

Green Marketing Mix Strategies of Consumer Durables with Reference to Automobile Sector

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Abstract –

Companies today are struggling to grow and increase their profits margins. On many occasions the corporates are not able to perform economically due to tough competition and versatile environment. During the last decade, lots of companies across the sectors have tried to create a competitive advantage by becoming more environmentally responsible. Nowadays, some companies try to green everything from their ground level manufacturing to their top management. Green marketing is used today by companies as it deals with all the activities designed to generate and facilitate any exchanges intended to satisfy human needs and wants, with minimal effect on the natural environment (Polonsky, 1994). There are different approaches to green marketing where some companies are more environmentally responsible than others because they employ different types of eco-friendly processes like green IT (information Technology), green marketing, green supply chain management (SCM) and so on. The purpose of the study is to identify the importance given to physical products in the automobile sector than other marketing mix elements, to know the relative strength of product related GMMS (Green Marketing Mix Strategies) against other GMMS and to ascertain the relative strength of other (Price, Promotion and Place) GMMS. The respondents for the study are the marketing/sales managers and executives of two two-wheelers and four four-wheelers manufacturing companies existing in India. 15 marketing professionals each from both two-wheelers and four-wheelers manufacturing companies have responded to the questionnaire. It was found that product related GMMS played an important role than other GMMS, specifically with regard to place and price related GMMS. Product and promotion related GMMS were not to be statistically significant. Various statements emphasizing product related GMMS were also found to be statistically significant. It indicates that product related GMMS play a very vital role in marketing of durable goods especially in the case of the automobile sector.

Keywords - Green Marketing Mix, Green Marketing Mix Elements, Green Marketing Mix Strategies, Product, Price, Place and Promotion, 4P's of Marketing, Automobile sector.

I. Introduction

There are numerous different definitions of green marketing. McDaniel and Rylander (1993), have coined the term green marketing to depict marketers' efforts to develop strategies targeting the eco-friendly consumer. Polonsky (1994) defines green marketing as: "Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment". The marketing process is ultimately implemented on consumers so that the companies make decent profits without causing detrimental impact on the environment. In this context, Prakash (2002) argues that the relationship between the marketing discipline, the public policy process and the natural environment is of great importance. Further, they identify several terms used to describe this relationship, such as, environmental marketing (Coddington, 1993) and greener marketing (Charter & Polonsky, 1999).

Green marketing is associated with the strategy to support products by using environmental aver (claim) either about their uniqueness or about the system policies and processes that the manufacturing company adopts (Prakash, 2002). The general public view about green marketing is that it refers only to the endorsement/ advertising/ promotion of products with environmental characteristics (Polonsky, 1994). However, Polonsky (1994) claims that green marketing contains a broad range of activities, such as product alteration, amendment to the production process, packaging modifications, as well as modifying promotional strategies. According to Menon and Menon (1997), green marketing is also a part of the overall corporate strategy. It requires that companies manipulate the marketing mix, as well as understand public policy processes (Prakash, 2002).

The automobile industry has made remarkable positive contributions to the world economy and people's mobility, but its products and processes are a significant source of environmental impact. When the consumer buys a consumer durable

product, it is evident that the physical nature of product influences the buying decision. Promotion creates awareness about the product but the buying pattern is primarily influenced by the tangible product followed by the place of availability and price of the product. This procedure is more evident in consumer durable goods.

II. Literature Review:

Breno and David , (2010) conducted research on title ‘Green Operations Initiatives in the Automotive Industry’ The purpose of this study is to focus on investigating and benchmarking green operations initiatives in the automotive industry documented in the environmental reports of selected companies. The investigation roadmaps the main environmental initiatives taken by the world’s three major car manufacturers and benchmarks them against each other. The categorization of green operations initiatives that is provided in the paper can also help companies in other sectors to evaluate their green practices. The findings show that the world’s three major car manufacturers are pursuing various environmental initiatives like following green operations practices: green buildings, eco-design, green supply chains, green manufacturing, reverse logistics and innovation.

Patrali, (2009) carried out research on ‘Green brand extension strategy and online communities’ The purpose of this study was to examine current and prospective consumer perceptions, purchase intent and parent brand evaluation due to green brand – line and category extensions by marketers of established (non-green) brands for products with high versus low perceived environmental impact. The results suggest that consumers are more likely to purchase green extensions of products with high perceived environmental impact and that current consumers prefer green line extensions to green category extensions. Both have similar reciprocal impact on parent brand evaluation among current consumers.

Gian and Deborah (2010) conducted research on ‘Green labels and sustainability reporting’, The paper aims to contribute to the understanding of corporate sustainability reporting strategies and communication tools that are increasingly being adopted to foster green market outlets, with focus on the building materials supply chain. Focusing on the present Italian situation and with emphasis on ornamental stones, ceramic tiles, cement and concrete products, the interest and the response in the building materials supply chain are highlighted, pointing out strengths, weaknesses and future perspectives.

According to Breno Nums and David Bennett (2010), for the automotive industry, the major global impacts result after production from vehicle use (Mildenberger and Khare, 2000). However, there are also serious environmental concerns about the production and final disposal of cars. The use of the automobiles consumes a significant amount of fossil fuels, and therefore is an important source of pollution. The harmful substances in the car’s exhaust emissions include carbon dioxide, carbon monoxide, sulphur and nitrogen oxides, particulate material, ozone, aldehyde compounds and hydrocarbon particles. During a car’s production, the main negative environmental impact results from solid waste generation, emission of volatic organic compounds (VOCs), and high levels of energy and water consumption. In addition, end-of-life cars may contaminate the soil and aquifers if there is irresponsible final disposal and inadequate management of landfill sites.

III. Objectives:

1. To assess the importance given to physical products than other marketing mix elements in automobile sector.
2. To assess the relative strength of product related GMMS against other GMMS
3. To ascertain the relative strength of other (Price, Promotion and Place) GMMS.

IV. Research Methodology:

- a. **Sample:** The marketing managers of 6 consumer durable manufacturing companies (automobile sector) were chosen as sample. Out of 6 durable goods manufacturer, 3 were from four wheelers manufacturer and rest were from two wheelers manufacturer.
- b. **Sample Size:** Totally, six consumer durable products manufacturers were selected and 5 marketing managers of each of the company were selected as respondents. Totally, 15 respondents from each four wheelers and two wheelers manufacturers responded to the research tool. The following exhibits the sample size:

Table I: Details about the Sample.

Sl. No.	Code name given selected Organisation.	Marketing Managers
1.	Two Wheeler Company ‘A’	5
2.	Two Wheeler Company ‘B’	5
3.	Two Wheeler Company ‘C’	5
4.	Four Wheeler Company ‘A’	5
5.	Four Wheeler Company ‘B’	5
6.	Four Wheeler Company ‘C’	5

- c. **Sampling:** To study the actual perceptions of the marketing managers of the selected organizations a sample of 30 employees was taken using the Stratified random sampling method. The sample consisted of the marketing manager/ sales managers.

Table II: Details about the Sample Selected for the Study.

Variables		Frequency	Percent
Sectors	Two wheeler	15	50.0
	Four wheeler	15	50.0
Age group of the companies	0-30 Years	05	16.7
	30.01 - 60 Years	05	16.7
	More than 60.01 Years	20	66.7
Origin	Indian	25	83.3
	Foreign	05	16.7
Perception on type of products produced	Eco-friendly products	16	53.3
	Regular products	14	46.7

- d. **Research tool:** As very minimum research work has been done in the area of sustainability in general and green marketing in specific, no standard data collection tools are available. The questionnaire was developed to elicit required information from marketing/ sales managers of selected companies. There are 16 statements for product related GMMS, 08 statements for price related GMMS, 16 statements for promotion related GMMS and 14 statements for Place related GMMS. The responses were obtained through five point Likert scale varying from strongly agrees to strongly disagree.
- e. **Procedure:** The questionnaire was developed to elicit required information from marketing/ sales managers of selected companies. The permission from the concerned authorities of organizations was obtained by the researcher in advance. Few organisations readily obliged the researcher’s request. Few organisations took some time to accept the request. Further, The Marketing Managers of selected organisations were approached and explained about the Green Marketing Strategies (GMS) questionnaire. GMS questionnaire was given to the respondents and they were enlightened that the questionnaire was meant for the assessment of managerial practices in the area of eco-friendly/ green marketing. The questionnaire consists of several statements that reveal what the respondents/ marketing managers feel about various types of green marketing strategies employed. They were promised that the information given by them will be used only for research purpose and treated strictly confidentially.

V. Data Analysis:

Statistical techniques like Descriptive statistics, Paired sample ‘t’ test, and One sample ‘t’ test were employed to analyze the data in the present study.

Table III: Mean Scores of Respondents on GMMS and the Result of Paired Sample ‘t’ test.

Green Marketing Mix Strategies		Mean	SD	‘t’ value	‘P’ value
Pair 1	Product related GMMS	3.85	0.32	8.580	.000
	Price related GMMS	3.04	0.40		
Pair 2	Product related GMMS	3.85	0.32	0.750	.488
	Promotion related GMMS	3.88	0.43		
Pair 3	Product related GMMS	3.85	0.32	3.444	.002
	Place related GMMS	3.66	0.48		
Pair 4	Pricing related GMMS	3.04	0.40	7.758	.000
	Promotion related GMMS	3.88	0.43		
Pair 5	Pricing related GMMS	3.04	0.40	6.431	.000
	Place related GMMS	3.66	0.48		
Pair 6	Promotion related GMMS	3.88	0.43	4.663	.000
	Place related GMMS	3.66	0.48		

N= 30

When the responses of product related GMMS were compared with price related GMMS, promotion related GMMS, and place related GMMS, it was observed that mean scores on Product related GMMS differed significantly with price related GMMS and place related GMMS, where we find that mean agreement on product related GMMS was significantly higher than mean scores on price and place related GMMS. However, no such difference was observed between product related GMMS and promotion related GMMS.

Mean responses on promotion related GMMS were significantly higher compared to mean scores on price and place related GMMS. Lastly, when promotion related GMMS are compared with place related GMMS, it was found that promotion related GMMS had higher agreement compared to place related GMMS.

Table IV: Mean Scores of Respondents on Various Product Related GMMS and the Results of One Sample ‘t’ Tests. (Test value = 3).

Sl. No.	Statements	Mean	S.D	‘t’ value	‘P’ value
S1	Company that adopts product related green marketing mix strategies (GMMS) are more important.	4.43	0.68	11.789	.000
S2	Product related GMMS play important role than price related GMMS.	4.17	0.46	14.966	.000
S3	Product related GMMS play important role than promotion related GMMS.	4.10	0.48	12.234	.000
S4	Product related GMMS play important role than distribution related GMMS.	4.33	0.66	12.042	.000
S5	As product is tangible, it plays important role in framing green marketing strategies.	4.30	0.53	13.310	.000
S6	Product related GMMS have more scope than price, promotion and distribution related GMMS.	4.07	0.83	6.952	.000

When mean responses of various statements on product related GMMS was compared with a standard value of 3.0 using one sample t tests, it was found that all the time obtained responses were significantly higher than the expected standards. It was found that the overall agreements were significantly higher than the expected ones. Highest levels of agreement was observed for ‘Company that adopts product related green marketing mix strategies (GMMS)’, followed by Product related GMMS play important role than distribution related GMMS’ and ‘As product is tangible, it plays important role in framing green marketing strategies’.

VI. Main findings:

- The marketing/ sales managers opine that the product related GMMS is important because the product is tangible aspect which has ‘touch and feel’ concept. The respondents believe that, consumers while making purchase decision of durable products (two wheeler and four wheeler) will spend extra penny or shall travel to long distance to buy the durable product which he/she would like to purchase as the purchase of durable product is not done on regular basis.
- It is important to note that, awareness of green product is as important as green product itself. The promotion related GMMS plays an important role in creating awareness about the product and other related green aspects of the durable products. If the green product benefits are clearly and convincingly communicated to the customers/ consumers, then price and place of marketing mix will not play a major role during purchase of two and four wheeler.
- The respondents opine that the name, aesthetics and service provided by the dealer (place related GMMS) play an important role than pricing strategy. As the product is worth lakhs of rupees, the consumer shall not think/ rethink on spending few more thousands if the place of purchase is trustworthy.
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VII. Conclusions:

4Ps of marketing mix delimits four separate, well-defined and independent management processes. Despite the consistent effort by many physical businesses to deal with the 4P in an integrated manner, the drafting and mainly the implementation of the P policies remains largely the task of various departments and persons within the organisation. Even more significant thought is the fact that the customer is typically experiencing the individual effects of each of the 4Ps in diverse occasions, times and places, even in case that some companies take great pains to fully integrate their marketing. Integrated marketing services (IMS) are important, the grading among the 4P’s is necessary based on the preference given by the consumers. If it is noticed through the lenses expenditure pattern, product acquires the major share followed by promotion and place. As product is tangible the green aspect of it are witnessed by the consumers. The eco-friendly efforts done towards other P’s of marketing mix except product is not clearly seen by the ultimate users (specifically in India). Indian consumers are becoming more aware of the products in terms of it life cycle cost too, which is making the chances of product related green marketing to be more brighter than other marketing mix.

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