Project Design Phase
Proposed Solution Template

Date	15 February 2025
Team ID	LTVIP2026TMIDS47424
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	India's EV ecosystem is growing rapidly, but critical data related to charging infrastructure, vehicle performance, brand distribution, and pricing is scattered across multiple sources. This fragmentation makes it difficult for stakeholders to analyze trends, compare EV models, and make informed decisions
2.	Idea / Solution description	Develop a unified visualization platform that integrates multiple EV datasets into a structured SQL database and presents insights through interactive Tableau dashboards. The solution includes: • Charging station analysis by region and type • Brand and model comparison • Performance and efficiency evaluation • Powertrain distribution analysis • Price segmentation of EVs in India
3.	Novelty / Uniqueness	1. Combines charging, performance, pricing, and brand analysis in one dashboard 2. Converts fragmented EV data into structured, interactive insights 3. Enables comparative and regional analysis in a single platform 4. Designed specifically for the Indian EV market
4.	Social Impact / Customer Satisfaction	1. Supports informed EV adoption decisions

		2. Assists policymakers in infrastructure planning
		3. Increases transparency in EV market data
		4. Reduces confusion and range anxiety among consumers
5.	Business Model (Revenue Model)	1. Subscription-based dashboard access for industry stakeholders
		2. Institutional licensing for government agencies and research bodies
		3. Data analytics consulting services
		4. Custom dashboard development for EV manufacturers
6.	Scalability of the Solution	1. Modular SQL database allows integration of additional datasets
		2. Can expand to include real-time data sources
		3. Easily adaptable to other countries or regions
		4. Dashboard framework supports future EV analytics enhancements

Currently implemented as an academic prototype. Revenue models can be explored during commercialization phase.