Project Design Phase
Problem – Solution Fit Template

Date	3 February 2026
Team ID	**LTVIP2026TMIDS82973**
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem–Solution Fit for this project is clearly established by identifying the fragmented and non-visual nature of electric vehicle (EV) data faced by consumers, analysts, and policymakers. Today's EV market presents complex challenges—customers often struggle to compare key parameters like range, price, powertrain, and charging station availability due to scattered or outdated data sources. Our solution, an interactive Tableau-based visualization tool, bridges this gap by centralizing and visualizing EV data from both Indian and global datasets.

Template:

1. CUSTOMER SEGMENTS (S) `CS`

- EV buyers (india and globally)
- Govermnent
- Manufacturers
- Analysts, journalists

2. CUSTOMER LIMITATIONS `CL`

- Difficullties in comparing a EVs by range, price and power train
- Lack of a a central source for Indian and global EV data
- Limited charging station knowledge
- Information overload

3. TRIGGERS TO ACT `TR`

- Government EV subsules, or tav rebates
- High fuel prices
- Pear recommendations

4. EMOTIONS `EM`

- Confiusion
- Unsware
- Overwhelmed

2. CUSTOMER LIMITATIONS `CS`

- Difficulty in comparing EVs. by range, price, powertrain
- Lack of a central source for Indian and global EV"V data
- Limited charging station kmowledge
- Manual and slow data comparison

7. PROBLEM ROOT / CAUSE `RC`

- Lack of a unified, interactive-platform for EV comparison
- Lack of visual tools combining indian and global EV data
- Fragmented datasets with no standard structure

9. PROBLEM ROOT / CAUSE

- Lack of a unified, interactive platform for EV comparison
- Lack of visual toole combining Indian and global EV data
- Fragmented datasets with no standar structure

10. YOUR SOLUTION `SL`

- A tableau dashboard and story interface combining indian and globa data. Ulududating range, price, power-trans efficiency, top speed, and model coure, showing interactive in deatership or government langenite
- Helps buyers analysts, and policy makers make informed decisions

5 AVAILLABLES SOLUTIONS `AS`

- Lack of technieJ knovleedge
- Pear of buving the:imorg EV
- Budget constraints
- Range anvisty
- Time constraints

7. BEHAVIOR `BE`

- Ay unned intractive platiform for EV comparision
- Lack of visual tools combining Indirone global EV data
- Fragmented datasets

7. BEHAVIOR `BE`

- Searching online on 'keot EV (eoet" D) takhs"
- Watching comparison videay, check EV infleage°range, price . top speed
- Visiting 2-4 brand websi-fas before deciding
- Looking for charger availability near byern

8. CHANNELS of BEI /AVIOR `CH`

- Online
- Dealership visits

It aligns with users' existing behaviors such as online research, brand comparison, and price filtering, making the tool intuitive and easy to adopt. By offering interactive dashboards, summary cards, and story-based insights, the solution simplifies decision-making and enhances user confidence. This fit is reinforced by the emotional shift it delivers—from confusion to clarity—and its ability to be deployed across multiple touchpoints like Tableau Public, websites, or dealership portals. The tool is designed with empathy for user limitations and directly addresses urgent and frequent pain points, ensuring strong adoption and value delivery.