Project Design Phase-I
Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID13001
Project Name	Project - DemandEst - AI powered Food Demand Forecaster
Maximum Marks	2 Marks

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS
Who is your customer?
i.e. working parents of 0-5 y.o. kids

- Star Hotels
- Catering services
- Food court
- Restaurants
- Canteen
- Cafe
- Whole sale food sellers

6. CUSTOMER CONSTRAINTS — CC
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.

- By listening to Expert opinions.
- By forecasting with their experience.
- Taking risk with over confidence.

5. AVAILABLE SOLUTIONS — AS
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

- Rough estimation using guesses.
- Estimation using experience.
- Estimation using count of sales and people.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS — J&P
Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

- Previous records of sales and usage are needed.
- Total count is also be taken.
- Dishes and ingredients should me mentioned.

9. PROBLEM ROOT CAUSE — RC
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.

- Excess of raw materials.
- Lack of raw materials.
- Loss due to wastage.
- Inventory management.

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)

Our model forecast the demand for raw materials using old data. Our model will train using existing data. Shows the accurate amount of raw material that needed.

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

Identify strong TR & EM

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

Triggers in demand estimation are reduce in wastage that leads to profit. And stay update in current technology.

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.

Before: Lack of confidence, doubts, fear. After: Happiness of getting profit.

10. YOUR SOLUTION — SL
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.

Our solution is to create a machine learning model to forecast the number of orders to gather raw materials for next ten weeks.

8. CHANNELS of BEHAVIOUR — CH

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

Creating data set of previous data.

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

Collecting local sales data and people count.

Extract online & offline CH of BE