Project Title : Real-Time River Water Quality Monitoring and Control system **Project Design Phase-I - Solution Fit Template** **Team ID: PNT2022TMID12872**

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

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

Our Customers are societies those who rely on river water for their day to day life.

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.

No proper knowledge on implementing IoT device for monitoring river quality parameters.Sensors are costly and maintanence is time consuming.

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 the only available solution is manually go and check river water and inform the municipality toi take necessary actions

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.

Identify existing problems. Ensure water is suitable for the intended use, check the chemical properties of water

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.

Industrial Waste:Industries and industrial sites across the world Project - Real-Time River Water Quality Monitoring And Control System
Marine Dumping
Oil Leaks and Spills.

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)

There is much talks going on about the current status of river water. But government is not seriously involved other than spreading awareness about river pollution.

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.

Triggers:Advertisements about a new product to monitor river water quality,Cost effective device which could ease customer's job of monitoring river water health.

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.

Absent, inadequate,or inappropriately managed water and sanitation services expose individuals to preventable health risks.So they fear about consuming dirty river water and try to avoid it as much as possible.
After:Customer get a sense of assurance that the river water they consume is clean and not contaminated

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.

A cost efficient IOT device is proposed which takes parameters like salinity,alkanity,acidity,TDS,pH and notifies the concerned authority to take action when there is a deviation from the normal range of values

8. CHANNELS of BEHAVIOUR CH

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

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

Online:Social networks can be created to keep track of the quality of water.
Awareness about proper water quality management could be spread via these networks.

Offline:
Authorities also need to simultaneously provide adequate infrastructure for waste disposal and put in place a robust mechanism for punitive measures against defaulters.

Identify strong TR & EM