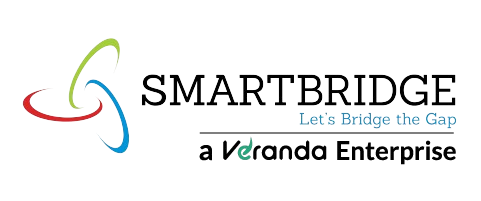
**Project Initialization and Planning Phase**

|  |  |
| --- | --- |
| Date | 15th July 2024 |
| Team ID | 739933 |
| Project Name | Predictive Modeling For Fleet Fuel  Management Using ML |
| Maximum Marks | 3 Marks |

**Define Problem Statements (Customer Problem Statement Template):**

Predictive modeling for fleet fuel management involves several key problem statements. Accurately forecasting future fuel consumption based on historical data and various influencing factors is crucial. Identifying abnormal fuel usage patterns can help detect issues like theft or inefficiencies. Optimizing the timing and volume of fuel purchases is essential to take advantage of price fluctuations. Predicting optimal maintenance schedules ensures vehicles operate efficiently, minimizing fuel consumption. Determining the most fuel-efficient routes by considering traffic and road conditions can significantly reduce fuel usage. Lastly, analyzing and influencing driver behavior is vital for promoting fuel-efficient driving habits.

**Example:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **I am (Customer)** | **I’m trying to** | **But** | **Because** | **Which makes me** |
| feel A fleet manager at a logistics company | Optimize fuel consumption and reduce costs across my vehicle fleet | I am struggling with predicting fuel usage accurately, detecting anomalies, and optimizing routes and maintenance schedules | Various factors such as  inconsistent driving behaviors, different vehicle types, fluctuating fuel prices, and varying road conditions  make it difficult to  manage fuel  efficiently | Frustrated and concerned about the increasing operational costs and inefficiencies |