Project Title: Real-Time River Water Quality Monitoring and Control System **Project Design Phase-I - Solution Fit Template Team ID:** PNT2022TMID20019

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

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

Municipal Corporation
Drinking Water Supplier
Farmers

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.

River water quality analysis replaces the need for using laboratory checking and reduces the time of delay required for result.The give instant solutions and suggestions like what it is and what can be done to change

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

This work presents the architecture of river water monitoring system based on contemporary IoT communication technology,AI, and Wireless Networks.
AI-based IoT applications to boost and save time for results and suggestions to the problems.

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.

Periodically checks the quality of the river water in terms of pH and temperature is monitored and regularly updated using a dedicated mobile app

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.

In Delta region, river water is the main source for cultivation and domestic uses. But the water get polluted by fertilizers, pesticides and other factors. So,the water is not fit for use

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)

Directly, farmers and localities are grouped as a team and get trained by the expect with the technology deployed at the best points of river bodies.Indirectly, helplines will be provided, and at the worst case, availability of the expert / technical persons are made in order tosupport the farmers and localities

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.

People who are using this system will feel free from water borne disease

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 using this system people suffers from water toxicity, soil infertility.After using this system people will feel healthy and produce quality crops

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.

River water is checked periodically using sensor.
If the quality is not good ,it will send alert to mobile application

8. CHANNELS of BEHAVIOUR — CH

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

Online portal for making recommendations for problems based on pH parameters using iot

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

In offline mode customer can contact us via helpline number

Extract online & offline CH of BE