Project Title: **Real-Time River water quality monitoring and Control System**
Project Design Phase-I - **Solution Fit Template**   **Team ID:** PNT2022TMID33916

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

Who is your customer?   CS

Our customers are ordinary people those who depend on river water for their day to day activities.

6. CUSTOMER CONSTRAINTS

What constraints prevent your customers from taking action or limit their choices of solutions?   CC

- Cannot find river water quality parameters like chemical, biological, and radiological parameters.
- Cannot easily avail network resources, appropriate devices.
- Budget and time management.

5. AVAILABLE SOLUTIONS

Which solutions are available to the customers when they face the problem   AS

- CWC (Central Water Commission) monitors water quality, by collecting samples from representative locations within the processing and distribution systems.
- TWAD – The local authorities must ensure the quality of the supplying river water.

Explore AS, differentiate

Focus on J&P, tap into BE,

RC   BE

2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems) do you address for your customers?

- Consumer should know the quality of water before consuming inorder to avoid diseases and from harmful contaminations.

9. PROBLEM ROOT CAUSE

What is the real reason that this problem exists? What is the back story behind the need to do this job?

- Industrial wastes
- Eutrophication
- Lack of public awareness

7. BEHAVIOUR

What does your customer do to address the problem and get the job done?

- After finding impurities in river water, the consumer complains it directly to the respective government authorities.
- Consumer tries to filter visible waste and boils water before consuming.

Focus on J&P, tap into BE,

3. TRIGGERS `TR`

What triggers customers to act?

- Public awareness
- To prevent from water borne diseases such as cholera, diarrhea, typhoid and so on.
- To check the pH, TDS, Salinity and hardness in the river water.

4. EMOTIONS: BEFORE / AFTER `EM`

How do customers feel when they face a problem or a job and afterwards?

- **Before implementing** – people find hard to enjoy boating, fishing and provision of safe drinking water.
- **After implementing** – People can monitor and regulate the water pollution, it leads way to healthy life.

10. YOUR SOLUTION `SL`

- pH level and salinity should be monitored.
- Turbidity and TDS should be determined.
- Temperature must be constantly monitored.
- Whenever there is a change, instant message should be sent to authorities.
- Monthly report on water maintenance should be displayed to the public.

8. CHANNELS of BEHAVIOUR `CH`

ONLINE

What kind of actions do customers take online?

- Video tutorial made to bring awareness among public.
- Social media campaigns on polluted water.

OFFLINE

What kind of actions do customers take offline?

- Creating awateness using Sign Boards, rallies.
- Publish Advertisment on Newspapers regarding polluted water.