

Project Design Phase-I
Problem – Solution Fit Template

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| Team ID | PNT2022TMID19883 |
| Project Name | Project – AI-powered Nutrition Analyzer for Fitness Enthusiasts |
| Maximum Marks | 2 Marks |

Problem – Solution Fit :

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.**

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| Define CS, fit into CC | <div>1. CUSTOMER SEGMENT(S)<div>CS</div></div> <div>Users are our customer</div> | <div>6. CUSTOMER CONSTRAINTS<div>CC</div></div> <div>Have to know the image capturing skills Need of more images Have cellphone/laptop Have proper images</div> | <div>5. AVAILABLE SOLUTIONS<div>AS</div></div> <div>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</div> <div>The algorithms for nutrition analyzer includes image preprocessing,model building and classification.Classification becomes complicated when class overlaps and class imbalance problems occur together.</div> | Explore AS, differentiate |
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| Focus on J&P, tap into BE, understand RC | <div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&P</div></div> <div>Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.</div> <div>The problem here in nutrition analyzer is accuracy and low quality images. Multiple foods can't be classified at a time.</div> | <div>9. PROBLEM ROOT CAUSE<div>RC</div></div> <div>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.</div> <div>Nutritional analysis is the process of determining the nutritional content of food.If proper nutrition is not provided,it could lead to health problems.</div> | <div>7. BEHAVIOUR<div>BE</div></div> <div>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)</div> <div>People can use different methods to analyze nutrition but fully automatic application is complicated.</div> | Focus on J&P, tap into BE, understand RC |
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| Identify strong TR & EM | <div>3. TRIGGERS<div>TR</div></div> <div>The point that triggers the customer is that it is easy to use and doesn't need anyone's assistance.</div> | <div>10. YOUR SOLUTION<div>SL</div></div> <div>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.</div> <div>The user interacts with the user interface and give the image as input.Then the input image is then passed to our flask application and finally with the help of the model which we build we will classify the result and showcase it on the user interface.</div> | <div>8. CHANNELS of BEHAVIOUR<div>CH</div></div> <div>8.1 ONLINE Users need to upload the image of fruits.</div> <div>8.2 OFFLINE Users need to take pictures to upload the images.</div> | Identify strong TR & EM |
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| | <div><div>4. EMOTIONS: BEFORE / AFTER</div><div><div>EM</div><div>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.</div></div><div><div>BEFORE:Users find it hard to analyze the proper nutrition content in foods.</div><div>AFTER:Now it is very easy to use and time saving.</div></div></div> | | | |
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