

Project Development Phase

Date	17 February 2026
Team ID	LTVIP2026TMIDS40575
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	15 Marks

1. Data Connectivity

The data required for this project was collected from publicly available sources and stored in CSV file format.

The datasets include:

- Electric Vehicle specifications
- Battery capacity and range details
- Charging station information

These CSV files were directly connected to Tableau for visualization and analysis.

Links of Data Sets:

1. https://drive.google.com/file/d/1f8hcispK439nJNgc-Ab13tBEsCx2vTcv/view?usp=drive_link
2. https://drive.google.com/file/d/1rMhNvFitXodY-zuPbxJ60dy4s2zaYGyR/view?usp=drive_link
3. https://drive.google.com/file/d/1mv1GcOzwShlv4vYyXF82kBfLtZMqlDoN/view?usp=drive_link
4. https://drive.google.com/file/d/1-rTANUsWxe2Et5vF6ik0SWjUTUTNoZhP/view?usp=drive_link

2. Data Preparation

Data preparation is an important step to ensure accuracy and consistency. The following preprocessing steps were performed before visualization:

- Removed missing and null values
- Eliminated duplicate records
- Renamed column headers for better understanding
- Converted units such as range (km) and battery capacity (kWh) into standard formats
- Filtered unnecessary attributes
- Checked data consistency and corrected errors

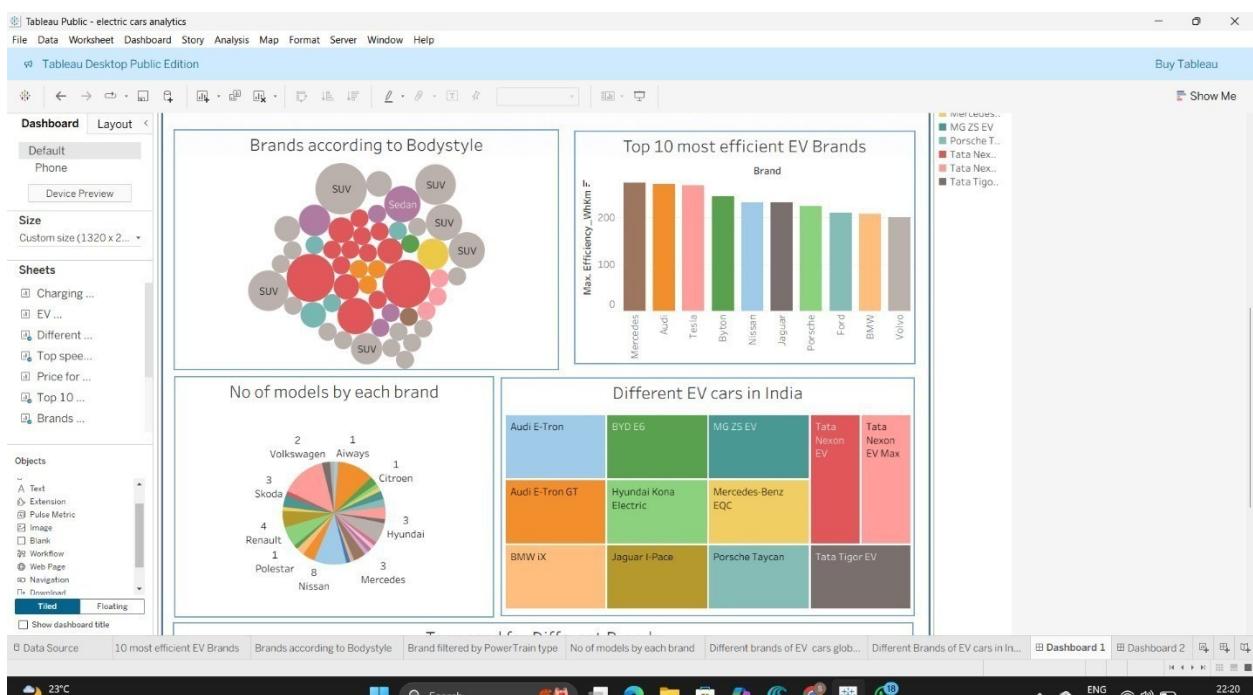
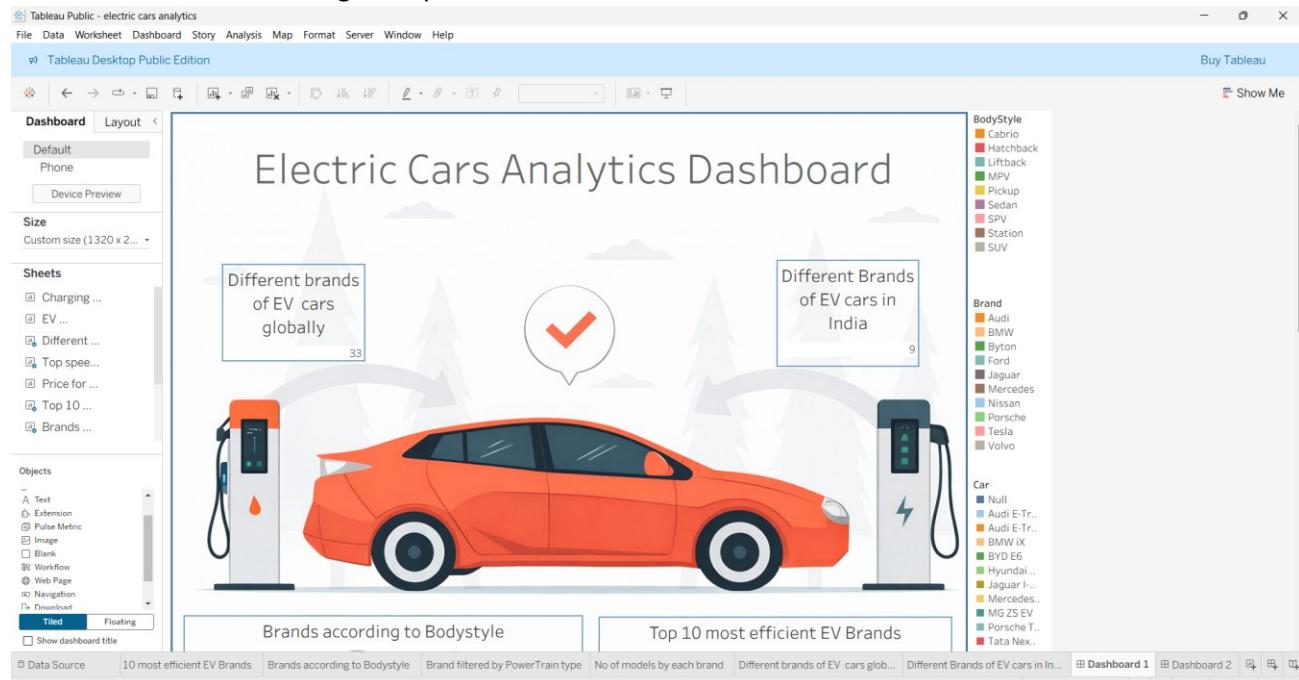
After preprocessing, the cleaned dataset was used to create dashboards and stories in Tableau.

3. Dashboard

A Tableau dashboard was created by combining multiple visualizations to provide a clear understanding of electric vehicle charge and range analysis.

The dashboard includes:

- Comparison of EV range across different models
- Analysis of battery capacity vs charging time
- Distribution of charging stations using map visualization
- Price vs range comparison



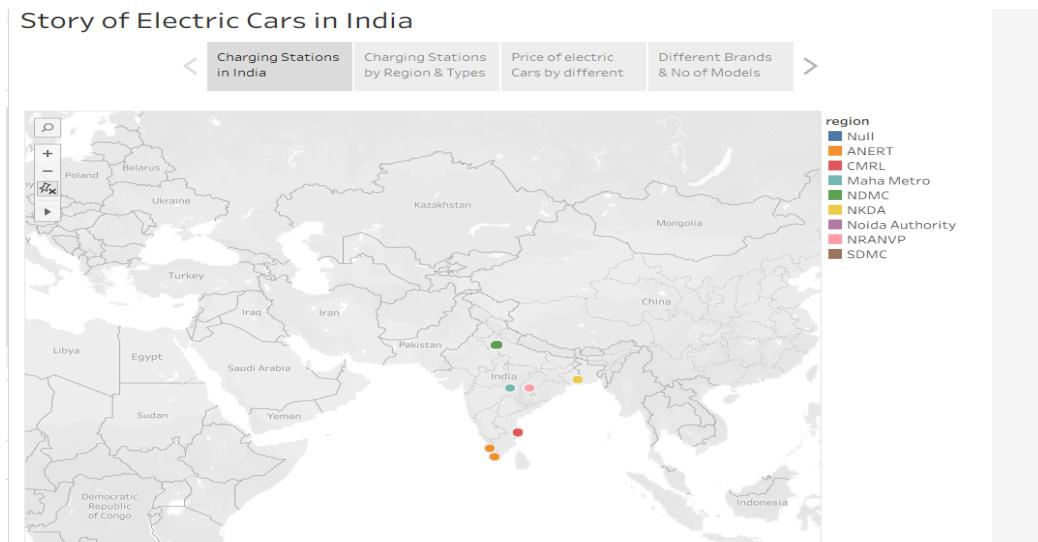


4. Story

A Tableau story was created to present insights in a structured, step-by-step manner. The story consists of multiple story points:

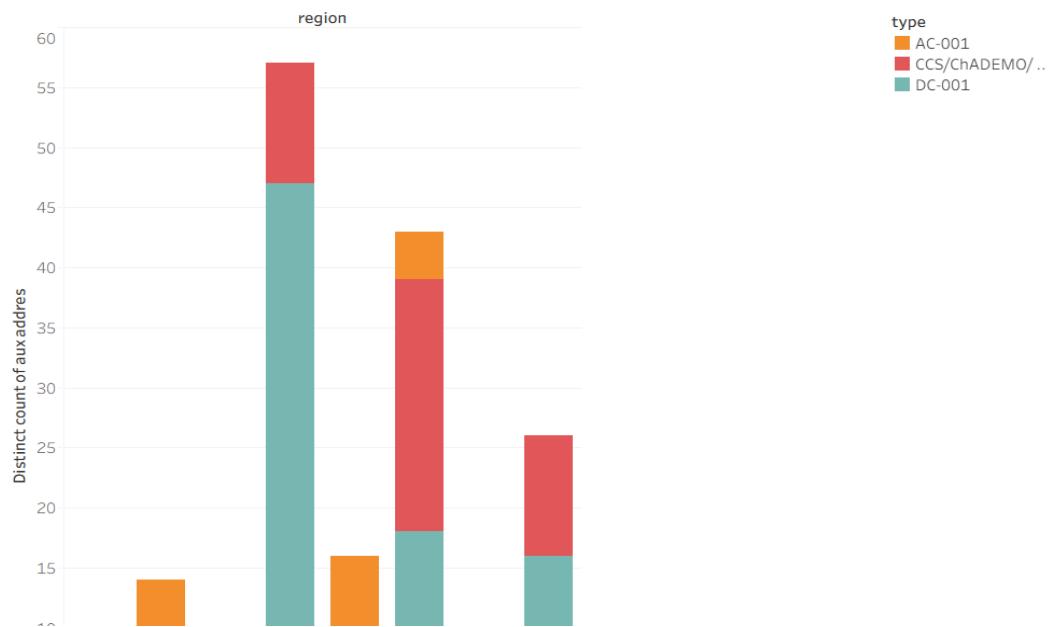
1. Overview of electric vehicle range
2. Comparison of charging time and battery capacity
3. Availability of charging stations
4. Key insights and observations

The story helps users easily understand trends and make informed decisions.



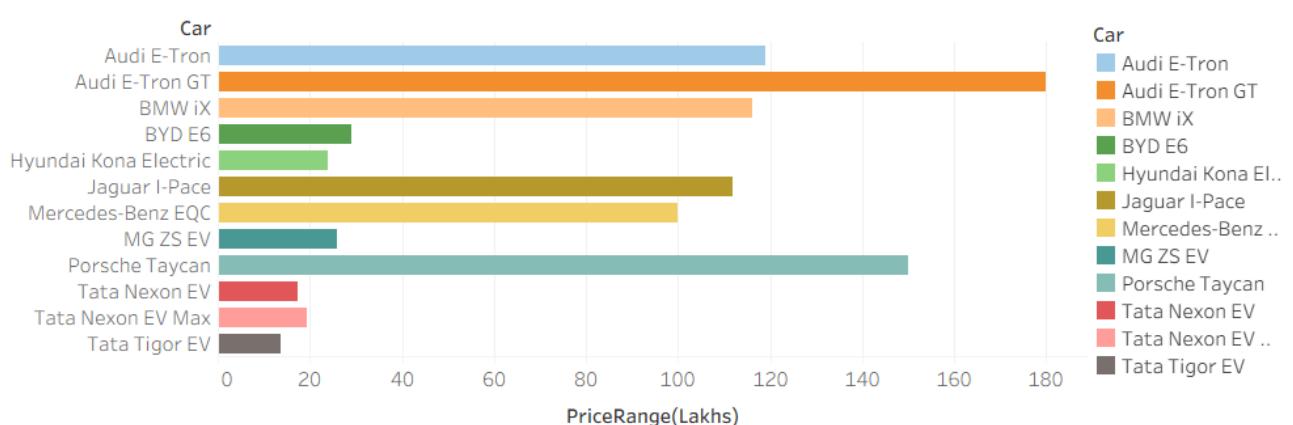
Story of Electric Cars in India

< Charging Stations in India | Charging Stations by Region & Types | Price of electric Cars by different | Different Brands & No of Models >

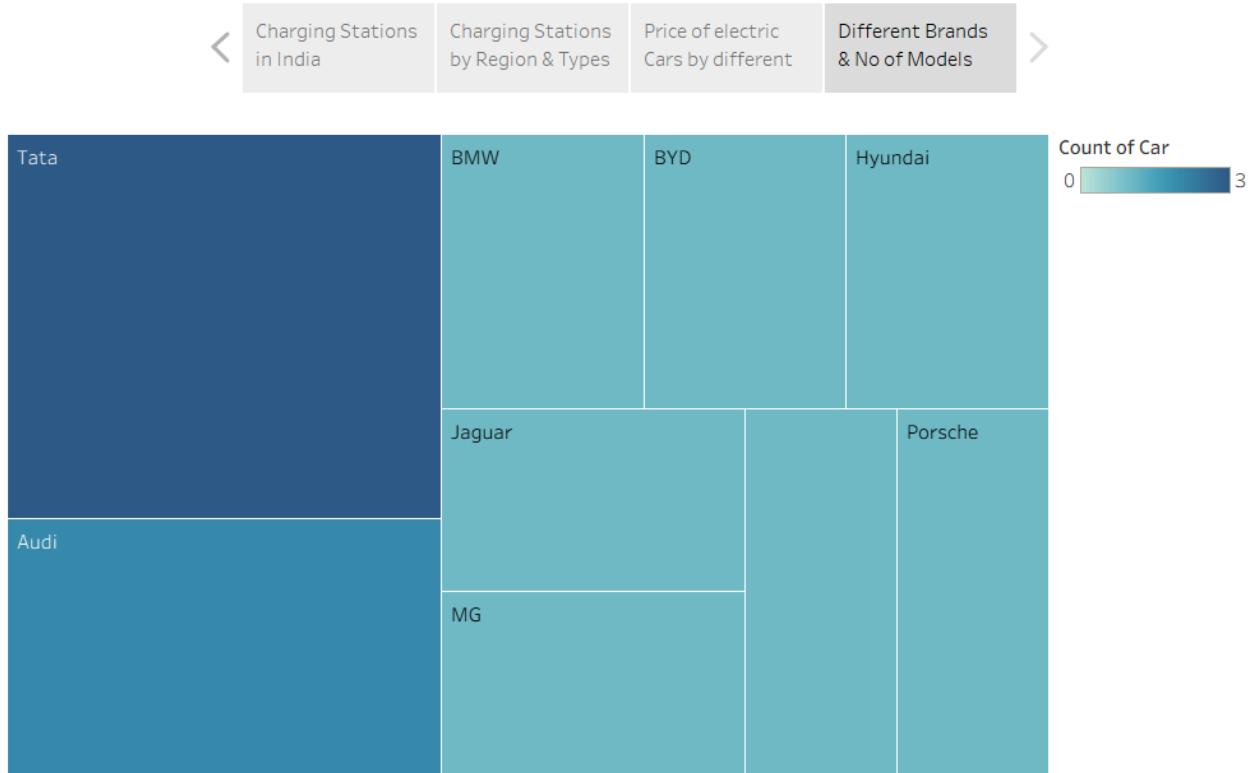


Story of Electric Cars in India

< Charging Stations in India | Charging Stations by Region & Types | Price of electric Cars by different | Different Brands & No of Models >



Story of Electric Cars in India



5.Creativity (Font and Style)

The project document is designed using a clean and professional layout.

The following design principles were applied:

- Clear headings and subheadings to separate sections
- Bullet points instead of long paragraphs for clarity
- Proper spacing and alignment across all pages
- Meaningful titles and captions for dashboards and stories
- Consistent colour theme in dashboard and story to visually differentiate data categories