, many of which are intangible resources. There are several ways of classifying these resources; perhaps the most useful of these is the one suggested by Hofer and Schendel (1978), which divides corporate resources into the following broad categories; Physical, Financial, Human, Technological, Organizational, Tangible and Intangible. Among the intangible resources are included; brands, patents, know-how, reputation and customer relations. These are all resources which may be owned by the company and which it may utilize to develop competitive advantage, profits and growth.

Tangible resources are defined as those factors that can be observed, are financial in nature, have physical properties, are controlled and owned by the firm and contain an accounting value as recorded on the firm's financial statement. These resources have been described as the firm's basic factor stocks (Amit and Schoemaker, 1993). Examples include: plant, equipment, land, other capital goods, and stocks and deposits.

Lev (2001, p.5) defines an intangible resource as "a claim to future benefits that does not have a physical or financial (a stock or bond) embodiment." The International Accounting Standards 38 (IASB, 1998) defines intangible resources as "non-monetary assets without physical substance held for use in production or supply of goods and services, for rental to others, or for administrative purposes that are identifiable, that are controlled by an enterprise as a result of past events, and from which future economic benefits are expected to flow to the enterprise."

Hall (1992, 1993) suggests that intangible resources essentially fall into two categories: assets and skills. If the intangible resource is something that the firm 'has,' it is an asset. If the intangible resource is something that the firm 'does,' it is representative of the firm's skills (know-how) or its capabilities. Hall's (1992, 1993) approach is adopted in this study. In line with this approach, the following classes of intangible resources are described and will serve as a foundation for this research.

Intangible resources that are assets include: intellectual property assets (copyrights, patents, registered designs, proprietary (or held-in-secret) technology and trademarks), Organizational assets (contracts, culture, human resource management policies and organizational structure) and reputation assets (brand reputation, company reputation, customer service reputation and product/service reputation). Intangible resources that are skills include: capabilities (employee know-how, managerial know-how, relational abilities and routines).

The global market in general and the knowledge-based economy in particular, is required to increase its capacity to compete on the basis of its intellectual competencies, which must be strategically aligned with the objectives of the organization. The dynamics of the economy dictate that businesses will have to find creative means by which to gravitate with the changes. The pharmaceutical firm is no exception. For organizations such as this, operating in the realm of developing medical therapeutic agents, the key to success clearly lies in the ability to use intangible resources as a major competency better than other pharmaceuticals. As organizations are required to change relative to

heightened competition, improved information systems processes, advanced technology, and overall increased organizational learning, managers must have a broad perspective of the organization's capabilities, so that implementing new strategies is managed effectively.

1.1.2 Global Pharmaceutical Industry

The global pharmaceuticals industry has long been considered one of the most profitable industries, and historically, it has proven itself to be reassuringly defensive one during bear markets. However, the perception of pharmaceuticals as a 'safe bet' is changing as investor concern mounts over a number of challenges facing the industry. Patents on major drugs continue to expire while companies struggle to produce innovative breakthroughs to offset the impact of generic substitutes (Nissan, 2005). One cannot stress enough what a risky, expensive and time consuming business the development of pharmaceuticals is. It normally takes an average of 12-15 years and 300 million USD to develop a therapeutic agent into a new commercial entity (Spilker, 1989).

Pharmaceutical companies are under pressure to demonstrate reasonable efforts are made to ensure access to essential medicines in developing countries. Failure to do so places the entire industry's reputation at risk, and threatens its 'social licenses to operate'. A landmark event which clearly demonstrated the gravity of reputation risk was the 2001 South African Aids trial (Vinayak, 2001).

The challenges of the pharmaceutical industry are enormous. Even the largest firms in the pharmaceutical industry receive most of their sales from only a handful of products

(Sutton, 1999). Simultaneously, their total sales are increasingly coming from off-patent drugs. Consequently, pharmaceutical firms are bound to face generic competition, shortening product lifecycles and eroding profits. The drug development process and associated regulatory procedures have become slower and more expensive. Various delays in the process of drug approval result in lost sales and a decrease in effective product patent life. Public authorities are reluctant to extend patent times unless drug prices come down, since they are faced by pressures for medical cost containment (Muller and Uedelhofen, 1997).

The most significant single reason behind cost explosion in the health care is the demographic rise of the older age groups in the population of the industrialized countries. Facing escalating health care budgets, governments are poised to employ price controls. The pharmaceutical industry has been one of the primary targets of cost-cutting measures both in the US and in the EU – a choice that is ‘not logical but politically convenient (Redwood, 1989).

1.1.3 Kenyan Pharmaceutical Industry

The pharmaceutical industry consists of three segments, namely the manufacturers, distributors and retailers. Kenya is currently the largest producer of pharmaceutical products in the COMESA region, supplying about 50% of the regions market (Economic survey, 2004). Out of the region’s estimated 50 recognized pharmaceutical manufacturers; approximately 30 are based in Kenya (EPZ survey, 2005). It is

approximated that about 9,000 pharmaceutical products have been registered for sale in Kenya. These are categorized according to particular levels of outlets as free sales/OTC (Over The Counter), pharmacy technologist dispensable, or pharmacist dispensable/prescription only (Pharmacy and Poisons Board).

The pharmaceutical industry in Kenya consists of 30 licensed manufacturers, distributors, retailers, health institutions, health management organizations (HMOs) and traditional/herbal medicines (Kenya factbook, 2001). It is the manufacturing segment of the industry which forms the basis of this study. The manufacturing sector consists of both local and multinational corporations, subsidiaries, joint ventures and other working under franchise or licenses. Most are located within Nairobi and its environs.

The industry compounds and repackages 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 products (Industrial sector analysis report (MoH), 2001). 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.

This industry has had its fair share of challenges that have seen firms reorganize and restructure themselves so as to continue being profitable. Key among these is the scourge of the 20th and 21st centuries, HIV/AIDS that has seen far reaching regulation and

legislation introduced in the industry. The regulation were in an attempt to make ARVS affordable, accessible, maintain quality and ensure sustainable supply, provide incentives for the local industry to manufacture generics, ensure appropriate use by providing guidelines and training for prescribing doctors.

In 2001 the government passed the intellectual property bill, now IP Act (2001) that allows the manufacture, importation and distribution of generics of patent protected medicines that the country may deem necessary to manage AIDS. IP Act also allows parallel importation of certain drugs on the Kenyan market if there is a significant price differential but with prior notification of the pharma-holder of patent rights and within a stringent regulatory framework. The channels of distribution of pharmaceuticals as set out in Cap 244 laws of Kenya have been altered 'without registration' an evolution driven by customers demand allowing HIV patients to fill their prescription at the manufacturer's warehouse or doctors office.

NGOs like Medicins San Frontiers (MSF) have been allowed to import into the country WHO certified ARVs and other generics to alleviate the suffering of the HIV infected (GW Data, 2002). These changes in the industry brought about by the HIV/AIDS scourge have a significant impact on the sales of firms with products in the same therapeutic categories.

There has also been a call by lobbyists and activists to lower prices or donate drugs to treat the sick who can't afford to buy medicines (GW Data, 2002). Alternative treatments

like micronutrients (e.g. GLND) and herbal remedies (e.g. Makini Herbal Clinic) have become significant substitute products. Increased number of health management organization (HMOs) operating in Kenya in the last 10 years e.g. AAR, Maxximed etc. has also added to the woes of the pharma manufacturer. These HMOs have predominantly focused on cost cutting measures to enable sustainability thus leading majority of the pharma companies which sell branded products to result to other measures other than prices to remain competitive. The paradigm shift is now geared towards branding generic drugs to differentiate from other generic manufacturers. Pharmaceutical companies have begun to build up new drug development capabilities to enhance product brand and quality. This is in a bid to align their strategies to ensure sustained performance in the industry.

The industry relies heavily on imported raw materials, over 95% of the raw material inputs are imported (Ministry of commerce and industry, 1996). As a result the cost of manufacture is too high. With the increasing high cost of health care and calls to lower drug prices leaves the pharmaceutical manufacturer with no choice other than to device new strategies to remain competitive. The customer the industry is serving today is more aware about diseases and their management, more demanding of faster services and lower prices, has become an activist too, for cause he/she deems worthy of support. Customers are able to decide on what brands to use and many a times buy directly from the manufacturer. The ability to understand and thus influence the customers' (doctors) prescription is one of the greatest marketing challenges in the industry.

The Kenya pharmaceutical industry is facing a ravaged Kenyan economy (though now on recovery path), contraband, pressure to reduce prices on drugs, the ever increasing competition amongst firms, entry of HMOs who dictate the drugs to be prescribed by doctors (as opposed to letting market forces to do so) (Majumder, 1996), entry of generics and of course HIV/AIDS scourge. There has been heightened cooperation in some areas by different players to safeguard the industry. Areas of mutual agreement include regulation and pilferage containment, disagreements on parallel imports, generics and patents protection especially between the multinational and local manufacturers (GW Data, 2002). Differentiation has gone into overdrive in pricing, dose simplification, channels of distribution, presentation of clinical data, on-time delivery and the way samples or starter packs are used especially regarding ARVs. Lobbying to have a drug included in a hospital drug formulary or the firm get a favorable corporate image has become very important. Alliances, mergers, franchises and licensing have also become common phenomena in this industry. For example in 2000 Glaxowellcome merged with SmithKline Beecham to form GlaxoSmithKline, in 1999, Astra merged with Zeneca to form AstraZeneca etc.

Thus, the new competitive landscape in the pharmaceutical sector in Kenya is changing and most firms are seeking ways to revise their strategies and resource allocation, as well as updating their environmental scanning system so as to select the most suitable avenues to enhance their profitability. Restructuring, innovating, creating alliances and internal efficiencies seems to be the mode firms are utilizing to compete in the new economy.

1.2 Statement of the Research Problem

The pharmaceutical industry is heavily characterized as one of the most innovative, knowledge-based, and research and development industry. The innovation in the industry has been in a large measure driven by a strong patent protection law. Further, healthcare is very much a national issue strongly anchored in cultural values, beliefs and tradition. Governments, in their quest to safeguard and make healthcare more affordable to its citizen are employing price control measures. Public authorities are reluctant to extend patent times unless drug prices come down.

Given the small Kenyan market size, pharmaceutical companies may not afford the vast costs of a whole range new drug R&D, covering from discovering new chemicals to developing new drugs. Therefore, most pharmaceutical companies in Kenya are essentially generic drug manufacturers. The competition for this type of companies mainly focuses on low costs and prices. Other players such as the HMOs and herbal clinics not to mention counterfeits are exerting pressure on the mainstream drug manufacturers. Pharmaceutical companies are under pressure from lobby groups to demonstrate reasonable efforts are made to ensure access to essential medicines, particularly ARVs, in developing countries. The challenge facing to-days pharma is the need to demonstrate that the industry does not place profits above people. The question is, “how will the firms recoup the large capital outlay in R&D, make some profit margin and still be social responsible?”

The resource based theory (RBT) as a body of knowledge argues that the competitiveness of a firm lies in the way it manages its resources, skills or capabilities. The RBT proponents argue that intangible resources are the major source of sustainable competitive advantage in organizations. The pharmaceutical firm is no exception. Organization such as this, operating in the realm of developing medical therapeutic agents, the key to success lies in the ability to use intangible assets as a major competency better than other pharmaceuticals (Boyce S, 2003). Competition and challenges in the Kenyan pharmaceutical industry is forcing firms to be creative in their strategic efforts as businesses are learning to improve the way customers/clients are served. As the need to consistently monitor performance against defined organizational goals, and to sustain a competitive advantage, pharmaceutical firms encounter challenges for effectively leading their intangible assets to maximize relevant competencies aligned with organizational change.

This study will seek to examine the role intangible assets play to create competitive advantage, while seeking to understand the challenges that threaten these resources' potential to sustain a competitive advantage among the Kenyan pharmaceutical manufacturers.

Prior studies in the field of pharmaceutical industry include that of Cool and Schendel (1998) on Performance difference among firms in the US pharmaceutical industry, Yeoh and Roth (1999) on Sustained performance in the US pharmaceutical industry, Mansfield,

E (1986) on Patents and innovation: An empirical study of 100 US pharmaceutical firms. Leung and Gan wang (2000) on streamlining product development in the pharmaceutical industry using fall-back option. Local studies in the area of pharmaceuticals have been undertaken by such researchers as Muiva (2001) a survey of the use of competitive intelligence system in the Kenyan pharmaceutical industry, Naikuni (2001) on strategic responses undertaken by pharmaceutical manufacturers to deal with the industry challenges.

1.3 Objective of the Study

- a) To examine the role intangible assets play among Kenyan pharmaceutical manufacturers to sustain competitive advantage.
- b) To determine the challenges facing intangible assets' potential as sources of sustainable competitive advantage among pharmaceutical manufacturers.

1.4 Significance of the Study

The findings of this study are of significance in the following ways:

The results of this study may be useful to practitioners and firms in the pharmaceutical industry in Kenya who can use this information to gain a deeper understanding of using intangible assets to be competitive.

Intangible assets have remained a critical area in research. The current study will go a long way in providing an ample base for future research in similar institutions, further; the study will assist academicians to broaden their syllabus on competitive strategy using intangible assets.

CHAPTER TWO: LITERATURE REVIEW

2.1 Concept of Competitive Advantage

Competitive advantage is the result of a strategy capable of helping a firm to maintain and sustain a favorable market position. This position is translated into higher profits compared to those obtained by competitors operating in the same industry. Several theories to the concept of competitive advantage exist; most notable are contribution by Michael Porter and the Resource based theory.

According to Porter (1985) a firm can gain a successful market position as a result of two factors: the industrial environment and the position assumed by the firm inside the market. Porter (1985) points out that industry attraction depends on the mutual influence of five competitive forces: competitors, new entrants, substitute producers, demand and suppliers. The two way interaction of these forces influences the profit leverage available to firms operating in the same industry. Porter (1985) further argues that, firm profits are also influenced by the specific position the firm occupies in the industrial environment. Firms operating in the same industry can decide to adopt different strategies; choosing between the so called 'generic competitive strategies': cost leadership, differentiation and focus.

In explaining the process of gaining competitive advantage, Porter introduces further the concept of 'value chain' claiming that: "competitive advantage results from a firm's

ability to perform the required activities at a collectively lower cost than rivals, or perform some activities in unique ways that create buyer value and hence allow the firm to command a premium price'' (Porter 1991, 102). In summary, Porter's theory is outward looking mainly focusing on the environment (factors external to the firm).

The Resource based theory (RBT) of competitive advantage emerged in 1980 when Porter's theory could not explain the notion of lasting competitive advantage. RBT chooses the single firm, its strategy, its resources, its strengths and weak points as the objects of analysis. It is therefore inward looking. According to the many proponents (Wernerfelt, 1984; Mahoney and Pandian, 1992; Barney, 1986a, b, c; Amit and Schoemaker, 1983. among others) of RBT, competitive advantage results from value creating resources of the firm. The firm and its resources are the focal level of analysis in RBT (Chen, 1996), and the underlying orientation considers a firm as a unique bundle of linked, idiosyncratic, tangible and intangible assets and resources (April, 2002; Hall, 1992; Penrose, 1959; Wernerfelt, 1984). One of the central notions of the RBT is that firms in the same industry compete with heterogeneously distributed bundles of resources acquired over time (Potgieter, April and Bishop, 2005), because of disparate approaches (April, 2002), because of differing histories of strategic choice and performance (April & Ahmadilzadi, 2004), because firms' management appear to seek asymmetric competitive positions and take on different risk portfolios (April, 2004), because of the various routines it has developed to manage them (Teece et al., 1991) and because of asymmetric capital endowments (April, 2004). It is the intangible resources that are considered to be a

source of competitive advantage because they resist replication, substitution, are rare and are valuable.

2.2 Sustainable Competitive Advantage

A firm has a competitive advantage when it has a value-creating strategy that earns a persistently higher rate of profit than its rival. The competitive advantage is sustained when the value-creating strategy, is not being implemented by its competitors and when these other firms are unable to reach an 'equilibrium level' (Hirshliefer, 1980) with the firm enjoying the advantage. According to Porter (1991), sustainable competitive advantage is derived from: a unique competitive position, clear tradeoffs and choices vis-à-vis competitors, activities tailored to the company's strategy, a high degree of fit across activities and a high degree of operational effectiveness.

The RBT focuses on resources as the main sources of competitive advantage. Barney (1991), Grant (1991) and Teece, Pisano and Shuen (1997) have found that competitive advantages, capabilities and the treatment of intangible assets as the sources of sustainable competitive advantage. RBT refer to resources that are a source of sustainable competitive advantage as strategic resources. RBT proponents argue that not all resources are source of competitive and therefore for a resource to be a strategic resource and hence a source of sustainable competitive advantage it must bear certain characteristics.

Grant, 1991; Hamel and Prahalad, 1990, among others) point out the characteristics firms need for sustainability of competitive advantage are; durability, transparency, transferability and replicability. Barney (1991) point out that to sustain a competitive advantage a company's own resources must be difficult to imitate, not easily substituted other resources, incapable of being rapidly developed elsewhere and firmly attached to the company that deploys or uses them.

2.3 Resource Based Theory of the Firm (RBT)

The RBT, the theory selected for this study explains better than any other theory the source of competitive advantages in an organization. The RBT of the firm and the conditions underlying business success or performance assumes that each organization is a collection of unique resources and capabilities, each of which provides the basis for its strategy (Barney, 1991; Hitt, Ireland and Hoskisson, 2000). The view is grounded on the perspective that a firm's internal environment, (in terms of its resources and capabilities developed), is crucial to the determination of strategic actions than is the external environment (Grant, 1991).

The advancement of RBT has been under scrutiny for many years. Though Penrose's was the pioneer, the initial popularity started in 1960's, when some researchers suggested (Andrews, 1971; Ansoff, 1965; Hofer and Schendel, 1978) that firms could have sustained competitive advantages by implementing strategies that exploit their internal strengths. Yet, it was not until the late 1980's with the work of Wernerfelt's (1984) when

the RBT became admired. However, the initial acknowledgement of the impending significance of the firm specific resources, go back to Chamberlin and Robinson in the 1930s (Fahy, 2000). As early as 1933, Chamberlin had already identified the existence of key capabilities for firms, example technical know-how, reputation, brand awareness, the ability of managers to work together or in teams, patents, and trademarks.

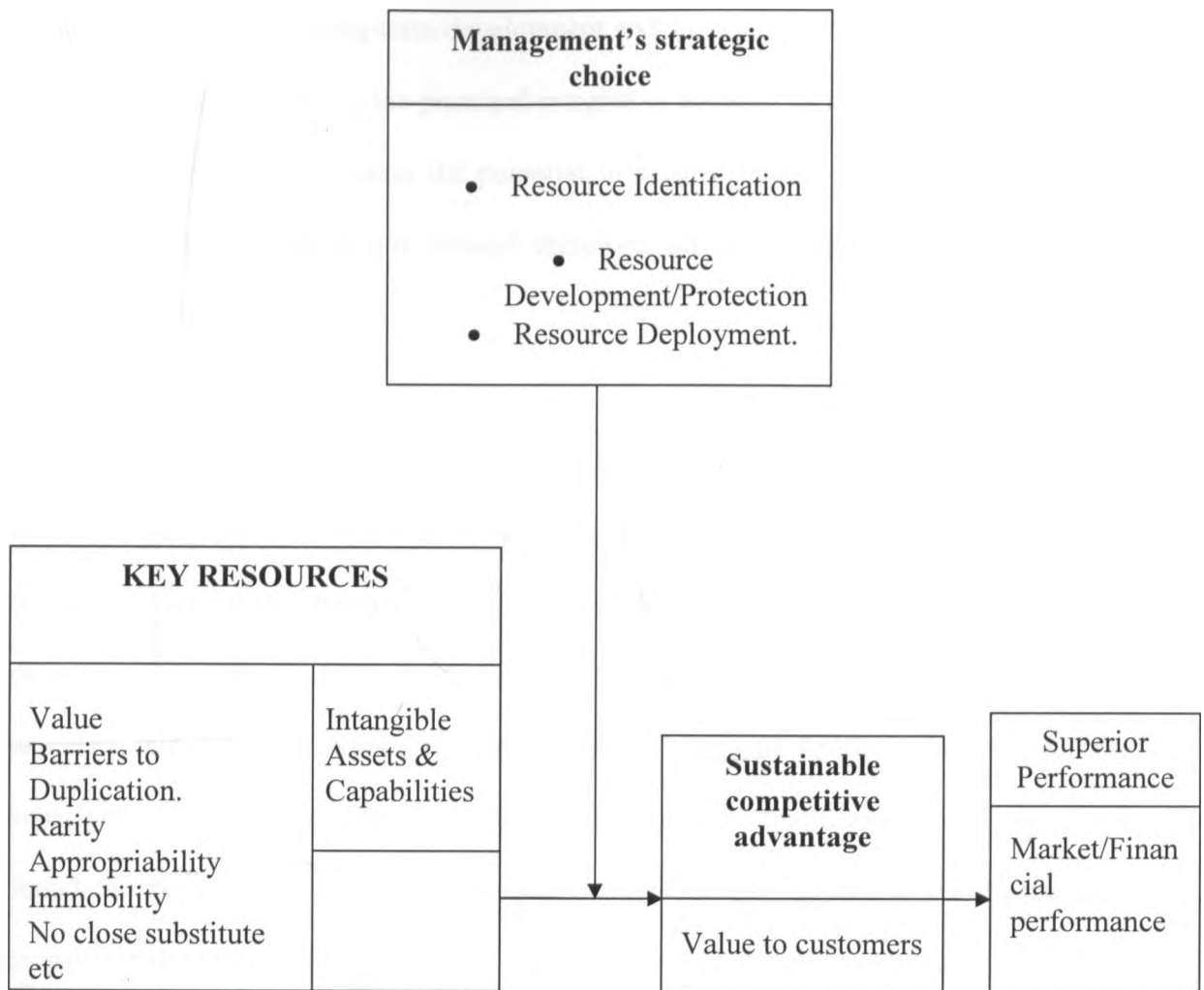
An extensive review of the literature on the subject shows that the RBT includes and is intertwined with concepts from mainstream strategy management research and has also become a paradigm in the field (Peteraf, 1993), specifically its focus on distinctive competencies (Andrews, 1971; Ansoff, 1965) of heterogeneous assets. The contribution this theory makes to this study resides on the acknowledging that intangible assets and capabilities are the major source of competitive advantage. Renowned authors have contributed positively to the development of this view, among them Barney (1991), Grant (1991) and Teece, Pisano and Shuen (1997). They point out that the RBT fits comfortably with firm-specific capabilities, assets and the existence of isolating mechanisms as the fundamental determinants of firm success. Other studies like, stress that (Schulze, 1994) intangible assets, as well as the emphasis on sustainable competitive advantage needed, and show strong concern for preventing imitation of valuable resources (Grant, 1991).

Additionally, a great deal of research has focused on sources of sustained competitive advantage, on either isolating a firm's opportunities and threats (Porter, 1980, 1985), unfolding its strengths and weaknesses (Hofer and Schendel, 1978). Other well-known models and typologies of strategy include: Ansoff (1965) models, the framework of

Andrews (1971) and Porter (1980). Reviewing of these models elicited diverse points of view. Per example, Porter's work sees the firm as a bundle of activities on the contrary RBT sees it as a bundle of unique resources. Porter (1990) focused on the environment-performance relationship with little emphasis on the impact of firm attributes on performance. He also assumed that firms are identical in terms of relevant resources and that any attempt to develop resource heterogeneity has no long-term feasibility because of the high mobility of strategic resources.

The RBT does reject the necessity of having monopolistic earnings to support competitive initiatives. To the Chicago view, the RBT sees returns as a result of how fortunate the firm might be in acquiring, combining and deploying resources, rather than the structure of the industry in which the firm belongs to, as is the case of the Bain type IO.

Figure1: A Resource-Based Model of Sustainable Competitive Advantage



Source: adapted from Fahy.J, (2001) model.

2.4 Strategic Resources

A strategic resource refers to a key resource that a company may own or have access to and is critical to the company's long-term development and success. This term is commonly used by RBT proponents. One of the principal insights of the RBT is that not all resources are of equal importance or possess the potential to be a source of sustainable competitive advantage. Much attention has focused therefore, on the characteristics of advantage-creating resources.

Barney (1991) proposed that advantage-creating resources must meet four conditions, namely, value, rareness, inimitability and non-substitutability. Grant (1991) argues that levels of durability, transparency, transferability and replicability are important determinants. Collis and Montgomery (1995) suggest that they must meet five tests, namely, inimitability, durability, appropriability, substitutability and competitive superiority. From the foregoing, it can therefore be deduced that resources can represent a foundation for key competency only if they are: valuable (i.e. buyers have to be prepared to pay for the additional value based on those resources), limited (scarce), difficult to substitute, (i.e. there are no similar resources which would provide the same efficiency to the company), difficult to imitate (i.e. resources irreproducible by other companies) and transferable into innovative products or markets.

2.5 Intangible Assets as Strategic Assets

Although it has been recognized for a long time that the economic prosperity for many firms rests in intangible assets and their useful application (Teece, 1998), the emphasis on them is relatively new. Many proponents of RBT argue that not all assets a firm owns or control have the same strategic value, some resources can be more valuable than others, and this is the case of intangible assets (Itam & Roehl, 1987; Hall, 1992, 1993; Barney, 1991; Grant 1991, 1996.). Other researchers like Aaker (1992) specify that drafting a strategy, defining how the firm chooses to compete, obtaining sustained competitive advantage valued by the organization client base, and supported by resources, will be the most relevant key to success in the future.

Intangible assets have relatively unlimited capacity and firms can exploit their value by using them in-house, renting them (e.g. license) or selling them (e.g. selling a brand) (Wernerfelt 1989). They are relatively resistant to duplication efforts by competitors. Intellectual property is afforded regulatory protection (Hall 1992), while databases, networks and reputation are examples of asset stocks (Dierickx and Cool 1989) and the inherent complexity and specificity of their accumulation hinders imitability and substitutability in the short run. (Teece, 2000) easy replicability of information, a central ingredient of knowledge assets, has important implications for its production cost structure: information has high fixed cost, but close to zero marginal cost. Moreover, fixed cost is largely non-recoverable in case of failure (Shapiro & Varian, 1999).

Therefore the support of the legal system in protecting intellectual property is crucial in encouraging economic innovation activity in knowledge intensive production.

Trade in intangible products involves a transfer of right of use (a license), while the proprietary right remain with the seller, since, from the legal perspective, the item of sale is a copy of the original intangible product-which, in turn, from the economic perspective is an asset. The right of use of an intangible asset cannot be transferred to a third party nor can it be altered without the consent of the seller (licensor). No such limitations apply to tangible assets. (Takki, 1999). An inherent characteristic of intellectual property, i.e., the 'fuzziness' of property boundaries, and the consequent vagueness of the legislation protecting IP hamper trade thereof. Takki (1999, p. 65) lists protecting competitive advantage as one of the concerns firms possess intellectual property rights.

2.6 Ways of Achieving Competitive Advantage Using Intangible Resources

Sustaining a competitive advantage is imperative for firms that are in dynamic industries, which require effective strategic implementation to manage such changing situations. Intangible assets have been known to play different roles to sustain competitive advantage. Bosworth (2003) lists a number of ways in which intangibles help companies to achieve competitive advantage, namely, identifying the niche in the market for new entrant, as a source of collateral for borrowing funds, as a source of revenues through

licensing and franchising, providing residual income on their sale at cessation of trading and for developing the customer base.

Slowik, et al. (2000) noted that there is a general perception by consumers that branded goods (such as prescription medicines) are of higher quality than non-branded. This can enable a trade mark/ brand owner to charge a premium price. He adds that the main legal function of trade marks is to enable consumers to quickly and efficiently recognize the trade mark holder's goods and services. Trade marks also provide an essential focus that allows the company to channel advertising and other forms of market promotion, thereby, controlling the message going out to the market about the company and its products or services. Moslehi (2000) points out that intangible asset enable firms to innovate and invest in research and development. He continues to argue that they (intangibles) give firms required monopoly power to undertake R&D and meet preferences of informed consumer.

Bosworth (2003) also argued that intangible assets have been used as tools to woo strategic partners to form alliances. He points out that it becomes easier for an organization with elaborate network or of reputation to enter into a strategic relationship/alliance or mergers. Good examples are Honda and Rover, Glaxo Wellcome and Smithkline Beecham. Other researchers have also found out that intangible assets can be used for effective communication and improving company image (reputation).

2.7 Risks and Challenges facing Intangible Assets' Potential for Competitive Advantage

Along with potentially great rewards of the intangible assets in the pharmaceutical sector come risks and challenges that must be managed as part of a comprehensive strategy. The managerial challenge is to identify the risks and or threats and put in measures and or strategies to mitigate them. Moslehi (2000) cites the issue of globalization as a major threat to intangible assets' potential. He points out that outsourcing of chip manufacturing has burgeoned and there are concerns about IP rights and protection, counterfeiting, protectionism and ineffective enforcement of property laws. He further notes the expensive and endless litigation for potential infringement or improper use of copyrights, trademarks and brand names.

According to Teece (2000), the importance of legally protected property rights grows with weak inherent appropriability. From this perspective, Paija (2003) notes that IPRs provide only imperfect protection of competitive advantage: patents expire, copyrights may be circumvented and trade secrets may break. The emergence of HIV/AIDS has had serious implication regarding the competitiveness in the pharmaceutical sector especially in Kenya. The Kenyan government introduced regulation and legislation in the sector. The IP Act (2001) was passed to allow for manufacture, importation and distribution of generics of patent protected medicines.

Nissan (2003) cites the issue of access to essential medicines as one of the most important challenge facing the sector. She argues that social responsibility affects a

company's reputation. Pharmaceutical companies are under pressure to demonstrate reasonable efforts are made to ensure access to essential medicines in developing countries. Failure to do so places the entire industry's reputation at risk, and threatens its 'social license to operate'. A landmark event which clearly demonstrates the gravity of reputational risk was the 2001 South Africa Aids trial. A group of 39 companies, including GlaxoSmithKline, contested a law which would allow cheaper, generic Aids drug enter the market. A well-publicized activist campaign caused such a backlash that the companies were forced to unconditionally drop the case (GW 2001). The result was a very profitable sector's reputation tarnished with accusations of placing profits above people.

2.8 Criticism leveled against RBT

The theoretical foundation of RBT most certainly has its limitations. According to Grant (1991: 115), the implications of RBT for strategic management are unclear for two reasons: (a) the various contributions lack a single integrating framework, and (b) little effort has been made to develop the practical implications of this theory. It does not provide rigorous means for translating 'feeder' resources into eventual core competencies. Bowman and Faulkner (1997: 34) believe that "although the firm's unique resources help to explain why some firms outperform their rivals; this is only one part of the explanation." They claim that 'most contributors to the RBT of the firm recognize this problem, but they either tend to assume a resource is valuable and they then focus their attention on problems of other firms copying these resources, or they define valuable

resources in rather vague generalized way.” Bromiley (1993), similarly, notes that RBT requires some concrete definitions of resource that is more insightful than ‘anything that leads to performance.’

The RBT does not give the due importance to the influence of past decisions on the actual behavior of firms. *‘The success factor approach fails (...) because it does not give the history its due. It does not adequately account for the constraints imposed both by past decisions on the current ones, and by current ones on those yet to come’* (Ghemawat 1991, 9). D’Aveni (1994) criticizes the RBT by posing the question, *‘is the sustainability of competitive advantage the real focus? Is it possible to imagine the constant creation of new short-term competitive advantages in hyper-competitive environment?’*

Calcagno (2000) also argued that RBT is unable to identify the causal mechanisms responsible for creating a durable competitive advantage. The relationship between resources and competencies on one side and competitive advantage and success on the other side is not explained. Further Calcagno (2000), pointed out that RBT is limited to the consideration of the firm out of its industrial context. Distinctive resources and competencies are taken into account without considering industrial factors which influence the firm’s strategy.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design

The research used a descriptive survey method to assist the researcher to identify the competitive strategies adopted by pharmaceutical organizations. Mugenda and Mugenda (1999) notes that a descriptive research attempts to collect data from members of a population and helps the researcher to get a description of the variables. This research design was deemed relevant to this study because the researcher had information about the variables and was in a position to establish any relationship existing in them.

3.2 Population

The population of this study comprised of pharmaceutical firms involved in production of pharmaceutical products within Nairobi. According to the Kenyan Medical Directory (2005) there are 30 pharmaceutical firms manufacturing pharmaceutical products located in Nairobi. The researcher undertook a census survey of all the pharmaceutical manufacturing firms located in Nairobi.

3.3 Data Collection

Data was collected through semi-structured questionnaire comprising open ended and close ended questions. The questionnaire was divided into three sections. Section A was used to

collect general information on the company profile, performance and ownership. Section B examined the extent of use and role played by intangible assets on the organization's business and section C was geared towards challenges faced by intangible assets. Both sections B and C were geared towards response to variables aimed at achieving the study objective.

The target respondents were the production managers or their equivalents. The mailing method was used to administer the questionnaire.

3.4 Data Analysis

Data collected was edited for accuracy, uniformity, consistency and completeness and arranged to enable coding and tabulation before statistical analysis (Nachmias & Nachmias, 1999; Kerama, 2003). The data was cross-tabulated to enable the responses be statistically coded. Data was largely measured on the likert scale. Descriptive statistics were used by way of percentages, tables, proportions and frequency distributions.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter gives a detailed analysis of the data collected and presents the findings. The data has been analyzed and presented in form of frequency tables, percentages and charts. Findings in this chapter have tried to fulfill the objectives of this study. The total numbers of firms involved in the study are 25 out of the target of 30 thus generating a response rate of 83%.

4.2 Profile of the Organization

This section provides a profile of the organizations involved in the study. This data was obtained from questionnaires that were filled in by the respondents. This section contains the ownership structure of the organization, years in operation and sales turnover. This section intended to identify the nature of the organizations that were involved in the study.

4.2.1 Ownership of the Organization

The researcher was interested in the ownership of the organizations as this had a bearing as to usage of intangible assets especially intellectual property rights. Foreign owned organizations competitive strategy (s) is to a large extent formulated from their headquarters and will be influenced by the intellectual property law in such countries. On

the other hand, local owned firms competitive strategy are formulated locally and are likely to be influenced by local ideals. In this section respondents were asked to indicate their ownership from a list of three categories provided. The table below summarizes the results as pertains to ownership.

Table 4.2.1 Ownership of Organization

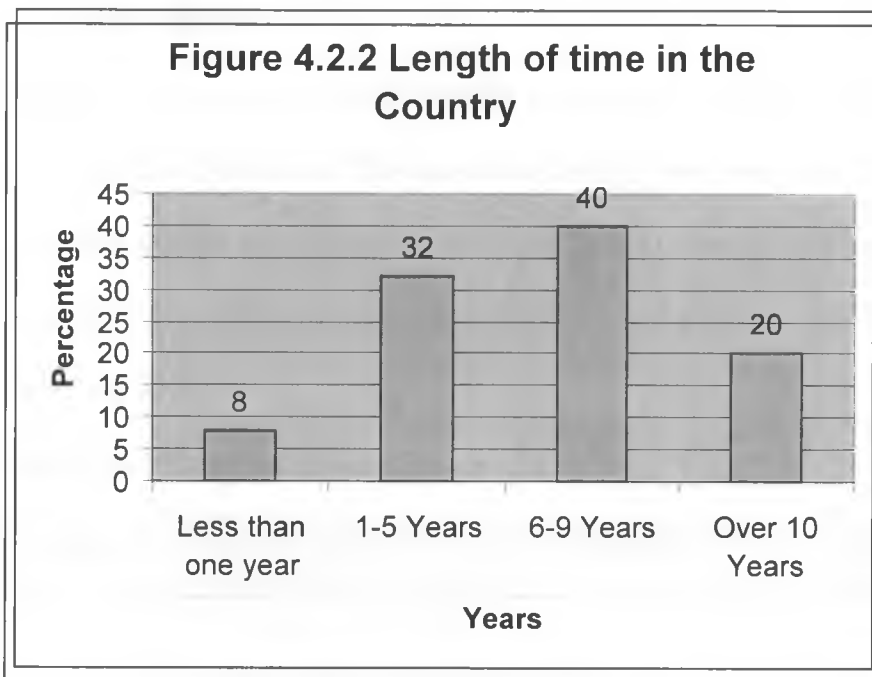
Ownership	Frequency	Percentage
Local	18	72%
Foreign	3	12%
Mixed	4	16%
TOTAL	25	100%

Source: Author (2007)

Majority of the firms involved in the survey were locally owned comprising of 72% of the firms involved in the study, 16% had a mixed ownership while only 12% of the firms involved in the survey were owned exclusively by foreigners. It can be concluded that majority of the players in the Kenyan pharmaceutical manufacturers are local. This means that the industry is essentially controlled by generic drug manufacturers, who do not have the muscle to invest in R&D and hence intellectual property law for enforcement of intellectual property rights may not be a major requirement.

4.2.2 Years in Operation

The researcher was interested in the years of operation because the life of an organization has an influence on wealth and resource accumulation. Further it may determine the size, investment in R&D and ability of the organization to retain high caliber manpower. In this section respondents were asked to indicate how long they have been in operation from a list of ranges of period provided. The results are as summarized in the graph below.



Source: Author (2007)

The above graph shows that 40% of the firms involved in the survey had been in the country for 6 to 9 years now, 32% had been in the country for 1 to 5 years, 20% had been in the country for over 10 years while only 8% had been in the country for less than a year.

From the result, it is clear that majority of the firms are fairly old with 60% of the respondents having been in operation for at least 6 years. This means that there is high possibility of the companies' therapeutic agents to have been exposed to the consumers for long thus enhancing their identity. There is also possibility that firms have had time to amass wealth and resource through processes that may be difficult for others to copy (Dierickx and Cool, 1989).

4.2.3 Size Turnover

Size has a bearing on a firm's wealth and resource availability for major research and development of products. The researcher chose to use sales turnover as a measure of size as it indicates the revenue generated by the firm's resources and investment. Respondents were provided with a list of turnover bands to choose from. The results are summarized in the table below.

Table 4.2.3 Sales Turnover

Turnover	Frequency	Percentage
Between Kshs 50 million-150 million	10	40.0
Between Kshs 160M-500M	12	48.0
Between Kshs 600M-1B	2	8.0
Between Kshs 1.5B-2B	1	4.0
Total	25	100.0

Source: Author (2007)

The above table shows that 48% of the pharmaceutical firms involved in the survey had an annual sales turnover of between 160 million to 500 million, 40% had sales turnover

of between Kshs 50 million to 150 million. 8% had sales turnover of between Kshs 600 million to 1 billion and only 4% had sales turnover of Kshs 1.5 billion to Kshs 2 billion. Going by the result, majority of the Kenyan pharmaceutical firms are fairly medium. This means there is a high possibility of resource constraint and low R&D investment.

4.3 Application of Intangible Assets

Intangible assets have been a cornerstone of virtually every industry and business. But only over the past two or three decades has the value and wealth generated by the various forms of intangible assets risen to the same levels as those gained from tangible assets. Consequently, there has been an increasing focus on creation and usage of intangible assets among pharmaceutical manufacturers, which consider it a major competitive advantage.

In this section, respondents were required to indicate their extent of use, from a number of commonly known intangible assets in the pharmaceutical industry. The results are tabulated below.

Table 4.3 Application of Intangible Assets

Intangible assets	Very great extent		Great extent		Moderate extent		Less extent		No extent	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Copyrights	2	8.0	9	36.0	12	48.0	2	8.0	0	0.0
Patents	14	56.0	8	32.0	3	12.0	0	0.0	0	0.0
Trademarks	12	48.0	6	24.0	4	16.0	3	12.0	0	0.0
Registered design	5	20.0	7	28.0	3	12.0	9	36.0	1	4.0
Contractual relationships	7	28.0	5	20.0	9	36.0	4	16.0	0	0.0
Proprietary technology	11	44.0	6	24.0	8	32.0	0	0.0	0	0.0
Company reputation	14	56.0	6	24.0	5	20.0	0	0.0	0	0.0
Brand reputation	13	52.0	8	32.0	4	16.0	0	0.0	0	0.0
Culture	6	24.0	7	28.0	9	36.0	3	12.0	0	0.0
Customer service reputation	16	64.0	9	36.0	0	0.0	0	0.0	0	0.0
Human resource management policies	13	52.0	10	40.0	2	8.0	0	0.0	0	0.0

Source: Author (2007)

With regard to the use of copyrights, 36% of the firms used them to a large extent while 48% of the firms used them to a moderate extent. On the other hand majority of the firms involved in the study comprising of 56% of the total population used patents to a very

great extent and 48% used trademarks to a very great extent too. With regard to registered design 36% of the firms involved in the survey used them to less extent while the same percentage used contractual relationships to a moderate extent. The use of proprietary technology to a very large extent was reported by 44% of the total population, while 56% of the total population used company reputation to a very large extent in order to achieve competitive advantage. Brand reputation, human resource management policies and customer service reputation were also in use to a very large extent by majority of the firms involved in the survey. However, the use of culture to achieve competitive advantage was in use by majority of the firms involved in the survey to a moderate extent.

The results indicate that pharmaceutical firms in Kenya have embraced the use of intangible assets as part of competitive strategy. Majority of the respondents embraced the use of patents, brand reputation, human resource policies, customer service reputation, trademarks and proprietary technology. The results affirms Boyce (2003) assertion that pharmaceutical firms' key to success lies in their ability to use intellectual capital as a major competency.

4.4 Role of Intangible Assets

Trade in intangible products involves a transfer of right of use, while the proprietary right remains with the seller, since, from the legal perspective; the item of sale is a copy of the original intangible product-which, in turn, from the economic perspective is an asset. The right of use of an intangible asset cannot be transferred to a third party nor can it be

altered without the consent of the seller (licensor). No such limitations apply to tangible assets. In this category, the interest of the researcher was to find out the role of intangible assets in the organization.

Table 4.4 Role of Intangible Assets

Role	Very great extent		Great extent		Moderate extent		Less extent		No extent	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Attracting strategic partners	3	12.0	5	20.0	15	60.0	2	8.0	0	0.0
Collateral to source for finances	0	0.0	3	12.0	14	56.0	4	16.0	4	16.0
Source of revenue through franchising	2	8.0	14	56.0	9	36.0	0	0.0	0	0.0
Source of revenue through licensing	4	16.0	12	48.0	6	24.0	3	12.0	0	0.0
Enable charging of premium prices to customers.	6	24.0	10	40.0	4	16.0	5	20.0	0	0.0
Identifying a niche in the market	0	0.0	8	32.0	2	8.0	10	40.0	5	20.0
Developing customer base	5	20.0	6	24.0	7	28.0	4	16.0	3	12.0
Affords monopoly power to innovate and invest in R&D	1	4.0	8	32.0	6	24.0	9	36.0	1	4.0
Communication and reputation building tool	3	12.0	11	44.0	5	20.0	6	24.0	0	0.0
Source of residual revenue on cessation of organization	0	0.0	2	8.0	6	24.0	13	52.0	4	16.0
Enabling easy recognition of products	7	28.0	9	36.0	9	36.0	0	0.0	0	0.0

Source: Author (2007)

60% of the respondents agreed that intangible assets helped in attracting strategic partners to a moderate extent. On the other hand 56% of the respondents agreed that intangible assets acted as collateral for sourcing finance to a moderate extent while the same percentage said that intangible assets acted as a source of revenue through franchising to a very large extent. Majority of the respondents agreed that intangible assets enabled the company to charge customers premium prices, enabled the company to identify a niche in the market and also enabled the company to get revenue through licensing its intangible assets to a large extent.

28% of the respondents agreed that intangible assets enabled the company to develop a customer base to moderate extent, 36% of the total population said that intangible assets afforded the company the monopoly to innovate and invest in R&D to small extent. Majority of the pharmaceutical companies involved in the survey agreed that to a large extent intangible asset acted as an effective communication and reputation building tool as well enabling customers to easily recognize their products. On the other hand majority of the respondents said that intangible assets acted as source of revenue on cessation of the organization but to small extent.

The results indicate that majority of Kenyan pharma embrace the use of intangible assets so as to enable easy product recognition, as a communication tool, develop a customer base, to enable them charge premium prices, sources of revenue through licensing and franchising. The results are in line with Slowik, et al. (2000) paper on the various strategic roles intangible asset play.

4.5 Challenges of Applying Intangible Assets

Along with potentially great rewards of the intangible assets in the pharmaceutical sector come risks and challenges that must be managed as part of a comprehensive strategy. The managerial challenge is to identify the risks and or threats and put in measures and or strategies to mitigate them. In this category, the researcher sought to find out the challenges that hamper intangible assets' capability to sustain competitive advantage among the firms involved in the study.

Table 4.5 Challenges of Applying Intangible Assets

Challenges	Very great extent		Great extent		Moderate extent		Less extent		No extent	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Expiry of patent	2	8.0	4	16.0	16	64.0	3	12.0	0	0.0
Government regulation	1	4.0	7	28.0	11	44.0	6	24.0	0	0.0
Weak intellectual property law	6	24.0	14	56.0	3	12.0	2	8.0	0	0.0
Proliferation of generic products	3	12.0	12	48.0	5	20.0	5	20.0	0	0.0
Parallel importation of products	6	24.0	10	40.0	6	24.0	3	12.0	0	0.0
Proliferation of counterfeit	14	56.0	3	12.0	4	16.0	4	16.0	0	0.0
Emergence of HIV/AIDS scourge	4	16.0	7	28.0	11	44.0	2	8.0	1	4.0
Circumvention of trademarks	5	20.0	9	36.0	6	24.0	2	8.0	3	12.0
Expensive and endless litigation	4	16.0	2	8.0	11	44.0	5	20.0	3	12.0
Head hunting of skilled workforce by rivals	0	0.0	4	16.0	6	24.0	10	40.0	5	20.0
Pressure from lobby groups	0	0.0	3	12.0	5	20.0	12	48.0	4	16.0

Source: Author (2007)

64% of the respondents said that the expiry of patents was a moderate challenge to the firm, as well as government regulation. Weak intellectual property was cited by 56% of the respondents as being to a large extent a challenge in managing intangible assets. The proliferation of generic products as well as parallel importation of products was quoted by majority of the respondents as being to a large extent a big challenge to the pharmaceutical companies involved in the survey. Proliferation of counterfeit products was to a very large extent a challenge to the firm while on the other hand the emergence of HIV/AIDS was to majority of the firms involved in the survey was of a moderate challenge in the use of intangible assets. 36% of the respondents reported that circumvention of trademarks was to a large extent a challenge to the firm while 44% said expensive and endless litigation was a moderate challenge in the implementation of intangible assets. Headhunting of workforce by rivals and pressure from lobby groups was reported by majority of the respondents as being small challenges in the management of intangible assets.

These challenges faced by pharmaceutical companies are the same as those faced by other pharmaceutical companies in the world, (Nissan, 2003, Moslehi, 2000). They are in agreement with Teece (2000), who stressed the importance of legally protected property rights grows with weak inherent.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The purpose of study was to examine the use and the role intangible assets play as sources of sustainable competitive advantage among Kenyan pharmaceutical manufacturers. The objectives of the study were to:

- 1) Examine the role intangible assets play among Kenyan pharmaceutical manufacturers to sustain competitive advantage.
- 2) Determine the challenges facing intangible assets' potential as sources of sustainable competitive advantage among pharmaceutical manufacturers.

A quantitative, descriptive research approach was adopted. The target population was all pharmaceutical manufacturers situated in Nairobi. The researcher used a census survey. 25 out of 30 targeted firms responded achieving 83% respondent rate. The data collection instrument was a semi structured questionnaire and data analysis was through descriptive statistics.

The findings indicate that majority of the firms involved in the study were locally owned and had been in operation for 6 to 9 years. This therefore means that the response obtained was from firms that had been exposed for a long time to the challenges in the pharmaceutical industry.

Majority of the respondents indicated that they used intangible assets, though in different extents. The usage of copyrights, trademarks and patents by the firms involved in the survey was to a large extent while registered design was in use by majority of the companies' involved in the survey to a small extent. Other intangible assets that were in use by majority of the companies' involved in the survey include proprietary technology, company reputation, brand reputation, customer service reputation and human resource management policies. Culture on the other hand was in use to a small extent by the pharmaceutical manufacturing companies to achieve competitive advantage.

Intangible assets can be used in various ways to achieve competitive advantage. The pharmaceutical manufacturing companies that were involved in the survey reported to use intangible assets as a source of revenue through licensing and franchising, charge customers' premium prices and use them to identify a niche in the market. Intangible assets were also reported to be a very effective communication and reputation building tool as well as enabling customers to easily recognize the company's products.

Though the use of intangible assets enables a company to gain competitive advantage, their use poses some challenges to the company using them. The companies involved in the survey reported that the serious challenges they faced from using intangible assets included; weak intellectual property law, proliferation of generic products, parallel importation of products and proliferation of counterfeit products. Other not so serious challenges included the emergence of HIV/AIDS, expensive and endless litigation as well as circumvention of trademarks.

5.2 Conclusions

According to Porter (1991), sustainable competitive advantage is derived from: a unique competitive position, clear tradeoffs and choices vis-à-vis competitors, activities tailored to the company's strategy, a high degree of fit across activities and a high degree of operational effectiveness. The findings of the study indicate that intangible assets play a key role in enhancing performance among pharmaceutical manufacturers in Kenya.

Different types of intangible assets have different values, some resources can be more valuable than others, and this is the case of intangible assets (Itam & Roehl, 1987; Hall, 1992, 1993; Barney, 1991; Grant 1991, 1996.). To pharmaceutical companies the main intangible assets that they used to a large extent were copyrights, patents, trademarks and company reputation.

To achieve competitive strategy using intangible assets there is need draft a strategy, defining how the firm chose to compete. This will enable the company obtain sustained competitive advantage valued by the organization client base, and supported by resources.

Bosworth (2003) lists a number of ways in which intangibles help companies to achieve competitive advantage, namely, identifying the niche in the market for new entrant, as a source of collateral for borrowing funds, as a source of revenues through licensing and franchising, providing residual income on their sale at cessation of trading and for

developing the customer base. However this becomes tricky if the other major players in the industry are also using the same intangible assets to achieve competitive strategy. The option that becomes available is to use those assets that are not in use by other companies but are viable in the industry.

Along with any asset that can be used to achieve competitive advantage there comes challenges and risks of its implementation. Moslehi (2000) cites the issue of globalization as a major threat to intangible assets' potential there is also the risk of protection of by the law, (Teece, 2000). The weak intellectual property laws as well as the proliferation of counterfeit products are the main challenges that pharmaceutical companies in Kenya face. Such challenges can only be addressed by legislators, but the players in the industry need to inform the legislators of the loopholes in the law for amendments to be made.

5.3 Recommendations for Further Research

The researcher recommends that further study can be done in the following:

Future studies should consider the role of intangible assets in other companies apart from pharmaceutical companies. In addition future studies can also consider other stakeholders in the pharmaceutical industry such as the government.

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APPENDIX I: QUESTIONNAIRE

SECTION A- GENERAL BACKGROUND INFORMATION

1. Name of organization? _____
2. Position of the respondent _____ (Optional)
3. Please tick the description that best describes the ownership of organization.
 - Local Foreign Mixed
4. How long has your organization been in the pharmaceutical sector in Kenya?
 - Less than one year 1-5 Years
 - 6-9 Years Over 10 Years
5. What is the average sales turnover of your organization?
 - Between Kshs 50million-150million
 - Between Kshs 160M-500M
 - Between Kshs 600M-1B
 - Between Kshs 1.5B-2B
 - Above Kshs 3B

**SECTION B: THE USE OF INTANGIBLE ASSETS TO REMAIN
COMPETITIVE**

In answering the questions in this section you are given scale 1-5 to indicate to help you respond easily. (5= a very great extent, 4= great extent, 3= a moderate extent, 2= a less extent, 1= not applicable)

6. To what extent does your organization use the following intangible assets?

	5	4	3	2	1
Copyrights	[]	[]	[]	[]	[]
Patents	[]	[]	[]	[]	[]
Trademarks	[]	[]	[]	[]	[]
Registered design	[]	[]	[]	[]	[]
Contractual relationships	[]	[]	[]	[]	[]
Proprietary technology	[]	[]	[]	[]	[]
Company reputation	[]	[]	[]	[]	[]
Brand reputation	[]	[]	[]	[]	[]
Culture	[]	[]	[]	[]	[]
Customer service reputation	[]	[]	[]	[]	[]
Human resource management policies	[]	[]	[]	[]	[]

7. Indicate in a scale of 1-5 the extent to which intangible assets in your organization play the following roles to sustain competitive advantage.

	5	4	3	2	1
<input type="checkbox"/> Help in attracting strategic partners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> As collateral to source for finances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Source of revenue through franchising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Source of revenue through licensing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Enable charging of premium prices to customers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Identifying a niche in the market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Developing customer base	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Affords you monopoly power to innovate and invest in R&D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> As an effective communication and reputation building tool	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Source of residual revenue on cessation of organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Enabling consumers to quickly and efficiently recognize your products.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION C: CHALLENGES FACED BY INTANGIBLE ASSETS

8. Below are some of the challenges that firms face when using intangible assets to remain competitive. To what extent is your organization affected by them. Indicate on a scale of 5-1

	5	4	3	2	1
Expiry of patents	[]	[]	[]	[]	[]
Government regulation	[]	[]	[]	[]	[]
Weak intellectual property law	[]	[]	[]	[]	[]
Proliferation of generic products	[]	[]	[]	[]	[]
Parallel importation of products	[]	[]	[]	[]	[]
Proliferation of counterfeit products	[]	[]	[]	[]	[]
Emergence of HIV/AIDS scourge	[]	[]	[]	[]	[]
Circumvention of trademarks	[]	[]	[]	[]	[]
Expensive and endless litigation	[]	[]	[]	[]	[]
Head hunting of skilled workforce by rivals	[]	[]	[]	[]	[]
Pressure from lobby groups	[]	[]	[]	[]	[]

9 Any other challenge (s), please specify.

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APPENDIX II PHARMACEUTICAL MANUFACTURERS

1. Aventis Pasteur SA (E.A)
2. Abbott laboratories
3. Alpha Medical Manufacturers
4. Astra Zeneca
5. Bristol Myers squibb Company
6. Bayer East Africa Limited
7. Beta Healthcare (Shelys Pharmaceuticals)
8. Boehringer Ingelheim Division
9. Cosmos Limited
10. Dawa Pharmaceuticals Limited
11. Didy Pharmaceutical ltd
12. Diversey Lever
13. Eli-Lilly (Suisse) SA Elys
14. Framin Kenya ltd
15. Galaxy Pharmaceutical
16. Glaxo SmithKline
17. Infusion (K) ltd
18. Ivey Aqua EPZ Limited Athi River
19. La Roche
20. Mac's Pharmaceutical Ltd

21. Manhar Brothers (Kenya) Ltd
22. Medivet Pharmaceutical
23. Merck Company
24. Novartis E.A. Ltd
25. Novelty Manufacturers Ltd
26. Pfizer Corp (Agency)
27. Pharmaceutical Manufacturing Co (K) Ltd
28. Pharmaceutical Products Limited
29. Phillips Pharmaceuticals Limited
30. Regal Pharmaceutical Ltd
31. Universal Pharmaceutical Limited

Source: *Kenya Medical Directory (2005)*