Project Design Phase-I
Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID35432
Project Name	Project – Statistical Machine Learning Approaches to Liver Disease
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

Purpose:

❑ Solve complex problems in a way that fits the state of your customers.
❑ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
❑ Sharpen your communication and marketing strategy with the right triggers and messaging.
❑ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
❑ **Understand the existing situation in order to improve it for your target group.**

Template:

This is the template that we have used for the solution fit.

Problem-Solution fit canvas 2.0

Define CS, fit into CC

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

Hospitals who currently diagnose liver diseases maybe are interested in our product.

Also, individuals who are interested in self-diagnosis are also part of our customer segment.

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.

Hospitals have to take up the constraint of conducting the necessary tests whose results are then put into the model.

Therefore, the cost associated with that needs to be taken up by the patient.

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

Currently, diagnosis is done when patients have severe symptoms following which necessary tests are taken.

The cons are that the treatment would be very late and there is high chance the patient would not be diagnosed

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.

Problem is the need for timely analysis of liver diseases so that treatment could be done well in advance.

Current technology will help us understand underlying patterns b/w features and help in early detection

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.

The increase in intake of drugs among people at an earlier age.

Since metabolism takes place in the liver, drugs severely impact the processing capability of the liver.

Which ultimately leads to liver disease.

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)

Hospitals at the moment try to identify liver diseases with the help of their experience.

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.

Most cases require liver transplant

Many cases could not even be treated by common practices.

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.

They are not sure if they will be able to diagnose the patient in time.

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.

Timely prediction will help our customer be able to diagnose the patient in time.

Will reduce the mortality rate.

Reduce treatment costs

8. CHANNELS of BEHAVIOUR — CH
8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7

NA

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

Apply diagnostic procedures to narrow down the problem.

Extract online & offline CH of BE

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