

PROJECT REPORT

VISUALIZATION TOOL FOR ELECTRIC VEHICLE CHARGE AND RANGE ANALYSIS

INTRODUCTION

PROJECT DESCRIPTION

A vehicle powered by an electric motor that receives electricity from a battery and can be charged from an external source and has an electric motor instead of an internal combustion engine. The electric vehicle (EV) is not new, but it has received significantly more attention in recent years. Both analysis of electric vehicles and the development of battery technologies led to an increase in car market share. However, this growth is not just due to hardware. A modern mechatronic vehicle combines electrical storage and propulsion systems with electronic sensors, controllers and actuators tightly integrated with software, secure data transmission and data analytics to form a complete transportation solution. Advances in all of these areas have contributed to the overall rise of electric cars, but the common thread running through all of these elements is data analytics. New electric cars are combined electric storage and power systems with electronic sensors, controllers and actuators tightly integrated with software, secure data transmission to form a complete transport solution.

PURPOSE

To analyse electric vehicle charge and range.

To analyse which brand is best in the vehicle market.

To know the price of different cars.

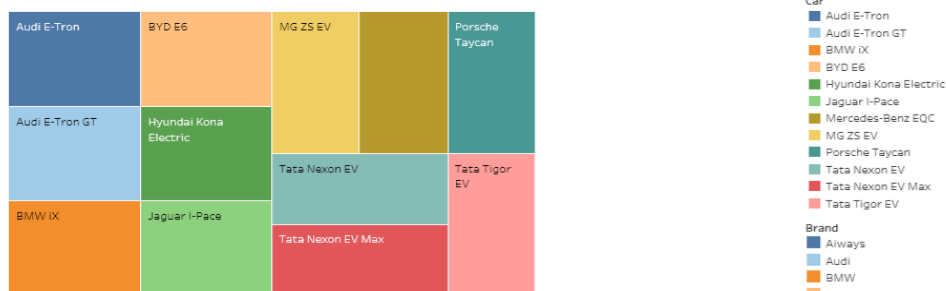
Vehicle power electronics primarily process and control flow of electrical energy.

They also control the speed of the motor and the torque it produces.

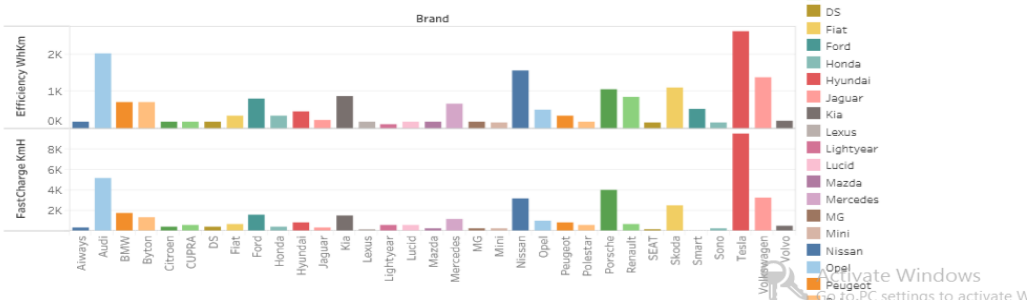
RESULT

Different car in india and their efficiency fast charge comparission shown given below picture.

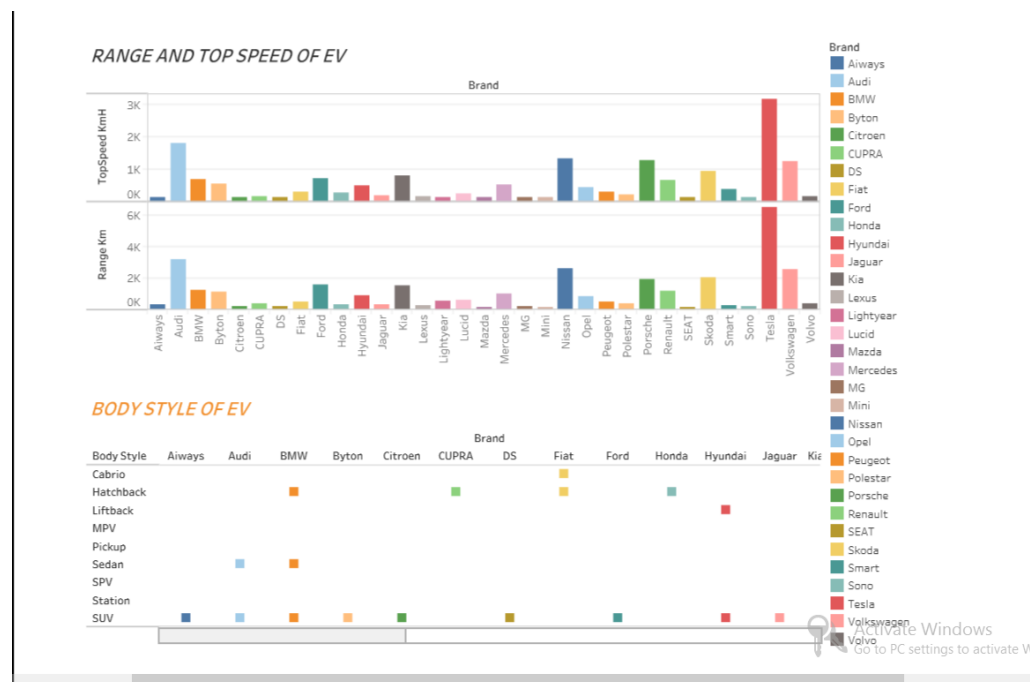
DIFFERENT EV CARS IN INDIA



MOST EFFICIENT AND TOP SPEED OF EV CARS



Range and top speed analysis comparison given below diagram.



Advantages of Electric Vehicles

1. Low Noise Pollution
2. Secure Environment
3. Low Maintenance Cost
4. More Convenient
5. No Fuel
6. Natural Resource Saving

Disadvantages of Electric Vehicles

1. Higher Purchase Cost
2. Low Speed and Range
3. Low Price on Selling
4. The Inconvenience of Service Station
5. Low Energy
6. Battery Expenses
7. Slow Charging
8. Expensive Recharging Options

Conclusion

So, in conclusion, electric cars have both advantages and disadvantages. They are a great way to minimize environmental pollution but also have certain disadvantages. We all know that nothing is perfect or adequate. Thus, in this article, we made you aware of these things. This article may be helpful when considering choosing an electric vehicle in the future.