Project Design Phase-I Solution Fit

Project Title: Machine Learning based Vehicle Performance Analyzer **Team ID: PNT2022TMID25852**

Define CS, fit into CC

1. Customer Segments CS

Automobile Manufacturers

6. Customer Constraints CC

Change in existing manufacturing auto-mobile model manufacturing process.

Formation of new domain for the pro-gramming, installation & maintenance ofthe performance analyser

5. Available Solutions AS

Investing in some other technology, But Vehicle Performance Analyser can give their customers the satisfaction of understanding their vehicle, improving itsperformance, etc.

Explore As, differentiate

Focus on JP, tap into BE

2. Jobs-To-Be –Done/Problems J&P

Lack of new technology to survive in thenew era of smart automobiles.

Inability to assure durability and mainte-nance of automobiles.

9. Problem Root Cause RC

- Increase in fuel prizes
- Lack of Better maintenance
- Additional support needed for unskilled labourers and guidance for general public.

7. Behaviour BE

Manufacture new parts with embedded technology.

Hire and form teams to program, deploy& maintain the application.

Take feedbacks and improve the model performance in new models.

Focus on JP, tap into BE

Identify strong TR & EM

3. Triggers to Act TR

Seeing rival companies coming up withnew technology.

Demand for smart technologies in vehicles.

4. Emotions EM

Imperiled --> Confident

10. Your Solution SL

A system which gets raw data from the automobile, analyses the vehicles perfor-mance, provides the analysis to the vehicle owner and guides the techni- cians working on optimising the vehicle performance

8. Channels of Behaviour CH

- Hardware Channel:
Manufacturing & installing parts to get raw data from the vehicle.

- Software Channel:
Processing the raw data; Implementing the ML model; Designing the UI for peo-ples' access.

Identify strong TR & EM