

Perception about Electronic Cars: A Study conducted on probable customers in Mysuru Area.

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Abstract: People are now more aware of the need to maintain the environment and conserve natural resources. This is due to their concern that the next generation would be afflicted with illnesses and that the planet will not be a safe place for people to live. Thus, in an effort to preserve the environment, different businesses are embracing ideas like green marketing, green entrepreneurship, etc. in order to transition to a paperless society. Regarding the automobile sector, we are all aware of the quantity of pollution that cars produce because they emit carbon monoxide gasses, which are extremely detrimental to the environment. Therefore, after performing a lot of study, electronic cars are launched which will be operated by electrical energy stored in rechargeable batteries. But the question arises as to whether the electric automobiles will be able to generate a market and retain their momentum? With that purpose, a small survey is undertaken in Mysuru area, Karnataka to evaluate market sentiment towards electric vehicles

I. INTRODUCTION

Consumers nowadays are growing more aware of the need to safeguard the environment and conserve natural resources. This is due to their concern that the next generation would be afflicted with illnesses and that the planet will not be a safe place for people to live. Thus, in an effort to preserve the environment, different businesses are embracing ideas like green marketing, green entrepreneurship, etc. in order to transition to a paperless society. Regarding the automobile sector, we are all aware of the quantity of pollution that cars produce because they emit carbon monoxide gasses, which are extremely detrimental to the environment.

Due to the large amount of carbon emissions that cars emit into the atmosphere, we are at risk from pollutants and greenhouse gasses. Thus, after much research, electronic vehicles powered by electrical energy stored in rechargeable batteries were introduced.

In the realm of the automobile business, the electric car is a relatively new idea. Some firms provide hybrid cars that run on both gas and electricity, but others have built their entire car model around being proactive and using electricity. An electric vehicle, such a Tesla Model S, Ford Focus Electric, Nissan Leaf, or Chevrolet Volt, is a fantastic way to save money and support environmental sustainability. However, it is unclear if the electric vehicles will be able to establish a market and maintain their growth. To that end, a modest survey is carried out in the Karnataka region of Mysuru to find out how consumers feel about electric vehicles.

What is Electric Car?

An electric car is an automobile that is propelled by one or more electric motors, using electrical energy stored in rechargeable batteries. Unlike a hybrid car which is fueled by gasoline and uses a battery and motor to improve efficiency an electric car is powered exclusively by electricity. Compared to regular gasoline-powered cars, electric cars have more batteries. When starting a gasoline engine, the same type of batteries are typically utilized. The sole distinction is that there are more of them in electric cars, which power the engine.

Advantages of an electric car

There are so many different reasons why to invest in an electric car in the modern-day technology:

There are numerous justifications for investing in an electric vehicle with contemporary technology:

- 1. No need for gas:** Since electric cars are fully powered by the electricity we supply, we will never again need to purchase gas, petrol, or diesel. Because fuel costs have reached an all-time high, driving a car that runs on petrol can be very expensive. Even while electricity isn't free, driving an electric automobile is far less expensive.
- 2. Savings:** The cost of fueling these vehicles is extremely low. In our own lives, electric cars can also be a terrific way to save money.
- 3. Popularity:** More people are choosing electric cars. As cars gain popularity, a variety of new, distinctive car models are introduced to the market. Offering us a multitude of options to proceed.
- 4. Safe to drive:** Electric vehicles go through the same testing and fitness standards as vehicles that run on gasoline. Airbags will likely deploy and the battery will cut off power in the event of a collision.
- 5. Cost-effective:** Purchasing an electric vehicle used to be extremely expensive. However, as technology has advanced, costs and upkeep have decreased.
- 6. Low maintenance:** Since electric cars' engines are powered by electricity, they don't require lubrication.
- 7. Less noise pollution:** Because electric automobiles are quieter, they don't produce noise pollution. Long-distance smooth driving and increased acceleration are features of electric vehicles.

Disadvantages of an Electric car:

- 1. Recharge stations:** The development of electric fueling stations is currently ongoing. We can be stranded if we run out of charge while on a lengthy journey.
- 2. Electricity isn't free:** If we don't carefully weigh our options, electric automobiles may also be a burden on our energy cost. Before investing in electric vehicles, it is advisable to conduct study.
- 3. Limited speed and driving range:** The speed and range of electric vehicles are constrained. The majority of these vehicles require recharging after a range of 50 to 100 miles. Long trips are out of the question for these vehicles.
- 4. Longer recharging time:** Although filling up a car with gasoline takes a few minutes, an electric car takes about 4-6 hours to get fully charged.
- 5. Silence as disadvantage:** People prefer to be awakened by the sound of cars behind them, therefore silence can be rather detrimental. Despite being silent, an electric car can occasionally cause accidents.
- 6. Typically, two-seaters:** The majority of electric vehicles on the market today are compact and only have two seats.
- 7. Battery replacement:** Almost all electric cars need new batteries every three to ten years, depending on the model and usage.
- 8. Unsuitable for cities with power shortages:** Since electric cars require electricity to charge, they are not appropriate for cities that are already experiencing power shortages.

II. OBJECTIVES

1. To find out whether conventional cars will be replaced by electrical cars after its availability or not.
2. To find out the attitude of the current car owners towards electrical cars.

III. METHODOLOGY

The research methodology involves primary data as the type of data. The research tool used is the Questionnaire Method of data collection. The sample size considered is 50. The Source of sample collection are the car dealers in Mysuru and convenience sampling method is used for sample selection. The area and scope of study is confined to Mysuru area. Five car dealers are available in Mysuru currently and as such 5 car customers from each dealer are considered as sample for data collection.

Available Car dealers in Mysuru:

1. **Ford:** Kaveri Ford, Near CIPET, Mysuru.
2. **Hyundai:** Star Hyundai, Bamboo Bazaar, Mysuru
3. **Mahindra:** India Garage, Mysuru
4. **Maruti Suzuki:** Madovi Motors pvt. Ltd, Mysuru

5. **Nissan:** Nissan, Hunsur Road, Mysuru.

IV. FINDINGS AND ANALYSIS

My first objective was to find out whether conventional cars will be replaced by electrical cars after its availability or not. Based upon the data collected the following results were discovered as enumerated in the table along with the diagram below:

	No. of respondents
Will replace Conventional car with electric car (Yes)	17
Will not replace Conventional car with electric car (No)	33

Table: 1 number of respondents who are going to replace their conventional cars with electric cars.

The above table clearly depicts the number of respondents who are going to replace their conventional cars with electric cars which is 17 and the remaining 33 respondents are not willing to replace.

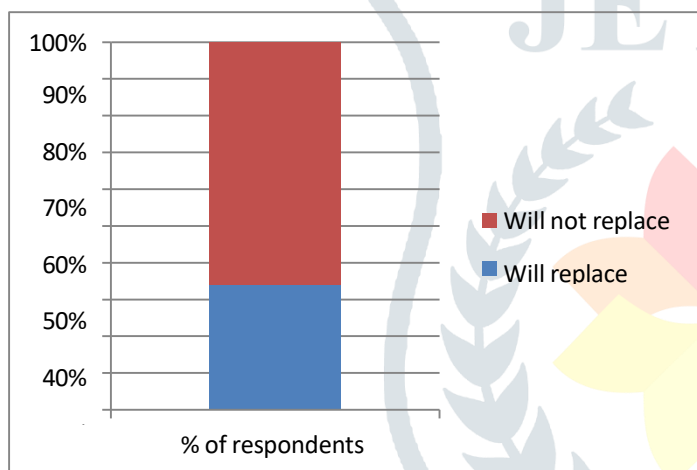


Fig. 34 % of respondents who are willing to replace their conventional cars with electrical cars

From the above diagram if % of respondents who are willing to replace their conventional cars with electrical cars are sought, it can be viewed that 34% of the sample says 'Yes' and the remaining 66% of the sample says 'No'.

The second objective of the study was to find out the attitude of the current car owners towards electrical cars. Based on the objective, my survey revealed the following information:

Why will the current car owners replace their Conventional cars with Electric cars?

1. Electric cars are not going to emit poisonous carbon which is going to hamper their environment. They feel the conventional cars are leading them towards an unhealthy environment which will not allow the future generation to survive safely.
2. The fuel prices are rising day by day which has become really expensive for them to run their cars on daily basis. They have to think twice before running their cars on road. Electrical cars will be cheap and hence will not curtail their interest of running their cars on daily basis.
3. Thirdly the queue in petrol pumps which waste a lot of important time for businessman, professionals and employed will be eradicated.

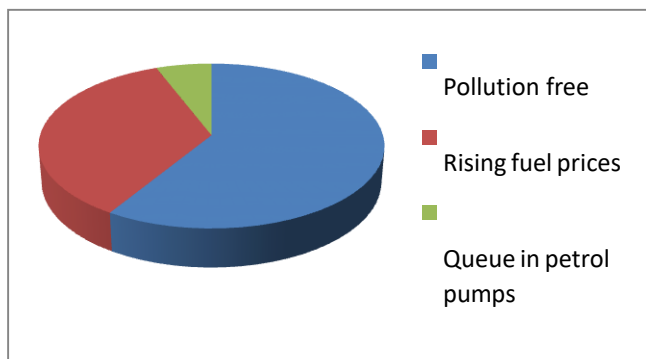


Fig. 2 Positive Reasons behind electric cars

The above diagram depicts the different reasons that are attracting the car owners to replace their conventional cars with electric cars. 10 of them basically want to embrace the electric car for its pollution free technology, 6 of them due to rising prices, they want to get rid of the fuel powered cars and 1 of them doesn't like to queue in petrol pumps, hence wants to recharge the car at home and move around.

Why will the current car owners not replace their Conventional cars with Electric cars?

1. They do not want to experiment with a new technology. They are satisfied with their conventional cars.
2. Electricity is also chargeable. Hence electric cars aren't going to curtail their expenses.
3. Electric cars are very expensive. Hence if cheap electric cars are launched, then they might think about purchasing one.
4. Electric cars are two seaters mostly. Hence is not a better idea for a family.
5. They are curious about if battery charge gets finished on the way which might make them stuck on that particular place if they do not get rechargeable points

V. SUGGESTIONS

1. Electric cars should be launched at an affordable price. Price is also a factor that might hinder the probable customers to purchase. The rich might purchase but India is not a country for rich people. Hence middle-class people are populating the country in large percentages. So, an affordable electric car will widen the market for the car industries launching electric cars.
2. Rechargeable points or stations should be installed immediately at a minimum distance so that owners of electric cars do not halt in between their journey.
3. Awareness programme on the benefits of owning an electric car should be conducted frequently to enlighten the good effects of the electric car towards the environment.

VI. CONCLUSION

In conclusion, an electric automobile will probably become the standard form of transportation in the near future because the demand for oil will only increase as resources run out. Businesses such as Tesla and Nissan provide excellent electric vehicles with a plethora of advantages for investors. We will be saving a significant sum of money for our family as well as for ourselves. An electric car has no negative effects on the environment as well-meaning we are reducing our carbon footprint and positively affecting the economy. Only the challenge is to change the mindset of the people towards shifting their interest towards such a positive step towards the environment and they embrace the new technology.

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