

# Data Visualization & Preprocessing

## Data Preprocessing Steps

- Collected EV datasets from multiple sources.
- Removed missing and duplicate values.
- Standardized column names.
- Converted numeric fields (price, range, speed).
- Filtered irrelevant data.
- Prepared datasets for Tableau connection.

## Business Questions with Visualizations

1. Which EV brands provide higher driving range?  
→ Range comparison visualization.
2. How does EV price relate to performance?  
→ Scatter plot (Price vs Range).
3. Which EV models are most efficient?  
→ Efficiency comparison bar chart.
4. What is the distribution of EV styles in India?  
→ Style distribution visualization.
5. Where are charging stations located in India?  
→ Map visualization.

## Outcome

Visualizations help compare EV performance, efficiency, pricing, and infrastructure through interactive analysis.