**Ideation Phase**

**Define the Problem Statements**

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| Date | 1 July 2025 |
| Team ID | LTVIP2025TMID50223 |
| Project Name | Visualization Tool For Electric Vehicle Charge And Range Analysis |
| Maximum Marks | 2 Marks |

**Customer Problem Statement Template:**

**Objective:**  
Understand the end-users' perspective and challenges when it comes to EV data, range anxiety, and the lack of accessible visual insights.

| **Problem Statement (PS)** | **I am (Customer)** | **I’m trying to** | **But** | **Because** | **Which makes me feel** |
| --- | --- | --- | --- | --- | --- |
| PS-1 | An EV owner in India | Understand how my EV performs over time and in various conditions | There’s no unified visual tool showing charge consumption, range, and real-world usage trends | Most data is scattered, textual, or not interactive | Uninformed and anxious about my vehicle’s real capability |
| PS-2 | A policy analyst | Evaluate EV adoption patterns across regions | I can't visually compare EV usage, battery types, or performance data across Indian states or countries | Public EV data is raw and not user-friendly | Frustrated and inefficient in decision-making |
| PS-3 | A potential EV buyer | Compare various EVs based on range, charging needs, and efficiency | The existing portals are limited to specs or static tables | I need an interactive and comparative dashboard | Confused and less confident about making a purchase |
| PS-4 | A sustainability researcher | Study the impact of EV battery usage on environmental metrics | I lack dynamic, visual access to region-wise battery trends | Static reports don’t reveal temporal changes | Limited in drawing meaningful conclusions |