Project Title: Crude Oil Price Prediction | **Project Design Phase-I - Solution Fit Template** | **Team ID:** PNT2022TMID52700

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

CS

Who is your customer?
i.e. working parents of 0-5 y.o. kids

The crude oil industries, crude oil investors and all the people in the society will be the customers. Anyone who is involved in the crude oil sector can be benefited.

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.

User must follow the guidelines
Proper Internet Connectivity
There is no requirement to spend much money to use the software

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

If crude oil price goes low ,the easiest way to take advantage of the low prices is to fleece the bears. In case of failures the price prediction can be given updated through social media and newspapers. The predicted details are available in dashboard, which will be available without internet connectivity in the portal.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

Websites crashes should be avoided.
Improve the accuracy and the cost efficient application model.
Growing economies increase demand for energy in general and especially for transportation.

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.

Changing pattern of oil prices with respect to time.
Crude oil price fluctuations have a great impact on global economy thus predicting crude oil price will help us taking minimal risks.

7. BEHAVIOUR

BE

What does your customer do to address the problem and get the job done?

i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

Sharing the problem about crude oil price prediction on their sharing on social media.
The Closing Price helps the investor understand the market sentiment of the stocks over time. It is most to determine the valuation of stock until the market resumes trading the next day.

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.

Cost Effective
Seeing another alternative which is more effective

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.

Reliability and Trust worthy
Fear of loss in profit

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.

A data driven approach is used to predict the prices. RNN is used to achieve future crude oil prices using previous history of crude oil. The cost is measured to determine its effectiveness. The performance of the proposed model is evaluated using the price data and other materials.

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

What kind of actions do customers take online? Extract online channels from #7

Looking for the latest crude oil prices

8.2 OFFLINE

What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

Performing tests on using the appropriate metrics
Analysis

Identify ng TR & EM