A Micro analysis on Dissect of Consumer's to Procure Green Products

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ABSTRACT: The study brings out green product awareness among Engineering College students in Tamil Nadu. The main objective of this study is to know the respondents inclination and major influencing factor for preferring a green product, to identify the level of knowledge about green products and its impact. The research design used in this study is descriptive research design. Data was collected from 1000 sample respondents. Data was collected by survey method through structured questionnaire with five point rating scale. Secondary data were collected from the available literature sources. For distribution of questionnaire to the respondents random sampling method was used and to collect the respondents opinion, survey was taken among the selected sample respondents. After collecting the data from the respondents, it was analyzed using Factor analysis. The collected data includes awareness level of respondents about green products, determinants of a green product and impact of advertisement on green purchase behaviour.

INTRODUCTION

Green marketing is designed to satisfy the human wants with minimal detrimental impact on the natural environment. Most of the companies are trying to amend their policies and objectives in an environmentally responsible fashion. Before two decades, companies were not focused to avert the environment, they manufactured the product which gave more profit to the company, even manufacturing process or products affects the environment. After the intervention and painful effort of societal activists and government, companies changed their policies. But recently companies are trying to create a brand name by using words like Green Manufacturing Process, Eco-friendly Product, Recyclable, etc.

Majority of the customers are intended to buy or consume green products by keeping in the mind, sustainability of the future generation. Responsibility of the government, industry, societal activists and academician are to impart knowledge and promote the green product purchasing behaviour through various Public awareness camp, Conference, Mass advertisement, Special Programmes and Negative Reinforcements to companies or customers for buying behaviour modification.

LITERATURE REVIEW

Climate change and natural resource conservation concepts focus on environmental responsibility as the need for large-scale transformation. Terms such as "global warming" and "Greenhouse effect" have become common terms in daily life, but yet only few enterprises have implemented a green strategy. *Olson (2008)*

According to *Kracklauer et al., (2004)* Governments, enterprises and individuals play an important role in protecting the environment, developing a green strategy helping an enterprise to make decisions that have a positive impact on the environment. So, the creation of a green culture often involves reinforcing behavior that people already want to adopt, but there is need for appropriate tools in order to change. To determine consumers' awareness of environmental justice, and their willingness to bear the costs associated. *Oyewole, P. (2001)*

Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packing changes and modifying advertisement. Mankind was unaware of the importance of natural environment but recently their attitudes are changed towards environment and industries are carrying out their business according to environmental principles *(Ottman, 1996)*.

While companies framing their policies and strategies, they are not focusing or considering gap between consumer's attitudes and actual behaviours and their unwillingness to pay premium for green products *(David Baron, 1995; Menon and Menon, 1997)*. From this study also we can know that creation of a green culture often involves reinforcing behaviour that people already want to adopt, but there is need for

appropriate tools in order to change their behaviour *(Kracklauer et. al., 2004).*

Customer are changing their attitude and behaviour based on the various determinants like willingness to bear the cost *(Oyewole,P 2001)*, depends on his /her ecological knowledge, affect and intention, information from print and entertainment from broadcast *(Speck and Elliott, 1997)*

Various psychological constructs such as affect, knowledge, verbal commitment, attitudes and memory have been advocated as important determinants of eco-friendly behaviour *(cf.Benton,1994; Heckler, 1994; Maloney & Ward, 1973; Maloney Ward & Braucht, 1975; Mobley, Painter; untch & Unnava, 1995; Smith, Haugtvedt & Petty, 1994).*

RESEARCH METHODOLOGY

The field work was conducted among all categories of people during June 2012 to December 2012. 1000 questionnaires were distributed among selected respondents. Convenience sampling method was used for this study. Questionnaires were framed to test the youngster's buying attitude, inhibiting sources to buy the product, pre and post purchasing behaviour and impact of advertisement. In this study, the scale was used from previous work *(Tan and Chai, 2007, Chan 2004; Teng et.al., 2007; habib Ahmad, Idress Ali Shah and Khursheed, 2010)* five point likert scale for measurement of items. Respondents were asked to reveal their agreeableness and disagreeableness for the statement whereas 1= Strongly Agree, 2=Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.

Factor chosen for analysis:

Determinants of consumer's to purchase green product was studied among Engineering College students in Tamil Nadu by selecting Twenty Six statements with five point scaling techniques. The statements chosen for the study are:

X_1 : Eco- friendly
X_2 : Organic products
X_3 : Harmful to environment
X_4 : Preference
X_5 : Intention to buy
X_6 : Buying detrimental products
X_7 : Print advertisement
X_8 : Television advertisement
X_9 : Content of advertisement
X_{10} : Exaggerated advertisement
X_{11} : Source country of the product
X_{12} : Manufacturer of the product
X_{13} : Content of advertisement
X_{14} : Ecological impact
X_{15} : Awareness camp
X_{16} : Web advertisement
X_{17} : Awareness camp
X_{18} : Youngsters responsibility
X_{19} : Unavailability
X_{20} : Cost
X_{21} : Attitude and culture
X_{22} : Unawareness
X_{23} : Quality
X_{24} : Sustainability
X_{25} : Hazardous
X_{26} : Innovation

RESULTS:

The data collected was analyzed using SPSS 20.0 software. Factor analysis was performed using the *Principal Components Analysis* (PCA) to extract the important components method of environment consciousness among the consumers. Kaiser-Meyer-Olkin (KMO) test of sampling adequacy produced coefficient at 0.749 (74.9%) and Barlett's test of sphericity showed a significance level of 0.00 *(Refer Table No. 1)*. Normally, a value higher than 0.5 (50%), is assumed to be a sound proof of sampling adequacy.

Table – 1. KMO and Barlett's Test of Sphericity

Kaiser – Meyer-olkin measure of sampling adequacy	*0.749*
Barlett's Test of Sphericity Significance	*0.00*

The Twenty Six items in the questionnaire were subjected to factor analysis and Nine principal components were extracted, which had Eigen values more than 1 *(Refer Table No. 2)*. These factors accounted for 55.64 percentage of variance. For better understanding and interpretation of the results, the factors were rotated using the Varimax method.

Table -2. Factors influencing purchasing of green product

Factors	Variables	Factor Loading	Eigen Value	Variance
Factor 1 (Promotion)	X8 X9 X18 X17 X19	0.678 0.648 0.645 0.499 0.457	4.847	17.309
Factor 2 (Cost)	X24 X23 X22	0.675 0.661 0.633	1.727	6.169
Factor 3 (Attitude of the customer)	X5 X4	0.789 0.599	1.718	6.137
Factor 4 (Product Attributes)	X13 X12 X25	0.718 0.649 0.405	1.464	5.227
Factor 5 (Environment Impact)	X1 X3 X14	0.722 0.519 0.479	1.279	4.568
Factor 6 (Product benefits)	X2 X16	0.677 0.500	1.232	4.399
Factor 7 (Knowledge)	X27 X26	0.751 0.509	1.140	4.071
Factor 8 (Advertisement)	X10 X11	0.628 0.628	1.134	4.050
Factor 9 (Product Performance)	X30 X29 X28	0.727 0.713 0.418	1.039	3.710

Extraction Method: Principal Component Analysis (PCA)
Rotation Method: Varimax with Kaiser

DISCUSSION

The extracted factor 1 has higher factor loadings of 9 variables viz., Print advertisement (0.678), Television advertisement (0.648), Web advertisement (0.645), Awareness camp (0.499) and Family and friends (0.457). These variables reflect the promotion of green product among the Engineering College students to consume more. The factor was responsible for 17.319 per cent of variance and had a Eigen value of 4.849.

The second factor which could be termed as "Price" has high loadings of variables like cost of the product (0.675), unavailability of the product (0.661) and youngster's responsibility (0.633). The factor was responsible for 6.169 per cent of variance and had Eigen value 1.727.

The third factor could be labeled as Attitude of the customer as it scores on two variables viz., intention to buy and preference of the customers about the green product. Intention to buy the green product (0.789) and customer preference (0.599) about the green product would influence to buy the product. The combined variance attributed by this factor was 6.137 and had Eigen value of 1.718.

The fourth factor could be labeled as product attributes has high loading variables like manufacturer of the (0.718), source country of the product (0.649) and attitude and culture of the consumer (0.405). The factor responsible for 5.227 per cent of variance and had Eigen value 1.464.

Environmental impact could be influencing consumer to buy green product which may consists of eco-friendly (0.722), harmful to environment (0.519) and content of advertisement (0.479). The factor responsible for 4.568 and had a Eigen value 1.279.

The sixth factor which could be termed as "Product benefits" as it scores two variables viz., organic product (0.677) and ecological impact (0.500).

The combined variance attributed by this factor was 4.399 percent and had Eigen value of 1.232.

Knowledge of the product and eco-revolution consists of quality of the product (0.751) and unawareness of the environment impact (0.509). The factor responsible for 4.071 percent and had a Eigen value of 1.140.

Advertisement has loadings of variables like content of advertisement (0.628) and exaggerated advertisement (0.628). The combined variance attributed by this factor was 4.050 percentages and had Eigen value of 1.134.

Product performance will determine the consumer's buying decision on green product. Innovation in the product (0.727), Hazardous nature of the product (0.713) and sustainability is scored 0.418. These factors were responsible for 3.710 percent of variance and had Eigen value 1.039.

The study shows that impact of various factors influence the customers to buy the green product. Customers are inclined more favorably towards environmental friendly products and it is organized that environmental messages in advertisements are credible *(Mathur and Mahur, 2000)*, this could be the reason that people are more influenced through promotional factors. Awareness camp is the most influencing factors by the customer to buy the green product. Manufacturing Environmental friendly products will influence the customer to buy for protecting the world. Focusing of ecological reason may be support to induce the people to go for green.

According to Ginsberg & Bloom (2004), the first step is to gain rich understanding on consumer preferences towards green marketing i.e., whether the development of product that has green attributes is better selling point target consumers. The second important influencing factor considered that the customer to buy the green product is based on the products attributes. Manufacturer of the advertised product bear an eco-friendly image. Traditionally, the market strategy of the company was to increase the profit margin *(Peattie 1999, p 57)* but early nineties there is a change in the firms strategy where the company must consider the effect of its action on all stakeholders including animals and environment *(Klonoski, 1991)*. Industry should take care of environment while making a product, this will help the company's to build a brand image of the company. Green marketing mix of the company will support to increase the sales of the product. Participation in environmental protection will influence the family and friends to participate in purchasing of green product which help to the sustainable development in the country.

CONCLUSION

Because of the efforts of the government and organizations, people have started to think green. They have brought green products into their consideration set. Hence, it is a good sign for the companies to acknowledge the purchase preferences shift of consumer and capitalize this to market their products and services.

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