

Ideation Phase

Define the Problem Statements

Date	25 June 2025
Team ID	LTVIP2025TMID20831
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	2 Marks

Problem Statement:

The Electric Vehicle (EV) is not new, but it has been receiving significantly more attention in recent years. Advances in both EV analytics and battery technologies have led to increased automotive market share. However, this growth is not attributed to hardware alone. The modern mechatronic vehicle marries electrical storage and propulsion systems with electronic sensors, controls, and actuators, integrated closely with software, secure data transfer, and data analysis, to form a comprehensive transportation solution. Advances in all these areas have contributed to the overall rise of EV's, but the common thread that runs through all these elements is data analytics.

Analysing different data from Multiple sources for Electric cars in India and Globally. We have 4 Different datasets we need to analyse the data and create Dashboard and story that can represent the data and show the Visuals for the data.

I am	EV policymakers, urban planners, and environmental analysts
ng to	Track EV adoption in India and globally
but	Data is scattered across different sources and countries
ause	There's no consolidated dashboard capturing key adoption KPIs
hich akes e feel	Frustrated and overwhelmed



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS1: Difficulty understanding adoption trends	EV policymakers, urban planners, environmental analysts	Track EV adoption in India and globally	Data is scattered across different sources and countries	There's no consolidated dashboard capturing key adoption KPIs	Frustrated and overwhelmed
PS2: Evaluating charging infrastructure needs	Transportation departments, EV charging companies	Predict optimal locations for new EV charging stations	Demand patterns aren't clearly visualized	Lack of geo-based and behavioral analytics integration	Uncertain and reactive