

## Project Design Phase-I Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID02019
Project Name	PROJECT-CAR RESALES VALUE PREDICTION
Maximum Marks	2 Marks

Project Title: Car Resale Value Prediction

Project Design Phase-I - Solution Fit Template

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Define CS, fit into CC	1. CUSTOMER SEGMENT(S) <span style="float: right;">CS</span>	6. CUSTOMER CONSTRAINTS <span style="float: right;">CC</span>	5. AVAILABLE SOLUTIONS <span style="float: right;">AS</span>	Explore AS, differentiate
	<p>Who is your customer? i.e. working parents of 0-5 y.o. kids</p> <p>To know about the sellers and Buyers of the old cars</p>	<p>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.</p> <p>To know about the worthiness of the used cars and budget of the car for sending money for sellers and buyers.</p> <ul style="list-style-type: none"> <li>A loss function is to be optimized by spending money for dealers, brokers to buy or sell a car.</li> </ul>	<p>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 &amp; cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking</p> <ul style="list-style-type: none"> <li>In the past User cannot find the value of used car buy their own without prior knowledge about cars.</li> <li>A person who don't know much about the car can also make predictions for used cars easily.</li> </ul>	
Focus on J&P, tap into BE, understand RC	2. JOBS-TO-BE-DONE / PROBLEMS <span style="float: right;">J&amp;P</span>	9. PROBLEM ROOT CAUSE <span style="float: right;">RC</span>	7. BEHAVIOUR <span style="float: right;">BE</span>	Focus on J&P, tap into BE, understand RC
	<p>Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.</p> <p>To build a supervised machine learning model using regression algorithms for forecasting the value of a vehicle based on multiple attributes such as</p> <ul style="list-style-type: none"> <li>Condition of Engine</li> <li>Age of the used car</li> <li>Kilometers driven</li> <li>Number of owners</li> </ul> <p>To know the worth of the used cars after usage</p> <p>To give the worthy price for used cars.</p>	<p>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.</p> <p>The price given by the dealers are not trustworthy sometimes.</p> <p>users can check the price of the car remotely and easily.</p> <p>users can eliminate the biased value prediction of the year.</p>	<p>What does your customer do to address the problem and get the job done? Indirectly related: find the right solar panel installer; calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)</p> <ul style="list-style-type: none"> <li>The History of Your Car's condition and documents produced by them will be suspicious.</li> <li>The model is to be built that would give the nearest resale value of the vehicle by eliminating anonymous value predicted by the humans.</li> </ul>	
Identify strong TR & EM	3. TRIGGERS <span style="float: right;">TR</span>	10. YOUR SOLUTION <span style="float: right;">SL</span>	8. CHANNELS of BEHAVIOUR <span style="float: right;">CH</span>	
	<p>What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.</p> <p>users can check and compare their car prediction price by car resales websites like oxb by using attributes like number of owners, fuel type etc...</p>	<p>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.</p> <p>The main aim is to predict the price of the used cars based on the attributes like fuel type, owner and kms driven.</p> <p>The price is predicted using ML and DL algorithms by taking attributes as inputs and enable customers by taking decision on their own.</p>		
Identify strong TR & EM	4. EMOTIONS: BEFORE / AFTER <span style="float: right;">EM</span>	8. CHANNELS of BEHAVIOUR <span style="float: right;">CH</span>		
	<p>How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure &gt; confident, in control - use it in your communication strategy &amp; design.</p> <p>Before:</p> <p>users will be anxious and fear about the price of the used cars.</p> <p>After:</p> <p>Happiness about the car after buying it in a right price</p>			