Green Marketing Mix and Customer Receptiveness of Green Product



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Abstract

Environmental protection and green consumption has become the area of concern for marketers, governments, environmental organizations and public in general. Marketing mix is an important ingredient of marketing and thus for green marketing as well. Metaphorically the number of green products has suddenly increased in the markets. Raised awareness about environmental problems has inclined consumers towards green products. In order to translate this raised awareness into environmental purchases; there is an urgent need for segmenting the customers on the basis of needs and wants of attributes of green marketing mix. This study aims at investigating the influence of green marketing mix on consumer's mental image about a green product. The design of this research is descriptive and quantitative in nature. The study population consisted of citizens of Bhopal City. A convenience sample of (150) customers was chosen from different areas of the Bhopal City. This paper covers most of the attributes of green marketing mix and briefly discusses the impact of these factors on mental image and also examines the relationship of customers' mental image of a green product with the customer receptiveness of a green product. The result of this study will add new information and knowledge in the existing knowledge about green marketing mix and will definitely provide marketers, base for segmenting customers. This research has surfaced some important implications.

Keywords:

Green marketing, Consumer mental image, Customer Receptiveness and Green product.

Introduction

Emergence of the concept of green marketing is the resultant of the governments, peoples and organizational interest in the environment. Humans have realized the relevance of environment since the inception of the civilization. Rapid industrialization has disturbed the pace of the environment and it is deteriorating at a faster rate than ever before and if the same conditions persist then the day is near where we will be struggling for our own existence. People have realized that the survival and continuity lie in the coordination between the environment, organizations and society. The realizations by the people, organizations and governments indicates the raised awareness with the importance of applying practices for saving the environment, as a result, green marketing concept has evolved out and which is viewed as a potential solution to curb down the environmental problems.

The green marketing is in its early phase, where the academicians, marketers, governments, NGOs and few aware people are talking about it. Concept of green in itself is very vague. I would like to quote one example to justify. Many of us consider CFL (compact fluorescent lamps) as a good source of lightning that reduces electricity consumption hence it is green. But very few of the people are aware of the fact that Havels Company provides CFL in which content of mercury (harmful pollutant) is very less as compared to other CFL manufacturers, so CFL of Havel Company are Green or rather more green. There arises a question of extent of green as well as the concept and extent should be clearly understood by the consumers.

It is organizational responsibility towards the society to create a better social environment, which may benefit the organizations as well as society in long run. Therefore the organizations should utilize the concept of green marketing in a successful way before it fades like any other concept. Some important steps should be taken by the governments and organizations to successfully bring the concept in the market. We are talking that the concept of green marketing is in the incipient stage, I think know it's a long time I have been hearing this. No solid grounds have been prepared by the marketers to clearly define exactly what green product is to the public in general. Though researchers round the world are putting their best efforts to explain the green product, green marketing and some other terms related to green. Researchers are doing lot of researches on varied topics pertaining to green like green advertising, green marketing mix and so on. But there is a lacunae form the marketers' side to clarify green as green procurement, green production, green transportation, green products and green marketing.

It should be understood that there is a lot of confusion about green in the minds of the consumers. Firstly there are very few green products available in the market, secondly those available are not able to clarify or justify as green because the parameters of green are not very clear (the sense in which they are green), and even there are not any green justifiable green claims available.

The aim of the green marketing is to supply the products that are able to fulfil the needs of the targeted consumers as well as protect the environmental deterioration. Therefore, the current study will focus in knowing the influence of green marketing mix (product, price, place, promotion) etc on consumers receptiveness of green products. Nowadays organizations face large challenges pertaining to marketing mix in realizing competitive advantage that distinguishes them from their competitors. But as far as green marketing is considered in country like India, the greatest challenge that organizations are facing pertaining to green marketing mix is customer receptiveness of green products.

Literature Review

Chen H. C. & Green Robert D. (2012), the research investigated the perception of marketing strategy of three age groups (younger, middle, and older) and their brand equity (brand loyalty, brand awareness, perceived quality, brand association). Different strategies are found to influences each age group. Findings of the study suggest that there is a significant difference between young, middle age and older shoppers' perceptions of the hypermarkets marketing strategies and brand equity of retail stores. It was found that younger shoppers were more prices sensitive and middle age customers were somewhat price sensitive having positive influence of price deals on brand equity. Older shoppers were not price sensitive and no significant relationship of price or price deals on brand equity found.

Mohajan H. K. (2012), this paper investigates whether or not manufacturers are cognisant about green products and ecolabeling programs and what are the difficulties in implementation of green marketing with special reference to a developing country Bangladesh. The paper suggests that green marketing is very difficult to implement in developing countries like Bangladesh without the government and other social organization intervention. Manufacturers should be promoted, compelled and should be furnished with the guidelines necessary for the implementation of green marketing and ultimately the sustainable development. Along with the above, the consumers should also be made aware of the green products and should be encourage buying these products.

Muthusamy A. (2012), the present study put forth the grounded concept of green-marketing, importance of green marketing and also examines the reasons that motivates the Corporate Houses to adopt green marketing practices. Study resulted into development of marketing mix model for the success of green marketing in complex and turbulent environment. As per the traditional concept, destabilising marketing activities are more effective in unstable environment and vice-versa. The present model provides destabilizing tactics suitable for the turbulent environment prevalent in South Africa. Implications of the study suggest that the present model could greatly help the marketers by providing new way to consider the future marketing activities of their companies.

Shafaat F. & Sultan A (2012), the current paper is the reflection of the work done by the previous researches and underpins the grounded concept of green marketing. The study encompasses all the facets of green marketing, its issues, benefits, and practices by different companies. Suggestion roll out of the study advocates that solutions to the environmental problems fall under three categories: ethical, legal, and business (economic and technological). Green marketing is much more than a marketing approach as it has both environmental and social dimension attached to it, but it should not neglect the economic aspect of marketing.

Sheth K. & Seth P. (2012), current paper is the manifestation of the previous work done in the field of green marketing. Paper provides us profound insight over the concept of green marketing, evolution of green marketing practices, necessity of green marketing, benefits of green marketing, reasons for adoption of green marketing practices and also furnish the explanation with some cases. The study underpins some of the basic concepts of green marketing, understanding of green consumers and serving their needs and demands in an environment friendly way are the area of concern of the study.

Chaudhary B., Tripathi S. & Monga N. (2011), the current article investigates the relationship between green marketing and corporate social responsibility. The article focuses on the need for the adoption of green marketing practices, green marketing mix, obstacles to green marketing and the way ahead of green marketing. Consumer behaviour towards green marketing and their willingness to pay have been discussed in the paper with emphasis on fact that green marketing activities should consider the economic aspect of the development as well. Companies are harnessing the nature for own and for communities benefit; the prevalent climatic situations and changed consumer behaviour have compelled companies to adopt green marketing practices as a part of corporate social responsibility.

Hashem T. N. & Al-Rifai N. A (2011), the paper attempts to scrutinize the influence of applying green marketing elements mix by chemical industries of three different Arab States in West Asia (Jordan, Kuwait and Syria), economy depending on oil. Attempt have been made to find whether there exists any differences in application of green marketing mix elements by chemical industries on consumer's mental image according to country, gender, age, educational level and income. Detailed analysis reveals that there is a significant influence of green marketing mix elements by chemical industries in all countries on the consumer's mental image. Findings suggest that there is a positive attitude toward Green marketing mix elements.

Kinoti Mary W. (2011), article reviews the literature on green marketing intervention strategies and sustainable development with special consideration to the environmental problems. Article analyses that organizations can achieve sustainable development by following green marketing strategies along with protecting the environment. It has been suggested in the paper that marketing has an important role in finding solutions to the environmental problems. Organizations by adopting green marketing strategies can address the environmental issues of sustainable development along with improving the organizational performance.

Kumar D. et. al (2011), in the current scenario companies are redefining their marketing mix in the context of green and adopting green marketing practices. Transformation in the behaviour of consumer and drastic change in the global climate have compelled the companies to adopt greener business practices. The research presents the comparative analysis of the different element of the green marketing mix of Indian FMCG companies. It has been mentioned that the companies should comprehend understand that Green marketing should not neglect the economic aspect of marketing. Paper proposes that Indian market is suitable for green marketing and it is the right time to inculcate sustainable development in the marketing mix of the companies and integrate them in marketing to address the global climatic issues and to save the planet from the imminent risk.

Rakhsha R. & Majidazar M. (2011), the paper analyses the effect of green marketing mix on satisfaction and loyalty of consumers and customers of the East Azarbaijan Pegah Dairy Company located in Tabriz, Iran. The outcome of the study proposes that green marketing mix has significant effect of consumer satisfaction and consumers' satisfaction has significant effect on their loyalty. Implications of the study suggests that company focussing on consumer and customer satisfaction will attain consumer loyalty in return and would be able to create competitive advantage by inculcating green marketing in their overall marketing strategy.

Vazifehdust H. & Asadollahi A. (2011), the article furnish deep insight over the issues of living environment, green marketing and examines the relationship between social responsibility and green

marketing with special reference to Iran industry. The article furnishes different principles to establish competitive advantages to green marketing. Outcome of the study suggests that greening in the production process places lower expenses on the firms and other green marketing activities provides companies an extra competitive advantage over the other firms. This helps in building companies environmental friendly image in the minds of customers and in turn result in increased customer loyalty, thus increase in profits.

Sima V. (2010), research presents integrated systemic approach to green innovation which has six dimensions namely- the organizational dimension, the strategic dimension, the technological dimension, the process dimension, the product dimension and the marketing one. Paper suggests that the companies adopting systemic approach to strategies for green innovative products should improve their strategic mix by seriously taking into consideration green planning, green processes, green product and green promotion. The developmental model which is based on the proposed green dimensions will lead towards low polluting production model, commonly understood as cleaner production. Implications of the study suggest that the adoption of such developmental model by the companies is a new systematic approach towards green solution.

Ovaskainen M. (2010), "thesis examined that how carbon footprint calculations can be utilized in the company's external environmental communication and as well as the demand for the carbon footprint from the market. The examination showed that the carbon footprint is not yet a common demand from the customer's side. Internal communication and external communication play a major role in the success of marketing. Carbon footprints are considered to a part of the external communications. The main area of concern in the study is how carbon footprints in environmental communication can be used as effectively to augment the customer base and as well as profits. Consumers are sceptic to the green marketing claims available in the market. External environment communication including carbon footprint should be comprehensive and continually improved so as to highlight the transparency of the methods and calculations used in the carbon footprints. Study suggests it as one of the probable ways to communicate sustainable calculations to the stake holders.

Adrian M. et al. (2009), the current study involves the sensitivity analysis of the market segments for sustainable development. Assessment of the study shows that there exists potential environmental sensitivity in the market at various levels. Approximately half of the buyers are insensitive to environment. In such a case it is mandatory to understand the role of evolution of systems of values, life styles and social constraints prevailing in the society and making consumers insensitive towards the environmental factors. The study suggests that the concept of sustainable marketing is innovative and is the output of economical, social and environmental behaviour of firms in association with all its stakeholders.

Polonsky M. J., Morrish S. & Miles M. (2009), the paper investigated the inculcation of sustainability practices into marketing activities of the top Australian firms. Findings of the study are alarming; approximately half of the organizations in Australia have not inculcated sustainability practices in their organization's mission statement. In the prevalent scenario when green and sustainability is everywhere discussed, it is important for all the consumers and other stakeholders to know what is being done by the company, to which they are associated, are they inculcating sustainability practices in their operations. Study suggests that Australian firms need to go much further in integrating sustainability in their marketing mix.

Baker W. E. & Sinkula J. M. (2005), the research paper attempts to bring in process the enviropreneurial marketing (EM) construct and inspects its relationship with firm performance. Enviropreneurial marketing has direct influence on firms' capabilities regarding new product development process, but could not provide competitive advantage to the firms. Apart from enviropreneurial marketing, market turbulence also affects the new product development success, but market turbulence has no impact on enviropreneurial marketing. On the basis of the above grounds research concludes that enviropreneurial marketing is driven by the internal forces persisting in the business rather than the external forces persisting outside the business. It implies that enviropreneurial marketing is deeply embedded in the business philosophy only.

Paço A. M. (2005), doctoral thesis contributes to the study of green marketing, more constricting towards the segmentation applied to the market of green consumers in Portugal. Raised environmental concerns and the increase of the demand of "green" products have shapes the green marketing concept and in turn marketers have realized the strategic importance of marketing to "environmental necessities" of the consumers and to promote a sustainable consumption for the benefit of future generations. Findings of the study resulted in identification of market segments having different sensibility towards green issues and determine different marketing strategic implications for the organizations.

Ginsberg J. M. & Bloom P. N. (2004), consumers are willing to pay premium prices for the environment friendly products, but many researches suggests that green marketing is not doing that good as it was supposed to do. Basically consumers buy products and services to fulfil individual needs and wants, therefore companies should highlight the direct benefits of their products attributes like of price, quality, convenience and availability and as well as environmental attributes. Companies should properly integrate green marketing activities as it could help in developing connection between consumers and brands and thus can generate a positive public image and in turn help in raising the profits of the companies.

Gruca T. S., Sudharshan D. & Kumar R. (2001), current work signifies the analysis of marketing mix response to entry of new products using the more realistic assumptions of discrete ideal points, segments of demand and probabilistic choice. Outcome of the study suggests that entry of a new product redraws competitive boundaries in a market; as a result some brands become more rigorous competitors for some segments, others get shut out of contention for some segments and thus becoming more dependent on other segments. Degree and direction of entry of new product is dependent on two factors: closeness of an incumbent to the entrant and degree of market shut out.

Objectives of the Study

- To group attributes of green marketing mix in order to help marketers to divide markets into groups of consumers, customers, or clients (called segments) with similar needs and wants.
- To find the impact of green marketing mix on customer mental image.
- ➢ To find whether the customers' mental image of a green products leads to customer receptiveness of a green products.
- To open vista for future researches.

Research Frame Work

The study utilizes the seven components of marketing mix rather than the traditional four components. The seven components product, price, place, promotion, people, processes and physical environment are considered for the study. Various attributes of the entire seven components have been taken in the study. Research framework has been developed by using seven component of green marketing with an assumption that these components impact-fully shapes the image of green products in the minds of the customer. The impact of the image set in customer mind (image created due to green mix) lead to receptiveness of green product by the customer and the terminology used as customer receptiveness. Figure 1 describes the green marketing mix as a precursor of customers' mental image of a green products and the image thus fabricated in the minds of the customer leads to receptiveness of a green product.

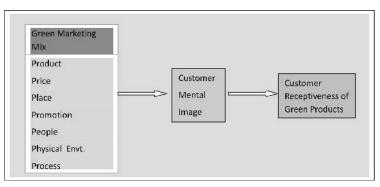


Figure 1. Green Marketing Mix Influencing Customer Receptiveness Source: Author

Research Methodology

The Study: Exploratory in nature.

Sample Design

Sampling Population: Questionnaire was distributed in person at different locations of Bhopal city in between January 10 - January 30, 2013.

Sample Frame: Sampling frame included all elements in the population who were present in the Bhopal city during the time of data collection.

Sampling Technique: Purposive convenient sampling technique was exercised to select the sample elements.

Sample Size: A total of 150 questionnaires were distributed, and 132 of them were returned. The respondents included 74 males and 58 females. Eighty-seven percent of them were under 30 years of age, 63 percent were students and rests were at least graduated. Demographics of the sample clearly indicate that the respondents were young and well educated.

Tools Used for Data Collection: Self designed questionnaire was utilized to collect data which intends to measure customers' mental image and customer receptiveness of green products as measured by the major attributes of all the seven components of green marketing mix. Data was collected on a Likert type scale, where 1 stands for minimum agreement and 5 stands for maximum agreement.

Tools Used for Data Analysis:

- The measure was standardized through computation of reliability and validity
- Hierarchical agglomerative cluster analysis for clustering the attributes of green marketing mix.
- Relationship between the customer mental image and customer receptiveness of green product was evaluated using simple regression analysis.

Data Analysis and Findings

Reliability of the Scale

Reliability of all the items was tested using Cronbach's alpha and resulted in Cronbach's alpha 0.739. It is considered that the reliability value more than 0.7 is good. It can be clearly in statistics that reliability value is acceptable standard value, so all the items in questionnaire are highly reliable. The reliability statistics is shown in Table 1.

Cronbach's		
Alpha	N of Items	
0.739	23	

Table 1. Reliability Statistics

Validity Test

Validity of the questionnaire was checked through face validity method and was found to be high.

Cluster Analysis

Segmentation of market is considered as the standard application of cluster analysis. The rationale of cluster analysis is to identify groups of objects (case or observations; in this case observations) that are very similar and assign them into clusters. The clustering process may result in different partitioning of a data set, depending on the specific criterion used for clustering (Halkidi, Batistakis and Vazirgianni, 2001). In this research cluster analysis has been used to group attributes of green marketing mix in order to help marketers to divide markets into groups of consumers, customers, or clients (called segments) with similar needs and wants.

Hierarchical agglomerative clustering has been done using SPSS software. In this method clusters are consecutively formed from objects. The result of the algorithm is a tree of clusters, called dendrogram, which shows how the clusters are related. By cutting the dendrogram at a desired level, a clustering of the data items into

disjoint groups is obtained (Jain et al., 1999). The dendrogram is shown in Figure 2.

Cluster Analysis resulted into five clusters which are described as below:

Cluster 1 – The major component of green marketing mix obtained in this cluster are durability of the product, facilities, single-use and comfort.

Cluster 2 - The component of green marketing mix obtained in this cluster are branding, technology, free gifts and value.

Cluster 3 - The constituent of green marketing mix obtained in this cluster are high price, service and culture.

Cluster 4 – The constituent of green marketing mix obtained in this cluster are availability, multi-channels, information through employee and information through internet.

Cluster 5 - The component of green marketing mix obtained in this cluster are retail availability, advertisement, quality, special offers, convenience, user trial and availability at wholesaler.

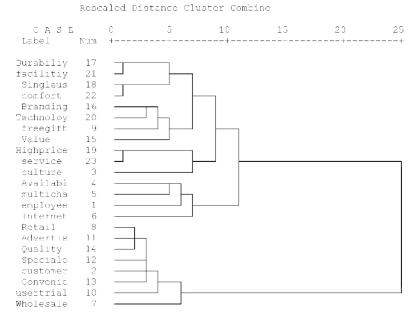


Figure 2. Dendrogram

Regression Analysis

Relationship between Mental Image and Customer Receptiveness

Model		Unstandardized Coefficients	Standardized Coefficients	T		
Model		В	Std. Error	Beta	1	Sig.
1	(Constant)	2.810	.316		8.892	.000
	Mental Image	.166	.078	.185	2.116	.036

Table 2: Relationship between mental image and receptiveness

a. Dependent Variable: Customer Receptiveness

Customer Receptiveness = 2.810+(.166)X Mental Image

The relationship between the customer mental image about a green product and customer receptiveness of green product is significant as indicated by the beta value of .185 and t value of 2.116 which is significant at significance level of less than 0.05 (0.036 level of significance). Therefore there exists relationship between customer mental image about a green product and customer receptiveness of green product.

Results and Discussion

Cluster analysis of the data resulted into five clusters each containing different attributes of green marketing mix that will help the marketers to divide markets into groups of consumers (segments) with similar needs and wants. This accomplishes the very first objective of the study.

The average respondent score on mental image about a green product was 3.26 on a five-point Likert scale, with 1 the least

favourable and 5 the most favourable. This is above the neutral score of 3, which implies that respondent mental image about the green product were positive. This fulfils the second objective of the study

Regression analysis shows that there exists a significant relationship between customers' mental image about a green product and customer receptiveness of green product. This fulfils the third objective of the study.

Limitations and Future Research

The very first restriction of the research is the use of sample, as the research is conducted in Bhopal city only. Therefore, further research must be extended to the number of cities across India before generalizing the result of the study. Cluster analysis is too sensitive to the use because of the relatively small data set. Though hierarchical clustering of variables helps in the identification of unique variables, or variables that make a unique contribution to

the data. This study can be used by different researchers to evaluate the different aspects of green marketing mix by different perspective that drives consumer towards green products. The study has important implication for the marketers and researchers as it will help in creating different sets of green marketing mix as per the customer choice, need or want.

Conclusion

Green marketing mix is an important aspect of green marketing activities. Firms are bearing up the responsibility of upgrading environmental degradation through different means and green marketing is one of them. There is an urgent need to segment and target the customers as per their needs and wants of green products. It appears that consumers are aware and committed to improve their environment as their view or image about the green product is positive i.e., they view green products as one of the means of curbing environmental problems. Until market segmentation of the customers occur on the basis of their needs and wants of the attributes of green products, it is very difficult for firms to realize the green marketing revolution. The results of this research study clearly indicate that there exists relationship between customers mental image of a green product with the customer receptiveness of a green product. Therefore, it is established through this research that consumers purchase green products in the areas of Bhopal because of positive mental image about a green product and they view green product as a potential means of curbing environmental problems.

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