Project Design Phase-I
Problem Solution Fit

Date	26 September 2022
Team ID	PNT2022TMID18784
Project Name	Project - Trip Based Modeling of Fuel Consumption in Modern Fleet Vehicles Using Machine Learning
Maximum Marks	

Problem-Solution fit

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Companies and Organizations, developers and ordinary people

6. CUSTOMER CONSTRAINTS — CC

Low accessibility to existing solution
Device compatibility

5. AVAILABLE SOLUTIONS — AS

A software exists which gets the dataset and after training the model, predicts the result.
Various models have been developed, but have not been implemented and brought into use.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

High Fuel Expense
No Proper platform for fuel consumption prediction

9. PROBLEM ROOT CAUSE — RC

Lack of awareness about fuel consumption
Existing solutions are minimal and does not meet user expectations

7. BEHAVIOUR — BE

Research about variations in fuel consumption
Search for solutions online
Seek suggestions from others

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS — TR

Finding it difficult to manage fuel consumption of vehicles
Realizing that the fuel expense is significantly higher than estimated

10. YOUR SOLUTION — SL

A website is developed which uses combination of multiple ML models to predict the fuel consumption accurately.
The website has a user friendly interface and is mobile responsive.
It offers various functionalities such as detailed report generation, predicting results for multiple samples simultaneously.

8. CHANNELS of BEHAVIOUR — CH

Online - Social Media, Forums, Blogs

Offline - Friends and Colleagues, Consultancy, Vehicle Manufacturers

4. EMOTIONS: BEFORE / AFTER — EM

Before - frustration, confused
After - satisfied, feeling productive and smart

Extract online & offline CH of BE