**Project Title:** Machine Learning-based Vehicle Performance Analyzer.

## **Project Design Phase-I - Solution Fit Template:**

**Team ID:** PNT2022TMID19741

The customer is one who wants to predict the performance of the vehicle

1. CUSTOMER SEGMENT(S) CS 6. CUSTOMER CONSTRAINTS CC 5. AVAILABLE SOLUTIONS Which solutions are available to the customers when they face the Who is your customer? What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices. i.e. working parents of 0-5 y.o. kids or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital CS, To determine the worthiness of In the past User cannot find the the car by their own within few fit into C value of used car buy their own minutes without prior knowledge about cars. A loss function is to be optimized •A person who don't know much by spending money for about the car can also make dealers.brokers to buy or sell a car. predictions for used cars easily. J&P 9. PROBLEM ROOT CAUSE RC 7. BEHAVIOUR 2. JOBS-TO-BE-DONE / PROBLEMS BE What does your customer do to address the problem and get the job Which jobs-to-be-done (or problems) do you address for your What is the real reason that this problem exists? done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; customers? There could be more than one; explore different sides. What is the back story behind the need to do indirectly associated: customers spend free time on volunteering work (i.e. i.e. customers have to do it because of the change in regulations. To build a supervised machine Greenpeace) learning model using regression The price predicted by the dealers The History of Your Car's condition or brokers for used car is not trustful and documents produced by them algorithms for forecasting the value Users can predict the correct will be Suspicious. The model is to of a vehicle based on multiple valuation of the car remotely without be built would give the nearest attributes such as Condition of human intervention like car dealers. value of the vehicle by eliminating Engine, Year of Registration, User can eliminate the valuation anonymous value predicted by Kilometers, Number of Owner predicted by the dealer. using humans.

### 3. TRIGGERS



What triggers customers to act? i.e. seeing their neighbour installingsolarpanels, reading about a more efficient solution in the news.

# 4. EMOTIONS: BEFORE AFTER

How do customers feel when they face problem or a job and afterwards?

i.e. lost, insecure > confident, in control - use it in your communication strategy & design

## Before:

• User will be in fear about the biased values predicted by the humans based on the condition of the car.

#### After:

• User can determine the worthiness of the car bytheir own without human intervention.

• The project should take parameters related to used car as inputs and enable thecustomers

- car as inputs
  and enable
  thecustomers
  to make
  decisions by
  their own.
- User can decide by seeing the exteriorand interior condition of the car.
- User can test the performance of the car and to buy it up in a affordable pricebased on its condition.

Users can predict the correct valuation of the car by their own like Olxcars, Cars24 and other car resale value prediction websites by using model, year, owner, etc

#### 10. YOUR SOLUTION



If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.

If you are working on a new business proposition, then keep it blank until you fill inthe canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

• The main aim of this project is to predict the price of used cars using the Machine Learning(ML) algorithms and collection data's about different cars.

#### 8. CHANNELS of BEHAVIOUR

#### 8.1 ONLINE

What kind of actions do customers take online? Extract online char

#### 82 OFFLINE

What kind of actions do customers take offline? Extract offline customer development.

- Customer should predict the v by using different parameters owner.
- User Should confirm the provided about the vehicle in online.