

# A Study On The Customer's Awareness And Perception Level Towards Green Cars

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**Abstract:** Environmentalism has fast emerged as a worldwide phenomenon. Today many sectors have accepted their responsibility to take green initiatives for protecting the planet. The automobile companies are also moving towards saving the environment through Green Cars. The green technology in car is a new trend but is the only option to save environment from heavy pollution. Though in Western countries, Green car is a huge success but for Indian market it is in the nascent stage. The purpose of this paper is to focus on investigating the awareness level and the perception of customers towards environment friendly practices of automobiles in India. Measuring the level of awareness of customers has been of great importance to the marketers as they need to bear the greatest responsibility to make the consumers understand the need for and benefits of eco friendly automobiles as compared to non green ones and motivate them to pay more to maintain a cleaner and greener environment.

## Introduction:

World-wide concern about the Green House effect, environmental pollution, and global warming has led to the development of a series of standards and campaigns in the automobile industry, which is considered to be a major contributor to these problems. It is widely certified that car usage resulted in a broad range of air emissions that cause climate change, smog, green house gases, and human diseases. In order to combat environmental issues the industry is adopting green initiatives in terms of "Green Cars". A green car is a vehicle that is considered to be environmentally safe and have less of a damaging impact on the environment than conventional cars as it consumes less petroleum or uses renewable energy sources to fuel its engine. There are a number of green cars available today such as electric cars, hybrid cars and hydrogen cars. Alternative fuel vehicles or green cars can potentially make an important contribution to green the economy. Thus, green solutions and environmental protection rises as necessity in the 21<sup>st</sup> century realm of the era. Today, many corporate have started realizing that they should be environment friendly and are focusing on cleaner solutions to vehicles used in everyday life from autos, bikes to cars. "Green" is seldom the over-riding determinant of product or brand choice but just another benefit or attribute that adds value, usually a 'feel good' factor to the overall product (Wong et al., 1996) Situations in which two products are perceived as equal on all aspects except that one is superior in its environmental performance, environmental benefit may determine consumer preference and choice (Kardash, 1974; Ottman, 1992) Consumers may be willing to purchase environment friendly products but are faced with constraints or conflicts that create a resistance to adopting pro-environmental behavior. For example, consumers may want to be environmentally responsible but still want to maintain their existing life style (Schwartz, 1990; Mc Daniel and Rylander, 1993). They may not be prepared to sacrifice convenience (Simon, 1992; Stern 1999), accept lower performance levels or pay a price premium (Peattie, 1999). Based on Azen's theory (1988) of planned behavior consumer's environmental purchasing intentions and behavior may be influenced by a number of factors, such as the individual's knowledge and motivation, the ability to perform the behavior and opportunity to

behave in an environment-friendly ways (Pieters, 1989; Olander and Thøgersen, 1995)

## Green Initiatives of Automobile Sector:

Indian Automobile industry is one of the most promising and booming sector but at the juncture with the rising concerns regarding climate and the pollution levels, "Going Green" is the future of this industry. In recent decades, many automobile companies have embarked on green technology initiatives to gain competitive advantage in the global market. Several famous automobile manufacturers such as Toyota, Volkswagen (VW), Honda, Ford, Mahindra & Mahindra, GM, Hindustan Motors and Maruti are in close competition with each other in producing green cars. India's largest car producer Maruti Suzuki India Ltd., as a part of its corporate social responsibility has delivered the eco-friendly hybrid cars. Toyota's Prius is the leader of green car market, rest are Mitsubishi i- electric car, Ford's escape and hybrid vehicles, Honda Civic & Accord cars, Chevrolet's Civic car, Nissan's leaf, Volkswagen's Jetta Hybrid cars etc. Reva motors has also promoted REVA-India electric car, Honda Civic, India's first electric car. For example, Honda has been proactive in acquiring environmental management ISO 14001 certification for its production and other facilities. Honda has Green Purchasing Guidelines, and is working with its suppliers to maximize procurement of materials and parts with minimal environmental impact. Good Green Dealer Certification is awarded to dealers that comply with environmental regulations and Best Green Dealer certification is awarded to dealers that have improved their environmental practices. These are some green initiatives taken by renowned automobile companies all over the world. However, adoption of green technologies as well as marketing strategy in Indian automobile industry is in a nascent stage. The sale of green cars is also decreasing day by day. The important reason for that are the awareness level and the perception of automobile customers in India. This research will help in identifying the factors or the barriers in taking purchase decision of green cars among customers.

**Research Objectives:**

The study seeks to explore the factors which influence the customer awareness and perception towards green cars. The objectives of the study are:

1. To segment the customers on the basis of their awareness and concern for the environment.
2. To segment the customers on the basis of their willingness to purchase green cars.
3. To investigate the factors that is restricting the customers to take purchase decision of green cars.

**Scope of the study:**

The study focuses to understand level of awareness of customers about environment-friendly initiatives of automobile companies and their perceptions toward buying the green vehicles. The present study has been conducted covering respondents of Kolkata city. The study is limited to eco friendly cars only. The study may be helpful to the automobile companies, marketers and retailers to work out a good green marketing campaign for their products, after understanding the level of awareness and perception of consumers on green initiatives of automobile companies.

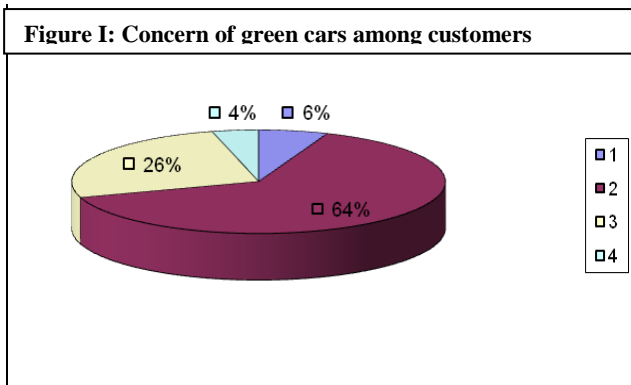
**Methodology:**

The study is based on the response collected in form of questionnaires from 200 respondents aged between 20-50 years who have been targeted in the retail stores of Kolkata city. The study is based on the primary data collected using a structured questionnaire which was sent to the respondents through mails. The questionnaire was focusing on the factors which affect the customers while taking

purchase decision of an automobile. The study is mentioning these variables also which will relate the awareness and perception levels of the automobile customers. The random sampling was used to choose the respondents. It concludes with the suggestions for improving the green framework in these companies to meet the untapped customer potential and automobile players.

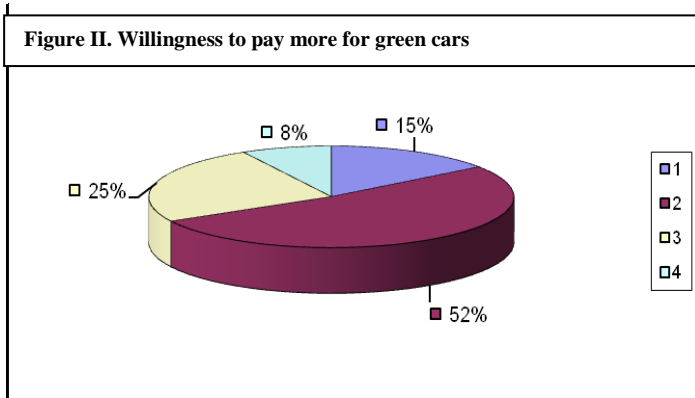
**Analysis and Findings:**

The analysis of the study focuses on measuring the level of awareness possessed by the consumers of Automobile companies on the environment friendly initiatives. As per the response Figure I reflect the response on level of green concerns of the customers using automobiles. During the survey the researcher came to know the awareness level of the respondents of Kolkata. Only 4% respondents are unaware about green vehicles and rest of the 96% was aware about the eco friendly cars in Kolkata. Out of the aware groups, the researcher further distributed them according to their concerns towards environment. Only 6% of the customers can be treated as passionate green customers as they will go out their way to help tackle climate change and be initiators in the use of eco friendly products. The maximum customers 64% are green supporters as they are concerned about the environment and aware about the environmental issues but they are not green customers and 26% respondents are not concerned about the green factor and don't take green automobiles in their choice while taking purchase decision. There are 4% customers who are not at all aware about the environmental concerns.



1	Green Customers	6%
2	Concerned about the environment and are green supporters	64%
3	Not concerned about the environment so not ready to prefer green vehicles.	26%
4	Unaware about the environmental concerns	4%

Figure II reflects that on the scale of checking the willingness to use green cars, 15 % consumers have indicated willingness to pay a premium price for green vehicles. 52% valued environmentally friendly initiatives in automobile sector and showed interest but with no additional cost/ sacrifices at their end. As per the responses 25% of the consumers who are already having an automobile are ready to buy green vehicles but with additional functional benefits offered to them by the companies. There were 8% of the consumers who rejected ecological lifestyle and products.



1	Ready to pays more for green vehicles	15%
2	Will buy green vehicles but at no additional cost/sacrifices	52%
3	Will buy green vehicles but only if other functional benefits will be provided in it.	25%
4	Reject ecological lifestyle & products.	8%

Table I reflects the factors responsible for not taking purchase decision of the eco friendly automobiles. For that purpose, respondents were asked to rank the listed barriers. The results are shown in the table below:-

**Table 1: The mean of barriers to green cars success in Kolkata's market**

Factors	Mean
Too High Cost	3.81
Lack of information and knowledge (in retail stores also)	3.79
Less mileage	3.66
Doubtful related to efficiency	3.65
Costly maintenance	3.58
Less trendy	3.52
Prestige decision not environmental decision	3.44
Lack of fuel stations	3.38
Lack of Service centers	3.34
Resistance to change	3.31

It can be seen that the highest barrier to purchase green cars by the respondent companies is too high cost. Cost is always an important issue for businesses when considering the implementation of an improvement in their products or processes. Cost is regarded as the main potential barrier to adopting sustainable practices (Millar and Russell, 2011). The second highest barrier is lack of understanding and knowledge. It might be due to sustainable manufacturing seen as a relatively new concept especially in the developing country. Lack of top management commitment is also considered as the major obstacle in implementing sustainable manufacturing and the rest of the factors are related to doubts about efficiency, maintenance, dearth of service centers and fuel stations in Kolkata for these cars. These cars are not in customer's choice because of less trendy and some resistance to change.

**Suggestions:**

From the analysis and findings of the study the following suggestions were proposed:

- The companies should make sure that most of the consumers are aware of and concerned about the green issues that the whole world is facing.

- The companies should try to educate their customers and letting them know what the companies are doing to protect the environment, also by making them know why it is important and educating them on eco certifications.
- Customers must be reassured of the fact that the company will never forego the vehicle's quality in the name of the environment.
- Automobile consumers are price conscious and they have presumptions that green vehicles are costly so they should be convinced on that part especially by the companies and marketers and by making them aware about the fact that green vehicles attributes are a "solution" to them as well as the need of the hour.
- There should be some government compulsions and regulations towards usage and production of green cars. The green automobile company should be awarded by the government for its sustainable efforts and practices.

**Conclusion:**

As the whole world is moving towards environmental protection, this seems to be right time for the automobile companies to choose green factor only in automobiles, because it is the vital ingredient to save the earth from man made hazards. It might bring a radical change in the auto sector if all the consumers will start using green vehicles all over the world. It will not only save the earth from the hazardous gases but also make the world green and clean. Educating the consumers on the importance of environmental protection should be more important than adopting the green marketing initiatives. To design the strategy to implement green marketing in the auto sector, it is imperative for companies to gauge the level of perception on their green marketing initiatives. Environmentalism has fast emerged as a worldwide phenomenon. Green consumerism has played a catalytic role in ushering corporate environmentalism and making the business firms green oriented. There is a need for a multilayered framework in all corporate functions and business units, from supply chains to internal operations to marketing and comes to ensure that all aspects of the company are aligned with the organization's visions. Though environmental protection is in trend of the day, green marketing is still found as its infant stage due to the lack of or low awareness of consumers on the eco friendly activities and products provided by the automobile companies in India. Yet the limited awareness and their perception and attitude to buy the green vehicles pressurizes the marketers as well as researchers to do a lot of research on green marketing in the automobile companies to explore the full potential of green automobiles in India.

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