

Visualization Tool for Electric Vehicle

Charge and Range Analysis

Project Report

1) INTRODUCTION

1.1 Overview

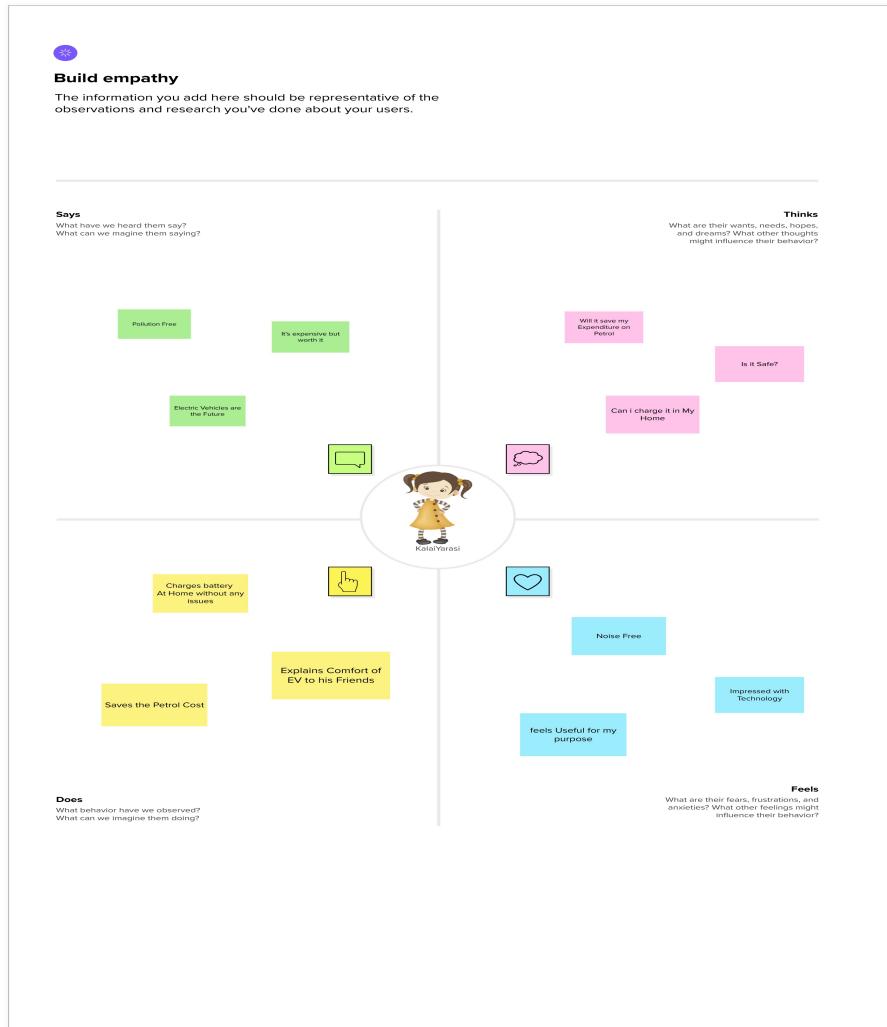
A vehicle that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source and have an electric motor instead of an internal combustion engine. The Electric Vehicle (EV) is not new, but it has been receiving significantly more attention in recent years. Advances in both EV analytics and battery technologies have led to increased automotive market share. However, this growth is not attributed to hardware alone. The modern mechatronic vehicle marries electrical storage and propulsion systems with electronic sensors, controls, and actuators, integrated closely with software, secure data transfer, and data analysis, to form a comprehensive transportation solution. Advances in all these areas have contributed to the overall rise of EV's, but the common thread that runs through all these elements is data analytics. The new EV's are combined Electrical storage and propulsion systems with electronic sensors, controls, and actuators, integrated closely with software, secure data transfer to form a comprehensive transportation solution.

1.2 Purpose

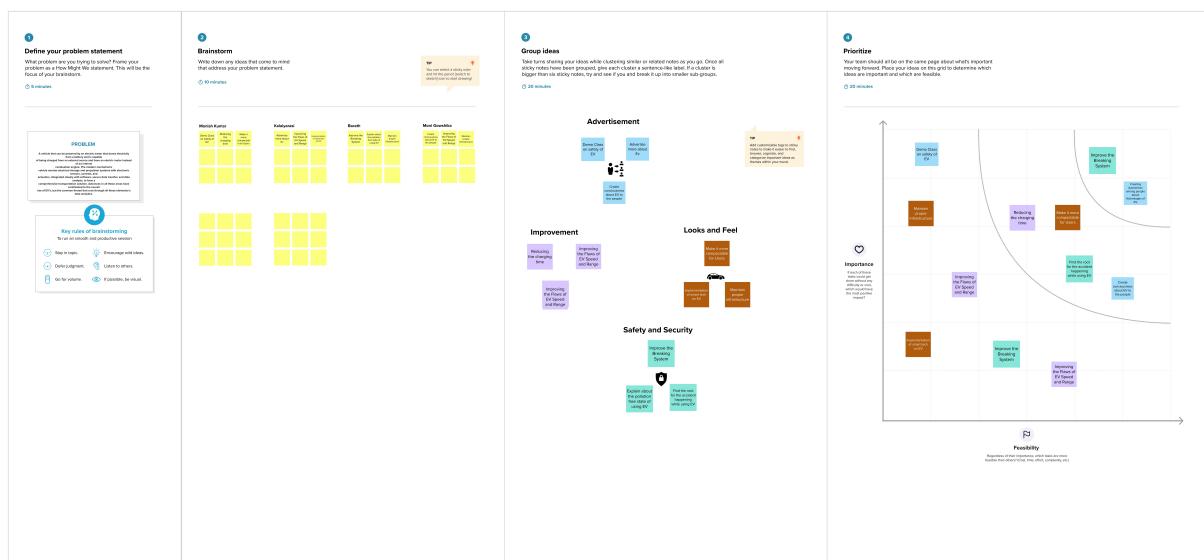
Data Visualization provides a quick and effective way to communicate information in a universal manner using visual information. Data visualization is the graphical representation of information and data in a pictorial or graphical format (Example: charts, graphs, and maps). Data visualization tools provide an accessible way to see and understand trends, patterns in data and outliers. Data visualization tools and technologies are essential to analyse massive amounts of information and make data driven decisions. The concept of using pictures is to understand data has been used since centuries. General types of data visualization are Charts, Tables, Graphs, Maps, Dashboard. Visualization of Electric Vehicles easily helps us to finds the full details on Electric Vehicles in India

2) Problem Definition and Design Thinking

2.1 Empathy Map

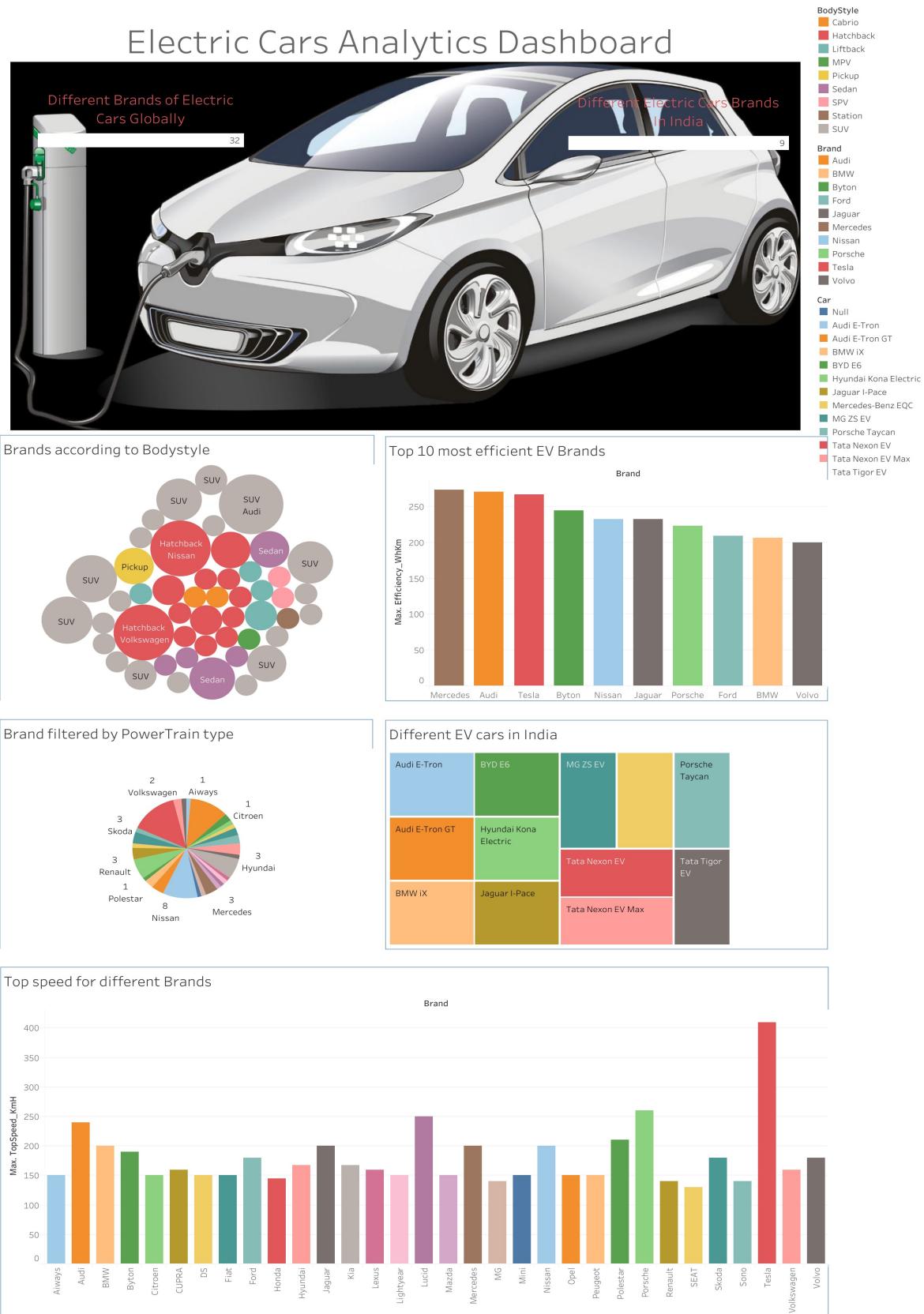


2.2 Ideation & Brainstorming Map

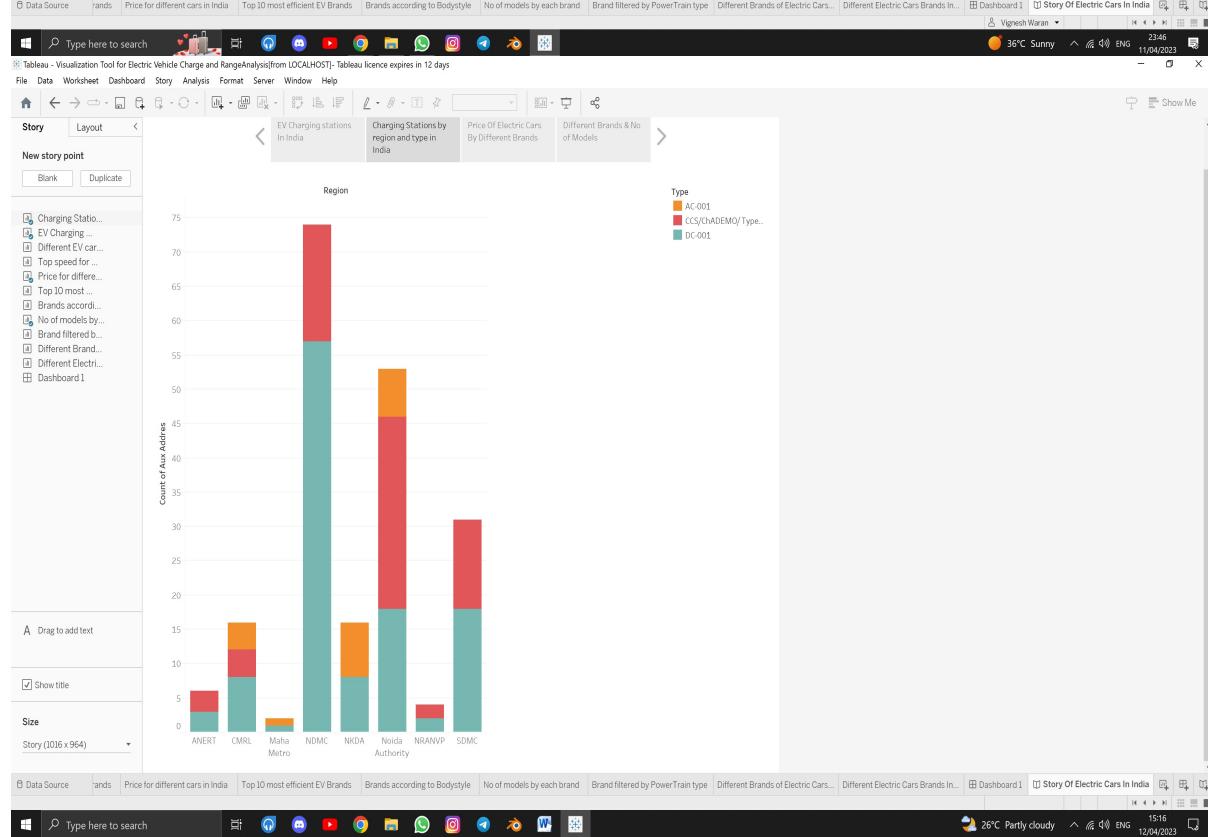
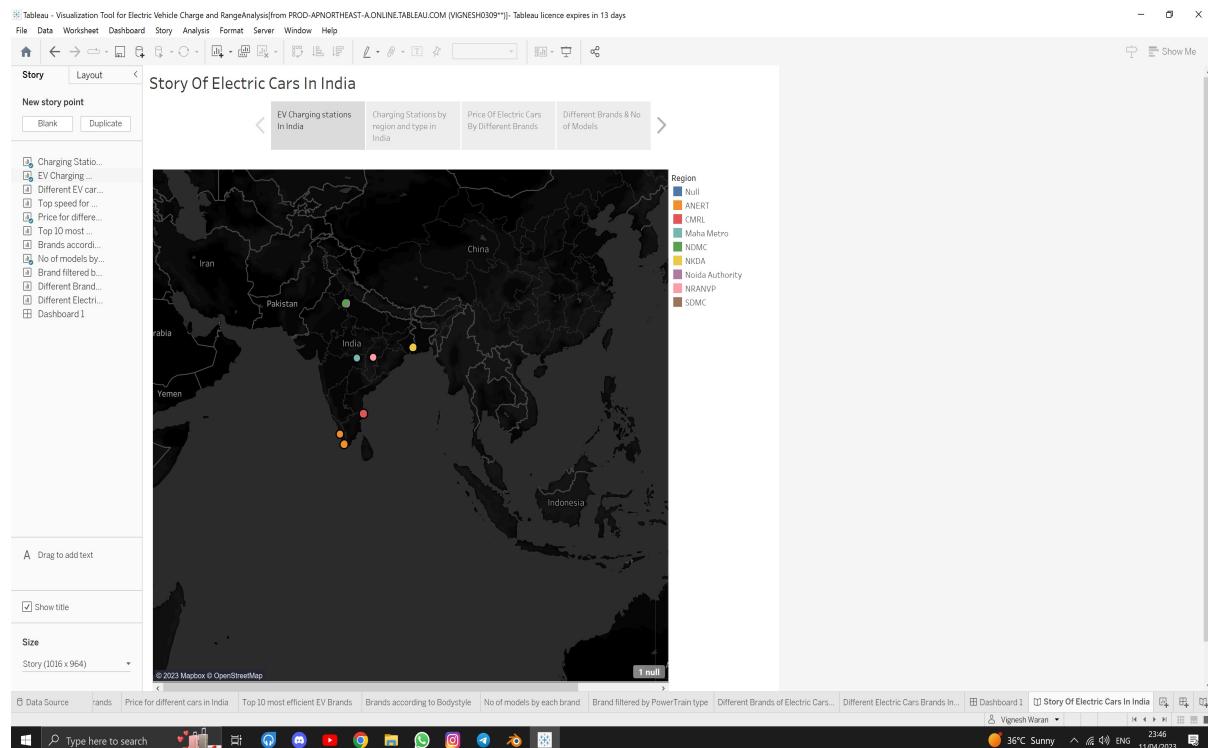


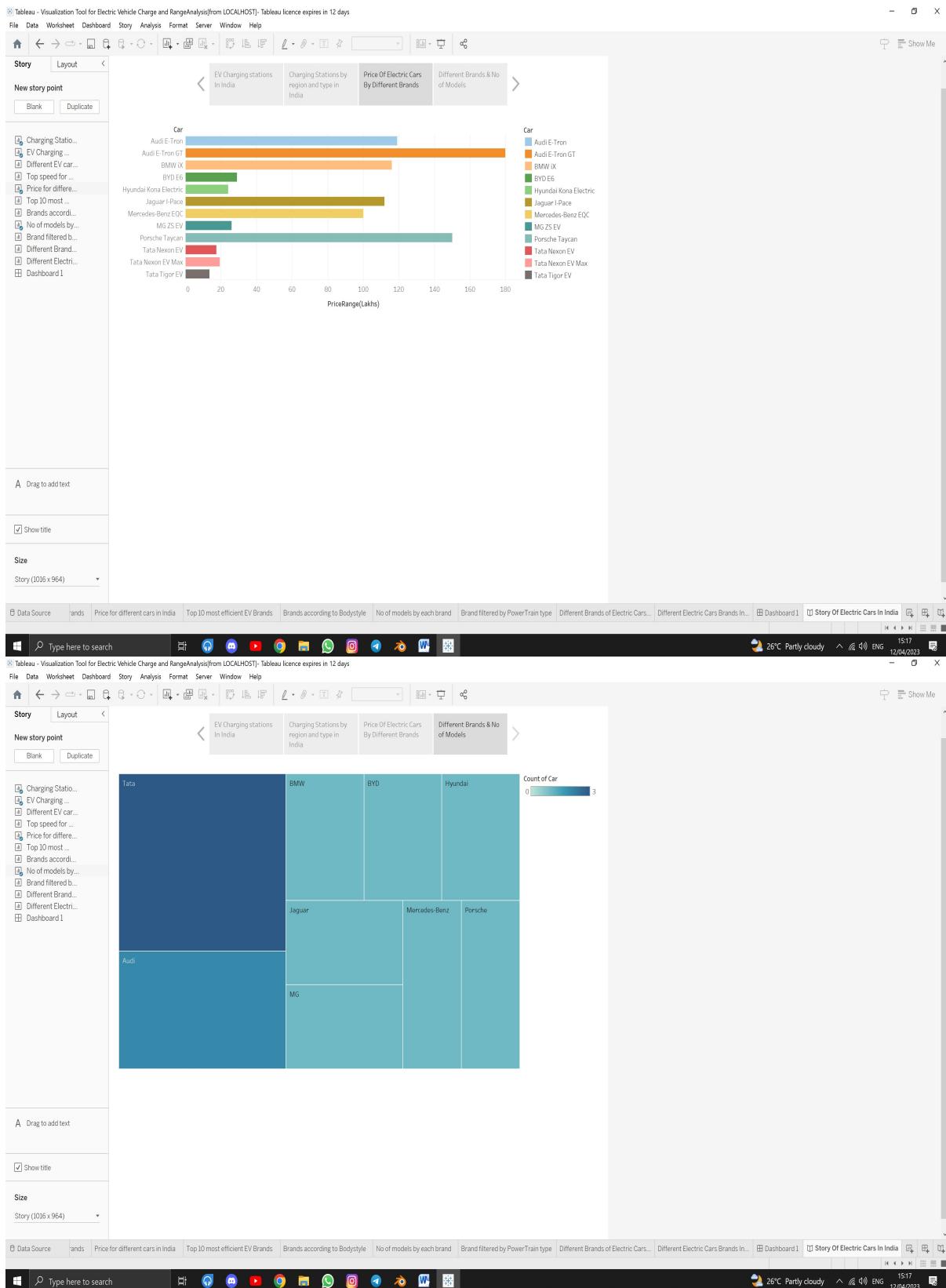
3) RESULT

Dash Board



Story Of Electric Vehicles In India





Web Application

E-CarStart

Home About Dashboard Story Team Contact Get Started

We offer modern Analytics solutions for Electric Vehicles

Get Started →

Different Brands of Electric Cars Globally

Different Electric Car Brands

Brands according to Bodystyle

Top 10 most efficient EV Brands

Brand filtered by PowerTrain type

Different EV cars in India

Top speed for different Brands

Their many different features of our project

Analyze the current state

Get to know EV cars

Know about Charging stations

Top performing Brands

different brands in India

different brands Globally

Overview of Electric Vehicle Sector

The supply of fossil fuels is constantly decreasing. The situation is very alarming. It is time for the world to slowly adapt to electric vehicles.

All of these need to happen

Major companies like Tesla and Honda manufacture many electric vehicles.

The improvement of battery technology in recent years has led to the growth of electric vehicles.

Buying an electric vehicle is a great choice for consumers. The drive quality, low noise levels, and convenience are really great.

Electric vehicles Analytics Story

Story Of Electric Cars in India

What they are saying about us

TESTIMONIALS

What they are saying about us

★★★★★ Right from our report deck designs to our dashboard designs, our product team's passion and expertise make us stand out.

★★★★★ Quick question about our report deck designs. I am looking for a quick answer to your question.

★★★★★

Electric Cars Analytics Dashboard

Electric Vehicles Analytics Solutions for Stakeholders

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Use-case based Analytics solutions for Stakeholders.

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- Web Development
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- Designs

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4) Advantages & Disadvantages of EV

Advantages:

Eco-friendly: Because electric vehicles do not utilize fuel for combustion, there are no emissions or gas exhaust. Vehicles that run on fossil fuels contribute significantly to hazardous gas accumulation in the environment, thus driving an electric car can help contribute to a cleaner environment.

Less noise and smoother motion: Driving an electric car is significantly smoother. Because they lack fast-moving elements, they are quieter and produce less noise.

Cost-effective: Electricity is far less expensive than fuels such as gasoline and diesel, which are subject to regular price increases. When solar electricity is utilized at home, battery recharging is cost-effective.

Low maintenance: Because electric cars have fewer moving components, wear and tear is reduced when compared to traditional auto parts. Repairs are also simpler and less expensive than combustion engines.

Government support: Governments throughout the world have granted tax breaks to encourage people to drive electric vehicles as part of a green program.

Disadvantages:

High initial cost: Electric vehicles continue to be quite expensive, and many buyers believe they are not as inexpensive as traditional automobiles.

Recharging takes time: Unlike conventional automobiles, which require only a few minutes to replenish their gas tanks, charging an electric vehicle takes many hours.

Limited options: Currently, there aren't many electric car models to pick from in terms of appearance, style, or customized variations.

Less driving range: When compared to conventional automobiles, electric vehicles have a shorter driving range. Electric cars can be convenient for short-distance travel but are inconvenient for long-distance travel.

5) APPLICATIONS

- It can be used in industry to analyse the data on Electric Vehicles.
- It helps the government to understand growth of EV in India.

- It gives full idea for the EV companies to develop their flaws and increase the infrastructures and build more EV stations around India.

6) CONCLUSION

As is demonstrated in our timeline, we hope that over the course of the next decade technological advancements and policy changes will help ease the transition from traditional fuel-powered vehicles. Additionally, the realization and success of this industry relies heavily on the global population, and it is our hope that through mass marketing and environmental education programs people will feel incentivized and empowered to drive an electric-powered vehicle.

7) FUTURE SCOPE

Because of its Pollution free state and great features EV will place a major role in our Future and this data visualization will help us to reach that state. So this data has a great scope for the Future Of EV