

PROJECT DESIGN PHASE I

Proposed Solution Fit

CRUDE OIL PRICE PREDICTION

TEAM ID	B10-4A6E
PROJECT NAME	Crude Oil Price Prediction
MAXIMUM MARKS	2 Marks

PROBLEM STATEMENT :

- Oil price prediction is not capable enough to deliver the accurate predicted prices as expected.
- Now the problem arising with the current ANN and CNN models that are used as prediction models is that they can't provide accurate results when the data is too big.
- Get the desired output and it can be compared with real value to fetch the errors occurring in the model.

IDEA/SOLUTION DESCRIPTION :

- Factors lead to the successful prediction of the oil prices and provide more accurate results from the model.
- WTI and used the LST model to predict the oil prices with the modal function as the input.
- A LSTM algorithm was proposed which uses backward and feed-forward propagation which helps to get more accurate results.

UNIQUENESS :

- Recurrent Neural Network refers to attacking the sequential problem or temporal aspects of data as time series which is a powerful tool in stock price prediction.
- To extract the feature automatically, and incorporate exogenous variables very easily.
- RNN can connect the previous information to the current task.
- LSTM models have excellent long-term and short-term memory ability, which will not lead to the loss of more historical state information on crude oil price.

SOCIAL IMPACT/ CUSTOMER SATISFACTION:

- Which you eventually use to predict the future stock market prices.
- Customers are expected to be useful to oil market investors, policymakers, and energy experts.
- Crude oil has a significant impact on financial markets and the real economy of countries.

BUSINESS MODEL :

- We use multiple complementary techniques to test for financial bubbles.
- Forecasting based on multi-population genetic algorithms to predict turning points in international oil prices.
- Increases in market speculation may lead to significant changes in the fundamental worth of price.

SCALABILITY OF SOLUTION :

- LSTM focuses on storing the previous data and prediction which is rather encouraging and more approximate.
- Major phases in formulated systems include data collection and preprocessing, feature and factor selection and price appraisal and prediction.
- To address rising oil prices, must find a way to reduce taxes on petroleum products, depending on how high global prices go.

