

Project Design Phase
Problem – Solution Fit Template

Date	25 June 2025
Team ID	LTVIP2025TMID51636
Project Name	Visualizing Electric Vehicle Trends: An Analysis of Range, Brands, and Powertrain Features Using Tableau
Maximum Marks	2 Marks

Problem:

Electric vehicle (EV) users, policymakers, and potential buyers often struggle to:

- Understand EV performance metrics (like range, speed, and efficiency) across brands and models.
- Identify charging infrastructure gaps across regions.
- Compare cost-efficiency and charging type availability to make informed decisions.
- Lack a consolidated visual overview of EV adoption, model availability, and regional trends in India and globally.

Purpose:

The **DriveSmart EV Charge & Range Analysis** project solves this by:

- **Visually analyzing EV datasets** from multiple sources using **Tableau dashboards**.
- Presenting **easy-to-understand visualizations** for top EV brands, charging station types, vehicle range, and speed comparisons.
- Helping users identify **the most effective EV brands** and their suitability for Indian regions.
- Supporting policymakers and EV adopters in **making data-driven decisions** to expand infrastructure and select models.

Template:

1	CUSTOMER SEGMENT(S)	5	CUSTOMER CONSTRAINTS AS	5	AVAILABLE SOLUTIONS
	<ul style="list-style-type: none"> EV buyers & potential users in India Policymakers and transport authorities Environmental researchers & analysts Make informed decisions on EV purchase or infrastructure 		<ul style="list-style-type: none"> Company-specific EV specs on websites Basic PDF reports by government/IV specs Static dashboards or Excel data (cons) 		<ul style="list-style-type: none"> Limited time to research Lack of technical background to interpret raw data Need for clear, visual insights instead of text-heavy
2	JOBS-TO-BE-DONE/PROBLEM	9	PROBLEM ROOT CAUSE	9	PROBLEM ROOT CAUSE
	<ul style="list-style-type: none"> Compare EV models for speed, range, and cost-efficiency Identify available charging stations by type and region Understand brand-wise EV efficiency or infrastructure expansion 		<ul style="list-style-type: none"> EV data is scattered and not centralized Lack of visual decision tools 		TO BEHAVIOUR Interactive EV Visualization storyboard <ul style="list-style-type: none"> Visualize EV models, range, efficiency, price Map EV charging stations by type, region
3	TRIGGERS: BEFORE/ AFTER	E	EMOTIONS: BEFORE/AFTER	10	YOUR SOLUTION
	Confused: <ul style="list-style-type: none"> Seeing news/skeptical Confident in data-backed decision		After: Confident in reading data-backed decision-making Confident in		An interactive Tableau Public Storyboard visualization <ul style="list-style-type: none"> EVs visualize EV models, range, efficiency, price Map EV charging stations by type, region Save time, gain insight, act confidently
	Emotions: BEFORE Confident in data-backed decision-making		After: Confident Data-backed decision-making		8 1 ONLINE Tableau Public dashboards EV brand websites Review blogs Government EV portals