ABSTRACT

Purpose: Green marketing refers to holistic marketing concept wherein the production, marketing, consumption and disposal of products and services happen in a manner that is less detrimental to the environment. Over the years, a majority of consumers have realized that their behavior had a direct impact on environment. The objective of this paper is to study the implementation of Green Marketing initiatives in the Indian organizations and also highlights on the top five green marketing initiatives in the information technology (IT) sector in Bangalore. The paper also aims to understand the concepts of Green Products; green marketing mix and points out the challenges before green marketing initiators.

Methodology/Approach: The present paper studies the theoretical concepts of the green marketing, green marketing management and green products. The paper also studies the theory contributed by researchers in the area of environment marketing which includes green products, green customers, green marketing mix and ecological processes.

Time frame: The research study was conducted during the period of August 2012 to April 2013.

Value: The research paper concludes that business firms need to change their mind set from traditional marketing strategies to green marketing strategies in order to survive in the green competitive world and to have a positive impact on the environment through green marketing elements.


“Earth provides enough to satisfy every man's needs, but not every man's greed.”

― Mahatma Gandhi
Introduction:

According to American Marketing Association (AMA), Green marketing is the marketing of products that are presumed to be environmentally safe. Thus, Green marketing incorporates a broad range of activities, including product modification, changes to the packaging as well as modifying advertising. Hence, green marketing refers to holistic marketing concept wherein the production, marketing, consumption and disposal of products and services happen in a manner that is less detrimental to the environment. Over the years, a majority of consumers have realized that their behavior had a direct impact on environment. There is a growing amount of evidence indicating that consumers are shifting traditional products to green products to have a positive impact on the natural environment.

Green Marketing as the development and marketing of products designed to minimize negative effects on the physical environment. Green Marketing as 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. The inclusion of all efforts to consume recognizes that many entities are involved in green marketing. Green marketing is not limited to government or nongovernment organizations, nor is it solely an activity undertaken by consumers. Manufacturers, wholesalers, retailers, and services firms each has opportunities to contribute in the field of green marketing. This definition also identifies the need to consider the production, distribution, and reclamation of products as integrated components of the marketing effort. Efficiency at one stage of this process (e.g., distribution) may offer advantages in the channel, but the goal of green efforts is to limit the total ecological influence associated with consumption. Green Marketing must consider the promotional efforts employed to gain consumer support of ecologically friendly products.

Green Marketing Management as the process of planning and executing the marketing mix to facilitate consumption, production, distribution, promotion, packaging, and product reclamation in a manner that is sensitive or responsive to ecological concerns. The management of green marketing activity continues to evolve as companies incorporate new thinking about climate change throughout their organizations. Initial green marketing efforts focused on the recycling of products such as aluminum cans and photocopier toner cartridges. Over time, firms have begun to consider ways to modify inputs to production that limit the influence of the products on the environment. The study of green marketing reflects an interest in becoming more aware of ecological and sustainability issues and consistently working to achieve higher levels of sustainability. Increasingly, firms are recognizing that outputs from the production process should be viewed under scrutiny of climate change as well. Savvy management recognizes that everything coming out of a production facility is a product, by-product, or waste. Green products are recognized nationally or internationally through certification and eco-labeling. For example, the United States Environmental Protection Agency provides Energy Star labels for electronics and appliances that are environmentally friendly. In the United States, personal computers account for 2% of annual electricity consumption. The EPA s new Energy Star labels require
computers possessing the label to be 65% more efficient than conventional products. Adoption of these new personal computers will enable industry to save $1.2 billion over the life of the products. Firms also are viewing by-products of production in novel ways. Shell Oil is pumping carbon dioxide, a refinery by-product, into 500 Dutch greenhouses. This action reduces emissions by 325,000 tons per year and saves greenhouses from having to burn millions of cubic meters of gas needed to produce carbon dioxide. 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. In December 1983, the United Nations commissioned research on development and the environment.

The 1987 report of the United Nations Commissioned Research defined sustainability as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Importantly, this edict recognizes that there are at any time limits on the ability of the biosphere to absorb human activity. The sustainable organization must generate acceptable levels of economic performance, or it will not survive. It must also nurture social performance in its interaction with customers, suppliers, consumers, and other interest groups. Survival is also contingent on the firm’s ability to achieve acceptable levels of environmental performance throughout the supply cycle from raw material procurement to post consumption disposal. In the retail sector, Wal-mart has publicly committed to reducing packaging in its global supply chain by 5% by 2013. As part of its effort to gain logistical sustainability; the firm developed a packaging scorecard to monitor supplier performance.

**Green Products:**

- Simon (1995) defined "Green Products" as products made with reduced amounts of material, highly recyclable material, non-toxic material, do not involve animal testing, do not adversely affect protected species, require less energy during production or use, or have minimal or no packaging.
- Nimse (2007) defined green products as those that use recyclable materials, minimal wastage, and reduce the use of water, save energy, have minimal packaging, and emit less toxic substances. Compared with other products, green products bring less harm to humankind and offer more long-term practical development opportunities from a social and economic perspective. Green products are environmentally friendly products.
Gains/Benefits of Green Marketing:

Green marketing has positive influences on multiple participants in the economy. The environment, developing economies, consumers, corporate strategy, the product, production processes, and supply chain benefit from green marketing.

Environmental Benefits: The obvious benefactor of green marketing is the environment. Conditions and trends in climate change, air, water, and soil conservation. Green marketing can have an influence on climate change in several substantial ways. Fossil fuel consumption is a major source of greenhouse gases associated with climate change. Two leading sources of climate change are the burning of coal for electricity and the burning of gasoline for automobile transportation. Green marketing initiatives focused on product development strategies reduce the need to rely on these forms of energy.

For example, new appliances are designed with fuel efficiencies that clearly reduce energy consumption. It is important to recognize that the consumer must incorporate concern for the environment with multiple other considerations. For example, potential consumers of the new Chevrolet Volt must reconcile the zero-fossil fuel consumption with the price differential for this car versus less expensive cars that produce more carbon dioxide. Green marketing initiatives contribute to the environment by incorporating green marketing strategies into superior value propositions for consumers.

Developing Economies: The term developing economies refers to nations that have a relatively low gross domestic product (GDP) per capita. The low income, underdeveloped assets, and economic vulnerability common to these economies results in high dependence on the agricultural sector. Inhabitants in these markets, however, face increased exposure to drought, intense storms, floods, and environmental trauma that limits the ability to enhance quality of life. Research performed by the United Nations indicates that inhabitants of these countries are much more likely to be affected by natural disasters than inhabitants in high-income countries. Climate change limits agricultural productivity, increases water stress, raises sea levels, negatively transforms ecosystems, and thwarts human health. These factors do not operate in isolation; interactively, they contribute to hunger and poverty in developing markets. Green marketing and production position to reduce climate modify and consequently limit hunger and poverty.

Consumer Benefits: Consumers benefit in several important ways through green marketing. These benefits often influence consumer decision making, and consumers will vary in the extent to which they value these benefits. Initially, consumers benefit from the knowledge that they are doing their part to reduce climate change. These consumers are likely to favor corporate efforts to reduce pollution over efforts to raise corporate profitability. Consumers also value the opportunity to be associated with environmentally friendly products and organizations.

Strategic Benefits: Managers of corporate strategy realize multiple benefits from a green approach to marketing. Companies that incorporate ecological consciousness into their mission
statements and strategy enhance their images among consumers, employees, investors, insurers, and the general public. Some consumers have strong attraction toward green products, and approaching the market with an ecological focus enhances image of the brand among these consumers.

**Product benefits:** Product benefits refer to components introduced into production outputs or services designed to benefit the consumer, whereas process benefits refer to tools, devices, and knowledge in throughput technology designed to facilitate manufacturing and logistics. For example, a hybrid engine is a product innovation, whereas a just-in-time inventory system is a process innovation.

**Production Process Benefits:** Production processes focus on organizational efforts to produce the highest-quality products at the lowest possible cost. Process benefits accrue for handling of products, by-products, and waste. The materials costs associated with sustainable manufacturing techniques can be reduced in a number of ways.

**Supply-chain Benefits:** Green marketing influences relationships among the firms that make up the channel from raw material mining to consumption. Green strategies that seek to eliminate waste in the supply chain result in firms analyzing truck loading and route planning in the delivery process. Routing that seeks to eliminate fuel costs can maximize truck capacity utilization and improve customer service.

**Review of Literature:**

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. Azhagaiah and Ilangovan (2006) according to their study, researchers found out that the environmental issues have a significant impact on the modern society and observed the impact of green marketing and the environment protection. 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. 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.

Participants who need to understand the Green Marketing:

Green marketing is progressively more an important issue for most entities concerned in marketing whether they are buyers, sellers, or regulators of an industry.

- Consumers.
- Governments.
- Companies with recognized environmental reputations.
- Companies highly dependent on scarce human capital.
- Companies with low market power.
- Companies operating in highly regulated industries.
- Companies dependent on natural resources.

Reasons Why companies to adopt Green Marketing:

✓ Opportunities or competitive advantage.
✓ Corporate social responsibilities (CSR).
✓ Government pressure.
✓ Competitive pressure.
✓ Cost or profit issues.

Challenges in Green Marketing:

✓ Majority of the people are not aware of Green products and their uses.
✓ Green products require a recyclable and renewable materials or elements which are expensive.
✓ People are often perceived that green products are expensive compared to traditional products.
✓ Green Marketing depends on technology and requires a huge investment in Research and Development.

Green Marketing Mix: The combination of 4 Green P’s or Green factors(Eco-friendly) is known as Green Marketing Mix namely; Green Product, Green Promotion, Green Place and
Green Price. Under GMM “Green factors” should be considered as they closely associated to the success or failure of the marketing of eco-friendly products:

- **Green Product**: While manufacturing green products the firms should incorporate environmentally friendly resources or materials in the product. The characteristics of the resources or materials used in the product and its packaging should influence environmental elements.

- **Green Promotion**: The firms should focus more on “Green Advertising” in order to communicate to its green customers (who uses eco-friendly products) and as well as traditional customers (who are not green users) about the concept of environmental protection. Apart from this, the firms should also launch promotional tools such as schemes, coupons, offers and premium etc; in order to attract consumers to buy eco-friendly products.

- **Green Place**: Green products and services which are to be delivered from the point of producers to the point of ultimate green consumers. In this context, the firm should choose a proper channel considering product characteristics, consumer characteristics and market characteristics.

- **Green Price**: It is often perceived by the consumers that the prices of green products are relatively higher compared to the traditional products. If production and operating costs are lowered, it would give green products more competent force on the market.

### Table: 1: Showing Companies had taken initiatives on Green Marketing:
<table>
<thead>
<tr>
<th>SL.No</th>
<th>Company</th>
<th>Green Marketing Initiatives</th>
</tr>
</thead>
</table>
| 1.    | Philips India            | • Energy saving Lights.  
• Medical Equipments.  
• House hold appliances.                                                                                                                                          |
| 2.    | Mahindra Reva            | • Electric Vehicle-“e2o”.  
• Earth friendly small tractor designed to the farmers.                                                                                                               |
| 3.    | Go GreenBOV              | • Battery Operated Vehicles(BOV)                                                                                                                                                                                              |
| 4.    | Philips                  | • Compact Fluorescent Light (CFL) bulbs.                                                                                                                                                                                      |
| 5.    | Hewlett-Packard Company  | • Energy-efficient products and services and institute energy-efficient operating practices in its facilities worldwide.                                                                                                |
| 6.    | Wipro Technologies      | • Sustainable IT products and solutions, which help customers, achieve high productivity in energy, space and asset management through the lifecycle.  
• Recycled plastic.  
• Launched Green ware ranges of desktops are not only 100% recyclable, but also toxin-free.                                                                        |
| 7.    | CISCO Systems            | • Cisco recently partnered with San Francisco’s Department of Energy to announce World’s first Urban Eco Map Pilot. This tool provides information on carbon emissions which are caused by transportation, energy waste etc. organized by ZIP codes.  
• Cisco is planning to minimize the ecological impact by establishing responsible operation programs aimed to reduce energy consumption across the company, limit the greenhouse gas emissions implicated in global warming, closely manage the air quality, water consumption, food procurement and waste and lastly, monitor and ensure proper disposal of hazardous materials. |
| 7.    | Infosys Technologies Ltd. | • Focused on green buildings, water harvesting and conservation, better transport management by encouraging car pool for its employees and increasing bio-diversity in its campuses.  
• Focused on ‘green engineering’. The unit works on new products as well as on refurbishing existing products to make them more energy efficient. |
Table No:2: Showing Countries ranked according to their response level on Green Marketing:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>India</td>
</tr>
<tr>
<td>2</td>
<td>UK</td>
</tr>
<tr>
<td>3</td>
<td>US</td>
</tr>
<tr>
<td>4</td>
<td>Thailand</td>
</tr>
<tr>
<td>5</td>
<td>Australia</td>
</tr>
<tr>
<td>6</td>
<td>Canada</td>
</tr>
<tr>
<td>7</td>
<td>China</td>
</tr>
</tbody>
</table>

(Source: Retrieved from www.google.com)

Table No: 3: Showing top 5 Information Technology (IT) Companies in Bangalore.

<table>
<thead>
<tr>
<th>SL.NO</th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wipro Technologies</td>
</tr>
<tr>
<td>2</td>
<td>CISCO Systems</td>
</tr>
<tr>
<td>3</td>
<td>Infosys</td>
</tr>
<tr>
<td>4</td>
<td>Accenture</td>
</tr>
<tr>
<td>5</td>
<td>HCL Technologies</td>
</tr>
</tbody>
</table>

Source: www.mybangalore.com/.../top-5-green-it-companies-in-bangalore-.html

Conclusion: In the present day, a majority of consumers have realized that their behavior had a direct impact on environment as there is mounting amount of evidence
indicating that consumers are shifting traditional products to green products to have a positive impact on the natural environment. The research paper concludes that business firms need to change their mind set from traditional marketing strategies to green marketing strategies with a huge investment in technology, R and D and through Green marketing elements such as eco-design of a product, eco-labeling, eco-packaging, green logo in order to survive in the green competitive world and to have a positive impact on the environment.

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Jeffrey R. Kosnett (2007), “GREEN is the Next Big Thing”, Kiplinger’s Personal Finance, October, pp32-34.


