CRUDE OIL PRICE PREDICTION USING ARTIFICIAL INTELLIGENCE

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PROPOSED SOLUTION:

This Project mainly focuses on applying Neural Networks to predict the Crude Oil Price. This decision helps us to buy crude oil at the proper time. Time series analysis is the best option for this kind of prediction because we are using the Previous history of crude oil prices to predict future crude oil. So we would be implementing RNN(Recurrent Neural Network) with LSTM(Long Short Term Memory) to achieve the task.

NOVELTY:

There has been a renewed interest in accurately forecasting the price of crude oil and its fluctuations. Buying crude oil at a proper time is crucial to avoid risk of losses. Time series analyses is the best option for this kind of prediction because we are using the previous history of crude oil prices to predict future crude oil prices. Time-series data will be collected and pre-processed as needed, and two architectures of computational neural networks will be tested: Recurrent Neural Network(RNN) and long-short term memory (LSTM) neural networks. The findings suggest that LSTM networks are the best architectures to predict the crude oil price. The outcomes of this project could potentially help in making the oil price prediction mechanism a more tractable task and in assisting decision-makers to improve macroeconomic policies, generate enhanced macroeconomic projections, and better assess macroeconomic risks

SOCIAL IMPACTS:

Crude oil is considered one of the most important fuel sources and contributes to over a third of the world's energy consumption thus making the global oil industry a multitrillion sector. The surge in the crude oil prices since 2002 has renewed interest in determining what variables affect the price of crude oil and has highlighted the importance of the ability to accurately predict the evolution of its prices. Using Artificial intelligence will provide more accurate prediction of prices which in turn will reduce losses when investing in crude oil market.

BUSINESS MODEL:

Artificial intelligence is drifting out of R&D labs and into the business world. Millions of industries across the globe and top-notch companies are fitting together the power of AI and Applied artificial intelligence (AAI). Most of the business industries spot the scams using machine learning algorithms in nanoseconds to improve customer satisfactions. A vivid rise in the machine learning tools, business platforms, and applications-based tools were developed to quench the business satisfactions. These state-of-the-art technologies not only compressed the quality of the internet and the software industry but also other verticals such as built-up, healthcare system, legal, automobile, and agriculture as well as in safety.

SCALABILITY:

Currently, nearly half of all companies rely on artificial intelligence (AI) for handling data quality. This powerful tool can be used to quickly and effectively predict investment outcomes, as well as to devise strategies or establish long-term goals. Scalable AI pertains to how data models, infrastructures, and algorithms are able to increase or decrease their complexity, speed, or size at scale in order to best handle the requirements of the situation at hand. As improvements continue with data storage capacities as well as computing resources, AI models can be created with billions of parameters. It’s extremely helpful for extracting value from large data sets and spotting patterns or trends that would be difficult or impossible for a human to notice. Load scalability pertains to software that can speed up its performance with regard to the available computing power.