Project design Phase 1

Problem - Solution fit Template

Date	19 October 2022
Team ID	PNT2022TMID04563
Project Name	Project – Crude oil price prediction
Maximum Marks	4 Marks

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS
- Our customers are the people who invest in the stock market, trying to get good returns on their investments.
- People who are trading in commodities, who want to know the sentiment of the market. People who are selling and buying crude oil.

6. CUSTOMER CONSTRAINTS — CC
- Inability to gather data from resources.
- Unable to produce conclusions from the given data.
- It is a limited resource so its price will fluctuate rapidly.

5. AVAILABLE SOLUTIONS — AS
- There are some apps that will provide the current price of the oil and its live market value.
- They try to predict it using global cues, like the supply and demand model. How much it is in demand vs how much is available in countries producing oil?

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS — J&P
- Inaccurate predictions that would lead to huge losses.
- Services not available at the right time ie, Server failures, client's device unable to render the live data, etc.
- Crude oil prices are hugely volatile, so good prediction model should be used.

9. PROBLEM ROOT CAUSE — RC
- It exists because of the rapid changes in the supply and demand of crude oil.
- For example, During the Pandemic there is no demand for crude oil so the prices fell to near zero, but now the world opened suddenly the demand increased rapidly, supply is not able to meet the demand so the prices rose and went through the roof.

7. BEHAVIOUR — BE
- The customer should be always aware of the supply and demand for crude oil.
- He also should be well informed about global cues.

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

Identify strong TR & EM

3. TRIGGERS — TR
- Predicting the supply and demand. Crude oil price fluctuations have a far-reaching impact on global economies.

4. EMOTIONS: BEFORE / AFTER — EM
Before: Losses in crude oil trades which deeply affected investors.

After: Forecasting oil predictions increased profits in trading.

10. YOUR SOLUTION — SL
- Using Statical, deep learning, and neural networks we can create a model that would predict the crude oil. It can be predicted by analyzing supply and demand.

8. CHANNELS of BEHAVIOUR — CH
8.1 ONLINE
- Investors are happy by gaining huge profits. Forecasting prices aided management to reduce operational costs.

8.2 OFFLINE
- Commodity trades analyze the supply and demand and take calculated positions. If their predictions come true they can book profits.

Extract online & offline CH of BE