

Project Design Phase-I

Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID52793
Project Name	Project – Crude oil price prediction
Maximum Marks	2 Marks

Problem – Solution Fit:

Crude oil is one of the most important resources in today's world; it is the primary fuel, and the price of crude oil has a direct impact on the global environment, our economy, and oil exploration, exploitation, and other activities. Prediction of oil prices has become a necessity; it benefits many large and small enterprises, individuals, and the government. Because of the evaporative nature of crude oil, predicting its price becomes incredibly complex and difficult. There are numerous elements that influence crude oil pricing. Using an artificial neural network, we offer a modern and unique approach of predicting crude oil prices (ANN). The key advantage of this ANN technique is that it continually captures the volatile pattern of crude oil prices that have been incorporated by determining the ideal lag and number of the delay effect that regulates crude oil prices. We then tested our results by assessing the root mean square error and found that the results produced using the suggested model greatly beat the results obtained using the previous model.

Template:

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) <small>Who is your customer?</small> <p>Oil accounts are the third of the world's energy consumption. That is the greatest share for all category of government.</p>	6. CUSTOMER CONSTRAINTS <small>What constraints prevent your customers from taking action or limit their choices of solutions?</small> <p>Due to strong chain effects owned by this crude oil market. Bias in the factors involved will have exclusive impact to the price.</p>	5. AVAILABLE SOLUTIONS <small>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?</small> <p>There are innumerable ways and approaches which are being used and have been used for predicting the prices of crude oil.</p>	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS <small>Economic growth is one of the biggest factors affecting petroleum product—and therefore crude oil demand. Growing economies increase demand for energy in general and especially for transportation.</small>	9. PROBLEM ROOT CAUSE <small>There is only one dependent variable, the closing price of crude oil which has been considered as a time series.</small>	7. BEHAVIOUR <small>The correct information should be given by the individual.</small>	
Focus on I&P, tap into BE, understand	3. TRIGGERS <small>What triggers customers to act?</small> <p>By seeing our friends and colleagues benefited by this web.</p>	10. YOUR SOLUTION <small>A contemporary and innovative method of predicting crude oil prices using the artificial neural network.</small>	8. CHANNELS of BEHAVIOUR <small>8.1 ONLINE</small> <p>Customer has used this web in any time any where.</p> <small>8.2 OFFLINE</small> <p>Non-working days are not predicting the price of crude oil.</p>	Focus on I&P, tap into BE, understand
	4. EMOTIONS: BEFORE / AFTER <small>How do customers feel when they face a problem or a job and afterwards?</small> <p>Traipsing for job will be reduced.</p>			

References:

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