

An Analysis of Green Marketing Practices among Pharmaceutical Firms in India

Sweta Singh

Research Scholar,
School of Studies in Management,
Jiwaji University,
Gwalior

Prof. K.S. Thakur

Chairman and Head,
School of Commerce and Business Studies,
Jiwaji University,
Gwalior

Abstract

There is an aggressive growing of awareness of the continuous environmental degradation that is facing current and future generations. The green marketing has developed into a known phrase in current years as organizations have focused on the environmentally alert consumer and growing stricter environmental rules. It notifies efforts of designing, promoting, costing and distributing products that will not damage the environment.

The pharmaceutical industry in India has been characterized by a lot of changes and an increasingly unstable environment. To live in such an environment, the firm has to regulate strategic responses and turn up with green marketing strategies for trading with the ever worsening environment. This study was therefore an examination of green marketing practices among the pharmaceutical manufacturing firms in India.

The study showed a descriptive review that involved a study of the 21 manufacturing pharmaceuticals firms targeting marketing manager or production manager in each firm. Primary data was composed by use of questionnaires; the data was studied using SPSS and data presented by use tables and percentages.

The study accomplished that the green market idea has not been fully adopted by the pharmaceutical industry due to lack of information. However the companies are trying to put in place various measures on green product, green costing, green promotion and green distribution. They comprise conserving energy, water and material resources in production to keep away from wastages and recover efficiency, product production that gather the legal specifications, product production that do not hurt animals and humans. However a number of challenges like lack of government incentives, financial expenses of varying processes, products and waste management, deficiency of factual information about the green marketing idea to both the industry and to the consumer. The recommendations are that there should be stipulation of factual information to both the industry and to the consumers; companies should build measures that make certain that the notion is easily adopted and practiced by its members and the government should present incentives for companies to turn green.

Keywords: Green marketing, Environment, Green product, Green costing, Green promotion and green distribution.

Introduction

Background

In the recent past, there has been an increasing knowledge of prevalent environmental degradation facing current and future generations. Attention has turned out to be so great that environmentalism has been recognized as potentially the major business matter (Kirkpatrick, 1990). Consumers, who support a concern for the environment, or what has been labeled a green orientation, are increasing in number (Donaton and Fitzgerald, 1992). In fact, according to one study, as many as eight out of ten American consumers currently assert that they are environmentalists (Gutfield, 1991). It is not astonishing, then, that many companies have made an attempt to take advantage of the public's interest in green concerns by positioning themselves as environmentally accountable organizations (Jay, 1990). Unfortunately, business' obligation to the environment has often been more obvious in their communications than in their authentic practices (Fierman, 1991; Garfield, 1991). Nevertheless, the concept of green marketing has become a recognized buzz-phrase in current years as organizations have focused on the environmentally alert consumer (Davis, 1991) and/or have begun to react to the increasing likelihood of stricter environmental rules (Porter, 1991).

The Concept of Green Marketing

The term green marketing defines an organization's labors of designing, promoting, pricing and distributing products that will not damage the environment (Pride and Ferrell, 1993). Clearly, there are a huge number of varied considerations that may be addressed by companies that choose to follow a green marketing agenda. Among these are matters such as: developing contributions that conserve energy and other natural resources in their manufacturing process (Porter, 1991); forming advertisements and other promotional messages that precisely imitate a company's commitment to the environment (Kangun et al., 1991); setting costs for green products that balance consumers' sensitivity to price against their enthusiasm to pay more for environmental protection (Jay 1990); decreasing pollutants and conserving resources in the transportation of products to market (Bohlen et al., 1993); and a host of other marketing-related decisions. To line up themselves with the green initiative, organizations often target on one or more of the three broad actions reusing, recycling and reducing. Sometimes referred to as the 3 R's principle for environmental management, these practices are proposed at scheming the amount of natural resources waste that often accompanies organizations' marketing pursuits. By reusing packaging (e.g. offering products in refillable containers), recycling materials (e.g. reclaiming elements from used products) and reducing resource usage (e.g. conserving energy in the production process), organizations can play an

important role in protecting the environment? These practices may also aid to position specific organizations as green focused in the public's brain and attract the ever larger green consumer section.

Reviewing these analyses, it seems evident that a lot of the troubles that have hindered the development of effectual mainstream marketing in the past have returned to destroy the progress of green marketing as well. These obstacles have contributed to the emergence of five failed manifestations of green marketing. These are: green spinning, green selling, green harvesting, enviropreneur marketing, and compliance marketing (Kalama, 2007).

Pharmaceutical Industry in India

The pharmaceutical industry in India has undergone many changes as being liberalized in the early 1990s. There has been an invasion of numerous pharmaceutical companies into the market, either as through franchise holders or as direct investments (Ronoh, 2002). The product range in the industry can be largely categorized in the prescription medication and non-prescription medication. In 2007, there were 9,640 doctors with fewer than 20% of these being in the public sector (India Medical Directory, 2008/2009). This results to on an average 50 doctors per 100,000 people. In the same way, there were 3,050 pharmacists, which approximately equals to 6 pharmacists per a population of 100,000.

The target market for the pharmaceutical industry constitutes the doctors who ultimately prescribe the medicine to the final customer or the patient. The other increasing target market is the pharmacist who is playing a major role in convincing doctors to alter medication in the prescription (Ongubo, 2003). Patients also play a considerable role in influencing the doctor's prescription by considering some brands on the basis of supposed efficiency or origin. Although direct marketing of prescribed drugs is illegal, patients are more and more asserting their liking on the medication that doctors and pharmacists suggest particularly in the private health care sector where the patients pay straight for medication and service.

The industry is made up of three domains namely the manufacturers, distributors and retailers. All these play an important role in helping the country's health sector, which is likely to have about 4,557 health facilities all over the country. India is at present the biggest manufacturer of pharmaceutical products in the Common Market for Eastern and Southern Asia (COMESA) area, supplying about 50% of the regions' market. Out of the area's estimated of 50 familiar pharmaceutical manufacturers, around 30 are based in India. Around 9,000 pharmaceutical products have been registered for sale in India. These are categorized as per the levels of outlet as free sales over the counter, pharmacy

technologist dispensable, or pharmacist dispensable and prescription only.

Statement of the Problem

The main sources of challenges for firms and determine strategic directions are Industry attractiveness and competitive conditions. According to Thompson and Strickland (1997), a firm's evaluation of the industry and competitive environment directly affects how it should attempt and locate itself in the industry, and what its basic competitive approach should be. The growing competition which is being faced by the companies today, rewards will be given to those who can read accurately what consumers desires by continuously monitoring the environment and delivering the maximum value to customers.

Ongubo,(2003) is of the opinion that as the operating environment alters; a more marked transformation of the business landscape lies in front. Therefore, a marketing strategy is important in order to adapt to the changing business environment. As per the Government of India economic survey (2000), implementation of structural adjustment programs and following market liberalization opened the Indian market, leaving businesses at the piny of market forces. Due to this, businesses faced growing competition and registered less profits and even losses. This could probably be because of lack of good marketing strategies (Abdalla, 2001).

Indian pharmaceutical industry has been characterized by various changes and an increasingly unstable environment. The pattern of competitive forces such as strength of competition, novel entrants, alternate products and supplier and buyer power have altered the environment a great deal, creating the requirement for firms to modify their competitive positions and accept green marketing as a strategy (Ndiho, 2001). Many researchers have studied the position of industries in India in accordance to changed economic and environmental situation particularly after environmental deprivation and global warming. It was found that the modified environment has affected business strategies and firms have become more proactive and competitive (Abdalla, 2001). To live in this kind of an environment, the firm needs to adjust strategic responses and turn up with green marketing strategies for dealing with the ever decreasing environment.

Whereas earlier studies by Ndiho (2001), Wachira (2001), Ronoh (2002), and Ongubo (2003), have targetted on marketing practices within the pharmaceutical industry in India, strategic alliances, and strategic responses in the pharmaceutical industry, while Obuya (2003), Kiongera (2003), Kalama(2007), and Odhiambo (2008) have focused on green marketing by many firms, but none of them has particularly faced the usage of green marketing as a practice

in the pharmaceutical manufacturing firms in India. As far as the marketing of pharmaceutical products is concerned, this remains a very crucial issue.

This study is according to the premise that the passage of time and the numerous and important changes in the business world have led to completely diverse responses to environmental problems by firms. For example, It was reported in The Hindustan Times of August 2,2009 that thousands of Indians are losing money in fatal scams operated by varying medicine clinicians with wild claims that their products are "health and natural"

But actually these are chemical compounds with dangerous side effects. A study is required that will update the previous knowledge about green marketing and green products in the pharmaceutical industry.

It is known that the pharmaceutical industry is unique and is one of the fast moving consumer products. For instance, it is expected that yearly India produces around 20-34 million tablets and capsules and over 400,000 litres of suspension and syrup. This way the production can have a huge impact in our environment. On the basis of this knowledge the study deals with the investigation of the green marketing practices in the industry, so that the stakeholders and interested parties are aware of the environmental impact of their marketing, production and disposal of products.

Objectives of the Study

The main aim of the study was to investigate green marketing practices among manufacturing pharmaceutical companies in India.

Specific Objectives

The specific objectives of this study were to:

1. Determine the extent to which manufacturing pharmaceutical firms in India have implemented green marketing practices.
2. To know the problems of manufacturing pharmaceutical firms in implementing green marketing.

Significance of the Study

This study will give insights into green marketing to the pharmaceutical industry and a structure on which players of the industry can build their competitive marketing strategies based on green marketing.

To the government, this study will offer hints, on how pharmaceutical make a conducive atmosphere for green marketing and sustains country's pharmaceutical industry.

The knowledge generated by this study will benefit the academicians enabling other researchers to get better and

build a better understanding of green marketing by manufacturing pharmaceutical firms.

Scope of Study

The study was a vivid survey and it covered all twenty one manufacturing pharmaceutical firms that are currently operating in India. Secondary data was composed from the many publications by the pharmacy and poisons board of India, Journals and publications from a variety of manufacturing pharmaceutical firms. Questionnaires were used to collect primary data and were delivered to the manufacturing pharmaceutical firms.

Literature Review

Introduction

Green marketing has gone through several phases since 1980s. After a backlash in the 1990s, green marketing made a comeback in the Indian markets from 2000 onwards (Ottman et al., 2006). In the Indian market economies, Market orientation and an importance on the use of market instruments in environmental policymaking have gained more popularity. For example, The World Bank (Steer, 1996), advocates the exercise of economic incentives and public information campaigns, at variance that economic policy instruments are just, more reliable and more reasonable solutions to environmental deprivation than the highly enforcement-intensive regulatory environmental policy actions. The approach based on Market to environmental policy (Turner et al., 1994) usually highlight the role and responsibility of consumers and private business enterprises in the production of environmental quality and in the evolution to sustainable global economy.

In good functioning markets, Green consumerism is a potent market force, which works to improve environmental innovation and drives firms toward environmentally responsible attitude and business ethics, effectively and with little government involvement. As per the information given by microeconomics and marketing literature, advocates of market-based environmental policy are of the opinion that the greening of consumers' values not only compels firms to incorporate environmental issues into their business approach, but also creates novel business opportunities (Ottman et. al., 2006).

The "4 Green Ps"

The graceful "4Ps" or marketing mix model, first pre sent as the theory of parameters by Rasmussen (1955), and then developed by McCarthy (1960) and finalized by Kotler (1967), came out of economic theory and also fixed few of its key assumptions into the marketing analysis tool. Based on the origin, the marketing mix was a resource allocation model, which rests on the assumption that the related resources which are involved in the exchange process,

including the products, are homogeneous, i.e. the economic value is independent of what combinations are present. (Bennett, 2005). On the basis of this underlying assumption, the problem of allocation first shows up as a topic of how much need to be allocated to marketing in total. The next concern is to take a decision related to how much to allocate to each of the different means – which in the green marketing mix representation are the "4 'green' Ps"; 'green' product, 'green' price, 'green' place and 'green' promotion. For the model to work, another important assumption needs to be added: that there is a linear dependency between the resources put into a mean and the results. In other words, each mean must be assumed to have a specific impact on the result.

The Challenges of Green Marketing

The challenges of green marketing can be due to government, company and consumers (NCCSD, 2006). The government regulation can discourage green marketing. The government can discourage public sector from buying green products and services by itself not buying green products and sustainable products, and not reducing resource consumption. The government can encourage green buying by providing incentives such as tax incentives and grants for installing energy efficient technology and or itself leading by example of buying green products.

The company has a poor perception of importance of environmental compliance. For example few companies lack green standards for manufacturing green products and packages, save energy, lessen waste and to recycle products. However proper designing of environmental values can activate innovation that reduces the overall costs of products and improve its value. Furthermore some companies do not have environmental sensitive corporate atmosphere, commitment of individual and company to sustainability is very low. Bansal and Roth (2000) found that firms that are inspired by environmental responsibility often pointed to a single individual who championed their ecological responses. Indeed, Lamming and Hampson (1996) noted that 'illiteracy among people related to environment' or lack of management commitment (Min and Galle 2001) as major challenge to green marketing.

Consumer challenges have been a concern in green marketing. For example, in the past various organizations appeared to be only "misusing" consumers' increased environmental alertness, i.e. altering their marketing claims without changing their products or production process. When this gap in corporate behavior and marketing claims are noticed, widespread negative publicity is created, which results in consumers leaving the aberrant companies (Lawrence, 1991; Ottman, 1992b).

Unconstructive publicity generated by the firm's deprived environmental marketing presentation can have unfavorable effects on other firms. It may spoil the present and future green marketing actions of the other firms or it may depress firms which are not yet utilizing green promotion behavior from doing so. There is evidence that when a negative repercussion to green advertising has taken place, consumers become very much cautious of green claims in general (Carlson et al., 1993; Cude, 1993; Kangun et al., 1991; Rawsthorn, 1990; The Roper Organization, 1990). As this cynicism has not dissuaded all manufacturers of consumer products from using green promotion, some firms diminish their green marketing behavior (Lawrence, 1992).

Green Marketing Strategies

Marketing on greening products/firms develops on both the societal and social marketing study. Societal marketing implies that organizations (governments, businesses and nonprofits) are required to know the requirements of focused markets and to bring the preferred satisfactions in a way that improves the consumer's and the society's good being. Social marketing targets on calculating and implementing programs that add to the adequacy of a social plan, cause, or carry out in (a) target group(s) (Kotler, 1994).

Usually, marketers target on person needs for designing/marketing products to best give out these desires. This approach is based on two observations. Primarily when individuals are inspired by the promise that products will fulfill their demands at outlays acceptable to them. Secondly, individual attributes do not have noteworthy externalities (the divergence between public and private costs/benefits), positive or negative. The presence of externalities often instigates events from the non-market atmosphere, majorly in the form of governmental system.

Dissimilar traditional marketers, social and societal marketers look for to convince consumers to change their behaviors that have significant externalities. However, these behavioral modifications may not directly/sufficiently benefit consumers or the benefits may also be non-excludable.

Greening Products versus Greening Firms

The impact of greenness on consumer's choice assumes that consumers purchase products primarily based on products' attributes. However, in some other cases, firm-level attributes (greenness of processes and systems) may be important for budding promotional strategies. Perhaps consumers want green products from green firms. From a managerial perspective, if brand attributes are more significant, firms should invest in greening products, but if corporate images are more vital, focusing on firm-level processes/systems is desirable (Prakash, 2000).

Of course, a belief on corporate advertising would require an integrated organizational approach to greening processes/systems as well. Firm- and product-level greening, however, are not mutually exclusive. Most firms possibly invest in both. Nevertheless, in terms of their relative salience, a characteristic between brand-focused and firm-focused greening strategies is important.

Challenges for green marketers involve what to green (product versus processes/systems), the pros and cons of daunting individual versus collective sacrifices on consumers, the role of economic and non-economic factors in influencing consumer behavior and what kinds of information revelation strategy to adopt (Prakash, 2000).

Managerial Implications

There are two different types of managerial implications that the 4 Green P's gives rise to. The first is the importance of practitioners in the development of new theoretical approaches in green marketing. There are obvious reasons why this should start out from important experimental observations or phenomenon. This regards not least the existence and characteristics of dynamic processes, value increasing green marketing developments and so on. Here companies and individual green marketing managers can be important lead users (Wilson, 2007).

The second proposition regards the general focus. Green marketing has been quite activity oriented and the main focus has been on designing and performing green marketing activities. If, marketing development is deepest then green marketing must become much more devoted to them. Not just the products that always have been central but also how products and services are related to each other and to important organizational resources. It is especially the latter – the interfaces between technical and organizational resources – that seems to have a large potential for the future development.

Green marketing includes greening products as well as greening firms. Though normative concerns impact consumers' and firms' decision making, economic aspects of green marketing should not be mistreated. Managers need to categorize what ought to be greened: systems, processes or products? Consumer boredom to green products is due to many factors, including inadequate information about levels of greenness, lack of credibility of firms' claims and the propensity to free ride. It also seems that green products that offer direct excludable benefits to consumers (such as pharmaceuticals with minimum side effect and nutritious and natural foods) would have higher adequacy (Wilson, 2007).

Consumer boredom may also be attributed to the belief that individual actions alone cannot impact the macro picture, and collective endeavors are impeded by free riding. To deal

with these market-related problems, perhaps initiatives in the non-market environment may bear fruit. To restrain free riding and to reassure consumers that their actions will have macro impact, some green marketers favor policies/regulations that lead to collective sacrifices.

This directs to another set of challenges, because environmental issues are often highly contested in terms of their etiologies and results. Many such disputes are attributable to ideological and economic factors. To some, collective sacrifices indicate intrusive big government and side-stepping individual accountability.

Economic considerations are even more complex. There is a rich literature in public policy on how the allocation of benefits and costs impacts policy processes and what types of political strategy are suitable in different contexts (Wilson, 2007). Actors may favor the status quo if the proposed collective sacrifice imposes costs on them. If the benefits are diffused, policy supporters could have complexity in mobilizing winning coalitions.

On the other hand, with determined benefits and diffused costs, mobilizing winning coalitions to support collective sacrifices is easier. When both benefits and costs are determined or diffused, the outcomes are difficult to predict. As this discussion suggests, the tasks of green marketers who favor collective sacrifices as vehicles for accomplishing their objectives are complicated by the politics of the non-market environment (Prakash, 2000).

Our understanding of green marketing is still at an initial stage, perhaps due to the multidisciplinary nature of the enterprise. Marketing scholars focus on a host of business strategy and public policy issues, including eco-labels and market segmentation, and the role of structural aspects and economic incentives in influencing consumer behavior. For environmental economists, green marketing denotes a broader trend in the evolution of environmental policies that focus on information disclosure.

Institutional theory, stakeholder theory and the corporate social performance perspective view green marketing as a subset of corporate policies designed to gain external legitimacy. These have developed in response to the potential of a broad spectrum of stakeholders, both internal and external. Political economists focus on collective deed dilemmas inherent in green marketing at the consumer and producer levels (Wilson, 2007).

Green Purchasing Behavior

Several studies have shown that consumers do take notice of the environmental performance of their energy supplier. For green power customers, their intention might either to make sure that their money does not support unsustainable energy

sources or to contribute to climate security and growth of renewable energy in their personal choice (Wüstenhagen and Bilharz, 2006). However, other empirical research has found that people accept mark-ups on the price of green energy brands as they want to feel better about themselves, and are not primarily concerned in the objective environmental impact of their decision. Customers experience an intrinsic value in using green products or services, and individual motivation is driven by a “warm glow of giving” (Menges, 2003). Interestingly, while Ritov and Kahnemann (1997) suggest that environmentally conscious consumers experience this feeling of well-being from acting in an altruistic way, a recent study of a green energy brand in Spain found that the “warm glow” benefit is felt mainly by consumers who rate low on measures of environmental consciousness (Hartmann and Apaolaza, 2005). Generally, then, consumers may indeed identify individual benefits as a consequence of green behavior, but those are not directly related to an apparent improvement of environmental quality. Rather, they are emotional benefits based on psychological factors. As Coddington (2006) points out, green marketing implies the satisfaction of consumer's emotional needs.

Are there any more emotional benefits be identified, which marketing strategists might use to amplify the perceived value of environmentally friendly products? Take the case of the “hybrid” car, powered by both conventional fuels and electricity. Sales of the first commercially produced example, the Mahindra Renaults, were far higher than estimated, while those of the consequent fuel-efficient versions of the Tata Safari and Audi A2 were so disappointing as to result in withdrawal from the market. In a recent Indian survey, the Mahindra brand as a whole was seen as the most environmentally sound. The Mahindra Renaults is marketed as an environmental innovation, and is evidently identifiable as such by its differentiated design and specific model name. Furthermore, followers of social fashion know that several movie stars own one. Are these the reasons for its commercial success? Belz and Dyllik (1996) suggest that consumers may derive self-expressive benefit from the socially visible utilization of green brands. Thus, the choice of a green brand may allow them to demonstrate their environmental awareness to others.

Extending the previously noted proposition that there is a near-universal human aspiration to “feel at one with nature” (Kals et al., 1999), we can suggest another approach to emotional benefits in green marketing. If there is indeed an instinctive inspiration to spend time in natural environments, based on a optimistic emotional state while in pleasant natural surroundings, the emotional benefits to be gained could be associated with a brand through marketing and advertising, to improve its perceived value. Several studies have found verification to support this (Hartmann

and Apaolaza Ibáñez, 2005). Though the effect of this type of emotional value has not otherwise been much studied so far, the association of a brand with images of nature has in fact been very common in green marketing crusade. The Spanish green energy brand Iberdrola Energía Verde (green energy), and the British conventional energy supplier BP both illustrate the potential effectiveness of the strategy. It seems credible in general that any sustained advertising campaign based on “tree-hugging” imagery, pooled with more seriously conveyed information that the advertiser's products are green, will significantly improve brand attitudes. Iberdrola was perceived before its campaign as the least environmentally committed energy company in Spain, and has been rated in recent surveys as the greenest; the case of BP is less dramatic and longer-term, but no less persuasive.

Thus, green brands can evoke positive emotions in convinced target groups by simply offering information on environmentally sound product attributes. Knowing that a brand is green will always make several consumers feel better while using it. The crucial question is, of course, how many of them? Is there “a market in the gap?” However, a much more powerful and valuable emotional response can probably be obtained through precise emotional benefits innate in the brand. Authors report many studies of alternative approaches to the delivery of emotional brand benefits and brand experiences through advertising, such as transformational advertising and emotional conditioning (Kim et al., 1998). By these means, planners and strategists can create green brands, maintained them by associations with the imagery of nature, and thereby benefit from the evoked emotional responses.

Research Methodology

Research Design

This was a descriptive survey study that investigated the green marketing practices among industrialized pharmaceuticals firms in India. Eloquent research involves collecting data in order to test hypothesis or answer questions concerning the current status of the subject under study. According to Boyd et al (2004) descriptive studies are hypothetical to describe the who, what, where, when and how of a phenomenon.

Population of the Study

The research was a descriptive survey study of the 21 manufacturing pharmaceuticals firms (appendix iii). The study population covered marketing manager or production manager in each firm totaling 21 respondents for the 21 firms.

Data Collection Techniques

Data was collected using semi structured questionnaire with a liker scale type of questions. The questionnaire was divided into three parts. The part A enclosed background information of the company, then part B enclosed Green marketing practices under the study, while part C contained challenges of implementing the green marketing.

Data Analysis and Reporting

The primary collection was summarized, coded, tabulated and then analyzed using descriptive statistics such as mean and regularity distribution. Data presentation was done by the use of tables and percentages; this ensured that the gathered information was clearly understood. The data was then coded and entered into statistical package for Social Sciences (SPSS) for analysis. The analyzed data was then presented in a report.

Data Analysis, Findings And Interpretation

Company background Information

The companies from which the research was done were; IMS Healthcare ltd, Abbott India ltd, Biocon ltd, Bal Phamra ltd, Cipla ltd, Combat drugs ltd, Dr reddy's laboratories ltd, Lab and allied Co. ltd, GlaxoSmithKline pharmaceutical ltd, Granules India ltd, ICVL ltd, JB Chemicals and Pharmaceuticals ltd, KDL Biotech ltd, Lyka labs ltd and Novartis India ltd.

Position of the Respondents

The respondents were asked to mention their position in the company. 48.7% were managers, 24.7% were sales managers, 8.6% were product development managers while 18% were quality control managers of the company. The fact that majorly there was managers; this may be due to the known population which included marketing and production managers. The results are as follows in Table 4.1.

	Frequency	Percent
Manager	8	48.7
Sales	4	24.7
Quality control	2	18.0
Product development manager	1	8.6
Total	15	100.0

Table 4.1: Position of the respondents

Length of time the respondents have been working in the pharmaceutical industry

On the length of time the respondents had been working in the pharmaceutical industry; 50% had been in the industry for 6 to 10 years, 10% for less than 5 years, the same 20% for

over 20 years, 15.3% for 11 to 15 years and 4.7% for 16 to 20 years. The majority said that they have been in the industry for 6 to 10 years which could be due to the target population of managers who tend to have stayed in the industry for long.

	Frequency	Percent
Less than 5 years	4	10.0
6-10 years	5	50.0
11-15 years	3	15.3
16-20 years	1	4.7
Above 20 years	2	20.0
Total	15	100.0

Table 4.2: Length of time the respondents have been working in the pharmaceutical industry

Length of time the respondents had been working in the present company

The Table 4.3 shows the length of time the respondent had been in the present company 35.3% had been in the company

for 6 to 10 years, 25.7% for 1 to 5 years, 20% for over 20 years, 14.3% for less than 1 year, 4.7% for 16 to 20 years while none of them had been there for 11 to 15 years.

	Frequency	Percent
Less than one year	3	14.3
1-5 years	4	25.7
6-10 years	5	35.3
11-15 years	0	-
16-20 years	1	4.7
Above 20 years	3	20.0
Total	15	100.0

Table 4.3: Length of time the respondents had been working in the present company

Company's Ownership

On the ownership of the company 75.3% of the results

indicated that the companies are locally owned and 18% foreign owned while 6.7% jointly owned as Table 4.4 shows.

	Frequency	Percent
Foreign	11	75.3
Local	3	18.0
Jointly	1	6.7
Total	15	100.0

Table 4.4: Company's Ownership

The length of time the company had been in existence

The Table 4.5 shows the results on the length of time the company had been in existence. 33.3% said that the

company had been in existence for over 25 years, 21% for 16 to 20 years, 21% for 5 to 10 years while 12.3% said that their company had been in existence for 11 to 15 years and the same 12.3% for 21 to 25 years.

	Frequency	Percent
5-10 years	3	21.0
11-15years	2	12.3
16-20 years	3	21.0
21-25 years	2	12.3
Above 25 years	5	33.3
Total	15	100.0

Table 4. 5: The length of time the company has been in existence

All the respondents agreed that they do not engage themselves in any other business apart from pharmaceutical business.

Green Marketing Practices

The researcher wanted to know the level of the companies attached to green marketing practices. A Five point Likert scale was used to interpret the respondent's extent. According to scale those factors which were not significant at all were awarded 5 while those which were very important were awarded 1. Within the continuum are 2 for important, 3

for indifferent and 4 for least important. Mean and standard deviation were used to evaluate the data.

Green marketing concept awareness

95% of the respondents had not heard of it while 5% had heard of green marketing conception. For the people who had heard of it they said that according to their understanding the theory was all about producing environment friendly products and its a type of marketing that puts into consideration the environment.

	Frequency	Percent
Yes	14	95
No	1	5
Total	15	100.0

Table 4.6: Green marketing concept awareness

Green Product Practices

The Table 4.7 shows the findings on the level of substance of green product practices. According to the researcher those factors with a mean close to 2.0 were not important at all on while those with a mean close to 1.0 were very important. On the same note the higher the standard deviation the higher the level of disagreement or distribution among the respondents. In regard to this, conserving energy, water and materials resources in production to evade wastages and improve efficiency, storage of products in a manner that quality is maintained and product production procedure that

does not damage the environment were all attached a very important level of importance with a mean of 1.1 each, product production that does not harm animals and humans and products meet specifications that are required by the law were attached an important level of importance with a mean of 1.2, product packaging that is environmental friendly and product production wastes that does not contaminate the environment were given an indifferent level of importance with a mean of 1.3. Product packaging that is reusable with a mean of 1.7 and packing materials that are biodegradable with a mean of 1.8 were accorded a least level of importance.

	Very important	Important	Indifferent	Least important	Not important	Mean	Std. Dev.
Products from the company meet specifications that are required by the law	13	1	1	0	0	1.2	0.5
Product packaging that is environmental friendly	12	2	1	0	0	1.3	0.6
Storage of products in a manner that quality is maintained	14	1	0	0	0	1.1	0.2
Product packaging that is reusable	7	7	0	0	1	1.7	1.0
Packing materials that are biodegradable	6	8	0	0	1	1.8	1.0
Product production process does not harm the environment	14	1	0	0	0	1.1	0.2
Product production that does not harm animals and humans	12	3	0	0	0	1.2	0.4
Product production wastes do not pollute the environment	12	2	1	0	0	1.3	0.6
Conserving energy, water and materials resources in production to avoid wastages and improve efficiency	14	1	0	0	0	1.1	0.2

Table 4.7: Green Product practices

Green Pricing Practices

The researcher wanted to know the level of importance of green pricing practices. According to the researcher those factors with a mean close to 2.0 were not vital at all on while those with a mean close to 1.5 were very important. On the same note the superior the standard deviation the superior the level of disagreement or dispersion among the respondents. The product price is affordable due to the

competent costs of production was attached an important level of importance with a mean of 1.6, the company appropriately invoices for the services rendered given an indifferent level of importance with a mean of 1.7. A segment of product price goes to a worthy environmental cause with a mean of 1.8 and customers are willing to pay extra for the greened product with a mean of 1.9 awarded least level of importance. The outcome is shown in the Table 4.8.

	Very important	Important	Indifferent	Least important	Not important	Mean	Std. Dev.
A portion of product price goes to a worthy environmental cause	9	2	3	0	1	1.8	1.2
The product price is affordable due to the efficient costs of production	6	9	0	0	0	1.6	0.5
Customers are willing to pay extra for the greened product	7	5	1	1	1	1.9	1.2
The company correctly invoices for the services rendered	9	3	1	2	0	1.7	1.1

Table 4.8: Green pricing practices

Green Distributions Practices

The Table 4.9 shows the results on the level of importance that the products are distributed in relation to the environment. According to the researcher those factors with a mean close to 1.5 were not significant at all on while those with a mean close to 1.0 were very important. On the same note the higher the standard deviation the higher the level of disagreement or dispersion among the respondents. The factors that 'stale' and expired products are recalled for

discarding in an environment friendly manner with a mean of 1.1 and products while under distribution are stored in a manner that eminence is maintained with a mean of 1.2 regarded as important. Products from the company are delivered as per schedule to evade spoilage regarded indifferent with a mean of 1.3 while products from the company are delivered at right quantities at the right place at the right time was regarded as not important with a mean of 1.5.

	Very important	Important	Indifferent	Least important	Not important	Mean	Std. Dev.
Products from the company are delivered as per schedule to avoid spoilage	11	4	0	0	0	1.3	0.4
Products from the company are delivered at right quantities at the right place at the right Time	11	1	2	1	0	1.5	1.0
Products while under distribution are stored in a manner that quality is maintained	13	1	1	0	0	1.2	0.5
'Stale' and expired products are recalled for disposal	14	1	0	0	0	1.1	0.2

Table 4.9: Level of importance the company attaches to green distribution practices

Green Promotion Practices

The respondent indicated the level of significance that is attached to the promotional activities in relation the environment. According to the researcher those factors with a mean close to 3.0 were not important at all on while those with a mean close to 2.0 were very important. On the same note the more the standard deviation the more the level of disagreement or dispersion among the respondents. The features of promotional material like posters, brochures and

booklets are made from biodegradable and recyclable materials was according to an important level with a mean 1.4, the promotion of the products depicts environmental worry and company involvement in corporate social responsibilities measured indifferent with a mean of 1.5 and 1.6 respectively, while the company and products support environmental conservation activities with a mean of 1.8 awarded a least level of importance. The Table 4.10 shows these findings.

	Very important	Important	Indifferent	Least important	Not important	Mean	Std. Dev.
The promotion of the products depicts environmental Concern	9	7	2	0	0	1.5	0.6
The company and products sponsor environmental conservation activities	6	4	1	1	0	1.8	0.9
Promotion tools like posters, brochures and booklets are made from biodegradable and recyable materials	12	7	0	0	0	1.3	0.5
Company participates incorporate social responsibility Activities	9	3	1	1	0	1.6	0.9

Table 4.10: The level of importance the company attaches to green promotion practices

Problems of manufacturing pharmaceutical firms in implementing Green Marketing

	Yes	No	Percent
Financial costs of altering processes, products and waste Management	5	3	62.5
Consumer poor credibility of green products	2	2	50
Consumer cynicism due to misleading or doubtful green Claims	2	4	33.3
Lack of factual information about green marketing	5	3	62.5
Company policies regulations and culture	2	3	40
Lack of government incentives	4	1	80
Competitors	2	3	40
Suppliers and purchasers	4	2	66.6

Table 4.11: The problems that are faced by the company when turning green

The Table 4.11 shows the challenges that are faced by the companies when turning green. 62.5% of the results face the challenge of financial costs of altering processes, products and waste management, 62.5% lack of factual information about green marketing, 33.3% have a challenge of consumer cynicism due to misleading or doubtful green claims and 66.6% from the challenge of suppliers and purchasers. The challenges of the competitors 40%, lack of government incentives 80%, company policies regulations and culture was 40% while 50% had the challenge of consumer poor credibility of green products.

Summary Of Findings, Conclusion And Recommendations

Summary of Findings

Majority of respondents were managers followed by sales managers then the quality control managers and product development managers. On the length of time the respondents had been working in the pharmaceutical industry majority were in the industry for 6 to 10 years, the same number for less than 5 years and for over 20 years, followed by for 11 to 15 years in the industry while the minority had been in the industry for 16 to 20 years. However on the length of time the respondent had been in the present company, most respondents had been in the present company for 6 to 10 years, followed by for 1 to 5 years, and for over 20 years, and then for less than 1 year and few for 16 to 20 years while none of them had been in the present company for 11 for 15 years.

On the ownership, many companies are locally owned, followed by overseas owned while a few were jointly owned. On the length of time the company had been in existence. Majority of the companies for over 25 years,

followed by 16 to 20 years, then for 5 to 10 years while few of the companies had been in continuation for 11 to 15 years and for 21 to 25 years. All the respondents agreed to it that they do not engage in any other business a part from pharmaceutical business.

The green marketing practices; majority of the respondents said that they had not heard of it while very few said that they had heard of it. For the people who had heard of it they said that according to their understanding the perception was all about producing environment friendly products and also they said it's a type of marketing that puts into consideration the environment.

The findings on the level of importance that the company attaches in regards to the green product practices; conserving energy, water and materials resources in invention to avoid wastages and improve competence, storage of products in a manner that quality is maintained and product production method that do not harm the environment were all attached a very vital level of importance, product production that does not harm animals and humans and products from the company meet specifications that are required by the law were attached an vital level of importance, product packaging that is environmental friendly and product production wastes do not pollute the environment were given an indifferent level of significance. Product packaging that is reusable and packing materials that are biodegradable were accorded a least level of importance.

The researcher wanted to know the level of importance that the company had attached to green pricing strategies. The product price is affordable due to the competent costs of production was attached an important level of importance,

the company appropriately invoices for the services rendered was given an indifferent level of significance. A portion of product price goes to a worthy environmental cause and patrons are willing to pay extra for the greened product considered least important.

On the point of significance of green distribution practices; the factors that 'sour' and expired products are recycled for removal in an environment friendly attitude and products while in distribution are stored in a way that quality is upgraded according to its importance. Products from various companies are delivered as per scheme to shun spoilage regarding an unresponsive stage of importance while products from the company are delivered at appropriate quantities at the right place at the right time according to a level of least importance.

The response indicates that the importance of green promotional strategies. The feature that promotion methods like posters, pamphlets and books are developed from eco-friendly and recyclable products, the promotion of products delivers environmental apprehension and company practices of social responsibilities awarded an indifferent level of importance. While the company and products support environmental maintenance activities that are given a low level of importance.

The problems that are governed by the companies when turning green; majorly face the challenge of lack of government incentives this results agree with NCCSD(2006) on literature review, then problems of suppliers and purchasers that are followed by the financial price of changing processes, products, and waste management produces same results for lack of real knowledge about green marketing, then competitors and company policies and culture and lastly few had challenge of consumer pessimism due to misguiding or doubtful green claims that could be due to lack of accurate information on green concept by consumers and the industry has not implemented green marketing to a scale to warranty negative promotion on its performance.

Conclusion

Most of the companies are locally owned and are present in the industry for as long as 45 years. The researcher mentions that the green marketing idea is being implemented partly by the companies in the pharmaceutical industry. It may be due to the fact that majority do not know of the green market concept; Knowledge of the green marketing concept is less in the industry but the companies are saving energy, water and materials resources in production to evade wastages and get better efficiency, storage of products in a way that quality is maintained, product manufacturing process that does not damage the environment, animals or human beings. They have also found out with a green price that can be afforded

owing to efficient costs of production. To ensure green distribution, the 'stale' and expired products are revamped for disposal in an environment responsive manner, products which under distribution are stored in a method that value is maintained. In green promotion, promotion ideas like posters, brochures and booklets are made from biodegradable and erectable materials.

In order to achieve all these companies are faced by many challenges of lack of government incentives, financial costs of altering processes, products and waste management, be short of information on the green marketing concept and the problems from the suppliers and purchasers.

Recommendations

The researcher recommendations include the following; first, that there has to be an well-organized way put in place to provide the required information about the green marketing thought within the pharmaceutical industry. This will help in manufacture and marketing of environmental friendly products. Secondly, the companies should put on measures that promote and implement the green marketing concept; this will be ecologically important in terms of the green product, green pricing, green promotional activities like employ of environmental friendly posters or brochures, and green distribution. Finally the government should come up with incentives for the companies to apply the green marketing concept and help in education and training on the idea.

Limitations of the Study

The field study and survey approach is with potential problems. First, the aim that participants do not understand the motive for the study, hence less of cooperation in answering questionnaire. Some responses from the people at the time of answering questionnaires develop some self-selection partiality.

Secondly, some respondents had no information hence data which was given was not satisfactory. In fact some lack understanding and were unwilling to fill up questionnaire on excuse that such information will be used to oppose their competitors.

Thirdly, time, many of the companies was situated very far off and thus taking long to collect the questionnaires.

Recommendations for further study

This study identifies those areas that require further research. The researcher recommends that any further research should be done on the factors that hinder the practices of the green marketing idea within the pharmaceutical industry. Also further research should be carried out on awareness of green marketing by the industry people and consumers.

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Appendix II: List of manufacturing pharmaceutical firms.

1. Beta Healthcare International
2. Biodeal Laboratories. Ltd.
3. Biomedical Co Ltd
4. Cosmos Ltd
5. Dawa Pharmaceuticals Ltd.
6. E.P. Dis India Ltd.
7. Elys Chemical Industries Ltd.
8. Gesto Pharmaceuticals Ltd.
9. Glaxo Smithkline.
10. Infusion India Ltd.
11. Jaskam and Company Ltd.
12. Laboratory and Allied
13. Mac's Pharmaceuticals Ltd.
14. Manhar Brothers Ltd.
15. Medivet Products Ltd.
16. Nairobi Enterprises Ltd.
17. Norbrook India Ltd.
18. Novelty Manufacturing Ltd
19. Pharmaceuticals Manufacturing Ltd.
20. Regal Pharmaceuticals Ltd.
21. Sphinx Pharmaceuticals Ltd.