

An Analytical Study of Green-Marketing Need and Impact on Consumer Buying Behaviour

Abstract

Green Marketing can be enumerated as an activity undertaken by the customers. It is not concerned to any type of organisation whether government or non-government. Any firm whether it be manufacturing, construction trading, shopkeeping or service providing, can practice green-marketing. Therefore, green marketing must consider the promotional efforts employed to gain consumer support of ecologically friendly products. Present day consumer is becoming more and more aware about the environment protection and feeling more socially responsible. Therefore, the organisations are also working on more environment friendly products and services or neutral pollutant products. Green marketing should not neglect the economic aspect of marketing. Marketers need to understand the implications of green marketing. Customers are not concerned about environmental issues or will not pay a premium for products that are more eco-responsible. Therefore, Green marketing is still in its infancy and a lot of research is to be done on green marketing to fully explore its potential.

Keywords: Green Marketing, Customer Buying Behavior, Environment Protection.

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Introduction

Green Marketing is a process of holistic marketing that ensures environment friendly production, marketing and consumption of products and services. Green Marketing is the study of all efforts to consume, produce, distribute, promote, package, and reclaim products in a manner that is sensitive or responsive to ecological concerns. There is a growing amount of evidence indicating that consumers are shifting from traditional products to green products to have a positive impact on the natural environment.

Green Marketing can be enumerated as an activity undertaken by the customers. It is not concerned to any type of organisation whether government or non-government. Any firm whether it be manufacturing, construction trading, shopkeeping or service providing, can practice green-marketing. Therefore, green marketing must consider the promotional efforts employed to gain consumer support of ecologically friendly products.

The term Green Marketing came into prominence in the late 1980's and early 1990's. The American Marketing Association held the first workshop on "Ecological Marketing" in 1975. The proceedings of this workshop resulted in one of the first book on Green Marketing entitled "Ecological Marketing". At this workshop, Ecological marketing was defined as "the study of the positive and negative aspects of marketing activities on pollution, energy depletion and non-energy resource depletion". This early definition has three components:

1. It is a sub activity of the overall marketing activity in a firm;
2. It evaluates both the positive and negative aspects of marketing;
3. It examines environmental issues minutely.

Peattie (2001), has Envisaged the Evolution of Green Marketing in Three Phases

Ecological Phase

All marketing activities are related directly to deal environment problems and give remedies for them.

Environmental Phase

It focuses on clean technology to design better innovative new products to fight away pollution and waste in the firms.

Sustainable Phase

It came into prominence in the late 1990's and early 2000. It means to acquire green marketing.

The management of green marketing activity continues to evolve as companies incorporate new thinking about climate change throughout their organizations. Green marketing, also, practices recycling of various products such as aluminum containers and printer cartridges. Therefore, organisations have started to consider methods to modify inputs to production that check the negative affect of the products on the environment. The study of green marketing motivates the related parties in becoming more aware of ecological issues and achieving higher levels of sustainability consistently. Green products are recognized nationally or internationally through certification and eco-labeling. For example, the Bureau of Energy Efficiency (BEE) under the Ministry of Power, Government of India provides Energy Star labels and EER (Energy Efficiency Rate) for electronics and appliances that are environmentally friendly. In the United States, personal computers account for 2% of annual electricity consumption. Each of these aforementioned activities represents a form of green marketing employed at various points in the supply chain.

Increasingly, however, organizations recognize the interdependencies operating throughout an economy. Efforts to control costs and enhance productivity at one stage cannot occur at the expense of other stages. The United Nations is an organization that has led the way in this recognition of the multiple interdependencies among nature, economy, and society. Government of India and Ministry of Power are stressing regularly upon the use of LED lights and CFLs. A product may be considered a green product if it:

1. Conserves water and energy
2. Prevents contributions to air, water and land pollution
3. Protects indoor air quality
4. Uses renewable, responsibly sourced materials
5. Produces little environmental impact
6. Manufactured using an environmentally friendly process

Broad and fairly ambiguous, the terms —green and —eco-friendly may be misleading. For example, a product labeled —green may have been responsibly sourced but may not necessarily be organic products and services that have been green labeled may appear to be eco-friendly, but upon closer inspection, often amount to little more than a well-executed green marketing campaign.

Need for Green Marketing

Present day consumer is becoming more and more aware about the environment protection

and feeling more socially responsible. Therefore, the organisations are also working on more environment friendly products and services or neutral pollutant products. Advantages of Greem Marketing are as given below. Some of the advantages of green marketing are:

Opportunity in India

Around 25 per cent of the consumers prefer environmental-friendly products, and around 28 per cent may be considered health conscious. Therefore, green marketers have diverse and fairly sizeable segments to cater to. The Surf Excel detergent which saves water (advertised with the message "do bucket paani roz bachana") and the energy-saving LG consumer durables are examples of green marketing. We also have green buildings which are efficient in their use of energy, water and construction materials, and which reduce the impact on human health and the environment through better design, construction, operation, maintenance and waste disposal.

Social Responsibility

Many companies have started realizing that they must behave in an environment-friendly fashion. They believe both in achieving environmental objectives as well as profit related objectives. The HSBC became the world's first bank to go carbon-neutral last year. Other examples include Coca-Cola, which has invested in various recycling activities. Walt Disney World in Florida, US, has an extensive waste management program and infrastructure in place.

Governmental Pressure

Various regulations are framed by the government to protect consumers and the society at large. The Indian government too has developed a framework of legislations to reduce the production of harmful goods and by products. These reduce the industry's production and consumers' consumption of harmful goods, including those detrimental to the environment; for example, the ban of plastic bags in Mumbai, prohibition of smoking in public areas, etc.

Competitive Pressure

Many companies take up green marketing to maintain their competitive edge. The green marketing initiatives by niche companies such as Body Shop and Green & Black have prompted many mainline competitors to follow suit.

Cost Reduction

Reduction of harmful waste may lead to substantial cost savings. There are examples where firms have evolved symbiotic relationship. The waste generated by one firm is used by another firm as a low cost raw material. For example, the fly ash generated by thermal power plants, which would otherwise contributed to a gigantic quantum of solid waste, is used to manufacture fly ash bricks for construction purposes.

**Table 1
Green Marketing Models**

	Tactical greening	Quasi-strategic greening	Strategic greening
Targeting	Ads mentioning green features are run in green- focused media.	A firm develops a green brand in addition to its other brands.	A firm launches a new strategic Business Unit (SBU) aimed at the green market.
Green design	A firm switches from one raw material supplier to another with more eco- friendly processes.	Life-cycle analysis is incorporated into the eco-design process to minimize eco-harm.	E.g. FUJI XEROX develops its Green Wrap paper to be more eco-friendly from the ground up.
Green positioning	E.g. a mining company runs a Public Relations (PR) campaign to highlight its green aspects and practices.	E.g. British Petroleum (B) AMOCO redesigns its logo to a sun-based emblem to reflect its view to a hydrogen/ solar-based future of the energy industry.	Eg. the BODY SHOP pursues environmental and social change improvements and encourages its consumers to do so as well.
Green pricing	Cost-savings due to existing energy-efficiency features are highlighted for a product.	E.G. a water company switches its pricing policy from a flat monthly rate to a per unit of water used basis.	A company rents its products rather than selling; consumers now pay only for use of the product.
Green logistics	A firm changes to a more concentrated detergent, which.	Packaging minimization is incorporated as a part of firm's manufacturing review process.	A reverse logistics system is put into place by FUJI XEROX to reprocess and remanufacture copiers.
Marketing waste	A firm improves the efficiency of its manufacturing process, which lowers its waste output.	E.g. TELSTRA (a phone company) has internal processes so that old telephone directories (waste) are collected and turned into car litter products by other companies.	E.g. a Queensland sugarcane facility is rebuilt to be cogeneration based, using sugarcane waste to power the operation.
Green promotion	An oil company runs a PR campaign to highlight its green practices in order to counter an oil spill getting bad press coverage.	A company sets a policy that realistic product eco-benefits should always be mentioned in promotional materials.	As a part of its philosophy the BODY SHOP co-promotes one or more social/eco campaigns each year with in shop and promotional materials.
Green alliance	A company funds a competition (one-off basis) run by an environmental group to heighten community awareness on storm water quality issues.	E.g. SOUTHCORP (a wine producer forms a long term allied with the Australian Conservation Foundation to help combat land salinity issues.	A company invites a representative of an environmental group to join its board of directors.

Review of Literature

A study by Peter Kangis (1992), proposes that the challenges both for marketing specialists and for consumers, raised by the concept of green marketing, are due to several issues, such as the lack of an acceptable definition for green marketing, the absence of a clear understanding of cause-and-effect relationships in matters affecting the environment, and the overt and covert reasons for concern about such issues. It is suggested that in the hands of unscrupulous marketers, green marketing can turn into green gold.

An important study by Vasanthkumar N. Bhat (1993) suggests that company should venture to start a green marketing program with better management strategies through cutting down wastes. As a product must meet several criteria, suggests a concurrent rather than sequential product development approach. It is thus concludes with tips for top management to improve green design in their organizations.

According to the authors like Ottaman, (1993) and Ken Peattie, (1993) concept of green marketing is in and the concept of conventional marketing is out.

According to Hallin (1995) and McCarty and Shrum (2001), people engage in environmental behavior as a result of their desire to solve environmental problem, to become role models and a belief that they can help to preserve the environment.

Azhagaiah and llangovan (2006) observed that the environmental issues have a significant impact on the modern society.

Another study by John Grant (2008) envisages a greener strategy and the future of green marketing.

Thakur (2009) "Customer awareness with reference to green marketing of automobiles" an empirical research carried at Indore, Madhya Pradesh and concluded that green marketing of automobiles is attracting both from urban and rural people. This clearly indicates that people are shifting to the eco-

friendly products to have a positive impact on the natural environment rather than traditional products.

Welling & Chavan (2010) "Analyzing the feasibility of Green Marketing in Small & Medium Enterprises", an empirical study and the data was collected from 114 respondents in (Suburban Mumbai), the main purpose of their study was to find out whether the Small & Medium Enterprises believed in implementing green culture practices in the manufacturing and marketing of green products. Further their study concluded that both the State and Central governments should take necessary steps and encourage the SME's to manufacture green products.

Brady (2010) Due to the diminishing availability of natural resources, such as water, oil, this green interest is also creating a concern for conservation. Sustainability concerns- climate change, toxic substances, ethical sourcing and extreme utilization are at an all time high with consumers and media. With the viability of the planet a growing concern many consumers are willing to do their part.

A study by Elham Rahbar (et al, 2011) proposes to determine the effect of green marketing tools on consumer's actual purchase behaviour in case of Penang (Malaysia). A survey was carried out on 250 Chinese, Malay, Indian and other races that represent the Penang population. Factor analysis, Cronbach alpha and multiple regression were used to identify factors impact on Penang consumers actual purchase behaviour. The study observes that customer's trust and perception of eco-label and eco-brand show positive and significant impact on their actual purchase behaviour.

Ramakrishna (2012) "Green Marketing in India: Some Eco-Issues", the researcher analysed the Eco-issues in Green Marketing through the 4p's of green marketing mix and concluded that awareness to be created among the people about green marketing benefits and eco-friendly products and also concluded that the firms need to give more attention towards the green culture in order to survive in the tough market.

Research Methodology

Objectives of the Study

1. To find out consumer behaviour regarding Green Marketing by Companies.
2. To demonstrate the challenges faced by companies in pursuing green marketing.
3. To study the relationship between consumers attitude and perception and green marketing

Hypothesis

The buying behaviour of buyers is not influenced by green marketing practices of organisations.

Population and Sample

For reasons of convenience, Meerut (UP) is selected, being representative of the Meerut socio-demographic profile. Meerut is the historical city of India. The first struggle of Freedom Movement started from Meerut in 1857. It is the second largest city of NCR and 26th most populous city in India. According to 2001 census, its municipal area is 117.89 km². It is famous for Sports Industry and Educational Institutes.

Sample Data has been collected from randomly selected buyers of the green products from Easy Day and Vishal Mega Mart at Meerut City. Primary data is collected through questionnaires. The questionnaire has 10 questions about purchase decision that is influenced by green marketing.

Sample Size

A Random sampling strategy would be carried out. A survey of about 50 consumers belonging to Meerut district is taken. They are familiar with the purchase of these products and also responsible for the purchase decisions.

Key Initiatives in Green Marketing in India

SBI's Green Counters

SBI has established new eco and power friendly systems in nearly 10,000 ATMs. It reduced carbon footprints. They named it "Green Channel Counter" Moreover, paper less banking, money less transactions, and SMSs in lieu of bank slips are other greener ways of operations.

In all the new ATMs, LCD monitors were deployed in lieu of CRTs. LEDs were used instead of tube lights/CFL, 5 star EER 3.1 rated ACs were installed. Specially designed ATMs were developed and installed that consumed low energy and require no air conditioning environment. This project is expected to help save a whopping 48508500 KWH per annum. This translates to about Rs 24.25 crores of energy savings per annum. Even solar powered ATMs were developed for rural areas. ATMs were built closer to the customer residences and their workplaces, so as to reduce their travel time thus saving time and fuel. More benefits include the convenience of 24x7 banking, increased use of e-transactions. Most other banks in India are also realizing the benefits of adopting green practices, and are therefore gradually adopting the same site preparation specifications as used by SBI in this deployment.

State Bank of India Turns to Wind Energy to Reduce Emissions

The State Bank of India became the first Indian bank to harness wind energy through a 15-megawatt wind farm developed by Suzlon Energy. The wind farm located in Coimbatore uses 10 Suzlon wind turbines, each with a capacity of 1.5 MW. The wind farm is spread across three states— Tamil Nadu, with 4.5 MW of wind capacity; Maharashtra, with 9 MW; and Gujarat, with 1.5 MW. The wind project is the first step in the State Bank of India's green banking program dedicated to the reduction of its carbon footprint and promotion of energy efficient processes, especially among the bank's clients.

Kansai Nerolac Paints Ltd (KNPL)

A leading paint manufacturing company in India, claims to be the first in India to manufacture lead-free paints, has transformed its entire range of decorative paints to suit environment and people's health. It has introduced a new range of emulsions that was low in Volatile Organic Compounds (VOC) and subsequently had low odour. Nerolac named it Healthy Homes and all these products are lead-free.

Nerolac launched Impressions Eco Clean, an interior paint with low-VOC focus on safer and eco-

friendly paints. It has less odour, easy maintaining and quick stain removal. Nerolac adopted this approach to safeguard people from health related issues like skin irritation, eye infection and respiratory problems to chronic blood, liver and kidney disease from prolonged exposure to heavy metals present in paint.

Indian Oil's Green Agenda

As an active partner of Global Compact Programme of United Nations, Indian Oil is fully focused on —sustainable development. All Indian Oil refineries have been provided with full-fledged effluent treatment plants consisting of physical, chemical, biological & tertiary treatment facilities. To control gaseous emissions all refineries use low-sulphur fuel oil, desulphurization of refinery fuel gas, tall stacks for better dispersion of flue gases, advanced process control systems; and energy conservation measures to reduce fuel consumption. Ambient air monitoring stations with automatic continuous monitoring instruments are provided at all the refineries.

Towards Green production Mathura Refinery started three ambient air quality-monitoring stations between the refinery and the city of Agra and a fourth one at Bharatpur to control sulphur dioxide emissions below prescribed limits as stated by the Ministry of Environment and Forests and State Pollution Control Boards.

Wipro goes Green

Wipro has moved up because of its performance in the chemical criterion and for using recycled plastic. Besides, the company has recently launched GreenWare range of desktops which are not only 100% recyclable, but also toxin free. The GreenWare range has a 13% share of the company's total hardware output. The core mission of Wipro green computing is to work towards clean and sustainable IT products and solutions, which help customers, achieve high productivity in energy, space and asset management through the lifecycle. Out of the twenty-five green buildings that IT industry has to its credit in India, as many as nine belong to Wipro, even going by sheer numbers that is almost 40% of the pie. The Wipro complex in Gurgaon, like almost all its complexes, uses solar panels and recycles all the water within its premises.

Going Green : Tata's New Mantra

Tata Motors is setting up an eco-friendly showroom using natural building material for its flooring and energy- efficient lights. The Taj chain, is in the process of creating eco rooms which will have energy- efficient mini bars, organic bed linen and napkins made from recycled paper. But there won't be any carpets since chemicals are used to clean those. And when it comes to illumination, the rooms will have CFLs or LEDs. About 5% of the total rooms at a Taj hotel would sport a chic eco-room design.

Another eco-friendly consumer product that is in the works is Indica EV, an electric car that will run on polymer lithium ion batteries. Tata Motors plans to introduce the Indica EV in select European markets this year.

India's 1st Green Stadium: The Thyagaraja Stadium

Stands tall in the quiet residential colony behind the Capital's famous INA Market. It was jointly dedicated by Union Sports Minister MS Gill and Chief Minister Sheila Dikshit on Friday. Dikshit said that the stadium is going to be the first green stadium in India, which has taken a series of steps to ensure energy conservation and this stadium has been constructed as per the green building concept with eco-friendly materials.

Eco-friendly Rickshaws before CWG

Chief minister Shiela Dikshit launched a battery- operated rickshaw, "E-rick", sponsored by a cellular services provider, to promote eco-friendly transportation in the city ahead of the Commonwealth Games.

Agartala to be India's first Green City

Tripura Sunday announced plans to make all public and private vehicles in Agartala run on compressed natural gas (CNG) by 2013, thus making the capital "India's first green city". Tripura Natural Gas Co Ltd (TNGCL), a joint venture of the Gas Authority of India Ltd (GAIL) and the Tripura and Assam governments, has undertaken a project to supply CNG to all private and government vehicles. CNG will also be available to those now using electricity, petrol and diesel to run various machineries. Agartala will be the first city in India within the next three years to become a green city.

NDTV

In partnership with car maker Toyota Kirloskar Motor Pvt. Ltd launched Greenathon a 24-hour live television event to create responsiveness about environmental issues.

Table 2:
Countries ranked according to their response level on Green Marketing

Rank	Countries
1	India
2	UK
3	US
4	Thailand
5	Australia
6	Canada
7	China

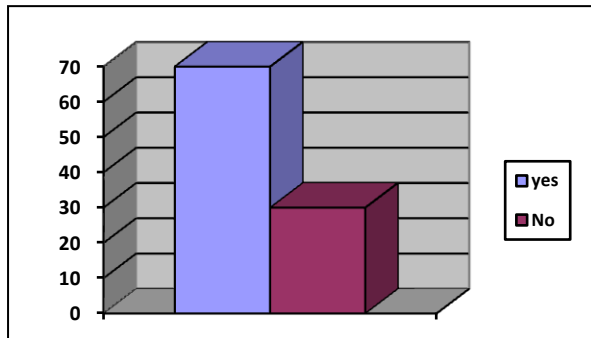
Source : Retrieved from www.google.com

Data Analysis

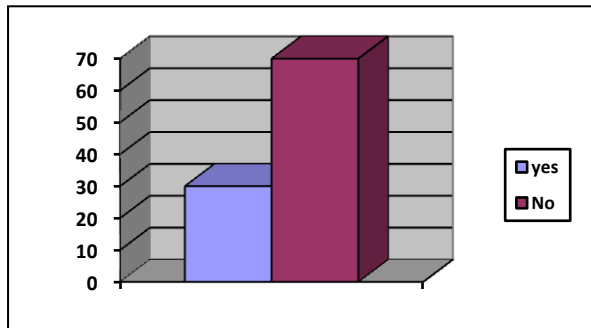
A questionnaire was prepared for the present study. A sample of 50 consumers, who were actual buyers at Easy Day and Vishal Mega Mart retail outlets, has been taken. Simple 10 Likert-scale based questions on buying behaviour of Green Marketing based products have been asked for this purpose exclusively. The findings are being presented here as given below:

Findings

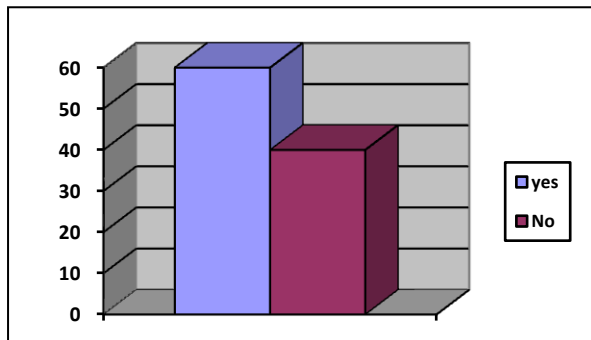
1. 70 per cent of respondents are aware of green products.



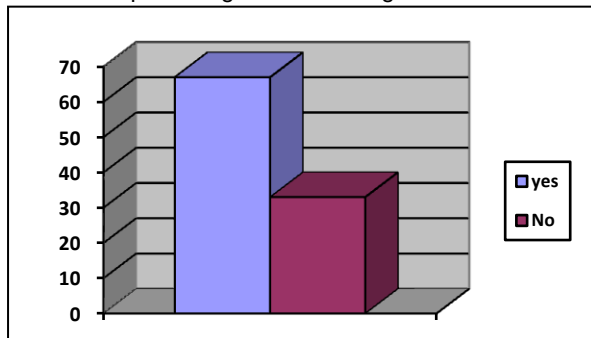
2. 30 per cent can pay more for eco friendly products.



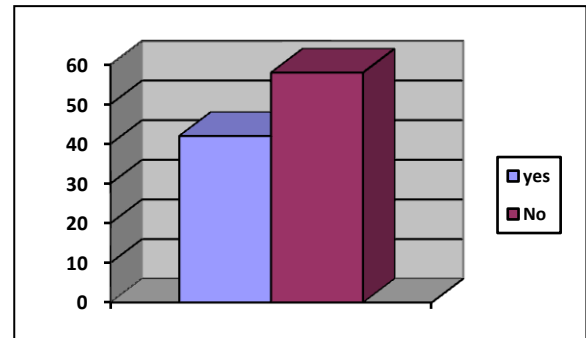
3. 60 per cent have agreed that there is enough information about the products while 40 per cent not.



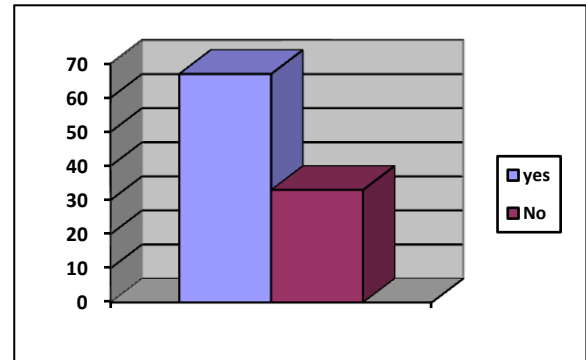
4. 67 per cent of the population in the sample agrees or strongly agrees that the organisations should practice green marketing.



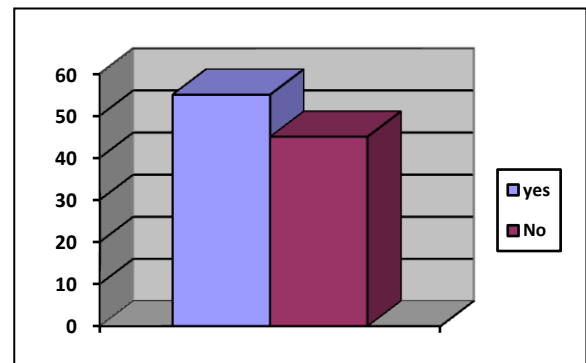
5. Majority of the people are not concerned about organisations polluting environment as 58 per cent are neutral regarding the issue.



6. 33 per cent customers are not affected by green marketing while making purchasing decision and 67 per cent are affected.



7. 55 per cent buyers prefer to repurchase such products which are green and 45 per cent are not affected.



In short Green marketing encourages consumers to use eco-friendly products and manufactures to develop more. The awareness about the products should be done through advertising so that individual buying behaviour can be changed which can have an impact on the welfare of the environment. It is also important that companies aiming at developing new eco-friendly products should ensure that products perform competitively.

Conclusion

Green marketing should not neglect the economic aspect of marketing. Marketers need to understand the implications of green marketing. Customers are not concerned about environmental

issues or will not pay a premium for products that are more eco-responsible. Therefore, Green marketing is still in its infancy and a lot of research is to be done on green marketing to fully explore its potential.

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