Explore

AS,

differentiate

## 1. CUSTOMER SEGMENT(S)

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



Oil merchants, investors, traders

## 6. CUSTOMER CONSTRAINTS



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.

Budget constraints, logistics, natural calamities.

#### 5. AVAILABLE SOLUTIONS

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

Predicting the crude oil price using the past data using ML AI forecasting algorithms.

Doing fundamental research Qualitative techniques using subjective data

pros: easy forecasting of prices without any physical effort, handy results.

cons: No guarantee of accurate results

# 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.

Predicting the prices before hand and with more accuracy.

## 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.

Fluctuation in crude oil price, economy fluctuation.

## 7. BEHAVIOUR



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)

Investors keep an eye on the fluctuation in prices, analyze the market and invest money on it according to the demand and supply.

us on J&P. tap into BE. understand Ro

## 3. TRIGGERS

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

Demand and constant changes in crude oil price, high profit in investment and trading in crude oil.

# 4. EMOTIONS: BEFORE / AFTER



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.

Before – Insecure about the price fluctuations, manual forecasting may lead to inaccurate predictions.

After – Confident speculation and funding.

## 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.

In ML, using forecasting algorithms like RNN and LSTM we can predict the price beforehand by processing historic data.

# 8. CHANNELS of BEHAVIOUR



#### 8.1 ONLINE

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

#### 8.2 OFFLINE

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

Online: User can access this site and resources through internet and use it.

Offline: Investors do manual forecasting from various resources, analyze the market pattern and act accordingly.