#### 1 INTRODUCTION

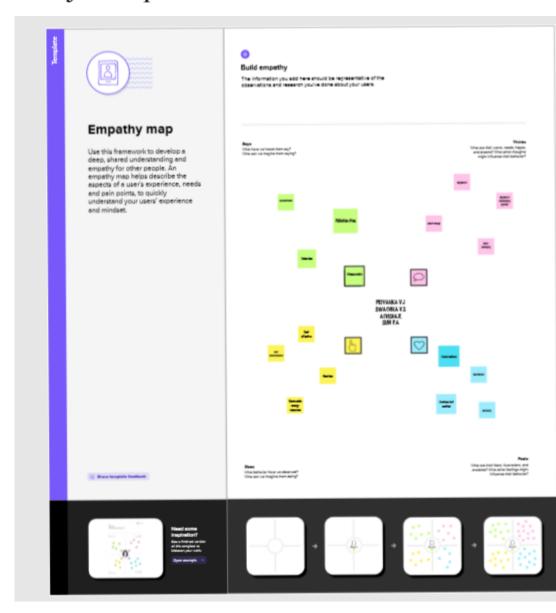
#### 1.1 Overview

- EV's are a promising technology for achieving a sustainable transport sector in the future, due to their very low to zero carbon emissions, low noise, high efficiency, and flexibility in grid operation and integration.
- These vehicles use electricity, typically stored in a battery, to power an electric motor.
- Electric vehicle technology has advanced and rapidly since its introduction and today there are many plug-in hybrid and battery electric vehicle options available on the market.

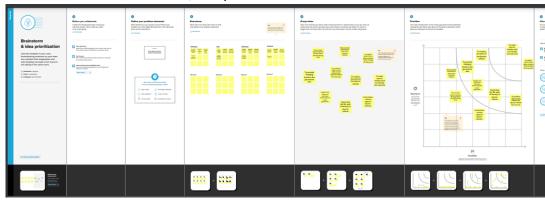
#### 1.2 Purpose

- Electric vehicles are more efficient and that combined with the electricity cost means that charging an electric vehicle is cheaper than filling petrol or diesel for your travel requirements.
- Using renewable energy sources can make the use of EV's more eco-friendly.
- The running cost of an EV is much lower than an equivalent petrol or diesel vehicle.
- Registration fees and road tax on purchasing electric vehicles are lesser than petrol or diesel vehicles.
- The availability is limited and their use is destroying the planet toxic emissions from petrol and diesel vehicles lead to long-term, adverse effects on public health.

### 2 Problem Definition & Design Thinking



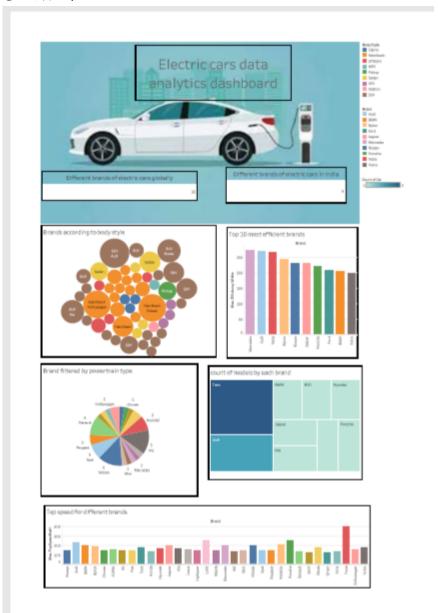
### 1.4 Ideation & Brainstorming Map



### 2 RESULT

We created the data visualization such as dashboard and story using the dataset provided.

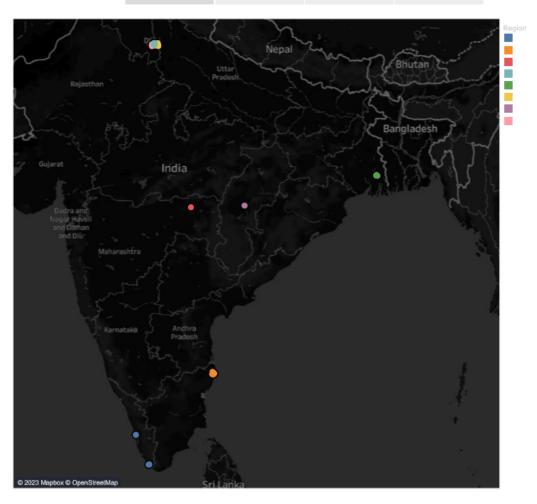
### DASHBOARD:



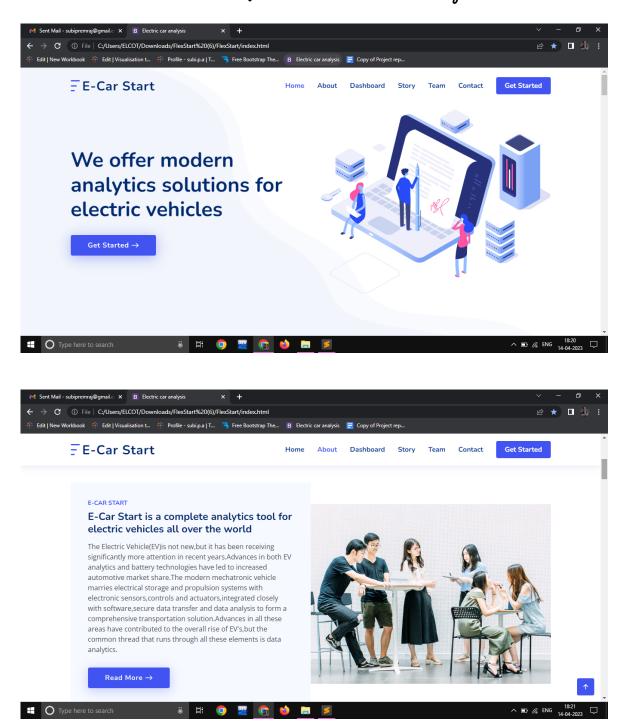
### STORY:

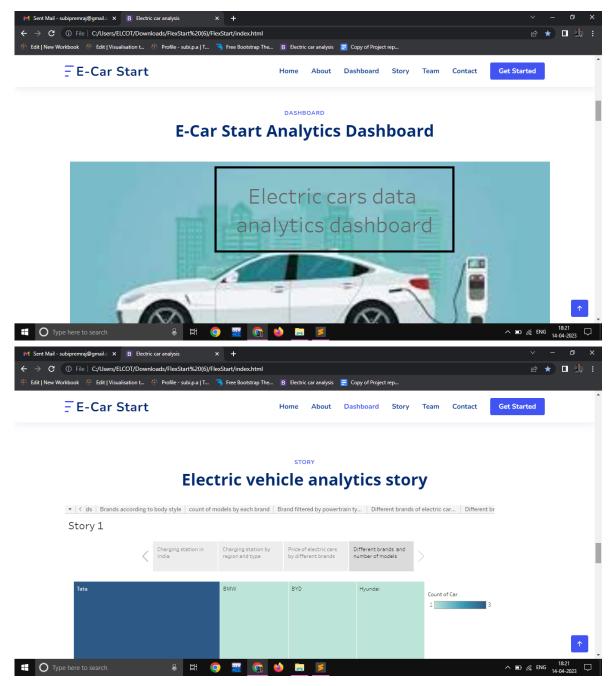
Story 1





### We have also embed with UI flask the dashboard and story





#### 3 ADVANTAGES & DISADVANTAGES

Advantages:-

- 1. Lower running costs
- . 2. Low maintenance.
- 3. Tax and financial benefits
- 4. Beller performance

- 5. Zero tailpipe emissions
- 6. Easy to drive and quiet
- 7. Convenience of charging at home
- 8. No fuel, no emissions
- 9. Spacious cabin and more storage.
- 10. They are future proof

### Disadvantages:-

- 1.EV's are part of the future, but they are not the entire future.
  - 2. Fixing EV's is a different ballgame.
  - 3. EU's are quick to 60 mph, but don't have high top speeds.
  - 4. EV's aren't as enivironmenta-friendly as they seem
  - 5. Replacing a battery is an inexpensive affair.
  - 6. EV's are costlier than equivalent ICE cars.
  - 7. The longevity of batteries is still a question.
  - 8. Very few EV's offr 400+ miles of range.
  - 9.Not enough charging stations to cater the EV-Boom.

#### 4 APPLICATIONS

- \*Consumer electronics.
- \*Public transportation.
- \*Aviation.
- \*Electricity grid.
- \*Renewable Energy storage.
- \*Military.

\*Spaceflight.

\*Wearable technology.

#### 5 CONCLUSION

We came across a lot of information related to EV and its charging stations, different brands etc. . Also we have used a graph for better understanding.

#### **6** FUTURE SCOPE

- 1. Racing
- 2. Motorcycles
- 3. Electric Semi-Trucks
- 4. Boating
- 5.Airplanes

etc.