

## Ideation Phase

### Define the Problem Statements

Date	15 Feb 2026
Team ID	LTVIP2026TMIDS43270
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	2 Marks

#### Customer Problem Statement Template:

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

A well-defined customer problem statement helps identify stakeholder needs, technical gaps, and emotional impact. It ensures the EV dashboard is designed to solve real-world decision-making challenges.

### Cosmetics Industry Customer Problem Statement

I am	I'm trying to	identify customer	But	Because	Which makes me
Product Strategist	Identify customer preferences	consumer needs are diverse	competition is intense	India's multifaceted population	overwhelmed
Senior Executive	differentiate our brand	sales are inconsistent	brands are constantly emerging	Frequent market fluctuations	challenged
Market Analyst	Understand market trends	It's hard to get data	It's hard to get data	purchases are often influenced by habits	uncertain

PS ID	I am	I'm trying to	But	Because	Which makes me feel
PS-1	a fleet manager managing multiple electric vehicles	Track EV energy consumption and measure carbon emission reductions	data is scattered across telematics systems and spreadsheets	there is no unified dashboard integrating charge, range, and vehicle performance	anxious about unexpected breakdowns and operational delays
PS-2	an individual EV owner	optimize my charging habits to improve battery life and maximize driving range	I cannot clearly see how charging frequency, speed, and environmental conditions impact my range	the data is available but not visualized in an easy-to-understand format	confused and uncertain about maintaining long-term battery health
PS-3	a sustainability manager in a corporate organization	track EV energy consumption and measure carbon emission reductions	reports lack interactive insights and comparative analytics	existing tools do not connect environmental data with vehicle performance	unsure about presenting sustainability impact confidently to stakeholders
PS-4	a data analyst working in the EV industry	analyze how temperature, terrain, driving speed, and load affect EV range	I cannot easily correlate multiple variables dynamically	current tools are static and do not allow interactive filtering or drill-down analysis	stuck while trying to extract meaningful patterns
PS-5	a charging station operator	understand peak charging demand, station utilization, and customer behavior	I lack time-based and location-based visual analytics	the system does not provide predictive trends or heatmap views	overwhelmed when planning infrastructure expansion

<b>PS-6</b>	a senior executive overseeing EV adoption strategy	review high-level KPIs such as average range, energy efficiency, and charging cost trends	dashboards are too technical and lack storytelling visuals	reports focus on raw data instead of strategic insights	disengaged during decision-making meetings
<b>PS-7</b>	a government transportation planner	assess EV charging infrastructure performance across regions	I cannot compare urban vs rural utilization effectively	there is no geo-spatial and comparative analytics dashboard	uncertain about policy planning decisions
<b>PS-8</b>	a vehicle performance engineer	monitor battery degradation and efficiency over time	long-term performance data is difficult to visualize historically	tools do not provide trend forecasting or degradation analysis	concerned about predicting maintenance needs accurately
<b>PS-9</b>	a logistics company operations head	reduce operational costs related to EV charging and downtime	I cannot track energy cost trends and vehicle utilization simultaneously	data systems are disconnected and lack cost-performance integration	frustrated about optimizing fleet profitability
<b>PS-10</b>	an EV startup founder	present product performance and market readiness to investors	I lack compelling visual dashboards with storytelling elements	available reports are static and not investor-friendly	unprepared during funding presentations