DIGITAL PLATFORMS & NATURAL ECO-DIGITAL ECO STRATEGY – TOP BRANDS IGNITING IT THROUGH ENVIRONMENT SUSTAINABLE REVOLUTION

Dr. Aparna Goyal [1] | Dr. Sanjeev Bansal [2]

[1] Associate Professor, Amity Business School, Amity University.

[2] Prof. & Dean FMS, Amity Business School, Amity University.

ABSTRACT

Digital Eco Marketing has emerged as a important concept in India as in other parts of the developing and developed countries. It is a new revolution in India in late 1990's .There is a radical change in consumer preferences and life styles. There has been a change in consumer attitudes towards a Digital Eco lifestyle. The companies are actively trying to increase their impact on the environment. Due to this shift from traditional marketing to Digital Eco marketing, companies these days are facing many new challenges. Organizations and business however have seen this change in consumer attitudes and are trying to gain an edge in the competitive market by exploiting the potential in the Digital Eco market industry. This conceptual study discusses the initiatives of few selected corporate towards Digital Eco marketing in India and abroad also. Though their initiatives are different but the goals are similar and the initiatives have resulted in competitive advantage for these organizations. This paper describes the various initiatives introduced by selected companies for promoting Digital Eco marketing-revolution.

KEYWORDS: Digital, Online, IT, Marketing, Strategy, Boom in Digitization, Eco, Digital Eco, Environment, Sustainability, Online revolution, growth

Introduction

With India making rapid progress in the field of industrialization, concerns have also been made by various sections of environmentalists regarding the repercussions on the environment. The companies themselves are now more aware about the ways in which their factories often affect the ecosystem and have taken a Digital Ecoer path to success. Digital Eco marketing can be defined as, "All activities designed to generate and facilitate any exchange intended to satisfy human needs or wants such that satisfying of these needs and wants occur with minimal detrimental input on the national environment. "By India's heritage, Indian consumers do appreciate the importance of using natural and herbal Digital Eco products. Indian consumer is exposed to healthy living lifestyles such as yoga and natural food consumption. In those aspects the consumer is already aware and will be inclined to accept the Digital Eco products. Some of the leading players progressing towards implementation of their concerns towards being environmentally sustainable are given as follows:

1. **LG:** LG India has been a pioneer is making electronic gadgets that are eco-friendly. Recently, it has launched a LED E60 and E90 series monitor for the Indian market. Its USP is that it consumes 40% less energy than conventional LED monitors. Also, they hardly used halogen or mercury, trying to keep down the use of hazardous materials in their products.

2. **HCL:** HCL is another brand that is trying to introduce eco- friendly products in the market and it has recently launched the HCL ME 40 notebooks. These notebooks do not use any polyvinyl chloride (PVC) material or other harmful chemicals and the Bureau of Energy efficiency already given it a five star rating.

3. **Haier:** Eco branding is a part of Haier's new Digital Eco initiative and they have launched the Eco Life Series. They have semi-automatic and automatic refrigerators and washing machines, split and window air conditioners and a lot more.

4. **Samsung:** Samsung India has always had a roaring range of LED TV screens and now they have come up with eco- friendly LED backlight. They use 40% less electricity have also no harmful chemicals like mercury and lead.

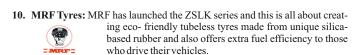5. **Tata Consultancy Services:** TCS has a globally recognized Sustainability practice and has already topped the Newsweek's top World's Digital Ecoest Company title. It also has a global Digital Eco score of 80.4% and this has mainly happened due their initiative of creating technology for agricultural and community benefits.

6. **Oil and Natural Gas Company:** ONGC, India's largest oil producer is all set to change the way with the invention of Digital Eco crematoriums, that would serve as a perfect replacement for the funeral pyres that emit so much smoke and uses up excess oxygen.

7. **IndusInd Bank:** One of the first banks in India to discourage the use of paper for the counterfoils in ATMs, and sending electronic messages, it has contributed a lot towards saving paper and reducing deforestation.

8. **ITC:** ITC has adopted a Low Carbon Growth Path and a Cleaner Environment Approach and has already introduced ozone treated elemental chlorine free bleaching technology that has improved the lives of millions worldwide.

9. **Wipro:** Wipro, has not only helped in the creation of technology that helps in saving energy and preventing wastes, but its corporate headquarters in Pune is the most eco friendly building in this sector all over India.

10. **MRF Tyres:** MRF has launched the ZSLK series and this is all about creating eco- friendly tubeless tyres made from unique silica-based rubber and also offers extra fuel efficiency to those who drive their vehicles.

The influence of the Digital Eco consumer will grow as environmental awareness among consumers spreads and improvements made to the environmental information available through eco-labeling schemes, consumer groups and consumer guides (Peattie, 1995). A variety of literature discuss about Digital Eco marketing and pays attention to the relationship between customers attitudes and environmental strategies in relation to the company's use of marketing. A global Synovate survey conducted in 2007 in association with Aegis, and repeated in 2008 in association with BBC World, also found that consumers in most countries are becoming more aware and willing to act on environmental concerns. Most of such studies on Digital Eco philosophy and Digital Eco marketing are done in developed countries but such studies remain missing in the context of developing economies like India. The present study discusses the concept of Digital Eco marketing and its interface with consumers in India, and few Indian cases also discussed.

Product Features

The products those manufactured through Digital Eco technology and that caused no environmental hazards called Digital Eco products. Promotion of Digital Eco technology and Digital Eco products is necessary for conservation of natural resources and sustainable development. We can define Digital Eco products by following measures:

- Products those are originally grown

- Products those are recyclable, reusable and biodegradable

- Products with natural ingredients,

- Products containing recycled contents, non-toxic chemical,

- Products contents under approved chemical,

- Products that do not harm or pollute the environment,

- Products that will not be tested on animals,

- Products with eco-friendly packaging i.e. reusable, refillable containers etc.

Literature Review

The growth of Digital Eco marketing and Digital Eco consumer is "perhaps the biggest opportunity for enterprise and invention the industrial world has ever seen" (Cairncross 1992: 177). The Digital Eco consumer is considered more educated and wealthier than the average consumer (Shim, 1995). There appears to be a democratization of Digital Eco purchasing in Europe and North America. Indeed, Laroche et al. (2001) found that there is a group of consumers which transcends the socio-economic boundaries and is willing to pay for the ethical credentials. In 2002 Roper survey, 41% of consumers said they did not buy Digital Eco products because they worried about the diminished quality of eco-friendly versions. All over the world, the demand in Digital Eco products is growing and as such there is a concern for understanding how Digital Eco is a Digital Eco product. This overwhelming increase in the overall environmental consciousness among different consumer profile there have been efforts undertaken by firms to "go Digital Eco" by presenting the concept of corporate environmentalism (Banerjee, 2003; Hay and Lichter 2000)One of the most important restrains to the development of Digital Eco products is the lack of consumer trust and the lack of information (Cervellon et al. 2010; Yiridoe et al., 2005). While buying Digital Eco may not appeal to everyone, there are substantial numbers of consumers who are potentially receptive to a Digital Eco appeal. According to the Roper survey (2002) mentioned above :

- 58% of consumers try to save electricity at home,

- 46% recycle newspapers, 45% return bottles or cans and

- 23% buy products made from, or packaged in, recycled materials.

Understanding the target consumer will help marketers to know whether "Digital Econess" is an appropriate selling attribute and how it should be incorporated into the marketing mix. The Roper survey divides consumers into the following groups:

- **True Digital Ecos (9%):** True Blues have strong environmental values and take it upon themselves to try to effect positive change. They are over four times more likely to avoid products made by companies that are not environmentally conscious.

- **Back to Digital Ecos (6%):** Digital Ecobacks differ from True Blues in that they do not take the time to be politically active. But they are more willing than the average consumer to purchase Environmentally friendly products.

- **Sprouts (31%):** Sprouts believe in environmental causes in theory but not in practice. Sprouts will rarely buy a Digital Eco product if it means spending more, but they are capable of going either way and can be persuaded to buy Digital Eco if appealed to appropriately.

Digitally Rising Digital Eco Marketing

- **Grousers (19%):** Grousers tend to be uneducated about environmental issues and cynical about their ability to effect change. They believe that Digital Eco products cost too much and do not perform as well as the competition.

- **Basic Browns (33%):** Basic Browns are caught up with day-to-day concerns and do not care about environmental and social issues.

Digital Digital Eco Marketing Mix

Understanding the target consumer will help marketers to know whether "Digital Econess" is an appropriate selling attribute and how it should be incorporated into the marketing mix. Every company has its own favorite set of marketing mix. Some have 4 P's and some have 7 P's of marketing mix. The 4 P's of Digital Eco marketing are that of a conventional marketing but the challenge before marketers is to use 4 P's in an innovative manner if they wanted to adopt the policy of Digital Eco marketing.

Digital Eco product:

Digital Eco products are typically durable, non-toxic, made from recycled materials, or minimally packaged (Ottman, 1997). Digital Eco based product strategies comprise any or a combination of recycling, reduction of packaging materials, re-consumption, dematerializing the products; using sustainable source of raw materials, making more durable products; designing products that are repairable, making products that are safe for disposal, making products and packag-

ing's that are compostable, and making products that are safer or more pleasant to use (Bhat, 1993; Ashley, 1993; Polonsky et al, 1997; Ottman, 1998 and Charter et al, 1999). The marketer's role in product management includes providing product designers with market-driven trends and customer requests for Digital Eco product attributes such as energy saving, organic, Digital Eco chemicals, local sourcing, etc., For example, Nike is the first among the shoe companies to market itself as Digital Eco. It is marketing its Air Jordan shoes as environment-friendly, as it has significantly reduced the usage of harmful glue adhesives. It has designed this variety of shoes to emphasize that it has reduced wastage and used environment-friendly materials.

Digital Eco Price

Many consumers assume that Digital Eco products are often priced higher than conventional products (Peattie, 1999; Polonsky, 2001). Digital Eco pricing takes into consideration the people, planet and profit in a way that takes care of the health of employees and communities and ensures efficient productivity. Value can be added to it by changing its appearance, functionality and through customization, etc. Wal Mart unveiled its first recyclable cloth shopping bag. The retail shops like Big Bazzar, Life style , Reliance trends, Nilgiris , Mc Rennett started charging consumers when they opted for plastic bags and encouraged people to shop using its Eco friendly bag

Digital Eco Place

Digital Eco place is about managing logistics to cut down on transportation emissions, thereby in effect aiming at reducing the carbon footprint. For example, instead of marketing an imported mango juice in India it can be licensed for local production. This avoids shipping of the product from far away, thus reducing shipping cost and more importantly, the consequent carbon emission by the ships and other modes of transport.

Digital Eco Promotion

According to Scholossberg (1993) as quoted by Polonsky (1997), Digital Eco promotion helps consumers to overcome the "greatest environmental hazard", that is, the lack of environmental information. To lessen the gap on environmental information through promotion Ottman (1997) has suggested several Digital Eco promotion strategies. Thus the Digital Eco companies should:

Digital Eco Marketing – Do's & Don't's

i) Educate consumers on the environmental problems that a Digital Eco product solves.

ii) Empower consumers with solutions by demonstrating to consumers how environmentally sound products and services can help consumers protect health, preserve the environment for future generations. British petroleum (BP) displays gas station which its sunflower motif and boasts of putting money into solar power

iii) Provide performance reassurance of Digital Eco-based products, as many consumers perceive them to be inferior to conventional products . Even the names of retail outlets like "Reliance Fresh", Fresh@Namdhari Fresh and Desi, which while selling fresh vegetables and fruits, transmit an innate communication of Digital Eco marketing.

DIGITAL ECO MOTIVATION
Exemplification:

1. **ITC Limited:** ITC strengthened their commitment to Digital Eco technologies by introducing 'ozone-treated elemental chlorine free' bleaching technology for the first time in India. The result is an entire new range of top Digital Eco products and solutions: the environmentally friendly multi-purpose paper that is less polluting than its traditional counterpart.

2. **Tamil Nadu Newsprint and Papers Limited (TNPL):** Adjudged the best performer in the 2009-2010 Digital Eco Business Survey, TNPL was awarded the Digital Eco Business Leadership Award in the Pulp and Paper Sector. The initiatives undertaken by this top Digital Eco firm in India includes two Clean Development Mechanism projects and a wind farm project that helped generate 2,30,323 Carbon Emission Reductions earning Rs. 17.40 Crore.

3. **Tata Metaliks Limited (TML):** Every day is Environment Day at TML, one of the top Digital Eco firms in India. A practical example that made everyone sit up and take notice is the company's policy to discourage working on Saturdays at the corporate office. Lights are also switched off during the day with the entire office depending on sunlight.

4. **State Bank of India: Digital Eco IT@SBI-** SBI entered into Digital Eco service known as " Digital Eco Channel Counter". SBI is providing many services like paper less banking, no deposit slip, no withdrawal form, no checks, no money transactions form all these transaction are done through SBI shopping & ATM cards. State Bank of India turns to wind energy to reduce emissions

5. **HCL Technologies:** This IT major may be considered as the icon of Indian Digital Eco initiatives, thanks to the "go Digital Eco" steps taken in solving

the problem of toxics and e-waste in the electronics industry. HCL is committed to phasing out the hazardous vinyl plastic and Brominated Flame Retardants from its products and has called for a Restriction on Hazardous Substances (RoHS) legislation in India.

6. **Oil and Natural Gas Company (ONGC):** India's largest oil producer, ONGC, is all set to lead the list of top 10 Digital Eco Indian companies with energy-efficient, Digital Eco crematoriums that will soon replace the traditional wooden pyre across the country. ONGC's Mokshada Digital Eco Cremation initiative will save 60 to 70% of wood and a fourth of the burning time per cremation.

7. **Hero Honda Motors:** Hero Honda is one of the largest two -wheeler manufacturers in India and an equally responsible top Digital Eco firm in India. The company's philosophy of continuous innovation in Digital Eco products and solutions has played a key role in striking the right balance between business, mankind and nature.

8. **Wipro's Digital Eco Machines (In India Only):** Wipro Infotech was India's first company to launch environment friendly computer peripherals. For the Indian market, Wipro has launched a new range of desktops and laptops called Wipro Digital Ecoware. These products are RoHS (Restriction of Hazardous Substances) compliant thus reducing e-waste in the environment.

9. **McDonald's Digital Eco Revolution:** McDonald's replaced its clam shell packaging with waxed paper because of increased consumer concern relating to polystyrene production and Ozone depletion. McDonald's restaurant's napkins, bags are made of recycled paper.

10. **Coca-Cola's Environmental Initiative:** The Coca Cola Company is one of the largest worldwide beverage retailers, manufacturers, and marketers of various non-alcoholic beverages. They maintain a large focus on the environmental impact of their products and use different methodologies and initiatives in order to reduce waste and sustain the environment.

11. **Suzlon Energy:** The world's fourth largest wind-turbine maker is among the Digital Ecoest and best Indian companies in India. Tulsi Tanti, the visionary behind Suzlon, convinced the world that wind is the energy of the future and built his factory in Pondicherry to run entirely on wind power. Suzlon's corporate building is the most energy-efficient building ever built in India.

12. **IDEA Cellular:** One of the best Indian companies, IDEA, paints India Digital Eco with its national 'Use Mobile, Save Paper' campaign. The company had organized Digital Eco Pledge campaigns at Indian cities where thousands came forward and pledged to save paper and trees. IDEA has also set up bus shelters with potted plants and tendril climbers to convey the Digital Eco message.

13. **KFC's new Digital Eco restaurant:** The latest store was built using elements that follow the Leadership in Energy and Environmental Design (LEED) certification process created by the U.S. Digital Eco Building Council. "This new KFC Digital Eco restaurant is part of our E3 initiative, which looks at Economically responsible ways of saving Energy and being Environmentally aware," said Roger McClendon.

14. **Tata group of companies:** Tata Motors ltd. has developed their showroom by using Digital Eco items and elements in its design. It shows eco-friendly atmosphere that attracts people towards itself. They are also going to launch a low cost water purifier which is made of pure and natural ingredients.

15. **Digital tickets by Indian Railways:** IRCTC has allowed its customers to carry PNR no. of their E-Tickets on their laptop and mobiles. Customers do not need to carry the printed version of their ticket anymore.

16. **Lead Free Paints from Kansai Nerolac:** Kansai Nerolac has worked on removing hazardous heavy metals from their paints. The hazardous heavy metals like lead, mercury, chromium, arsenic and antimony can have adverse effects on humans. Lead in paints especially poses danger to human health where it can cause damage to Central Nervous System, kidney and reproductive system. Children are more prone to lead poisoning leading to lower intelligence levels and memory loss.

17. **State Bank of India: Green IT@SBI-** By using eco and power friendly equipment in its 10,000 newATMs, the banking giant has not only saved power costs and earned carbon credits, but also set the right example for others to follow. SBI is also entered into green service known as "Green Channel Counter". SBI is providing many services like; paper less banking, no deposit slip, no withdrawal form, no checks, no money transactions form all these transaction are done through SBI shopping & ATM cards. 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.

18. **Lead Free Paints from Kansai:** Kansai Nerolac Paints Ltd. has always been committed to the welfare of society and environment and as a responsible corporate has always taken initiatives in the areas of health, education, community development and environment preservation. Kansai Nerolac has worked on removing hazardous heavy metals from their paints. The hazardous heavy metals like lead, mercury, chromium, arsenic and antimony can have adverse effects on humans. Lead in paints especially poses danger to human health where it can cause damage to Central Nervous System, kidney and reproductive system. Children are more prone to lead poisoning leading to lower intelligence levels and memory loss.

19. **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. 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.

20. **Eco-friendly Rickshaws before CWG:** Chief minister 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.

21. **Wipro Green It.:** Wipro can do for you in your quest for a sustainable tomorrow - reduce costs, reduce your carbon footprints and become more efficient - all while saving the environment. Wipro Infotech was India's first company to launch environment friendly computer peripherals. For the Indian market, Wipro has launched a new range of desktops and laptops called Wipro Greenware. These products are RoHS (Restriction of Hazardous Substances) compliant thus reducing e-waste in the environment.

22. **Phillips's "Marathon" CFL light bulb:** Philips Lighting's first shot at marketing a standalone compact fluorescent light (CFL) bulb was Earth Light, at $15 each versus 75 cents for incandescent bulbs. The product had difficulty climbing out of its deep green niche. The company re-launched the product as "Marathon," underscoring its new "super long life" positioning and promise of saving $26 in energy costs over its five-year lifetime. Finally, with the U.S. EPA's Energy Star label to add credibility as well as new sensitivity to rising utility costs and electricity shortages, sales climbed 12 percent in an otherwise flat market.

Literature Review

This paper explains the concept, importance, challenges of green marketing. It also includes some green marketing cases and its future in India. Green marketing is a new concept which has developed particular importance in the modern market. Green marketing is the marketing of products that are presumed to be environmentally safe. Other similar terms used are Environmental Marketing and Ecological Marketing. Firms may choose to green their systems, policies & products due to economic and non- economic pressures from their consumers; business partners, regulators, citizen groups & other stakeholders. Indian literate and urban consumer is getting more aware about the merits of green products. As a result of this businesses have increased their rate of targeting consumers who are concerned about the environment. Environmental issues have gained importance in business as well as in public life through out the world. It is not like that a few leaders of different countries or few big renowned business houses are concerned about the day to day deterioration of oxygen level in our atmosphere but every common citizen of our country and the world is concerned about this common threat of global warming. So in this scenario of global concern, corporate houses has taken green-marketing as a part of their strategy to promote products by employing environmental claims either about their attributes or about the systems, policies and processes of the firms that manufacture or sell them. Clearly green marketing is part and parcel of over all corporate strategy; along with manipulating the traditional marketing mix (product, price, promotion and place), it require an understanding of public policy process. So we can say green marketing covers a broad range of activities.

"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". According to the American Marketing Association, 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 production process, packaging changes, as well as modifying advertising. Other similar terms used are Environmental Marketing and Ecological Marketing. Firms use green marketing in an attempt to address cost or profit related issues. In implementing green market-

ing, consumers, corporate and the government play a very important role. But there are few constraints in implementing it like lack of consumer awareness, financial constraints, limited scientific knowledge, lack of stringent rules and competitive pressures. Green marketing involves developing and promoting products and Services that satisfy your customer wants and needs for quality, performance, affordable pricing and convenience without having a detrimental impact on the environment. A firm needs to develop environmentally safe products to have more impact on consumers than competitors. For this, it needs to identify customers environmental needs and develop products to address these needs. Usually environmental benefit is an added bonus but will often be the deciding factor between products of equal value and quality. Most customers will only be prepared to pay a premium if there is a perception of additional product value. Green products, in most cases, positioned broadly in the market place but very few customers will go out of their way to buy green products merely for the sake of it. For this, In-store promotions and visually appealing displays or using recycled materials to emphasize the environmental and other benefits. Promotion includes paid advertising, public relations, sales promotions, direct marketing and on-site promotions. Green marketers will be able to reinforce environmental credibility by using sustainable marketing and communications tools and practices.

Firms may choose to green their systems, policies and products due to economic and noneconomic pressures from their consumers, business partners, regulators, citizen groups and other stakeholders(non market environment).Some other reasons may includes:

1. Some scholar claim that Green policies/products are profitable: Green policies can reduce costs; green firms can shape future regulations and reap first mover advantage.

2. Now a day's firms are becoming more concerned about their social responsibilities (S.R). They have taken S.R as a good strategic move to build up an image in the heart of consumers. Even the socially responsible firms are getting leverage, whenever they intend to enter into foreign countries. There are example of firms like ITC, HLL (Surf excel) who are heavily promoting them as an environmentally concerned firms, where as there is example of firms who are working in this direction in a silence manner like Coca-Cola, who have invested crores of money in various recycling activities, as well as having modified their packaging to minimize its environmental impact. While being concerned about the environment coke has not use their concern as a marketing tool. Another big organization who is also working in this field without claiming any credit is Walt Disney World (WDW). So we can see that firms in this situation have taken two perspectives:

   • They are using green marketing as marketing tool.

   • They are working in this field without promoting the fact.

3. **Change in customers attitude:** With increasing concern about environment, consumers attitude towards firms having green policies or green products are becoming motivating factor.

4. **Governmental pressure:** In all most all civilized countries Govt. has the law to protect the consumers and the environment from the harmful goods or by products and ensure through law that all types of consumers have the ability to evaluate the environmental composition of goods. Govt. established several regulations to control the hazardous waste produced by firms and many by-products of production are controlled through the issuing of various environmental licenses, thus shaping the behavior of organization towards more socially responsible one.

5. **Competitive pressure:** Competition is the integral part of business; and you cannot over look any competitive action taken by your competitor. So to be in the market you have to have a vigil over your competitors move for marketing its products. Some firms have taken green-marketing as a strategy to build up its image rather than inculcate it as a part of the policy and work silence. In some instances this competitive pressure has caused an entire industry to modify and thus reduce its detrimental environmental behavior.

6. **Cost or profit issue:** Firms may also use green marketing in an attempt to address cost or profit related issues. Disposing of environmentally harmful byproducts, such as polychlorinated biphenyl (PCB) contaminated oil are becoming increasingly costly and in some cases difficult. Therefore firms that can reduce harmful wastes may incur substantial cost savings. When attempting to minimize waste, firms are often forced to re-examine their production processes. In these cases they often develop more effective production processes that not only reduce waste, but reduce the need for some raw materials. This serves as a double cost savings, since both waste and raw material are reduced. In other cases firms attempt to find end - of - pipe solutions, instead of minimizing waste. In these situations firms try to find markets or uses for their waste materials, where one firm's waste becomes another firm's input of production. One Australian example of this is a firm who produces acidic waste water as a by-product of production and sells it to a firm involved in neutralizing base materials.

Authors	Sustainable Entrepreneurship Definition
Gerlach (2003, p. 3)	"Innovative behaviour of single or organisations operating in the private business sector who are seeing environmental or social issues as a core objective and competitive advantage".
Crals and Vereeck (2005, p. 1)	"The continuing commitment by business to behave ethically and contribute to economic development, while improving the quality of life of the workforce, their families, local communities, the society and the world at large, as well as future generations. Sustainable Entrepreneurs are for-profit entrepreneurs that commit business operations towards the objective goal of achieving sustainability".
Dean, & McMullen (2007, p. 58)	"The process of discovering, evaluating, and exploiting economic opportunities that are present in market failures which detract from sustainability, including those that are environmentally relevant".
Cohen and Winn (2007, p. 35)	"The examination of how opportunities to bring into existence future goods and services are discovered, created, and exploited, by whom, and with what economic, psychological, social, and environmental consequences".
Choi and Gray (2008, p. 559)	"Create profitable enterprises and achieve certain environmental and/or social objectives, pursue and achieve what is often referred to as the double bottom-line or triple bottom-line".
Hockerts &Wüstenhagen (2010, pp 482)	"The discovery and exploitation of economic opportunities through the generation of market disequilibria that initiate the transformation of a sector towards an environmentally and socially more sustainable state".
Schaltegger & Wagner (2011, pp. 224)	"An innovative, market-oriented and personality driven form of creating economic and societal value by means of break-through environmentally or socially beneficial market or institutional innovations".
Shepherd & Patzelt (2011, pp. 142)	"Sustainable Entrepreneurship is focused on the preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society".

The definitions presented in table 2.6.2 provide valuable insights into the development of Sustainable Entrepreneurship. The above definitions provide an overview identifying the various attributes and key traits that have developed overtime. One can note that since 2003 to 2011 Sustainable Entrepreneurship definitions have developed overtime to encompass four defining attributes of Sustainable Entrepreneurship - 1) Balancing environmental and social concerns 2) Economic gains, 3) Market failures and disequilibria, and 4) Transforming Sectors towards sustainability. In section 2.6.3 we will discuss these four areas of Sustainable Entrepreneurship separately.

It is found that only 5% of the marketing messages from "Green" campaigns are entirely true and there is a lack of standardization to authenticate these claims. There is no standardization to authenticate these claims. There is no standardization currently in place to certify a product as organic. Unless some regulatory bodies are involved in providing the certifications there will not be any verifiable means. A standard quality control board needs to be in place for such labeling and licensing.

Indian literate and urban consumer is getting more aware about the merits of Green products. But it is still a new concept for the masses. The consumer needs to be educated and made aware of the environmental threats. The new green movements need to reach the masses and that will take a lot of time and effort. By India's ayurvedic heritage, Indian consumers do appreciate the importance of using natural and herbal beauty products. Indian consumer is exposed to healthy living lifestyles such as yoga and natural food consumption. In those aspects the consumer is already aware and will be inclined to accept the green products. The investors and corporate need to view the environment as a major long-term investment opportunity, the marketers need to look at the long-term benefits from this new green movement. It will require a lot of patience and no immediate results. Since it is a new concept and idea, it will have its own acceptance period. The first rule of green marketing is focusing on customer benefits i.e. the primary reason why consumers buy certain products in the first place. Do this right, and motivate consumers to switch brands or even pay a premium for the greener alternative. It is not going to help if a product is developed which is absolutely green in various aspects but does not pass the customer satisfaction criteria. Now this is the right time to select "Green Marketing" globally. It will come with drastic change in the world of business if all nations will make strict roles because green marketing is essential to save world from pollution. From the business point of view because a clever marketer is one who not only convinces the consumer, but also involves the consumer in marketing his product. Green marketing should not be considered as just one more approach to marketing, but has to

be pursued with much greater vigor, as it has an environmental and social dimension to it. With the threat of global warming looming large, it is extremely important that green marketing becomes the norm rather than an exception or just a fad. Recycling of paper, metals, plastics, etc., in a safe and environmentally harmless manner should become much more systematized and universal. It has to become the general norm to use energy-efficient lamps and other electrical goods. Marketers also have the responsibility to make the consumers understand the need for and benefits of green products as compared to non-green ones. In green marketing, consumers are willing to pay more to maintain a cleaner and greener environment. Finally, consumers, industrial buyers and suppliers need to pressurize effects on minimize the negative effects on the environment-friendly. Green marketing assumes even more importance and relevance in developing countries like India.

Methodology
Objectives of the study
- To investigate the perception consumers have about eco-friendly products.

- To find out the factors that influence consumers to opt for eco-friendly products.

Research design
The research is a descriptive research and is based on primary and secondary information.

- The technique used was a survey method, which was conducted through a structured questionnaire.

- A structured questionnaire was prepared which was designed to gather the primary information from a sample size.

- The structured questionnaire was then sent to respondents using email and internet.

Secondary data sources used are
- Internet

- Published reports and Journals

Selection of variables

Variables	Source
concern for environmental problems (V1)	(Prem Shamdasani, 1993)
purchase of eco-friendly products (V2)	(Prem Shamdasani, 1993)
readiness to switch to eco-friendly products (V3)	(Prem Shamdasani, 1993)
unwillingness to buy harmful items (V4)	(Prem Shamdasani, 1993)
Eco-friendly products are of better quality (V5)	(Morel, 2012)
Individual customer can preserve environment (V6)	(Kumar S. , Consumar awareness and perception of eco friendly products- A study among youngsters in india, 2011)
Community as a whole should take steps (V7)	(Kumar S. , Consumar awareness and perception of eco friendly products- A study among youngsters in india, 2011)
Purchase of products in recyclable containers (V8)	(Kumar R. , 2012)
recyclable packaging is more convenient than others (V9)	(Chitra, 2007)
will use products that save energy and last longer (V10)	(Prem Shamdasani, 1993)
willingness to pay more for eco-friendly products (V11)	(Chitra, 2007)
eco-friendly products can save money as others (V12)	(Prem Shamdasani, 1993)
willingness to contribute to the environment (V13)	(Prem Shamdasani, 1993)
companies should keep special displays for eco-friendly products (V14)	(Prem Shamdasani, 1993)
GOV. should initiate in promoting eco friendly products.(V15)	
eco-friendly products associated with good brand are of good quality (V16)	(Morel, 2012)
willingness to purchase eco-friendly products of good quality (V17)	(Morel, 2012)
Gender	
Age	
Occupation	
Income	

The structured questionnaire was divided into 2 parts. The first part consists of 17 items needed for the study and the second part consists of the demographic profile of respondents i.e. age, gender, occupation and income.

Reliability testing
The questionnaire was prepared and was filed by a sample of 30 respondents in order to check the reliability of the questionnaire. The results of reliability analysis are as follows:-

Table 1

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.784	.791	17

The above table shows the reliability analysis which was performed on a sample size of 30 respondents. The calculated cronbach's alpha is 0.784 which is acceptable. This suggested that the questionnaire is reliable. The questionnaire was then sent to other respondents for data collection.

Sampling design
Target population- Adults meeting qualifications such as over 15 years of age, having employment either government or private, self employed and are students.

Sampling technique- Convenience sampling.

Sample size- 250

Data interpretation tools- SPSS version 22 was used to analyze the data. The statistical tool used was factor analysis. The independent variables are age, income, gender and income of respondents. All other variables are dependent variables.

Demographic Profile
From the sample size of 250 respondents, there are 172 males and 78 females. Majority of the respondents belong to the age group of 20-30 i.e. 146 respondents. There were 52 respondents aged between 30-40, 26 respondents aged between 40-50 and 26 respondents aged above 50. 122 respondents were students, 59 were government employees, 35 were businessmen and 34 were private sector employees. The income of most of the employees was between 5-10 lakhs and also above 10 lakhs.

Factor analysis
The first stage involved performing factor analyses on 17 items which are my dependent variables. The research is in an early stage exploratory factor analysis was performed to reduce a large number of measures to a reliable set of constructs. The 17 items were my dependent variables and age, gender, income and occupation are my independent variables. Principal components were used for extraction of factors and the rotation performed was Varimax method. This was used to reduce the dimensions of construct. The KMO and Bartlett's test of sphericity was performed.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.582
Bartlett's Test of Sphericity	Approx. Chi-Square	2969.919
	df	136
	Sig.	.000

Table 2 shows the Kaiser-Meyer-Olkin value which is 0.582. KMO value greater than 0.5 is considered desirable (Malhotra, 2011). Therefore this indicates that there are sufficient number of items. Bartlett's test of sphericity was also found to be significant ($p<0.05$).

After this the correlation matrix was constructed to see that whether the values are correlated or not.

Table 3

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17
									Correlation Matrix[a]								
V1	1.000	.021	.142	.275	.145	-.047	-.131	.041	.132	.083	.083	.051	.100	-.067	-.020	.025	.051
V2	.021	1.000	.289	.146	.187	.016	.024	.176	.164	.019	-.175	-.220	-.092	.062	.094	.081	.008
V3	.142	.289	1.000	.630	.606	.108	.015	.594	.491	.274	.077	.008	.173	.055	-.246	.370	.163
V4	.275	.146	.630	1.000	.515	-.008	-.109	.351	.604	.585	.154	-.124	.024	-.282	-.230	-.045	.207
V5	.145	.187	.606	.515	1.000	-.097	-.041	.345	.047	.168	.420	.449	.635	-.030	-.269	.173	-.124
V6	-.047	.016	.108	-.008	-.097	1.000	.592	.212	-.009	-.037	.057	-.014	-.027	.020	-.006	-.115	.122
V7	-.131	.024	.015	-.109	-.041	.592	1.000	.017	-.216	-.005	.027	-.040	-.023	.100	-.041	-.079	.094
V8	.041	.176	.594	.351	.345	.212	.017	1.000	.457	.365	.021	.027	.022	.010	-.262	.112	.027
V9	.132	.164	.491	.604	.047	-.009	-.216	.457	1.000	.656	-.191	-.417	-.518	-.082	.029	.051	.325
V10	.083	.019	.274	.585	.168	-.037	-.005	.365	.656	1.000	-.004	-.375	-.368	-.265	-.250	-.228	.335
V11	.083	-.175	.077	.154	.420	.057	.027	.021	-.191	-.004	1.000	.379	.553	-.159	-.179	-.197	-.406
V12	.051	-.220	.008	-.124	.449	-.014	-.040	.027	-.417	-.375	.379	1.000	.823	.219	.179	.218	-.067
V13	.100	-.092	.173	.024	.635	-.027	-.023	.022	-.518	-.368	.553	.823	1.000	.141	-.090	.191	-.222
V14	-.067	.062	.055	-.282	-.030	.020	.100	.010	-.082	-.265	-.159	.219	.141	1.000	.656	.761	.388
V15	-.020	.094	-.246	-.230	-.269	-.006	-.041	-.262	.029	-.250	-.179	.179	-.090	.656	1.000	.411	.454
V16	.025	.081	.370	-.045	.173	-.115	-.079	.112	.051	-.228	-.197	.218	.191	.761	.411	1.000	.364
V17	.051	.008	.163	.207	-.124	.122	.094	.027	.325	.335	-.406	-.067	-.222	.388	.454	.364	1.000

a. Determinant = 4.80E-006

Table 3 shows the correlation matrix. It shows that there is a relatively high correlations among (readiness to switch to eco-friendly products) V3 & (unwillingness to buy harmful items) V4, (Eco-friendly products are of better quality)V5 & (readiness to switch to eco-friendly products)V3, (recyclable packaging is more convenient than others) V9 & (unwillingness to buy harmful items) V4, (Willingness to contribute to the environment)V13 & (Eco-friendly products are of better quality) V5, (Willingness to contribute to the environment) V13 & (eco-friendly products can save money as others) V12, (gov. should initiate in promoting eco-friendly products) V15 & (companies should keep special displays for eco-friendly products) V14, (companies should keep special displays for eco-friendly products) V14 & (eco-friendly products associated with good brand are of good quality) V16.

Table 4
Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.728	21.343	21.343	3.063	18.016	18.016
2	3.245	18.500	39.843	2.943	17.309	35.325
3	2.749	16.171	56.014	2.756	16.210	51.536
4	1.722	10.121	66.135	1.983	11.663	63.198
5	1.206	7.097	73.232	1.706	10.034	73.232
6	.967	5.684	78.915			
7	.797	4.687	83.602			
8	.681	4.063	87.665			
9	.580	3.413	91.078			
10	.481	2.838	93.916			
11	.293	1.719	95.635			
12	.208	1.209	96.844			
13	.179	1.055	97.900			
14	.130	.763	98.663			
15	.114	.663	99.326			
16	.069	.407	99.733			
17	.046	.267	100.000			

Extraction Method: Principal Component Analysis.

Table 4 gives the eigenvalues. The eigenvalues for the factors are in decreasing order o magnitude as we go from factor 1 to factor 17. Only factors with eigenvalues greater than 1 i.e. Factor 1 to Factor 5 are retained and other factors will not be included. The eigenvalue for a factor indicates the total variance attributed to that factor. Factor 1 to Factor 5 account for 73.2% of the total variance.
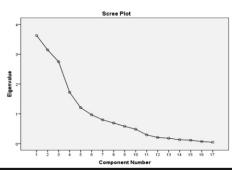

Scree Plot

Figure above shows a Scree plot of the eigenvalues against the number of factors on order of extraction. The above figure clearly indicates the point at which the scree begins indicates the total number of factors i.e. 5.

Table 5
Rotated Component Matrixa

Variables	Component				
	1	2	3	4	5
concern for environmental problems (V1)	.202	.389	.031	-.135	-.181
purchase of eco-friendly products (V2)	-.221	-.110	.046	.720	-.053
readiness to switch to eco-friendly products (V3)	.238	.518	.095	.708	.078
unwillingness to buy harmful items (V4)	.136	.820	-.148	.274	-.057
Eco-friendly products are of better quality (V5)	.708	.316	-.081	.471	-.084
Individual customer can preserve environment (V6)	-.002	.020	-.002	.039	.883
Community as a whole should take steps (V7)	-.004	-.121	.002	.015	.870
Purchase of products in recyclable containers (V8)	.088	.412	-.046	.592	.202
recyclable packaging is more convenient than others (V9)	-.401	.760	.066	.268	-.098
will use products that save energy and last longer (V10)	-.254	.807	-.197	.029	.054
willingness to pay more for eco-friendly products(V11)	.690	.076	-.332	-.123	.069
eco-friendly products can save money as others(V12)	.834	-.161	.242	-.122	-.014
willingness to contribute to the environment (V13)	.943	-.172	.049	.070	-.030
companies should keep special displays for eco-friendly products (V14)	.082	-.189	.881	.105	.067
gov. should initiate in promoting eco-friendly products (V15)	-.116	-.124	.791	-.232	-.046
eco-friendly products associated with good brand are of good quality (V16)	.162	-.029	.808	.324	-.130
willingness to purchase eco-friendly products of good quality (V17)	-.243	.462	.668	-.144	.182

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]
a. Rotation converged in 12 iterations.

The above table shows the rotated component matrix. It shows that factor 1 has a high factor loading with 3 items i.e. V5, V12 and V13. Factor 2 has a high factor loading with V4, V9 and V10. Factor 3 has a high factor loading with V14, V15 and V16. Factor 4 has a high factor loading with V2 and V3. Factor 5 has a factor loading with V6 and V7.

Table 6
Factor analysis

Factors	Factor loading	Variance
1. Environment friendly attitude (3 items)		17.9%
a) Eco-friendly products are of better quality	.717	
b) eco-friendly products can save money as others	.835	
c) willingness to contribute to the environment	.953	
2. Recycling (3 items)		17.3%
a) unwillingness to buy harmful items	.821	
b) recyclable packaging is more convenient than others	.760	
c) will use products that save energy and last longer	.807	
3. Promotion (3 items)		16.1%
a) companies should keep special displays for eco-friendly products	.881	
b) gov. should initiate in promoting eco-friendly products	.791	
c) eco-friendly products associated with good brand are of good quality	.808	
4. Empowerment (2 items)		11.5%
a) purchase of eco-friendly products	.721	
b) readiness to switch to eco-friendly products	.709	
5. locus of control (2 items)		10.04%
c) Individual customer can preserve environment	.883	
d) Community as a whole should take steps	.870	

Table7

Reproduced Correlations

		V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17
Reproduced Correlation	V1	.243ᵃ	-.174	.141	.314	.213	-.158	-.208	.059	.198	.243	.163	.132	.120	-.057	-.008	.025	.137
	V2	-.174	.584ᵃ	.400	.073	.149	-.021	-.021	.347	.206	-.024	-.268	-.243	-.136	.115	-.089	.243	-.080
	V3	.141	.400	.842ᵃ	.633	.651	.106	.015	.665	.488	.364	.091	.051	.187	.085	-.184	.318	.157
	V4	.314	.073	.633	.791ᵃ	.499	-.023	-.145	.507	.638	.661	.168	-.087	.001	-.249	-.296	-.026	.197
	V5	.213	.149	.651	.499	.834ᵃ	-.051	-.107	.457	.085	.098	.475	.463	.644	-.028	-.290	.203	-.164
	V6	-.158	-.021	.106	-.023	-.051	.782ᵃ	.767	.210	-.061	.066	.057	-.023	-.029	.058	-.053	-.105	.163
	V7	-.208	-.021	.015	-.145	-.107	.767	.772ᵃ	.135	-.171	-.050	.045	.002	-.008	.084	-.026	-.104	.103
	V8	.059	.347	.665	.507	.457	.210	.135	.570ᵃ	.414	.347	.049	-.079	.045	-.035	-.244	.129	.090
	V9	.198	.206	.488	.638	.085	-.061	-.171	.414	.823ᵃ	.705	-.279	-.472	-.483	-.097	-.054	.064	.435
	V10	.243	-.024	.364	.661	.098	.066	-.050	.347	.705	.759ᵃ	-.048	-.394	-.388	-.340	-.235	-.222	.309
	V11	.163	-.268	.091	.168	.475	.057	.045	.049	-.279	-.048	.611ᵃ	.497	.611	-.257	-.326	-.206	-.323
	V12	.132	-.243	.051	-.087	.463	-.023	.002	-.079	-.472	-.394	.497	.795ᵃ	.818	.299	.144	.298	-.100
	V13	.120	-.136	.187	.001	.644	-.029	-.008	.045	-.483	-.388	.611	.818	.927ᵃ	.158	-.064	.224	-.292
	V14	-.057	.115	.085	-.249	-.028	.058	.084	-.035	-.097	-.340	-.257	.299	.158	.834ᵃ	.683	.755	.479
	V15	-.008	-.089	-.184	-.296	-.290	-.053	-.026	-.244	-.054	-.235	-.326	.144	-.064	.683	.710ᵃ	.554	.525
	V16	.025	.243	.318	-.026	.203	-.105	-.104	.129	.064	-.222	-.206	.298	.224	.755	.554	.799ᵃ	.416
	V17	.137	-.080	.157	.197	-.164	.163	.103	.090	.435	.309	-.323	-.100	-.292	.479	.525	.416	.773ᵃ
Residualᵇ	V1		.195	.000	-.039	-.068	.111	.077	-.018	-.066	-.159	-.079	-.081	-.021	-.010	-.012	.000	-.086
	V2	.195		-.111	.073	.038	.037	.045	-.171	-.042	.043	.093	.022	.044	-.053	.183	-.162	.087
	V3	.000	-.111		-.003	-.044	.002	.000	-.070	.003	-.090	-.014	-.043	-.013	-.030	-.061	.052	.005
	V4	-.039	.073	-.003		.016	.015	.036	-.156	-.034	-.076	-.014	-.037	.023	-.033	.065	.019	.010
	V5	-.068	.038	-.044	.016		-.046	.065	-.112	-.039	.069	-.054	-.014	-.009	-.002	.021	-.030	.040
	V6	.111	.037	.002	.015	-.046		-.175	.002	-.038	-.047	#####	.009	.002	-.038	.047	-.010	-.042
	V7	.077	.045	.000	.036	.065	-.175		-.118	-.044	.044	-.018	-.043	-.014	.016	-.014	.024	-.008
	V8	-.018	-.171	-.070	-.156	-.112	.002	-.118		.043	.017	-.028	.106	-.023	.046	-.019	-.017	-.063
	V9	-.066	-.042	.003	-.034	-.039	.051	-.044	.043		-.049	.088	.054	-.035	.015	.083	-.013	-.110
	V10	-.159	.043	-.090	-.076	.069	-.103	.044	.017	-.049		.044	.019	.019	.074	-.015	-.006	.025
	V11	-.079	.093	-.014	-.014	-.054	#####	-.018	-.028	.088	.044		-.117	-.057	.098	.147	.008	-.082
	V12	-.081	.022	-.043	-.037	-.014	.009	-.043	.106	.054	.019	-.117		.005	-.080	.035	-.080	.034
	V13	-.021	.044	-.013	.023	-.009	.002	-.014	-.023	-.035	.019	-.057	.005		-.018	-.026	-.033	.069
	V14	-.010	-.053	-.030	-.033	-.002	-.038	.016	.046	.015	.074	.098	-.080	-.018		-.028	.007	-.091
	V15	-.012	.183	-.061	.065	.021	.047	-.014	-.019	.083	-.015	.147	.035	-.026	-.028		-.143	-.071
	V16	.000	-.162	.052	-.019	-.030	-.010	.024	-.017	-.013	-.006	.008	-.080	-.033	.007	-.143		-.052
	V17	-.086	.087	.005	.010	.040	-.042	-.008	-.063	-.110	.025	-.082	.034	.069	-.091	-.071	-.052	

Extraction Method: Principal Component Analysis.
a. Reproduced communalities

B Residuals are computed between observed and reproduced correlations. There are 51 (37.0%) non redundant residuals with absolute values greater than 0.05.

Table 7 shows the reproduced correlation matrix. The reproduced correlation matrix provides details of the lower triangle of the matrix and the upper hypotenuse of the lower triangle consists of values which are greater than 0.5 and this proves that the 5 factors are a perfect fit for the model that has been derived to find out the consumer perception for eco-friendly products.

Findings & Conclusion

The study was conducted to find out the consumer perception towards eco-friendly products. Exploratory factor analysis resulted in seven factors which were Environmental friendly attitude, recycling, promotion, empowerment and locus of control. The current study findings are in line with (Prem Shamdasani, 1993) who categorized the dimensions into locus of control and Empowerment. The study findings are in line with (Chitra, 2007) who categorized the dimensions into promotion and recycling. The study findings are in line with (Singh, 2014) who categorized environmental friendly attitude.

Hence, it is established that shoppers who perceive high benefits of eco-friendly products is most likely to purchase eco-friendly products. Such consumer's behaviour with eco-friendly products would be consistent and would recommend it to others as well.

Careful evaluation of factor analysis results as shown in table 6 led to the identification of 7 factors which were named subsequently on the basis of variables which clustered together under different factors. The detailed characteristics of factors are identified below:

Factor 1: Environmental friendly attitude- with factor loading of 3 items that accounts for highest 18% variance. This represents the attitude of consumers towards eco-friendly products. Consumers perceive eco-friendly products as being of better quality; they can save money by using eco-friendly products and are willing to contribute to the environment.

Factor 2: Recycling- with factor loading of 3 items that accounts for the variance of 17.3%. This represents that consumers are unwilling to buy harmful items. Consumers believe that recyclable packaging is more convenient than other and they intend to use products that save energy and last longer.

Factor 3: Promotion- with factor loading of 3 items that accounts for the vari-

ance of 16.2%. This represents that the consumers agree that eco friendly products should be promoted more and more and government should take steps to initiate this process. Consumers agree that companies should keep special displays for eco-friendly products. Consumers also believe that products of good brand name will be of better quality and branding of eco-friendly products should be done.

Factor 4: Empowerment- with factor loading of 2 items that accounts for the variance of 11.6%. Empowerment represents the feeling of getting influenced and benefitted by the choice of products. This dimension shows that consumers are willing to switch to eco-friendly products and are influenced by the purchase of them.

Factor 5: locus of control- with factor loading of 2 items that accounts for the variance of 10%. People who develop an internal locus of control take their own responsibility. Such consumers feel that individual can contribute to the environment by taking various steps. People who develop an external locus of control feel that the community as a whole should contribute to the environment.

Digital Eco marketing is a relatively quite recent phenomenon and it is growing awareness amongst consumers and businesses about minimizing the adverse impact on the environment. Enviornmental issues are given more importance these days .This paper helps us to know the various practices made by companies for promoting Digital Eco environment and also aimed at transforming the consumer minds and their perceptions towards environment. Well in this scenario , many corporate has taken Digital Eco marketing further and as a part of their company strategy just to create brand image , gain the attention of the consumers . More and more companies need to emerge and also facilitate to the environment. This paper can also be viewed as a source of new opportunities to grow in today's highly competitive global environment.

The question that remains, however, is, what is green marketing's future? Business scholars have viewed it as a "fringe" topic, given that environmentalism's acceptance of limits and conservation does not mesh well with marketing's traditional axioms of "give customer what they want" and "sell as much as you can". Evidence indicates that successful green products have avoided green marketing myopia by following three important principles:

- Design environmental products to perform well (or better than) alternatives.

- Promote and deliver the consumer desired value of environmental products and target relevant consumer market segments.

- Broaden mainstream appeal by bundling consumer desired value into environmental products.

- Educate consumers with marketing messages that connect environmental attributes with desired consumer value.

- Frame environmental product attributes as "solutions" for consumer needs.

- Create engaging and educational internet sites about environmental products desired consumer value.

- Employ environmental product and consumer benefit claims that are specific and meaningful.

- Procure product endorsements or eco-certifications from trustworthy third parties and educate consumers about the meaning behind those endorsements and eco certifications.

- Encourage consumer evangelism via consumers social and internet communication network with compelling, interesting and entertaining information about environmental products.

REFERENCES:
1. Amyx, D.A., Dejong, P.F., Lin, X., Chakraborty, G. and Weiner, J.L. (1994), "Influencers of purchase intentions for ecologically safe products: an exploratory study", in Park, C.W. and Smith, D.C. (Eds), Marketing Theory and Applications: The Proceedings of the 1994 American Marketing Association's Winter Educator's Conference, Vol. 5, AMA, Chicago, IL, pp. 341-7.
2. Anderson, W.T. Jr, Henion, K.E. II, and Cox, E.P. (1974), "Socially vs. ecologically concerned consumers", American Marketing Association Combined Conference Proceedings, Vol. 36 (Spring and Fall), pp. 304-11.
3. Antil, J.A. (1984), "Socially responsible consumers: profile and implications for public policy", Journal of Macromarketing, Fall, pp. 18-39. Arbuthnot, J. and Lingg, S. (1975), "A comparison of French and American environmental behaviours, knowledge and attitudes", International Journal of Psychology, Vol. 10 No. 4, pp. 275-81.
4. Arcury, T.A., Scollay, S.J. and Johnson, T.P. (1987), "Sex differences in environmental concern and knowledge: the case of acid rain", Sex Roles, Vol. 16 Nos. 9/10, pp. 463-72.
5. Armstrong, J.S. and Overton, T.S. (1977), "Estimating non-response bias in mail surveys", Journal of Marketing Research, Vol. 14, August, pp. 396-402.
6. Balderjahn, I. (1988), "Personality variables and environmental attitudes as predictors of ecologically-responsible consumption patterns", Journal of Business Research, Vol. 17, pp. 51-6.

7. Bearden, W.O., Netemeyer, R.G. and Mobley, M.F. (1993), Handbook of Marketing Scales: Multiitem Measures for Marketing and Consumer Research, Sage, Newbury Park, CA.

8. Bernstein, V., Hakel, M.D. and Harlan, A. (1975), "The college student as interviewer: a threat to generalizability?", Journal of Applied Psychology, Vol. 60, pp. 266-8.

9. Bohlen, G.M., Schlegelmilch, B.B. and Diamantopoulos, A. (1993), "Measuring ecological concern: a multi-construct perspective", Journal of Marketing Management, Vol. 9 No. 4, October, pp. 415-30.

10. Brooker, G. (1976), "The self-actualizing socially conscious consumer", Journal of Consumer Research, Vol. 3, September, pp. 107-12.

11. Burnett, J. and Dunne, P.M. (1986), "An appraisal of the use of student subjects in marketing research", Journal of Business Research, Vol. 14, August, pp. 329-43.

12. Buttel, F.H. (1979), "Age and environmental concern: a multivariate analysis", Youth and Society, Vol. 10 No. 3, March, pp. 237-56.

13. Buttel, F.H. and Flinn, W.L. (1978), "Social class and mass environmental beliefs: a reconsideration", Environment and Behaviour, Vol. 10 No. 3, September, pp. 433-50.

14. Carson, P. and Moulden, J. (1991), Green is Gold: Business Talking to Business about the Environmental Revolution, Harper Business, Toronto.

15. Churchill, G.A. Jr (1979), "A paradigm for developing better measures of marketing constructs", Journal of Marketing Research, Vol. 16, February, pp. 64-73.

16. Coddington, W. (1993), Environmental Marketing: Positive Strategies for Reaching the Green Consumer, McGraw-Hill, New York, NY. Green purchasing decisions

17. Cope, D. and Winward, J. (1991), "Information failures in green consumerism", Consumer Policy Review, Vol. 1 No. 2, April, pp. 83-6.

18. Corrado, M. and Ross, M. (1990), "Environmental issues in the 1990s: green issues in Britain and the value of green research data", ESOMAR Annual Congress, Vol. 43, September, pp. 347-69.

19. Crosby, L.A., Gill, J.D. and Taylor, J.R. (1981), "Consumer/voter behaviour in the passage of the Michigan container law", Journal of Marketing, Vol. 45, Spring, pp. 19-32.

20. Dembkowski, S. and Hanmer-Lloyd, S. (1994), "The environmental attitude-system of the Annual Conference of the Marketing Education Group, Coleraine, 4-6 July, pp. 232-41.model: a framework to guide the understanding of environmentally conscious consumer behaviour", in Carson, D. et al. (Eds), Marketing: Unity in Diversity. Proceedings

21. DeVellis, R.F. (1991), "Scale development: theory and applications", Applied Social Research Methods Series, Vol. 26, Sage, Newbury Park, CA.

22. Dunlap, R.E. and Van Liere, K.D. (1978), "The new environmental paradigm: a proposed measuring instrument and preliminary results", Journal of Environmental Education, Vol. 9, pp. 10-19.

23. Du Preez, J.P., Diamantopoulos, A. and Schlegelmilch, B.B. (1994), "Product standardization and attribute saliency: a three country empirical comparison", Journal of International Marketing, Vol. 2, No. 1, pp. 7-28.

24. Elkington, J. (1989), "Why it pays to be green", Weekend Financial Times, October 14, p. 13. Fishbein, M. (1973), "The prediction of behaviours from attitudinal variables", in Mortenson, C.D. and Sereno, K.K. (Eds), Advances in Communication Research, Harper & Row, New York, NY.

25. Foxall, G.R. (1984a): "Evidence for attitude-behavioural consistency: implications for consumer research paradigms", Journal of Economic Psychology, Vol. 5, pp. 71-92.

26. Foxall, G.R. (1984b), "Consumers' intentions and behaviour", Journal of the Market Research Society, Vol. 26, pp. 231-41.

27. Gerbing, D.W. and Anderson, J.C. (1988), "An updated paradigm for scale development incorporating unidimensionality and its assessment", Journal of Marketing Research, Vol. 25, May, pp. 361-70.

28. Gill, J.D., Crosby, L.A. and Taylor, J.R. (1986), "Ecological concern, attitudes and social norms in voting behaviour", Public Opinion Quarterly, Vol. 50, Winter, pp. 537-54.

29. Gordon, M., Schmitt, N. and Schneider, W. (1984), "An evaluation of laboratory research on bargaining and negotiations", Industrial Relations, Vol. 23, pp. 218-33.

30. Grunert, S.C. (1991), "Everybody seems concerned about the environment: but is this concern reflected in (Danish) consumers' food choice?", paper prepared for a special session at The ACR Summer Conference, Amsterdam, June.

31. Hackett, P.M.W. (1992), "A conceptual and empirical model of the environmentally concerned consumer", Working Papers in Consumer Research, CRU/92-02, University of Birmingham, Birmingham.

32. Hackett, P.M.W. (1993), "Consumer's environmental concern values: understanding the structure of contemporary green world views", in Van Raaij, W.F. and Bamossy, G.J. (Eds), European Advances in Consumer Research, Vol. 1, pp. 416-27.

33. Hair, J.F. Jr, Anderson, R.E., Tatham, R.L. and Black, W.C. (1992), Multivariate Data Analysis – with Readings, Macmillan, New York, NY.

34. Heberlein, T.A. (1981), "Environmental attitudes", Journal of Environmental Policy, Vol. 2, pp. 241-70.

35. Henion, K.E. II and Wilson, W.H. (1976), "The ecologically concerned consumer and locus of control", in Henion, K.E. II and Kinnear, T.C. (Eds), Ecological Marketing, American Marketing Association, Chicago, IL.

36. Henley Centre (1990), "Rising challenge of green", Marketing, 13 September, p. 24. European Journal of Marketing 30,5

37. Hines, J.M., Hungerford, H.R. and Tomera, A.N. (1987), "Analysis and synthesis of research on responsible environmental behaviour: a meta-analysis", Journal of Environmental Education, Vol. 18 No. 2, Winter, pp 1-8.

38. Hooley, G.J. and Saunders, J. (1993), Competitive Positioning: The Key to Marketing Strategy, Prentice-Hall International, London.

39. Hsueh, L.M. and Gerner, J.L. (1993), "Effect of thermal improvements in housing on residential energy demand", Journal of Consumer Affairs, Vol. 27 No. 1, pp. 87-105.

40. Jackson, E.L. (1985), "Environmental attitudes and preferences for energy resource options", Journal of Environmental Education, Vol. 17, pp. 23-30.

41. Jackson, J.E. (1983), "Measuring the demand for environmental quality with survey data", Journal of Politics, Vol. 45, pp. 335-50.

42. Kinnear, T.C., Taylor, J.R. and Ahmed, S.A. (1974), "Ecologically concerned consumers: who are they?", Journal of Marketing, Vol. 38, April, pp. 20-24.

43. Landy, F.J. and Bates, F. (1973), "Another look at contrast effects in the employment interview", Journal of Applied Psychology, Vol. 58, pp. 141-4.

44. Lawrence, J. (1993), "Green product sprouting again: more focused efforts avoid controversy", Advertising Age, 10 May, p. 12.

45. Lounsbury, J.W. and Tournatzky, L.G. (1977), "A scale for assessing attitudes toward environmental quality", The Journal of Social Psychology, Vol. 101, pp. 299-305.

46. Lowe, G.D., Pinhey, T.K. and Grimes, M.D. (1980), "Public support for environmental protection: new evidence from national surveys", Pacific Sociological Review, Vol. 23 No. 4, October, pp. 423-45.

47. Maloney, M.P., Ward, M.P. and Braught, G.N. (1975), "A revised scale for the measurement of ecological attitudes and knowledge", American Psychologist, Vol. 30, July, pp. 787-90. Marketing (1992), "How green is the UK consumer when shopping?", 26 November, p. 16.

48. Mohai, P. and Twight, B.W. (1987), "Age and environmentalism: an elaboration of the Buttel model using national survey evidence", Social Science Quarterly, Vol. 68, December, pp. 798-815.

49. Moser, C.A. and Kalton, G. (1971), Survey Methods in Social Investigation, 2nd ed., Heinemann, London.

50. Murphy, P.E., Laczniak, G.R. and Robinson, R.K. (1979), "An attitudinal and a behavioural index of energy conservation", in Henion, K.H. II and Kinnear, T.C. (Eds), The Conserver Society, American Marketing Association, Chicago, IL, pp. 82-91.

51. Noru¯sis, M.J. (1988), SPSS-X Introductory Statistics Guide for SPSS-X Release 3, SPSS Inc., Chicago, IL.

52. Nunnally, J.C. (1967), Psychometric Theory, McGraw-Hill, New York, NY.

53. Ottman, J.A. (1992), Green Marketing: Challenges and Opportunities for the New Marketing Age, NTC Business Books, Lincolnwood, IL.

54. Peattie, K. (1992), "Green marketing", The M + E Handbook Series, Longman, London.

55. Permut, S.E., Michel, A.J. and Joseph, M. (1978), "The researcher's sample: a review of the choice of respondents in marketing research", in Ferber, R. (Ed.), Readings in Survey Research, American Marketing Association, Chicago, IL, pp. 2-13.

56. Powers, T.L., Swan, J.E. and Lee, S.D. (1992), "Identifying and understanding the energy conservation consumer: a macromarketing systems approach", Journal of Macromarketing, Vol. 12, No. 2, pp. 5-15.

57. Prothero, A. (1990), "Green consumerism and the societal marketing concept: marketing strategies for the 1990s", Journal of Marketing Management, Vol. 6 No. 2, pp. 87-103.

58. Prothero, A. and McDonagh, P. (1992), "Producing environmentally acceptable cosmetics? The impact of environmentalism on the United Kingdom cosmetics and toiletries industry", Journal of Marketing Management, Vol. 8 No. 2, April, pp. 147-66.

59. Ramsey, C.E. and Rickson, R.E. (1976), "Environmental knowledge and attitudes", Journal of Environmental Education, Vol. 8, pp. 10-18.

60. Ray, J.J. (1975), "Measuring environmentalist attitudes", The Australian and New Zealand Journal of Sociology, June, pp. 70-71.

61. Rothschild, M.L. (1979), "Marketing communications in non-business situations or why it's so hard to sell brotherhood like soap", Journal of Marketing, Vol. 43, Spring, pp. 11-20.

62. Schlegelmilch, B.B., Diamantopoulos, A. and Bohlen, G.M. (1994), "The value of sociodemographic characteristics for predicting environmental consciousness", in Park, C.W. and Smith, D.C., Marketing Theory and Applications: The Proceedings of the 1994 American Marketing Association's Winter Educator's Conference, Vol. 5, AMA, Chicago, IL, pp. 348-9.

63. Schwepker, C.H. Jr and Cornwell, T.B. (1991), "An examination of ecologically concerned consumers and their intention to purchase ecologically-packaged products", Journal of PublicPolicy and Marketing, Vol. 10 No. 2, pp. 77-101.

64. Scott, D. and Willits, F.K. (1994), "Environmental attitudes and behavior: a Pennsylvania survey", Environment and Behaviour, Vol. 26 No. 2, March, pp. 239-60.

65. Sears, D.O. (1986), "College sophomores in the laboratory: influences of a narrow data base on social psychology's view of human nature", Journal of Personality and Social Psychology, Vol. 51 No. 3, pp. 515-30.

66. Smyth, M. and Browne, F. (1992), General Household Survey 1990, HMSO, London.

67. Spector, P.E. (1992), "Summated rating scale construction: an introduction", Quantitative Applications in the Social Sciences, Series No. 07-082, Sage, Newbury Park, CA.

68. Synodinos, N.E. (1990), "Environmental attitudes and knowledge: a comparison of marketing and business students with other groups", Journal of Business Research, Vol. 20 No. 2, pp. 161-70.

69. Tognacci, L.N., Weigel, R.H., Wideen, M.F. and Vernon, D.T.A. (1972), "Environmental quality: how is public concern?", Environment and Behaviour, Vol. 4, March, pp. 73-86.

70. Toor, M. (1992), "ISBA's green code delays government legislation", Marketing, 30 January, p. 8.

71. Van Dam, Y.K. (1991), "A conceptual model of environmentally-conscious consumer behavior", Marketing Thought around the World – Proceedings of the 20th European Marketing Academy Conference, Vol. 2, Michael Smurfit Graduate School of Business, University College, Dublin, pp. 463-83.

72. Van Liere, K.D. and Dunlap, R.E. (1980), "The social bases of environmental concern: a review of hypotheses, explanations and empirical evidence", Public Opinion Quarterly, Vol. 44, Summer, pp. 181-97.

73. Van Liere, K.D. and Dunlap, R.E. (1981), "Environmental concern: does it make a difference how it's measured?", Environment and Behavior, Vol. 13 No. 6, November, pp. 651-76.

74. Vining, J. and Ebreo, A. (1990), "What makes a recycler? A comparison of recyclers and nonrecyclers", Environment and Behavior, Vol. 22 No. 1, January, pp. 55-73.

75. Webster, F.E. (1975), "Determining the characteristics of the socially conscious consumer", Journal of Consumer Research, December, pp. 188-96.

76. Witherspoon, S. and Martin, J. (1992), "What do we mean by green?", British Social Attitudes: The 9th Report, Social and Community Planning Research, Hants, pp. 1-26.

77. Wongtada, N., Rice, G. and Sammartino, C. (1992), "Emerging issues in green marketing: trends and their implications in Europe", paper presented at The Academy of International Business Conference, Brussels, Belgium, 20-22 November.

78. Worcester, R. (1993), Public and Elite Attitudes to Environmental Issues, MORI, London.