# 1. CUSTOMER SEGMENT(S)

Who is your customer? i.e. working parents of 0-5 v.o. kids

- 1. Our project mainly focuses on the continuous usage of statistical and econometric techniques including AI for crude oil price prediction might demonstrate demotions to the prediction performance.
- 2. Our project is used to predict the future price and use the oil according to the prices. People from any age group can use this application.

## 6. CUSTOMER CONSTRAINTS

CS

J&P

TR

CC

RC

SL

What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.

- 1. Proper internet connectivity is required.
- 2.User must enter appropriate details for accurate results.
- 3. Must read the guidelines for better usage.

## 5. AVAILABLE SOLUTIONS

AS

Explore AS, differentiate

Focus on J&P, tap into BE, understand

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? i.e. pen and paper is an alternative to digital notetaking

- 1. if crude oil price goes low the easiest way to take advantage of the low prices is to fleece the bears.
- 2. Simply buying oversold oil or gas stocks can be a great way to take advantage now and reap the benefits when the bears realize their mistake and oil prices rebound.

## 2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

- 1 Websites crashes should be avoided.
- 2, Application interface should be user-friendly.
- 3. Precision of results delivered.

#### 9. PROBLEM ROOT CAUSE

What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations.

- 1. Changing pattern of oil prices.
- 2. Inexperienced professionals.

## 7. BEHAVIOUR

BE

What does your customer do to address the problem and get the job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated; customers spend free time on volunteering work (i.e. Greenpeace)

- 1. Closing price is the last price at which a stock trades during a regular trading session.
- 2. The Closing Price helps the investor understand the market sentiment of the stocks over time. It is the most accurate matrix to determine the valuation of stock until the market resumes trading the next day.

# 3. TRIGGERS

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

- 1.Cost Effective.
- 2. Early prediction can avoid serious problems.

## 4. EMOTIONS: BEFORE / AFTER

EM How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design.

1. Trust, Profit gain or loss fear, insecurity.

## 10. YOUR SOLUTION

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality

If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations solves a problem and matches customer behaviour.

- 1. This Guided Project mainly focus on applying Neural Networks to predict the crude oil price.
- 2. This decision helps us to buy crude oil at proper time. 3. 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.
- 4.So we would be implementing RNN(Recurrent Neural Network) with LSTM(Long Short Term Memory) to achieve the task.

# 8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

What kind of actions do customers take online? Extract online channels from #7

1. Searching online for current crude oil prices.

What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

- 1.Performing fundamental analysis.
- 2. Technical analysis.
- 3. Risk Management

**Extract online & offline CH of BE**