Project Design Phase-I

Problem – Solution Fit Template

Date	09 NOVEMBER 2022
Team id	PNT2022TMID08456
Project name	Real Time River Water Quality Monitoring And Control System
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.

Problem-Solution fit canvas 2.0

Purpose / Vision

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

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

For those people who use river water as source for living.

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.

A product is to be developed in such a way it continuously monitors the quality of water and takes values and initiatives to control river water quality.To prevent further health hazards and other infections,people need a change to consume a pure river water.

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

Through fast sms, an dynamic messaging system can be created to deliver acknowledgements to each and everyone accurately.if they miss or they are unnotified of the message they can always view the values stored in the mobile app handled via cloud.with which they can notify others too.

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.

The system is basically a real-time embeded system of WSN and raspberry pi which uses zigbee network.WSN is choosed because of its dynamic architecture of connecting multiple sensors(pH sensor,Temperature sensor .etc) zigbee has high efficiency and low power consumption for networking.Together can notify messages to public accurately.

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 only bottle neck we have is the cost efficiency.since multiple sensor nodes involving quantized connectivity makes it an dynamic system and product of considerable cost.It continuously monitors river quality and replaces it with perfectly built control system.

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)

User guide is available as blogs and comes in as manual in all languages.Else customer service is provided.In which customers can report their problem and can have a clear understanding and description of the product.If customer seems there is a problem with the system they can contact and can have it fixed with the authorities.

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