Project design Phase – I

Proposed Solution

S. No	Parameter	Description
1.	Problem Statement	Crude oil market is very difficult and changing environment and hence the process of predicting those changes in such a difficult environment becomes challenging and difficult with regards to its accuracy.
2.	Idea / Solution description	The ideation to predict crude oil prices using Long Short-Term Memory (LSTM) based recurrent neural networks.
3.	Novelty / Uniqueness	LSTM network is better than other traditional neural network for forecasting prices as it aims in using backpropagation model The model with single LSTM model is definitely the most accurate. LSTM focuses on storing the previous data and prediction which is rather encouraging and more approximate.
4.	Social Impact / Customer Satisfaction	It will be helpful for various stakeholders such as governments, public and private enterprises, policymakers, and investors. It can assist in minimising the risks associated with volatility in oil prices.
5.	Business Model	It assists various stakeholders as the price of crude oil influences the costs of other production and manufacturing across the world. A drop in fuel prices means lower transport costs and cheaper airline tickets.

6.	Scalability of the Solution	The LSTM networks overcomes two major issues which is encountered in RNN. The two issues are vanishing gradients and exploding gradients.