ADOPTION OF NEW PHARMACEUTICAL PRODUCTS BY WHOLESALERS IN KENYA

BY

NZIOKA CHRISTINE MUTHEU

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DECLARATION

I declare that this research project report is	my original work and has never been submitted
anywhere for a degree or qualification of	the same in any other university or institute of
higher learning.	
Signed	Date
Nzioka, Christine Mutheu.	
Registration: No. D61/P/8144/2002	
This research project report has been submitted	ted for examination with my approval as the
University supervisor.	
Signed	Date
Dr. R.M. Musyoka	
Lecturer, Department of Business Administra	ation
School of Business	
University of Nairobi	

DEDICATION

I dedicate this project to my late father John Nzioka Mbithi, my mother Margaret and to my children Laura and Adam.

ACKNOWLEDGEMENT

First I thank God for giving me life and the courage to undertake this project.

Special thanks go to my supervisor, Dr Raymond M. Musyoka, who guided me patiently through this research project.

I would also like to thank my family and my friends for their moral support and patience.

ABSTRACT

The importance of new product adoption has been widely proclaimed by managers and academics and the pace of product adoption-related research has increased dramatically, reflecting the importance of the area to many industries, including the pharmaceutical industry. The study was guided by the following specific objectives: to determine the factors influencing new product adoption by pharmaceutical wholesalers in Kenya; to establish the barriers to new product adoption by pharmaceutical wholesalers in Kenya; and to determine strategies adopted by pharmaceutical wholesalers to influence effectiveness of new product adoption in Kenya.

A descriptive survey design was used to undertake the study. The population of interest in this study was all the pharmaceutical wholesalers based in Nairobi and its environs whose number stood at 30 as of December 31st 2009. There was one respondent from each of the outlets. A census was undertaken since all pharmaceutical wholesalers solely involved in wholesale business are located in Nairobi and its environs and have branches in other major towns in Kenya. A semi-structured questionnaire was used to collect primary data from the respondents. The questionnaire was pre-tested on six randomly selected respondents to enhance effectiveness and hence data validity before being administered. Data pertaining to the profile of respondents was analyzed by employing content analysis. In order to meet the three objectives of the study, data was analyzed by employing descriptive statistics. Computation of frequencies in tables, charts and bar graphs were used in data presentation. In addition, standard deviations and mean scores were used to present information pertaining to

the study objectives. The information was presented and discussed as per the objectives and research questions of the study.

The findings of the study show that the key factors influencing new product adoption by pharmaceutical wholesalers in Kenya include: potential opportunities in the relevant product class; price of the product/brand compared to competitors' offerings; gross profit margin and contribution margin of the product; potential profitability compared to others in the product class; potential of the product to maximize profits; prior experience with the product vendor in the market; organizational profit and sales objectives; and availability of the product to maximize profits.

In view of the findings, the study recommendations include: the wholesale outlets should consider enhancing buyer and supplier relationships in order to sustain a competitive edge over other players in the industry; technology, information sharing and process integration should be embraced to enable lowering of costs; and focus on fulfillment; customer management; forecasting and planning; and procurement.

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ABBREVIATIONS AND ACCRONYMS

KEMSA Kenya Medical Suppliers Agencies

MEDS Mission for Essential Drugs and Supplies

OTC Over The Counter

POM Prescription Only Medicines

POM Prescription only Medicines

PoS Point of Sale

PR Public Relations

R & D Research and Development

SPSS Statistical Package for Social Sciences

UK United Kingdom

CHAPTER ONE: INTRODUCTION

1.1 Background

The importance of new product adoption has been widely proclaimed by managers and academics. Furthermore, the pace of product adoption-related research has increased dramatically, reflecting the importance of the area to many industries, including the pharmaceutical industry. In this paper, it is argued that as international produce markets become more hostile with emerging low cost competitors improving their marketing mix and marketing strategy elements, the market-focused development and commercialization of new varieties becomes a strategic necessity for mature suppliers, rather than a strategic option (O'Rourke, 2006).

With a large number of new entrants at the low end of the industry and a trend towards mergers and acquisitions that has led to larger, more integrated firms with broad reach across the industry, there is an increasingly competitive business environment that has created pressure on firms to quickly build successful product portfolios. Some of the industries most profitable drugs will lose their patent protection and the multinational pharmaceutical companies have to look internally and externally to remain competitive. Examples of those facing patent lose are Plavix and Clexane from the French multinational Sanofi-Aventis and the osteoporosis drug Fosamax from Merck. With the imminent patent expiration of many major drugs, 42 in the period 2005 to 2009 in major markets the pressure on pharmaceutical firms to develop and launch new products has never been greater.

In the past the research and development of new drugs was always the fall back but in the recent past the pharmaceutical firms have not been in a position to come up with new

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inventions fast enough and so they still have to find a way to remain profitable with the existing products. There has also been a rebalance of prescribing decisions making power such that the decision about what product to prescribe does not solely lie with the doctor but is also influenced by other parties including insurance companies, purchasing people, hospital formularies, pharmacists and to some extent the patients.

There has also been a dramatic change in sales channels and as such pharmaceutical companies also need to look at the best way to get the drugs to the customers while minimizing on the cost to the customer and themselves. Fueled by heightened competition from new market entrants, lapsing patents, a dramatic change in sales channels, rebalance of prescribing decision making power, pharmaceutical companies are looking internally to find ways to remain competitive, build market share and maintain revenue growth.

1.1.1 The Concept of New Product

New product development is synonymous with innovation. In the pharmaceutical industry market, intense competition exists and according to Kotler (2000), resisting change can shorten the potential life cycle and create risk for the company overall. New product development is necessary for sustainability, and much of the literature on new product development investigates how to ensure success (Cooper, 2002; Hem, Chernatony, and Iversen, 2003). Risk is a major aspect of new product development and many authors identify the risk of failure in debating the strategy for success (Lee-Mortimer, 2004; Edgett and Parkinson, 2004).

A new product in the consumers' point of view is a one that will offer additional benefits to an existing product or one that solves a completely different problem. In the manufacturer's point of view a new product is one that technically has different features even though it may be targeted to solve the same problems as previously marketed product.

1.1.2 The Concept of Adoption

Many research studies have identified the principles, elements, and influences associated with the diffusion and adoption process. Rogers and Shoemaker (2001) defined the diffusion process as "the human interaction in which a person communicates a new idea to another person, group of individuals, or an organization." Rogers (2002) defined the adoption as, "a mental process through which an individual passes from first hearing about an innovation to final adoption. Rogers (2002) identified the characteristics of innovation and how an innovation's "relative advantage, compatibility, complexity, trialability, and observability" could affect adoption. Rogers (2002) found that, "Uncertainty and the new users' desire to reduce this uncertainty causes them to seek out new information, as part of the individual's innovative decision-making process." Rogers (2002) identified influences that might be considered when diffusing and adopting technology. These factors include user characteristics of motivation, need for control, sense of self-sufficiency, user's attitudes and concerns as well as fears or uncertainties which are not predictable, organizational factors of culture, organizational structure, leadership, the organizational policies and procedures, technology factors of observable benefit, relative advantage, complexity, compatibility, trialability, and observability.

As distribution outlets' adoption behavior influences diffusion of the new product (Kuester et

al, 2000), it is crucial to understand, why wholesalers adopt or why they reject new products. According to Gourville (2006), the wholesalers' adoption behavior turns out to be a serious problem, as the package goods industry in western countries faces failure rates of 70% to 90%, in that distribution of these products is stopped within twelve months after market introduction. Likewise, take-off is also hard to achieve for new consumer durables, especially when the innovation is discontinuous and, thus, implies behavioral changes (Kuester *et al*, 2000).

In this regard, wholesalers' resistance to innovation, which is evoked by certain adoption barriers, is stated as a major cause of new product failure (Ram and Sheth 2001). Referring to Rogers' (2003) adoption model, acceptance and resistance are results of the persuasion stage where wholesale outlets form their attitude towards the innovation. In contrast, adoption and rejection of an innovation are possible outcomes of the decision stage (Rogers 2003). Within this decision-making process distributors tend to overvalue products they stock and reject new products even if the innovation promises a higher benefit than the old one (Gourville 2006). Consequently, for a successful innovation management it is necessary to develop a broad understanding of the wholesale outlets' adoption processes - new product evaluation strategies, utility estimation, decision making, and moderating variables. Thus, marketing managers can develop instruments to control resistance, rejection, and therefore, new products' success.

It is widely agreed that adoption is an individual's decision making process (Rogers 2003). Within this innovation decision process Nabih *et al* (2001) distinguish the stages 'awareness', 'interest', 'evaluation', 'trial', and 'decision' and hypothesize that adoption

barriers can occur at multiple stages of the adoption process, decelerating it, or even leading to its break-up. If an individual is aware of an innovation's existence, but resists it without considering its potential, the authors talk about passive resistance. Whereas active resistance is the outcome of barriers emerging at the evaluation stage and reduces customers' desire to adopt (Ram 2002; Ram and Sheth 2001). Adoption barriers occurring at the decision stage result into rejection or adoption postponement (Nabih *et al.*, 2001).

1.1.3 The Pharmaceutical Industry in Kenya

The pharmaceutical industry in Kenya comprises of three segments, namely manufacturers, distributors and retailers. The three segments play a major role in supporting the country's health sector. Pharmaceutical products are categorized according to particular levels of outlet as Over-the-Counter (OTC), Pharmaceutical technologist dispensable or Prescription only Medicines (POM) which are pharmacist dispensable. The pharmacy and poisons Board regulates the practice of pharmacy, manufacture and trade in drugs and poisons. All pharmaceutical firms, their products and their personnel are required to be registered by the Pharmacy and Poisons Board. The approval comes after establishing safety, efficacy and quality of drugs, chemical substances and medical devices whether locally manufactured, imported, distributed, sold and used. The manufacturers segment consists of Local manufacturing pharmaceutical companies which include Dawa pharmaceuticals, Regal pharmaceuticals and Cosmos, Large multi-national corporations for example GlaxoSmithKline and Pfizer Warner Lambert, Subsidiaries for example Bayer East Africa and Joint ventures an example being Phillips pharmaceuticals.

Distribution of pharmaceutical products is largely carried out by the Kenya Medical

Suppliers Agencies (KEMSA) which is a division of the Ministry of Health. Kenya Medical Suppliers Agencies mainly distributes drugs to government public health facilities as well as some private health facilities. Private wholesalers as well as the mission based medical supplies facility Mission for Essential Drugs and Supplies (MEDS) also distribute medicines to public and private health facilities. These distributors are based mainly in Nairobi. Pharmaceutical products are channeled to the consumer via pharmacies, chemists, health facilities and shops. There are about 30 registered wholesale and 1300 retail dealers in Kenya and these are manned by registered pharmacists and pharmaceutical technologists.

1.2 Statement of the Problem

One vital area of the pharmaceutical industry product development process that is beginning to receive more attention is the assessment and adoption of new products by wholesale buyers, and the activities and actions suppliers can undertake to facilitate product adoption (Hultink, Tholke and Robben, 2003). Buyers often act as gatekeepers, allowing suppliers' access to their customer base only if they fulfill ever more demanding product and marketing requirements. Manufacturers must understand buyers' requirements and the factors influencing product adoption if they hope to access storage space in wholesalers' outlets. According to Rogers (2002), following its long and complicated history, the pharmaceutical distribution sector now faces major challenges. These include: The current operation mode of most distributors is not in line with the requirements of modern distribution, especially with regard to scale and automation; many distributors lack logistics management knowledge and talented managerial professionals; macro regulation and control from the government is limited; profits today are at very low levels; the existence of a large number of undersized distributors has caused malignant competition and chaotic growth, which has resulted in

higher costs, lower profits, and conflicts over limited market shares; and many distributors have limited market development and service capabilities.

As pharmaceutical products markets become more global, it is important for producers to consider improvements in the process of product development and commercialization. Key issues emanating from this research include: Improving the opportunity to facilitate product adoption through the development of strong cooperative relationships with buyers and other critical actors involved in assessing new product and building confidence in buyers and stimulating their willingness to adopt new varieties through undertaking appropriate consumer research on preference and potential demand.

Related studies undertaken in Kenya include: - Kiumbura (2003) focused on retailer brands and channel conflict in the supermarkets in Nairobi. M'Mbui (2004) focused on determinants of distribution intensity among firms in the Kenyan pharmaceutical industry. Alumila (2004) focused on distribution strategies used by health maintenance organizations in Kenya. None of the studies focused on the new product adoption by pharmaceutical wholesalers. The current study has attempted to bridge the knowledge gap by seeking answers to the following research question: - What are the factors influencing new product adoption by pharmaceutical wholesalers in Kenya?

1.3 Objectives of the Study

The study was guided by the following specific objectives.

- (i) To determine the factors influencing new product adoption by pharmaceutical wholesalers in Kenya.
- (ii) To establish the barriers to new product adoption by pharmaceutical wholesalers in

Kenya.

(iii) To determine strategies adopted by pharmaceutical wholesalers to influence effectiveness of new product adoption.

1.4 Importance of the Study

It is anticipated that the study will be of benefit to the following groups of people:

The study will benefit the pharmaceutical industry managers in articulating the deliberate strategies that are targeted at winning and retaining wholesalers. Specifically, the pharmaceutical companies will achieve the following: - Increased sales effectiveness; Additional revenues from existing drugs; reduced drug development and launch costs; Greater regulatory compliance; improved product quality; Greater return on promotional investment; Greater persistency and patient compliance; and Lowered risk of new product failure.

To Scholars and Researchers the study will contribute to the existing body of knowledge in the area of product adoption process by wholesalers. It will also inspire future researchers to carry out further research in the same or related field.

The study will benefit the policy makers in making decisions on registration and regulation of pharmaceutical wholesalers' activities.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the literature related to the purpose of the study. The chapter is organized according to the specific objectives in order to ensure relevance to the research problem. The review was undertaken in order to eliminate duplication of what has been done and provide a clear understanding of existing knowledge base in the problem area. The literature review is based on authoritative, recent, and original sources such as journals, books, thesis and dissertations.

2.2 Factors Influencing New Product Adoption

According to Hultink *et al.* (2003), previous studies of the new product adoption decision in pharmaceutical industry context can be divided into two major streams: Diffusion of innovation - primarily diffusion of technological innovations in an organizational context, for instance new retail scanning; and Pharmaceutical buyers' adoption decisions - primarily outlining the process and variables influencing the adoption of new packaged pharmaceutical goods. It is also possible to add and examine a third area that of consumer purchasing decisions related to new products. Generally though, from a new product development perspective, the wholesale buyer is a relatively neglected link in the new product development chain (Doyle and Weinberg, 2000).

From a packaged goods perspective, a number of attributes have been identified as belonging to the wholesale buyers' evaluation criteria (Shaw, Dawson and Blair, 2002; Nilsson and Host, 2004; Doyle and Weinberg 2000). Doyle and Weinberg (2000), for example, found that a pharmaceutical buyer's decision was generally based on how the product is rated on eight

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characteristics, including: Potential opportunities in the relevant product class; Marketing reputation of the manufacturer; Price of the product/brand compared to competitors offerings; Quality of the product/brand; Contribution margin; Rating of the proposed product launch; Expected volume compared to others in the product class; and Potential profitability compared to others in the product class.

In examining the literature it is apparent that there are many criteria employed in the context of new product evaluation. These criteria can be related to the supplier and their marketing efforts, the buyers' requirements related to the market position and economic requirements of their company, and to the expected response from consumers in accepting or rejecting the new product. Nilsson and Host (2004), proposed an even more extensive framework of 10 major categories and 25 sub-categories as follows:

Profitability Measure - Overall profitability; Rate of turn over and sales potential; Economic conditions – Suppliers' price; Gross margin; Allowances and rebates; Support of cooperative advertising; Credit terms; and other financial considerations; Assortment considerations – Existence of private brands; and Relations to other products; Consumer evaluation- Overall consumer evaluation; Retail price; Product's physical characteristics; Product's psychological characteristics; and packaging; and Supplier Marketing

Shaw and Gibbs (2001), assert that the supplier/buyer relationship is important and suggest that improvements in this area can bring benefits in terms of greater supply chain coordination, better planning and coordination of primary production and ultimately improve consumer value. In today's more competitive market environment, research into adoption of

new products by wholesale outlets must consider the issue of buyer and supplier relationships.

2.3 Barriers to New Products Adoption

Following the continuum model of innovations, new products are perceived as either congruent or incongruent with an existing product category depending on how continuous, respectively discontinuous the innovation is. The level of congruence determines customers' cognitive elaboration and their evaluation of a new product (Campbell and Goodstein, 2001).

Literature on innovation resistance is compatible with these findings. An innovation may conflict with prior belief structures and impose change (Ram 2002; Ram and Sheth 2001). "Resistance to change is a normal consumer response" (Ram 2002), as it is a consequence of attitude strength. Resistance is a result of attitude formation and subsequently tends to inhibit adoption (Ram and Sheth 2001). The construct depends on perceived innovation characteristics, customer characteristics, and characteristics of propagation mechanisms (Ram 2002). To provide an understanding of this change and the disruptions innovations cause, Ram and Sheth (2001) have identified certain adoption barriers which are categorized as either functional or psychological. Functional barriers concern usage patterns, economic value, and risk associated with the innovation (Ram and Sheth 2001). Usage barriers are triggered when the innovation is not compatible with existing habits, value barriers are erected when customers do not perceive a relative advantage against existing alternatives, and risk barriers are caused by uncertainties. Customers face psychological barriers if the innovation conflicts with social norms and values and thus, causes dissonances, or if the innovation is linked with negative associations due to its product category, industry

affiliation, or country of origin. Apparently, these psychological barriers are rather a societal phenomenon than an individual. On the individual level consumer behavior researchers have identified another type of adoption barrier despite the functional barriers by Ram and Sheth (2001). The perceived difficulty to categorize or to evaluate new products is referred to as cognitive barrier.

While some researchers have already tried to analyze the phenomenon of resistance (Ram 2002; Ram and Sheth 2001), "investigation of rejection behavior has not received much scholarly attention" (Rogers, 2003). Customers rejecting the innovation have already processed the information that they required to make a decision but then have decided not to adopt it.

More generally, it is stated that the adoption decision is based on the value of the innovation, which is uncertain due to a number of factors, especially the lack of information about the likely performance of the innovation. The nature and degree of risk perceived by customers, and the manner in which they deal with perceived risk, are important determinants of the adoption decision. Ignoring uncertainty and risk aversion overestimates the benefits of an innovation. The crucial role of risk and uncertainty within the innovation decision process requires the application of the subjective expected utility model of behavioral decision theory. As behavioral decision theory explains how individuals actually make decisions and takes into account limited information processing capacity and limits of rationality, it is appropriate to explain the observed innovation bias (Gourville, 2006). The innovation bias refers to the fact that customers overvalue the old product and stick to it, even when the new product is objectively superior. Applying these findings to new product context leads to the

proposition that customers are endowed with their entrenched alternative (the old product) and consequently underestimate the value of the innovation (Gourville, 2006).

2.4 Strategies adopted by wholesale outlets to influence effectiveness of new product adoption.

According to Joyce (2004), a powerful determinant of consumer choice is habit or inertia. It suits the consumer to treat much of her activity as a matter of routine. To indulge in a process of conscious deliberation at every purchase would take an enormous amount of time and mental effort, which not unnaturally, there is, a strong drive to avoid. Any satisfactory model of consumer choice is bound to give a large weight to the brand previously purchased. Communications support the diffusion process, time can vary between different products and Rogers refers to those who adopt early as innovators (Rogers, 2002). Rogers' model of innovation diffusion illustrates how consumers respond to the adoption process. Rogers classified consumers into five categories: innovators, early adopters, early majority, late majority, and laggards. Earlier knowers' of an innovation, when compared to later knowers' have a shorter innovation decision period than later adopters; are characterized by more formal education, higher social status, greater exposure to mass media channels of communication, greater exposure to interpersonal channels of communication, greater change agent contact, greater social participation and more cosmopolitanism (Rogers, 2002). Channel components in the distribution system face a number of operating decisions pertaining to the marketing mix elements, namely, products, prices, logistics and promotion. Each of these is analyzed in detail below.

Packaging needs to be adapted in order to conform to the peculiarities of the marketing environment (Ocwieja, 2004). For instance, exposure to extremely high temperatures and rough handling during transport through vast distances require the development of special protective packaging. Packaging also has to take into consideration the unique storage conditions in warehouses and prolonged shelf-time in stores. Labeling also must conform to local rules and regulations and provide certain basic information to end-users, such as the name of the manufacturer, country of origin, production/expiry dates and list of ingredients. All this information is very important in affecting the purchasing decision of the Kenyan consumers, on whose basis the retail outlets make decisions on new product adoption.

Dubois (2000) defines the brand image as, "made up of all the precepts that a consumer holds in relation to a product, company, person, idea". The brand is seen as an important marketing tool, because of how the consumer perceives it. The brand adds value to the product by the use of the name and packaging and through promotion of the brand it is positioned in the mind of the consumer (Blythe, 2001). Png and Reitman (2001), explains why, "...for consumers who either don't want to spend time on an extended information search or who don't have the expertise to do so can use the brand as an implicit guarantee of quality". This can be related to an earlier quote from Joyce (2004) where he claims that the routine purchase process limits consumer effort in the information search, differentiation of the product then has a major significance in the buying decision.

Price constitutes a critical aspect in the intermediary's efforts to sell a product, in view of the fact that today's consumers are concerned with obtaining value for money (Leonidou, 2001). This has increased price competition in the market and has led many firms both to reduce

various operating, financial and managerial costs and to slash their profit margins considerably. Such actions, however, do not benefit manufacturers since they rarely have any control over prices charged to final consumers. In fact, suppliers lose control over prices as soon as the ownership of the product passes to the wholesaler and the situation becomes further complicated when goods are subsequently sold to retailers. In the end, consumers are confronted by a variety of prices for exactly the same product which is even more confusing when low-priced counterfeit brands exist.

Markup levels tend to differ by both product category and channel component (Leonidou, 2001). With regard to the former, non-durable goods have low markups, which usually do not exceed the 25 per cent mark, while the opposite is true in the case of durables. In addition, variations can exist within the same product group. For instance, markups for fast-moving consumer goods range from as low as 10 per cent for powdered milk, to as high as 23 per cent for bar soap. As far as channel components are concerned, distributors/agents and wholesalers usually enjoy lower markups compared to retailers. Markup differences are also evident among retailers, with larger stores typically having lower margins than smaller ones. A case in point is that of carbonated soft drinks which have a 15 per cent and 25 per cent markup in supermarkets and Kiosks respectively.

The unique character of the country's natural environment implies that physical distribution plays a vital role in shaping product costs and providing customer satisfaction. Ordering procedures are usually more efficient among large companies, most of which are linked with their trade partners via on-line computer systems. An issue relating to ordering is the concept of minimum order size which, however, is rarely encountered in Kenya. Nevertheless, there

is a consensus among traders that a reasonable quantity of goods should be purchased if they want to receive financial, promotional and other benefits from suppliers.

Fierce competition and demanding customers imply that members of the distribution chain should exercise special care when making inventory decisions. This is particularly true for specific product lines, such as foodstuffs and pharmaceuticals because of strict regulations governing production/expiry dates. The marketing communications supporting innovation through adoption are the elements of the promotional mix, advertising, personal selling, public relations (PR), and sales promotion. The promotional mix makes the potential consumer aware of the products available. Blythe (2001) says, "...the promotional mix is like a recipe, in which the ingredients must be added at the right times and in the right quantities for the promotion to be effective".

Advertising informs the consumer about the products through a range of advertising methods, the media, television, radio, newspapers, and magazines. Outdoor advertising may also be used, such as billboards, buses, or advertising screens. The choice of medium depends upon the budget and target audience. While advertising informs the general public about products available, sales promotions are focused on the specific product and targeted at the potential consumer. Blythe (2000) sees the purpose of sales promotions as tactical, creating temporary increases in sales and bringing the buying decision forward creating urgency to the decision-making process. Sales promotion is used for low-value items and as part of an overall promotional campaign. Advertising and PR build sales on the long term, whereas sales promotion and personal selling are tactical and short term (Blythe, 2000).

Retail promotions increase store traffic, frequency and amount of purchase, store loyalty, own-brand sales, and even out busy periods (Blythe, 2001).

Sales promotions are both strategic and tactical. Wilson *et al.* (2002) identify promotional tactics that raise awareness of the brand through packaging impact at the point of sale (POS), other POS display materials, by obtaining prime positions in retail outlets, through the use of in-store merchandising activities, such as free sampling, special offers, competitions, exhibitions, and sponsorship, and by the use of sales literature or other selling aids. Sales promotions help to keep the customer. Examples of promotional tactics employed to attract the consumer include price markdowns, premium offers, self-liquidating premium offers, banded packs, stamp-collecting schemes, free samples or tasting offers, prize competitions, personality promotions, in-store demonstrations, and special displays (Wilson *et al.*, 2002).

Sales promotion accounts for a smaller proportion of promotional expenditure and is used as a tactical tool to induce sales from both traders and consumers. In the former case, sales promotions are mainly in the form of cash discounts, free goods, push money and specialty advertising. Trade-promotion tools usually differ by type of intermediary and product line. For instance, wholesalers of foodstuffs are attracted more by free goods, while footwear retailers prefer cash discounts. In the case of consumer-promotion tools, the most popular are premiums, samples and price packs. Interestingly, the fragmented retail system is responsible for making the use of certain types of sales promotion, such as coupons, impractical and ineffective.

Public relations (PR) are about creating favorable images of the organization in the consumer's mind (Blythe, 2001). Establishing effective PR between the supermarket and the

customer is essential and can be seen in the provision of services for customers and in their support for the community. Public relations/sponsorships is the most neglected element of the promotion mix, despite the fact that they provide a cost-effective tool in creating favorable public awareness of the company and its products (Leonidou, 2001). The limited public relations activity usually concerns major branded goods and takes the form of news releases, grand openings, guest tours and sales meetings. Sponsorships focus mainly on sport activities, such as football, boxing and horse racing. The thrust of this promotional effort is undertaken by distributors/agents in association with their foreign principals, while wholesalers and retailers are rarely involved. In light of the country's increasing concern with consumerism and environmental issues, public relations/sponsorships is expected to gain momentum in future.

Merchandising is any activity related to the buying and selling of goods and in prompting purchase at the POS). Visual stimulation and communications are important aspects of retailing. Blythe (2000) supports the notion of merchandising tactics; he thinks, it facilitates retailers in the efficient use of floor space by creating visibility for customers, encouraging traffic flows around the shop and interrupts such as display materials and stands from manufacturers. The initiation of relationships in the distribution system usually comes from the manufacturer, either foreign or indigenous. The former seeks collaboration with prominent distributors/agents in the country, while the latter is more interested in establishing relationships with wholesalers and large retailers. Such an effort is quite difficult today, since most trade buyers are already handling brands with a long presence in the market, thus leaving little room for new entrants.

Most of the promotional activity in the Kenyan distribution system is undertaken by distributors/agents and, to a lesser extent, by local producers and large retailers. Wholesalers are typically not promotion-oriented and the same is also true of small retail stores. According to Leonidou (2001), the criteria for selecting channel partners depend largely on whether the channel intermediary has the role of seller or buyer. Those acting as sellers place greater emphasis on securing good prices and reasonable profits from their trade partners, while at the same time enjoying a long-term, reliable and trustworthy relationship. In the case of buyers, however, the major criterion for choosing suppliers is their ability to deliver products on time, of consistent quality and with favorable payment terms; moreover, these goods should be offered at fair prices, enabling the buyer to make a reasonable profit. Surprisingly, the reliability and trustworthiness of the supplier does not constitute a major selection criterion, reflecting a tendency on the part of buyers to be flexible regarding their sources of supply.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter aims at defining the research design and methodology used in the study. It contains a description of the study design, target population, sample design and size, data collection instruments and procedure.

3.2 Research Design

A descriptive survey design was used to undertake the study. The method was preferred as it permits gathering of data from the respondents in natural settings. In this case, it was possible to administer the data collection tools to the respondents in their workstations, which was relatively easy and aided in increasing the response rate. The research methods used to conduct this study were qualitative. Qualitative research facilitates an in-depth understanding of how, why, and in what context certain phenomena occur and what impacts upon or influences such phenomena (Carson *et al.*, 2001). Qualitative research also employs a range of methods and this flexibility enables overall understanding of the research topic.

According to Brown, Askew, Baker, Denvir, and Millett (2003), research design provides the glue that holds the research project together. A design is used to structure the research, to show how all of the major parts of the project - the samples or groups, measures, treatments or programs, and methods of assignment - work together to try to address the central research questions. The current study is qualitative in nature.

3.3 Population of the study

The population of interest in this study was all the pharmaceutical wholesalers based in

Nairobi and its environs whose number stood at 30 as of December 31st 2009 (Appendix 1). There were was one respondent from each of the outlets. A census was undertaken since majority of the major pharmaceutical wholesalers solely involved in wholesale business are located in Nairobi and its environs and have branches in other major towns in Kenya.

3.4 Data Collection.

A semi-structured questionnaire was used to collect primary data from the respondents. Closed ended questions were presented on a Likert scale. The Likert scale, commonly used in business research was used because it allows participants to respond with certain degrees of agreeing or disagreeing. Participants were asked to rate anticipated factors, barriers and strategies adopted. The rating was on a scale of 1 (lowest impact or least important) to 5 (highest impact or most important).

The questionnaire was pre-tested on six randomly selected respondents to enhance effectiveness and hence data validity before being administered. Since majority of the pharmaceutical wholesale outlets are strategically located within Nairobi City and its environs, the questionnaires was administered by drop-and-pick method. A letter of introduction, which stated the purpose of the study, was attached to each questionnaire. In addition telephone calls were made to the respective respondent to further explain the purpose of the study and set a time frame for the completion of the questionnaires. Once the questionnaires were filled, they were collected and analysis was undertaken.

3.5 Data Analysis

According to Marshall and Rossman (2002), data analysis is the process of bringing order, structure and interpretation to the mass of collected data. Statistical Package for Social

Sciences (SPSS) was used as an aid in the analysis. SPSS was preferred because of its ability to cover a wide range of the most common statistical and graphical data analysis and is very systematic. The SPSS was used to generate percentages, frequencies, mean scores and standard-deviations.

The quantitative data and qualitative information collected were coded and summarized in various forms. Data pertaining to the profile of respondents was analyzed by employing content analysis. In order to meet the three objectives of the study, data was analyzed by employing descriptive statistics. Computation of frequencies in tables, charts and bar graphs were used in data presentation. In addition, standard deviations (measures of dispersion) and mean scores (measures of central tendencies) were used to present information pertaining to the study objectives. The information was presented and discussed as per the objectives and research questions of the study.

CHAPTER FOUR: FINDINGS AND DISCUSSIONS

4.1 Introduction

The study utilized a combination of both quantitative and qualitative techniques in the collection of data. The study targeted 30 pharmaceutical wholesalers based in Nairobi and its environs. The persons in charge of business development gave their responses and the relevant documentation relating to the study objectives in their respective organizations. All the 30 questionnaires that were distributed were returned completed, a 100% response rate.

The data was analyzed by employing descriptive statistics such as percentages, frequencies and tables. Statistical Package for Social Sciences (SPSS) was used to aid in analysis. The researcher preferred SPSS because of its ability to cover a wide range of the most common statistical and graphical data analysis and is very systematic. Computation of frequencies in tables, charts and bar graphs was used in data presentation. In addition, standard deviations were computed to show measures of dispersion while mean scores were computed to show measures of central tendencies. The information is presented and discussed as per the objectives and research questions of the study.

4.2 Profile of Respondent organizations

This section presents a summary of the responses on profile of the respondents and their respective organizations.

4.2.1 Period organization has been in existence

The respondents were asked to give the number of years that their organizations have been in operation in Kenya. Responses are summarized and presented in table 4.1 below.

Table 4.1: Period organization has been in existence

Period organization has	Frequency	Valid	Cumulative	Mean	Standard
been in existence		Percent	Percent	score	deviation
1 to 5 years	4	13.3	13.3		
6 to 10 years	16	53.3	66.7		
11 to 15 years	9	30.0	96.7		
16 years and above	1	3.3	100.0		
Total	30	100.0		3.23	0.73

The findings in table 4.1 above show that the majority of the respondents, (53.3%) have been in operation for a period of 6 to 10 years, (30%) of the respondents for a period of 11 to 15 years, (13.3%) of the respondents for a period of 1 to 5 years, (3.3%) of the respondents for a period of 16 years and above while none of the respondents have been in operation for less than a year. The mean score was 3.23 and the standard deviation was 0.73.

4.2.2 Number of full time employees

Respondents were asked to give the number of full time employees in their respective organizations. Responses are summarized and presented in table 4.2 below.

Table 4.2: Number of full time employees

Number of full time	Frequency	Valid	Cumulative	Mean	Standard	
employees		Percent	Percent	score	deviation	
Less than 25	24	80.0	80.0			
26 to 50	5	16.7	96.7			
51 to 75	1	3.3	100.0			
76 and above	0	0				
Total	30	100.0		1.23	0.50	

The findings in table 4.2 above show that majority of the respondents, (80%) have less than 25 full time employees, (16.7%) of the respondents have 26 to 50 full time employees, (3.3%) of the respondents have 51 to 75 full time employees and none of the respondents have more than 76 full time employees. The mean score was 1.23 and the standard deviation

was 0.50.

4.2.3 Length of time respondents had worked in their respective organizations

Respondents were asked to give the period of working in their respective organizations.

Reponses are summarized and presented in the table 4.3 below.

Table 4.3: Length of time respondents had worked in their respective organizations

Length of time in the organization	Frequency	Valid Percent	Cumulative Percent	Mean score	Standard deviation
	1	3.3	3.3	SCOLC	ucviation
1 to 5 years	1				
6 to 10 years	16	53.3	56.7		
11 to 15 years	11	36.7	93.3		
16 years and above	2	6.7	100		
Total	30	100.00		2.47	0.68

The findings in table 4.3 above show that the majority of the respondents, (53.3%) have worked for between 1 and 5 years, (36.7%) of the respondents have worked for between 6 to 10 years, (6.7%) of the respondents have worked for between 11 to 15 years, only (3.3%) of the respondents have worked for less than 1 year and none of the respondents have worked for more than 16 years. The mean score was 2.47 and the standard deviation was 0.68.

4.2.4 Ownership of the respondent organizations

Respondents were asked specify the ownership of their organizations. Responses are summarized and presented in table 4.4 below

Table 4.4: Ownership of the respondent organizations

Ownership of the respondent organizations	Frequency	Valid Percent	Cumulative Percent	Mean score	Standard deviation
Foreign	0	0	0		
Private	30	100	100		
Public	0	0	100		
Total	30	100.0		2.00	0.00

The findings in table 4.4 above shows that all organizations interviewed (100%) are privately owned. The mean score was 2.00 while the standard deviation was 0.00.

4.2.5 Branch Network

Respondents were asked to indicate the number of branches their respective organizations had. Reponses are summarized and presented in the table 4.5 below.

Table 4.5: Branch Network

Branch Network	Frequency	Valid	Cumulative	Mean	Standard
		Percent	Percent	score	deviation
None	12	40.0	40.0		
Between 1 and 2	13	43.3	83.3		
Between 2 and 3	4	13.3	96.7		
More than 3	1	3.3	100.0		
Total	30	100.0		1.80	0.81

The findings in table 4.5 above shows that majority of the respondents, (44%) have between 1 and 2 branches, (13%) of the respondents have between 2 and 3 branches, only (3%) of the respondents have more than 3 branches while (40%) of the respondent organizations do not have branches. The mean score was 1.80 while the standard deviation was 0.81.

4.3 Adoption of new Pharmaceutical Products by Wholesalers in Kenya

This section presents a summary of the responses pertaining to the objectives of the study.

4.3.1 The factors influencing new product adoption by pharmaceutical wholesalers in Kenya

In order to meet the first objective of the study, "to determine the factors influencing new product adoption by pharmaceutical wholesalers in Kenya", the respondents were asked to indicate the extent to which each of the listed factors has influenced the organization's new product adoption decisions. Reponses are summarized and presented in the table 4.6 below.

Table 4.6: Factors affecting new product adoption by wholesale outlets

Factors affecting new product adoption by wholesa	ale outlets	Not	Neutral	Somehow	Much	Very	Mean	Standard
	T	at all				much		deviation
Potential opportunities in the relevant product class	Percentage	0	0	13.3	33.3	53.3	4.40	0.72
	Frequency	0	0	4	10	16		
Marketing reputation of the manufacturer	Percentage	0	6.7	16.7	10.0	66.7	4.37	1.00
	Frequency	0	2	5	3	20		
Price of the product/brand compared to competitors	Percentage	0	0	13.3	40.0	46.7	4.33	0.71
offerings	Frequency	0	0	4	12	14		
Quality of the product/brand and its status in the	Percentage	0	6.7	23.3	40.0	30.0	3.93	0.91
market, uniqueness and packaging	Frequency	0	2	7	12	9		
Gross profit margin and contribution margin of the	Percentage	0	0	0	26.7	73.3	4.73	0.45
product	Frequency	0	0	0	8	22		
Rating of the proposed product launch	Percentage	6.7	10.0	43.3	30.0	10.0	3.27	1.01
	Frequency	2	3	13		3		
Expected volume sales compared to others in the	Percentage	0	6.7	20.0	13.3	60.0	4.27	1.01
product class	Frequency	0	2	6	4	18		
Potential profitability compared to others in the	Percentage	0	0	10.0	23.3	66.7	4.57	0.68
product class.	Frequency	0	0	3	7	20		
Prior experience with the product vendor in the	Percentage	6.7	0	3.3	70.0	20.0	3.97	0.93
market	Frequency	2	0	1	21	6		
Product uniqueness	Percentage	3.3	16.7	20.0	36.7	23.3	3.60	1.13
	Frequency	1	5	6	11	7		
Marketing efforts and support of the product	Percentage	6.7	3.3	20.0	53.3	16.7	3.70	1.02
vendor/manufacturer	Frequency	2	1	6	16	5		
Other financial aspects (rebates, and terms)	Percentage	0	3.3	10.0	23.3	63.3	4.47	0.82
	Frequency	0	1	3	7	19		
Organizational profit and sales objectives	Percentage	0	0	10.0	16.7	73.3	4.63	0.67
	Frequency	0	0	3	5	22		
Likely consumer demand for the product	Percentage	0	10.0	10.0	20.0	60.0	4.30	1.02
<u>-</u>	Frequency	0	3	3	6	18		

Factors affecting new product adoption by outlets	wholesale	Not at all	Neutral	Somehow	Much	Very much	Mean	Standard deviation
Promotion and advertising commitment for	Percentage	0	13.3	26.7	50.0	10.0	3.57	0.86
the product by manufacturer	Frequency	0	4	8	15	3		
Availability of the product to maximize	Percentage	0	0	20.0	43.3	36.7	4.17	0.75
profits	Frequency	0	0	6	13	11		
Potential of the product to maximize profits	Percentage	0	20.0	0	10.0	70.0	4.30	1.21
	Frequency	0	6	0	3	21		
Potential growth in product category	Percentage	0	0	10.0	60.0	30.0	4.20	0.61
	Frequency	0	0	3	18	9		
Supplier track record/performance	Percentage	0	16.7	10.0	46.7	26.7	3.83	1.02
	Frequency	0	5	3	14	8		
Product delivery	Percentage	6.7	10.0	33.3	40.0	10.0	3.37	1.03
	Frequency	2	3	10	12	3		
Non-task (interpersonal relations between	Percentage	6.7	0	40.0	40.0	13.3	3.53	0.97
retailer and product vendor)	Frequency	2	0	12	12	4		

The responses in table 4.6 above are discussed as follows:

(a) Potential opportunities in the relevant product class

With respect to potential opportunities in the relevant product class, majority of the respondents (53.3%) indicated "very much", (33.3%) of the respondents indicated "much" and only (13.3%) of the respondents indicated "somehow." The findings show that all the respondents indicated that potential opportunities in relevant product class affected new product adoption by wholesale outlets in Kenya. The mean score was 4.40 while the standard deviation was 0.72.

(b) Marketing reputation of the manufacturer

With respect to marketing reputation of the manufacturer, majority of the respondents (66.7%) s indicated "very much", (16.7%) of the respondents indicated "somehow", (10.0%) of the respondents indicated "much" and only (6.7%) of the respondents indicated "neutral". The findings show that at least (93.3%) of the respondents indicated that market reputation of the manufacturer affected new product adoption by wholesale outlets in Kenya. The mean score was 4.37 while the standard deviation was 1.00.

(c) Price of the product/brand compared to competitors' offerings

With respect to price of the product/brand compared to competitors' offerings, majority of the respondents (46.7%) indicated "very much", (40.0%) of the respondents indicated "much" while only (13.3%) of the respondents indicated "somehow". The findings show that all the respondents indicated that price of the product/brand compared to competitors affected new product adoption by wholesale outlets in Kenya. The mean score was 4.33 while the standard deviation was 0.71.

(d) Quality of the product /brand and its status in the market

With respect to quality of the product /brand and its status in the market, uniqueness and packaging, majority of the respondents (40%) indicated "much", (30%) of the respondents indicated "very much", 23.3% of the respondents indicated "somehow" and only (6.7%) of the respondents indicated "neutral". The findings show that at least (93.3%) of the respondents indicated that the quality of the product /brand and its status in the market, uniqueness and packaging affected new product adoption by wholesale outlets in Kenya. The mean score was 3.93 while the standard deviation was 0.91.

(e) Gross profit margin and contribution margin of the product

With respect to gross profit margin and contribution margin of the product, majority of the respondents (73.3%) indicated "very much" and (26.7%) of the respondents indicated "much". The findings show that all the respondents indicated that gross profit margin and contribution margin of the product affected new product adoption by wholesale outlets in Kenya. The mean score was 4.73 while the standard deviation was 0.45.

(f) Rating of the proposed product launch

With respect to rating of the proposed product launch, (43.3%) of respondents indicated "somehow", (30%) of the respondents indicated "much", 10% of the respondents indicated "very much", another (10%) of the respondents indicated "neutral" and only (6.7%) of the respondents indicated "not at all". The findings show that at least (83.3%) of the respondents indicated that the rating of the proposed product launch affected new product adoption by wholesale outlets in Kenya. The mean score was 3.27 while the standard deviation was 1.01.

(g) Expected volume sales compared to others in the product class

With respect to expected volume sales compared to others in the product class, majority of the respondents (60%) indicated "very much", (20%) of the respondents indicated "somehow", (13.3%) of the respondents indicated "much" and only (96.7%) of the respondents indicated "neutral". The findings show that at least (93.3%) of the respondents indicated that the expected volume sales compared to others in the product class affected new product adoption by wholesale outlets in Kenya. The mean score was 4.27 while the standard deviation was 1.01.

(h) Potential profitability compared to others in the product class

With respect to potential profitability compared to others in the product class, majority of the respondents (66.7%) indicated "very much", (23.3%) of the respondents indicated "much" and only 10% of the respondents indicated "somehow". The findings show that all the respondents indicated that potential profitability compared to others in the product class affected new product adoption by wholesale outlets in Kenya. The mean score was 4.57 while the standard deviation was 0.68.

(i) Prior experience with the product vendor in the market

With respect to prior experience with the product vendor in the market, majority of the respondents (70%) indicated "much", (20%) of the respondents indicated "very much", (6.7%) of the respondents indicated "not at all" and only (93.3%) of the respondents indicated "somehow". The findings show that all the respondents indicated that prior experience with the product vendor in the market affected new product adoption by wholesale outlets in Kenya. The mean score was 3.97 while the standard deviation was 0.93.

(j) Product uniqueness

With respect to product uniqueness, (36.7%) of the respondents indicated "much", (23.3%) of the respondents indicated "very much", (20%) of the respondents indicated "somehow", (16.7%) of the respondents indicated "neutral" while (3.3%) of the respondents indicated "not at all". The findings show that at least (80%) of the respondents indicated that product uniqueness affected new product adoption by wholesale outlets in Kenya. The mean score was 3.60 while the standard deviation was 1.13.

(k) Marketing efforts and support of the product vendor/manufacturer

With respect to marketing efforts and support of the product vendor/manufacturer, (53.3%) of the respondents indicated "much", (20%) of the respondents indicated "somehow", (16.7%) of the respondents indicated "very much", (6.7%) of the respondents indicated "not at all" and only (3.3%) of the respondents indicated "neutral". The findings show that at least (90%) of the respondents indicated that marketing efforts and support of the product vendor/manufacturer affected new product adoption by wholesale outlets in Kenya. The mean score was 3.70 while the standard deviation was 1.02.

(l) Other financial aspects

With respect to other financial aspects (rebates, and terms), majority of the respondents (63.3%) indicated "very much", (23.3%) of the respondents indicated "much", (10%) of the respondents indicated "somehow" and only (3.3%) of the respondents indicated "neutral". The findings show that at least (96.7%) of the respondents indicated that financial aspects (rebates, and terms) affected new product adoption by wholesale outlets in Kenya. The mean score was 4.47 while

the standard deviation was 0.82.

(m) Organizational profit and sales objectives

With respect to organizational profit and sales objectives, majority of the respondents (73.3%) indicated "very much", (16.7%) of the respondents indicated "much" and only (10%) of the respondents indicated "somehow". The findings show that all the respondents indicated that organizational profit and sales objectives affected new product adoption by wholesale outlets in Kenya. The mean score was 4.63 while the standard deviation was 0.67.

(n) Likely consumer demand for the product

With respect to likely consumer demand for the product, majority of the respondents (60%) indicated "very much", (20%) of the respondents indicated "much", (10%) of the respondents indicated "neutral". The findings show that at least (90%) of the respondents indicated that consumer demand for the product affected new product adoption by wholesale outlets in Kenya. The mean score was 4.30 while the standard deviation was 1.02.

(o) Promotion and advertising commitment for the product by manufacturer

With respect to promotion and advertising commitment for the product by manufacturer, (50%) of the respondents indicated "much", (26.7%) of the respondents indicated "somehow", (13.3%) of the respondents indicated "neutral" and (10%) of the respondents indicated "very much". The findings show that at least (86.7%) of the respondents indicated that promotion and advertising commitment for the product by manufacturer affected new product adoption by wholesale outlets in Kenya. The mean score was 3.57 while the standard deviation was 0.86.

(p) Availability of the product to maximize profits

With respect to availability of the product to maximize profits, (43.3%) of the respondents indicated, "much", (36.7%) of the respondents indicated "very much" and only (20%) of the respondents indicated "somehow". The findings show that all the respondents indicated that availability of the product to maximize profits affected new product adoption by wholesale outlets in Kenya. The mean score was 4.17 while the standard deviation was 0.86.

(q) Potential of the product to maximize profits

With respect to potential of the product to maximize profits, majority of the respondents (70%) indicated "very much", (20%) of the respondents indicated "neutral" and only (10%) of the respondents indicated "much". The findings show that at least (80%) of the respondents indicated that potential of the product to maximize profits affected new product adoption by wholesale outlets in Kenya. The mean score was 4.30 while the standard deviation was 1.21.

(r) Potential growth in product category

With respect to potential growth in product category, majority of the respondents (60%) indicated "much", (30%) of the respondents indicated "very much" and only (10%) of the respondents indicated "somehow". The findings show that all the respondents indicated that potential growth in product category affected new product adoption by wholesale outlets in Kenya. The mean score was 4.20 while the standard deviation was 0.61.

(s) Supplier track record/performance

With respect to supplier track record/performance, (46.7%) of the respondents indicated "much", (26.7%) of the respondents indicated "very much", (16.7%) of the respondents indicated

"neutral" and only (10%) of the respondents indicated "somehow". The findings show that at least (83.3%) of the respondents indicated that supplier track record/performance affected new product adoption by wholesale outlets in Kenya. The mean score was 3.83 while the standard deviation was 1.02.

(t) Product delivery

With respect to product delivery, (40%) of the respondents indicated "much", (33.3%) of the respondents indicated "somehow", (10%) of the respondents indicated "very much", another (10%) of the respondents indicated "neutral" and only (6.7%) of the respondents indicated "not at all". The findings show that at least (93.3%) of the respondents indicated that product delivery affected new product adoption by wholesale outlets in Kenya. The mean score was 3.37 while the standard deviation was 1.03.

(u) Non-task (interpersonal relations between retailer and product vendor

With respect to non-task (interpersonal relations between retailer and product vendor), (40%) of the respondents indicated "somehow", another (40%) of the respondents indicated "much", (13.3%) of the respondents indicated "very much" and only (6.7%) of the respondents indicated "not at all". The findings show that at least (93.3%) of the respondents indicated that non-task (interpersonal relations between retailer and product vendor) affected new product adoption by wholesale outlets in Kenya. The mean score was 3.53 while the standard deviation was 0.97.

4.3.2 The barriers to new product adoption by pharmaceutical wholesalers in Kenya.

In order to meet the second objective of the study, "to establish the barriers to new product adoption by pharmaceutical wholesalers in Kenya", the respondents were asked to indicate the

extent to which they agree/disagree that each of the barriers listed has affected effectiveness of new product adoption in their organizations. Reponses are summarized and presented in table 4.7 below.

 Table 4.7: Barriers to new product adoption by pharmaceutical wholesalers

Barriers to new product adoption b pharmaceutical wholesalers	y	Strongly disagree	Disagree	Somehow agree	Agree	Strongly agree	Mean	Standard deviation
Functional Barriers Concerns								
Usage patterns	Percentage	0	0	16.7	10.0	16.7	3.80	0.85
	Frequency	0	3	5	17	5		
Economic value	Percentage	6.7	3.3	6.7	33.3	50.0	4.17	1.15
	Frequency	2	1	2	10	15		
Risk associated with the innovation	Percentage	0	10.0	43.3	40.0	6.7	3.43	0.77
	Frequency	0	3	13	12	2		
Psychological Barriers	1 7		•	•				
Customers face psychological	Percentage	0	0	10.0	60.0	30.0		
barriers if the innovation conflicts								
with social norms an values and								
thus, causes dissonance, or if the	Frequency	0	0	3	18	9	4.20	0.61
innovation is linked with negative								
associations due to its product								
category or country of origin								
Innovation Rejection Behavior				·				
The adoption decision is based on	Percentage	0	6.7	46.7	46.7	0		
the value of the innovation, which is								
uncertain due to a number of factors,	_						3.40	0.62
especially the lack of information	Frequency	0	2	14	14	0		
about the likely performance of the								
innovation								
The nature and degree of risk	Percentage	0	16.7	23.3	60.0	0		
perceived by customers and the								
manner in which they deal with	Г	0		7	1.0	0	3.43	0.77
perceived risks, are important	Frequency	0	5	7	18	0		
determinants of the adoption								
decision								

Continued

Barriers to new product adoption by pharmaceutical wholesalers	y	Strongly disagree	Disagree	Somehow agree	Agree	Strongly agree	Mean	Standard deviation
Ignoring uncertainty and risk	Percentage	0	30.0	50.0	16.7	3.3		
aversion over estimates the benefits of an innovation	Frequency	0	9	15	5	1	2.93	0.78
The innovation bias whereby customers overvalue the old product	Percentage	6.7	0	16.7	66.7	10		
and stick to it, even when the new product is objectively superior	Frequency	2	0	5	20	3	3.73	0.91
The reference point in the adoption decision is the old product and the losses customers will incur in	Percentage	6.7	16.7	6.7	33.3	36.7	3.77	1.30
switching to the new product will weight more than the gains expected from the innovation	Frequency	2	5	2	10	11	3.77	1.30
Customers valuing an innovation take into account the regret they feel about giving up the existing product	Percentage	6.7	33.3	26.7	26.7	6.7	2.93	1.08
and, consequently perceive a reduced subjective utility	Frequency	2	10	8	8	2		

The responses in table 4.7 are discussed below.

(a) Usage patterns

With respect to usage patterns, majority of the respondents (56.7%) "Agreed", (16.7%) of the respondents "strongly agreed", another (16.7%) of the respondents "somehow agreed" and only (10%) of the respondents "disagreed". The findings show that (90%) of the respondents indicated that usage patterns was a barrier to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 3.80 while the standard deviation was 0.85.

(b) Economic value

With respect to economic value, half of the respondents (50%) "Strongly agreed", (33.3%) of the respondents "agreed", and (6.7%) of the respondents "strongly disagreed" and only (3.3%) of the respondents "disagreed". The findings show that (90%) of the respondents indicated that economic value was a barrier to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 4.17 while the standard deviation was 1.15.

(c) Risk associated with the innovation

With respect to risk associated with the innovation, (43.3%) of the respondents "somehow agreed", (40%) of the respondents "agreed", (10%) of the respondents "disagreed" and only (6.7%) of the respondents "strongly agreed". The findings show that (83.3%) of the respondents indicated that risk associated with the innovation was a barrier to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 3.43 while the standard deviation was 0.77.

(d) Psychological barriers faced by customers

With respect to customers facing psychological barriers, more than half of the respondents (60%) "Agreed", (30%) of the respondents "strongly agreed" and only (10%) of the respondents somehow "agreed". The findings show that all the respondents indicated that customers' facing psychological barriers was a hindrance to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 4.20 while the standard deviation was 0.61.

(e) Adoption decision

With respect to adoption decision, (46.7%) of the respondents "agreed", another (46.7%) of the respondents "somehow agreed" and only (6.7%) of the respondents "disagreed". The findings show that (93.3%) of the respondents indicated that adoption decision was a barrier to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 3.40 while the standard deviation was 0.62.

(f) The nature and degree of risk perceived by customers

With respect to the nature and degree of risk perceived by customers, (60%) of the respondents agreed, (23.3%) of the respondents somehow agreed and only (16.7%) of the respondents disagreed. The findings show that (83.3%) of the respondents indicated that nature and degree of risk perceived by customers was a barrier to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 3.43 while the standard deviation was 0.77.

(g) Ignoring uncertainty and risk aversion

With respect to ignoring uncertainty and risk aversion, half of the respondents (50%) "Somehow agreed", (30%) of the respondents "disagreed", (16.7%) of the respondents "agreed" and only

(3.3%) of the respondents "strongly agreed". The findings show that (66.3%) of the respondents indicated that ignoring uncertainty and risk aversion was a barrier to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 2.93 while the standard deviation was 0.78.

(h) Innovation bias

With respect to innovation bias, majority of the respondents (66.7%) agreed, (16.7%) of the respondents somehow agreed, (10%) of the respondents strongly agreed and (6.7% of the respondents strongly disagreed. The findings show that (93.3%) of the respondents indicated that innovation bias was a barrier to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 3.73 while the standard deviation was 0.91.

(i) The reference point in the adoption decision

With respect to the reference point in the adoption decision, (36.7%) of the respondents "strongly agreed", (33.3%) of the respondents "agreed", (16.7%) of the respondents "disagreed", (6.7%) of the respondents "somehow agreed" and another (6.7%) of the respondents "strongly disagreed". The findings show that (86.6%) of the respondents indicated that reference point in the adoption decision was a barrier to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 3.77 while the standard deviation was 1.30.

(j) Customers' innovation value to customers

With respect to customers valuing an innovation, (33.3%) of the respondents "disagreed", (26.7%) of the respondents "somehow agreed", another (26.7%) of the respondents "agreed", (6.7%) of the respondents "strongly disagreed" and the same number of respondents (6.7%)

"strongly agreed". The findings show that (60%) of the respondents indicated that customers valuing an innovation was a barrier to new product adoption by pharmaceutical wholesalers in Kenya. The mean score was 2.93 while the standard deviation was 1.08.

4.3.3 The strategies adopted by pharmaceutical wholesalers to influence effectiveness of new product adoption

In order to meet the third objective of the study, "to determine strategies adopted by pharmaceutical wholesalers to influence effectiveness of new product adoption". In order to asses the strategies adopted by pharmaceuticals wholesale outlets to influence effectiveness of new product adoption, respondents were asked to indicate the extent to which their organizations has utilized each of the listed strategies. Responses are summarized and presented in table 4.8 below.

Table 4.8: Strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption

Strategies adopted by pharmaceutical voutlets to influence effectiveness of new adoption		Not at all	Neutral	Somehow	Much	Very much	Mean	Standard deviation
Product Aspects								
Product packaging	Percentage	60.0	6.7	6.7	20.0	6.7	2.07	1.46
	Frequency	18	2	2	6	2		
Packaging also has to take into consideration the unique storage	Percentage	20.0	13.3	40.0	20.0	6.7	2.80	1.19
conditions in warehouses and prolonged shelf-time in stores	Frequency	6	4	12	6	2		
Labeling also must conform to local rules and regulations and provide certain	Percentage	6.7	0	33.3	43.3	16.7	3.63	1.00
basic information to end-users	Frequency	2	0	10	13	5		
Product branding, partly due to the	Percentage	13.3	13.3	43.3	20.0	10.0	3.00	1.14
tendency of consumers to personalize brands	Frequency	4	4	13	6	3		
Pricing Issues								
Markup levels	Percentage	6.7	10.0	6.7	43.3	33.3	3.87	1.20
	Frequency	2	3	2	13	10		
Logistical Arrangements								
The unique character of the country's	Percentage	6.7	6.7	33.3	46.7	6.7	3.40	0.97
natural environment	Frequency	2	2	10	14	2		
Fierce competition and demanding	Percentage	6.7	6.7	20.0	36.7	30.0	3.77	1.17
customers	Frequency	2	2	6	11	9		

Continued

Promotional activities									
Advertising	Percentage	20.0	10.0	36.7	20.0	13.3	2.97	1.30	
	Frequency	6	3	11	6	4			
Public relations activities	Percentage	10.0	13.3	0	33.3	43.3	3.87	1.38	
	Frequency	3	4	0	10	13			
Personal selling activities	Percentage	6.7	10.0	3.3	23.3	56.7	4.13	1.28	
	Frequency	2	3	1	7	17			
Promotional activities									
Advertising	Percentage	20.0	10.0	36.7	20.0	13.3	2.97	1.30	
	Frequency	6	3	11	6	4			
Public relations activities	Percentage	10.0	13.3	0	33.3	43.3	3.87	1.38	
	Frequency	3	4	0	10	13			
Personal selling activities	Percentage	6.7	10.0	3.3	23.3	56.7	4.13	1.28	
	Frequency	2	3	1	7	17			
Behavioral aspects									
Retailers forming close relationships	Percentage	13.3	3.3	20.0	53.3	10.0	3.43	1.17	
with the manufacturers	Frequency	4	1	6	16	3			

The responses in table 4.8 are discussed below.

(a) Product packaging

With respect to product packaging, majority of the respondents (60%) indicated "not at all", (20%) of the respondents indicated "much", (6.7%) of the respondents indicated "neutral", (6.7%) of the respondents indicated "somehow" and another (6.7%) of the respondents indicated "very much". The findings show that only (23.3%) of the respondents indicated that product packaging was one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 2.07 while the standard deviation was 1.46.

(b) Unique storage condition in warehouse

With respect to packaging also has to take into consideration the unique storage conditions in warehouses and prolonged shelf-time in stores, (40%) of the respondents indicated "somehow", (20%) of the respondents indicated "much", another (20%) of the respondents indicated "not at all", (13.3%) of the respondents indicated "neutral" and only (6.7%) of the respondents indicated "very much". The findings show that at least (66.7%) of the respondents indicated that product packaging having to take into consideration the unique storage conditions in warehouses and prolonged shelf-time in stores was one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 2.80 while the standard deviation was 1.19.

(c) Labeling

With respect to labeling, (43.3%) of the respondents indicated "much", (33.3%) of the

respondents indicated "somehow", (16.7%) of the respondents indicated "very much" and only (6.7%) of the respondents indicated, "not at all". The findings show that at least (93.3%) of the respondents indicated that product labeling was one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 3.63 while the standard deviation was 1.00.

(d) **Product branding**

With respect to product branding, partly due to the tendency of consumers to personalize brands, (43.3%) of the respondents indicated somehow, (20%) of the respondents indicated "much", (13.3%) of the respondents indicated "neutral", another (13.3%) of the respondents indicated "not at all", and only (10%) of the respondents indicated "very much". The findings show that at least (73.4%) of the respondents indicated that product branding was one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 3.00 while the standard deviation was 1.14.

(e) Markup levels

With respect to markup levels, (43.3%) of the respondents indicated "much", (33.3%) of the respondents indicated "very much", (10%) of the respondents indicated "neutral", (6.7%) of the respondents indicated "not at all" and another (6.7%) of the respondents indicated "somehow". The findings show that at least (83.3%) of the respondents indicated that product markup levels were one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 3.87 while the standard deviation was 1.20.

(f) The unique character of the country's natural environment

With respect to the unique character of the country's natural environment, (46.7%) of the

respondents indicated "much", (33.3%) of the respondents indicated "somehow", (6.7%) of the respondents indicated "very much", another (6.7%) of the respondents indicated "neutral" and the same number of respondents (6.7%) indicated "not at all." The findings show that at least (86.6%) of the respondents indicated that the unique character of the country's natural environment was one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 3.40 while the standard deviation was 0.97.

(g) Fierce competition and demanding customers

With respect to fierce competition and demanding customers, (36.7%) of the respondents indicated "much", (30%) of the respondents indicated "very much", (20%) of the respondents indicated "somehow", (6.7%) of the respondents indicated "neutral" and another (6.7%) of the respondents indicated "not at all". The findings show that at least (86.6%) of the respondents indicated that fierce competition and demanding customers was one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 3.77 while the standard deviation was 1.17.

(h) Advertising

With respect to advertising, (36.7%) of the respondents indicated "somehow", (20%) of the respondents indicated "much", another (20%) of the respondents indicated "not at all", (13.3%) of the respondents indicated "very much" and only (10%) of the respondents indicated "neutral". The findings show that at least (70%) of the respondents indicated that advertising was one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 2.97 while the standard deviation was 1.30.

(i) Public relations activities

With respect to public relations activities, (43.3%) of the respondents indicated "very much", (33.3%) of the respondents indicated "much", (13.3%) of the respondents indicated "neutral" and only (10%) of the respondents indicated "not at all". The findings show that at least (76.7%) of the respondents indicated that public relations activities were one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 3.87 while the standard deviation was 1.38.

(j) Personal selling activities

With respect to personal selling activities, majority of the respondents (56.7%) indicated "very much", (23.3%) of the respondents indicated "much", (10%) of the respondents indicated "neutral" and only (3.3%) of the respondents indicated "somehow". The findings show that at least (90%) of the respondents indicated that personal selling activities were one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 4.13 while the standard deviation was 1.28.

(k) Close relationship between retailers and manufacturers

With respect to retailers forming close relationships with the manufacturers, majority of the respondents (53.3%) indicated "much", (20%) of the respondents indicated "somehow", (13.3%) of the respondents indicated "not at all", (10%) of the respondents indicated "very much" and only (3.3%) of the respondents indicated "neutral". The findings show that at least (83.4%) of the respondents indicated that close relationship between retailers and manufacturers was one of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. The mean score was 3.43 while the standard deviation was 1.17.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND

RECOMMENDATIONS

5.1 Introduction

This chapter presents conclusions drawn from the research findings and the recommendations for practice and for further studies.

5.2 Summary

The study findings show that new product adoption is of great importance, especially in the pharmaceutical industry. According to Kotler (2000), intense competition exists in the pharmaceutical industry and resistance to change can shorten the potential life cycle and create risk for the company overall. Cooper (2002) and Hem et al. (2003) assert that new product development is necessary for sustainability.

With respect to the factors influencing new product adoption by pharmaceutical wholesalers, a number of attributes were identified in the literature review as belonging to the wholesale buyers' evaluation criteria. According to Doyle and Wienberg (2000), pharmaceutical wholesalers' buying decision was based on how the product is rated on eight characteristics, including: Potential opportunities in the relevant product class; Marketing reputation of the manufacturer; Price of the product/brand compared to competitors offerings; Quality of the product/brand; Contribution margin; Rating of the proposed product launch; Expected volume compared to others in the product class; and Potential profitability compared to others in the product class.

Nilsson and Host (2004) proposed the following buying decision criteria: profitability measure, which include overall profitability, rate of turn over and sales potential; economic conditions, which include suppliers' price, gross margin, allowances and rebates, support of cooperative advertising, credit terms and other financial considerations; assortment considerations, which include existence of private brands and relations to other products; consumer evaluation, which include overall consumer evaluation, retail price, product's physical characteristics, product's psychological characteristics, packaging and supplier marketing

With respect to the barriers to new product adoption by pharmaceutical wholesalers, Ram (2002) argued that resistance to change is a normal consumer response, is a consequence of attitude strength and depends on perceived innovation characteristics, customer characteristics, and characteristics of propagation mechanisms. Ram and Sheth (2001) assert that resistance is a result of attitude formation and subsequently tends to inhibit adoption. According to Ram and Sheth (2001) adoption barriers can be categorized into either functional, which concern usage patterns, economic value, and risk associated with the innovation or psychological barriers, which are faced if the innovation conflicts with social norms and values and thus, causes dissonances, or if the innovation is linked with negative associations due to its product category, industry affiliation, or country of origin.

Various strategies that have been adopted by pharmaceutical wholesalers to influence effectiveness of new product adoption were identified in the literature. For instance, Ocwieja (2004) noted that packaging needs to be adapted in order to conform to the peculiarities of the

marketing environment. Ocwieja further asserts that labeling must conform to local rules and regulations and provide certain basic information to end-users, such as the name of the manufacturer, country of origin, production/expiry dates and list of ingredients. According to Blythe (2001), brand image is of importance in that the brand adds value to the product by the use of the name and packaging and through promotion of the brand it is positioned in the mind of the consumer.

Leonidou (2001) asserts that price constitutes a critical aspect in the intermediary's efforts to sell a product, in view of the fact that today's consumers are concerned with obtaining value for money. According to Blythe (2000), the purpose of sales promotions is tactical, creating temporary increases in sales and bringing the buying decision forward creating urgency to the decision-making process. In addition, retail promotions increase store traffic, frequency and amount of purchase, store loyalty, own-brand sales, and even out busy periods. Blythe supports the notion of merchandising tactics.

5.3 Conclusions

The findings of the study show that all respondents indicated that the key factors influencing new product adoption by pharmaceutical wholesalers in Kenya include: potential opportunities in the relevant product class; price of the product/brand compared to competitors' offerings; gross profit margin and contribution margin of the product; potential profitability compared to others in the product class; and potential of the product to maximize profits. The responses are in line with the findings by Weinberg (2000), Shaw *et al* (2002) and Nilsson and Host (2004) who identified the listed factors among others as influencing pharmaceutical buyers' evaluation

criteria in adoption of new products. Other key factors influencing new pharmaceutical products adoption by the wholesale outlets include prior experience with the product vendor in the market; organizational profit and sales objectives; availability of the product to maximize profits.

Findings of the study also show that pharmaceutical wholesalers in Kenya are faced by both functional and psychological barriers in adoption of new products. The major functional barriers identified include usage patterns, economic value, and risk associated with the innovation. The psychological barriers include adoption decision, the nature and degree of risk perceived by customers, innovation bias and reference point in the adoption decision. The responses corroborate the findings by Ram and Sheth (2001).

Further, the findings indicate that the strategies adopted by pharmaceutical wholesalers in Kenya to influence effectiveness of new product adoption include product labeling, product branding, mark-up levels, the unique character of the country's natural environment, fierce competition and demanding customers, advertising, public relations, personal selling activities and close relationship between retailers and manufacturers. The responses are in line with the findings by (Blythe, 2001; Leonidou, 2001 and Ocweieja, 2004).

5.4 Limitations of the Study

The scope of the study could be a limiting factor in that only 30 pharmaceutical wholesalers located in Nairobi and its environs participated in the study. The findings may thus not be

representative of the whole population of the pharmaceutical wholesalers in Kenya. However, the sampling technique used ensured that each of the pharmaceutical wholesalers had a non-zero chance of being selected to participate in the study.

Various constraints were encountered as during the project. The time allocated for data collection may not have been sufficient to enable the respondents complete the questionnaires as accurately as possible, considering that they were at the same time carrying out their daily duties and priority is of essence. The researcher preferred to administer the data collection tools to only the personnel in charge of running the day to day operations, however, this was practically not always possible as some of them delegated this request since they were either too busy or were away on official duties. The competitive nature of the pharmaceutical sector in Kenya also meant that some of the information sought was of confidential nature and could not be divulged for fear of giving a competitor an upper hand. Respondents were however re-assured that all information would be treated confidentially.

5.5 Recommendations

This section presents the recommendations for policy and practice and recommended areas of further research, based on findings of the study.

5.5.1 Recommendations for policy and practice

Based on findings of the study, it is expected that the stakeholders, who include the management of pharmaceutical wholesale outlets will gain a better understanding of the issues to be addressed in adoption of new pharmaceutical products. The following are the key recommendations of the

study:

Given that supplier/buyer relationship is important and improvements in this area can bring benefits in terms of greater supply chain coordination, better planning and coordination of primary production and ultimately improve consumer value. The wholesale outlets should consider enhancing buyer and supplier relationships in order to sustain a competitive edge over other players in the industry.

In new product development, highly specialized niche companies are demonstrating that they can bring innovation faster. With escalating Research and Development (R&D) costs, pharmaceutical outlets that facilitate collaborative efforts through alliances and partnerships, can better manage risk and portfolio profitability. As more parties participate in the race for innovation, integrating research, development and design efforts will become a source for competitive advantage.

Once a new product has been developed, the cycle for commercializing that product and rolling it out must become tighter. With exclusivity periods shortening and generics gaining higher market share, the time it takes to get product commercialized and demand generated will directly affect the profitability and life of that product. Regulations and compliance also affect the transition from development to rollout. The winning pharmaceutical outlets will be those organizations that can: maintain profitability despite falling margins; generate and conserve cash flow for future acquisitions and licensing arrangements.

Pharmaceutical wholesalers that want to be well positioned for the future, despite the growing hardships and complexity of the industry, should achieve excellence by focusing on these five

supply chain areas: production; fulfillment; customer management; forecasting and planning; and procurement.

5.5.2 Recommendations for further research

The findings of this study, it is hoped, will contribute to the existing body of knowledge in the area of new products adoption and form basis for future researches. The following areas of further research are thus suggested:

Whereas the current study focused on the responses from the management of pharmaceutical wholesalers in Kenya, future studies should focus on responses from the retail outlets and users of pharmaceutical products; future studies should seek to establish whether the factors identified as influencing new products adoption by pharmaceutical wholesalers in Kenya are applicable to other sectors of the economy; and further studies should also focus on the challenges faced in adoption of new pharmaceutical products and the possible mechanisms that could be employed to overcome the challenges.

REFERENCES

- Alumila, G.M (2004), Distribution strategies used by health maintenance organizations in Kenya: Unpublished Research Project, University of Nairobi.
- Brown, M., Askew, M., Baker, D., Denvir, H and Millett, A. (2003). 'Is the National Numeracy Strategy Research-Based?' British Journal of Educational Studies, 46, 4, 362-385 [A review of the evidence for and against the numeracy strategy]
- Blythe, J. (2000), *Marketing Communications*, Prentice Hall, London.
- Blythe, J. (2001), Essentials of Marketing, 2nd ed., Prentice Hall, London.
- Campbell, M.C. and Goodstein, R.C (2001), 'The moderating effect of perceived risk on consumers' evaluations of product incongruity: Preference for the norm', Journal of Consumer Research, vol. 28, no. 3, pp. 439-449.
- Carson, D., Gilmore, A., Perry, C and Gronhaug, K. (2001), *Qualitative Marketing Research*, Sage Publications Limited, London.
- Cooper, R.G. (2002), "New products: the factors that drive success", International Marketing Review, Vol. 11 No.1, pp.60-76.
- Doyle, P and Weinberg, C.B. (2000), "Effective new product decisions for supermarkets", Operational Research Quarterly, Vol. 24 No.1, pp.45-54.
- Gourville, J.T (2006), *Eager sellers and stony buyers*, Harvard Business Review, vol. 84, no. 6, pp. 98-106.
- Hem, L.E., Chernatony, L and Iversen, N.M. (2003), "Factors influencing successful brand extensions", Journal of Marketing Management, Vol. 19 pp.781-806.
- Joyce, T. (2004), in Spence, W.R. (Eds), What do we know about how advertising works? Thompson, London.
- Kiumbura, G (2003), *Retailer brands & channel conflict. The case of supermarkets in Nairobi:* Unpublished MBA Research Project, University of Nairobi.

- Kotler, P. (2000), *Marketing Management: Analysis, Planning, Implementation and Control*, 9th ed., Prentice Hall, New Jersey.
- Kuester, S., Gatignon, H. and Robertson, T.S (2000), Firm strategy and speed of diffusion in New-product diffusion models, eds. V. Mahajan, E. Muller and Y. Wind, Kluwer Academic Publishers, Boston.
- Lee-Mortimer, A. (2004), Managing innovation and risk, World Class Design to Manufacture, Vol. 2 No.5, pp.38-42.
- Leonidou, L.C. (2001), *Marketing in the Gulf States*, Management Decision, Vol. 29 No.8, pp.38-45.
- Marshall, C and Rossman, G. (2002). Designing Qualitative Research, Sage, London.
- M'Mbui, G (2004), Determinants of distribution intensity among firms in the Kenyan pharmaceutical industry: Unpublished MBA Research Project, University of Nairobi.
- Nabih, M.I., Bloem, S.G. and Poiesz, T.B.C (2001), Conceptual issues in the study of innovation adoption behavior, Advances in Consumer Research, vol. 24, no. 1, pp. 190-196.
- Nilsson, J. and Host, V. (2004), Reseller Assortment Decision Criteria, JAI Press, Aarhus.
- O'Rourke, A.D. (2006), *Trends in world apple production and marketing*, Good Fruit Grower, pp.46-50.
- Ocwieja, F.A. (2004), *Marketing in Saudi Arabia*, Overseas Business Reports, US Department of Commerce'.
- Png, J.P. and Reitman, D. (2001), *Why are some products branded and others not*, in Blythe, J. (Eds), Journal of Law and Economics, Prentice Hall, London, Vol. 38 pp.207-24.
- Ram, S. and Sheth, J.N (2001), Consumer resistance to innovations: The marketing problem and its solutions', Journal of Consumer Marketing, vol. 6, no. 2, pp. 5-14.
- Ram, S (2002), *A model of innovation resistance*, Advances in Consumer Research, vol. 14, no. 1, pp. 208-212.

Rogers, E and Shoemaker, F (2001) Communication of Innovations. The Free Press: New York

Rogers, E.M. (2002), Diffusion of Innovations, 4th ed., The Free Press, New York.

.Rogers, E.M (2003), Diffusion of Innovations, 5th ed., Free Press, New York.

Shaw, S.A., Dawson, J.A and Blair, L.M.A. (2002), The sourcing of retailer brand food products by a UK retailer, *Journal of Marketing Management*, Vol. 8 pp.127-46.

Wilson, R.M.S., Gilligan, C and Pearson, D. (2002), *Strategic Marketing Management*, Butterworth-Heinemann, Oxford.

APPENDIX I: LIST OF REGISTERED PHARMACEUTICAL WHOLESALERS

1)	City Link Pharma limited
2)	City square Pharmacy limited
3)	Eldohosp limited
4)	Essential Drugs limited
5)	Haripharm Pharmacy limited
6)	Harley's limited
7)	Karuri stores pharmaceuticals limited
8)	Krishna Chemists
9)	Kruger-Kent pharmaceuticals
10)	Laborex Kenya limited
11)	Medina Chemicals Limited
12)	Nairobi pharmaceuticals limited
13)	Nila Chemist
14)	Njimia pharmaceuticals
15)	Omaera pharmaceuticals limited
16)	Phillips pharmaceuticals
17)	Prudence pharma.
18)	Salama Chemist
19)	Sanana Pharmaceuticals
20)	Shifa chemist limited
21)	Sky Healthcare limited
22)	Surgik pharmaceuticals
23)	Surgipharm Limited
24)	Thika Chemist
25)	Transchem limited
26)	Transwide limited
27)	United Pharma (K) limited
28)	Veteran pharmaceuticals limited
29)	Woodvale pharmacy limited
30)	Zuripharma Ltd

APPENDIX II: INTRODUCTION LETTER

Dear Respondent,

My name is Christine M. Nzioka. I am currently pursuing a Masters in Business Administration

at the University of Nairobi.

I am inviting you to participate in a research project entitled "Adoption of new pharmaceutical

products by pharmaceutical wholesalers n Kenya". Along with this letter is a short questionnaire

that asks a variety of questions about factors that influence adoption, barriers to adoption and the

strategies adopted by wholesalers to influence effectiveness of product adoption.

The results of this project will be for academic purposes only and will be held in confidentiality.

If you have any questions or concerns about completing the questionnaire you may contact me

on telephone number 0722 758081 or Email: cmnzioka@yahoo.com

Thanking you in advance for your participation, I remain

Sincerely Yours

CHRISTINE M. NZIOKA

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APPENDIX III: QUESTIONNAIRE

This questionnaire has been designed to collect information from selected pharmaceutical wholesalers in Kenya and is meant for academic purposes only. Please complete each section as instructed. Do not write your name or any other form of identification on the questionnaire. All the information in this questionnaire will be treated in confidence.

SECTION I: BACKGROUND INFORMATION

1.	Name of pharmaceutical wholesaler (optional)
2.	For how long has this organization been in operation in Kenya? (Tick as appropriate)
(a)	Less than 1 year []
(b)	1 to 5 years []
(c)	6 to 10 years []
(d)	11 to 15 years []
(e)	16 years and above []
3.	How many full time employees does the organization have? (Please tick as appropriate)
(a)	Less than 25 []
(b)	26 to 50 []
(c)	51 to 75 []
(d)	76 to 100 []
(e)	01 and above []
4.	For how long have you worked in the organization? (Tick as appropriate)
(a)	Less than 1 year []
(b)	Between 1 and 5 years []
(c)	Between 6 and 10 years []
(d)	Between 11 and 15 years []
(e)	16 years and above []
5.	What is the ownership of the organization? (Tick as appropriate)
(a) Pu	blic []
(b) Pri	ivate []
(c) For	reign []
6.	How many branches does the organization have? (Tick as appropriate)
(a)	None []
(b)	1-2 []
(c)	2-3 []
(d)	More than 3 []

SECTION II: FACTORS INFLUENCING NEW PRODUCT ADOPTION OF PHARMACEUTICAL PRODUCTS BY WHOLESALERS IN KENYA

5. Listed below are some of the possible factors influencing new product adoption by wholesale outlets. With respect to your organization, please indicate the extent to which each of the listed factors has influenced the organization's new product adoption decisions. (Please tick as appropriate)

	Not at all (1)	Neutral (2)	Somehow (3)	Much (4)	Very much (5)
Potential opportunities in the relevant product class	[]	[]	[]	[]	[]
Marketing reputation of the manufacturer	[]	[]	[]	[]	[]
Price of the product/brand compared to competitors offerings	[]	[]	[]	[]	[]
Quality of the product/brand and its status in the market, uniqueness and packaging	[]	[]	[]	[]	[]
Gross profit margin and Contribution margin of the product	[]	[]	[]	[]	[]
Rating of the proposed product launch	[]	[]	[]	[]	[]
Expected volume sales compared to others in the product class	[]	[]	[]	[]	[]
Potential profitability compared to others in the product class.	[]	[]	[]	[]	[]
Prior experience with the product vendor in the market	[]	[]	[]	[]	[]
Product uniqueness	[]	[]	[]	[]	[]
Marketing efforts and support of the product vendor/manufacturer	[]	[]	[]	[]	[]
Other financial aspects (rebates,	[]	[]	[]	[]	[]

trade terms)

	Not at all (1)	Neutral (2)	Somehow (3)	Much (4)	Very much (5)
Organizational profit and sales objectives	[]	[]	[]	[]	[]
Likely consumer demand for the product	[]	[]	[]	[]	[]
Promotion and advertising commitment for the product by manufacturer	[]	[]	[]	[]	[]
Availability of the product	[]	[]	[]	[]	[]
Potential of the product to maximize profits	[]	[]	[]	[]	[]
Potential growth in product category;	[]	[]	[]	[]	[]
Supplier track record/performance;	[]	[]	[]	[]	[]
Product delivery	[]	[]	[]	[]	[]
Non-task (interpersonal relations between retailer and product vendor)	[]	[]	[]	[]	[]

SECTION III: BARRIERS TO NEW PRODUCT ADOPTION BY PHARMACEUTICAL WHOLESALERS IN KENYA

6. Listed below are some of the barriers to new product adoption by pharmaceutical wholesalers. Please indicate the extent to which you agree that each of the barriers listed below has affected effectiveness of new product adoption in your organization (Tick as appropriate along the 5 point scale)

	Strongly disagree (1)	Disagree (2)	Somehow agree (3)	Agree (4)	Strongly agree (5)
Functional Barriers Concerns					
Usage patterns - Usage barriers are triggered when the innovation is not compatible with existing habits	[]	[]	[]	[]	[]
Economic value - value barriers are erected when customers do not perceive a relative advantage against existing alternatives	[]	[]	[]	[]	[]
Risk associated with the innovation - risk barriers are caused by uncertainties	[]	[]	[]	[]	[]
Psychological Barriers					
Customers face psychological barriers if the innovation conflicts with social norms and values and thus, causes dissonances, or if the innovation is linked with negative associations due to its product category or country of origin	[]	[]	[]	[]	[]

		Strongly disagree (1)	Disagree (2)	Somehow agree (3)	Agree (4)	Strongly agree (5)
(b) In	novation Rejection Behavior					
i.	The adoption decision is based on the value of the innovation, which is uncertain due to a number of factors, especially the lack of information about the likely performance of the innovation.	[]	[]	[]	[]	[]
ii.	The nature and degree of risk perceived by customers, and the manner in which they deal with perceived risk, are important determinants of the adoption decision.	[]	[]	[]	[]	[]
iii.	Ignoring uncertainty and risk aversion overestimates the benefits of an innovation.	[]	[]	[]	[]	[]
iv.	The innovation bias whereby customers overvalue the old product and stick to it, even when the new product is objectively superior.	[]	[]	[]	[]	[]
v.	The reference point in the adoption decision is the old product and the losses customers will incur in switching to the new product will weight more than the gains expected from the innovation.	[]	[]	[]	[]	[]
vi.	Customers valuing an innovation	[]	[]	[]	[]	[]

about giving up the existing prod	uct				
and, consequently perceive reduced subjective utility	a				
Others (Specify)	[]	[]	[]	[]	

take into account the regret they feel

vii.

SECTION IV: STRATEGIES ADOPTED BY PHARMACEUTICAL WHOLESALERS TO INFLUENCE EFFECTIVENESS OF NEW PRODUCT ADOPTION.

[]

7. Listed below are some of the strategies adopted by pharmaceutical wholesale outlets to influence effectiveness of new product adoption. Please indicate the extent to which your organization has utilized each of the listed strategies to influence effectiveness of new product adoption. (Tick as appropriate)

	Not at all (1)	Neutral (2)	Somehow (3)	Much (4)	Very much (5)
Product Aspects					
Product packaging – appropriate packaging of products to conform to the peculiarities of the marketing environment.	[]	[]	[]	[]	[]
Packaging also has to take into consideration the unique storage conditions in warehouses and prolonged shelf-time in stores.	[]	[]	[]	[]	[]
Labeling also must conform to local rules and regulations and provide certain basic information to end-users.	[]	[]	[]	[]	[]
Product branding, partly due to the tendency of consumers to personalize brands.	[]	[]	[]	[]	[]

	Not at all (1)	Neutral (2)	Somehow (3)	Much (4)	Very much (5)
Pricing Issues					
Markup levels - Markup levels tend to differ by product category and channel component	[]	[]	[]	[]	[]
Logistical Arrangements					
The unique character of the country's natural environment implies that physical distribution plays a vital role in shaping product costs and providing customer satisfaction.	[]	[]	[]	[]	[]
Fierce competition and demanding customers imply that members of the distribution chain should exercise special care when making inventory decisions with special attention to expiry date and shelf life.	[]	[]	[]	[]	[]

Promotional activities

Advertising - Advertising takes the lion's share of promotional budgets	[]	[]	[]	[]	[]
	Not at all (1)	Neutral (2)	Somehow (3)	Much (4)	Very much (5)
Public relations activities - The public relations activities concerns major branded goods and take the form of sponsorships, CSR, news releases, and sales meetings.	[]	[]	[]	[]	[]
Personal selling activities - owing to the fact that most business transactions are based on personal exchanges	[]	[]	[]	[]	[]
Behavioral aspects					
Retailers forming close relationships with the manufacturers	[]	[]	[]	[]	[]

THANK YOU