

Project Design Phase-I
Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID02053
Project Name	Project - Car Resale Value Prediction
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

Purpose:

- Solve complicated issues in a manner that suits the state of your customers.
- Succeed quicker and improve the answer adoption with the aid of tapping into present mediums and channels of behavior.
- Sharpen your communication and advertising method with the proper triggers and messaging.
- Enables to communicate with customers for further enhancements in solution.
- Increase touch-factors along with your enterprise with the aid of locating the proper problem-behavior fit and improving trust with the aid of fixing common annoyances, or expensive issues.
- Understand the present scenario which will enhance it in your goal group.

Template:

Project Title: Car Resale Value Prediction		Project Design Phase-I - Solution Fit Template		Team ID: PNT2022TMD	
Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS Who is your customer? i.e. working parents of 0-5 y.o. kids To know about the sellers and Buyers of the old cars	6. CUSTOMER CONSTRAINTS CC 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. To know about the worthiness of the used cars and budget of the car for sending money for sellers and buyers. • A loss function is to be optimized by spending money for dealers, brokers to buy or sell a car.	5. AVAILABLE SOLUTIONS AS Which solutions are available to the customers when they face the problem 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 notetaking • In the past User cannot find the value of used car buy their own without prior knowledge about cars. • A person who don't know much about the car can also make predictions for used cars easily.	Explore AS, differentiate	
	2. JOBS-TO-BE-DONE / PROBLEMS J&P Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides. To build a supervised machine learning model using regression algorithms for forecasting the value of a vehicle based on multiple attributes such as • Condition of Engine • Age of the used car • Kilometers driven • Number of owners To know the worth of the used cars after usage To give the worthy price for used cars.	9. PROBLEM ROOT CAUSE RC What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations. The price given by the dealers are not trustable sometimes. users can check the price of the car remotely and easily. users can eliminate the biased value prediction of the year.	7. BEHAVIOUR BE What does your customer do to address the problem and get the job done? (2" Directly related find the right solar panel installer, calculate usage and benefits; indirectly associated - customers spend free time on volunteering work (i.e. Greenpeace) • The History of Your Car's condition and documents produced by them will be suspicious. • The model is to be built that would give the nearest resale value of the vehicle by eliminating anonymous value predicted by the humans.		Focus on J&P, tap into BE, understand RC
Identify strong TR & EM	3. TRIGGERS TR What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news. users can check and compare their car prediction price by car resales websites like olx by using attributes like number of owners, fuel type etc...	10. YOUR SOLUTION SL 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 in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour. The main aim is to predict the price of the used cars based on the attributes like fuel type, owner and kms driven. The price is predicted using ML and DL algorithms by taking attributes as inputs and enable customers by taking decision on their own.	8. CHANNELS of BEHAVIOUR CH 8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7 8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development. • customer should predict the worth of the car by using different parameters given by the owner. • User Should confirm the details provided about the vehicle in RTO online.	Identify strong TR & EM	
	4. EMOTIONS: BEFORE / AFTER EM How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design. Before: users will be anxious and fear about the price of the used cars. After: Happiness about the car after buying it in a right price				

References:

- <https://www.ideahackers.network/problem-solution-fit-canvas/>
- <https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>