Project Title: Real-Time River Water Quality Monitoring and Control System

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMID00036

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Fisherman.

Marine biologist

Water pumping plants

6. CUSTOMER CONSTRAINTS — CC

User friendly

Cost effective

Maintaining eco system

Temperature check Pollution

5. AVAILABLE SOLUTIONS — AS

water quality monitoring software developers

Water treatment stakeholders

Oil & gas and power generation plants

Water pumping plants

Explore AS, differentiate

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

Aquaculture worker

Aquarist

Fisherman.

Hydrologist

Marine biologist.

9. PROBLEM ROOT CAUSE — RC

Sometimes the water has dangerous particles or chemical mixed and general purpose water purifier cannot purify that. And it'simpossible to check the quality of water manually in every time

7. BEHAVIOUR — BE

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)

Find a core controller and create the app.

Calculate the Ph value of the river water .

Making it user friendly with more convenient and cost effective

Identify strong TR & EM

3. TRIGGERS — TR

geology, climate,
topography
land use Pesticides
Temperature

10. YOUR SOLUTION — SL

So the water we reserved in the water tank at our roof top or basement in our society or apartment may not be safe. Still in India most of the people use simple water purifier that is not enough to get surety of pure water. So it can warn us automatically if there is any problem with the reserved water. And we can check the quality of the water anytime and from anywhere. By keeping this mind we designed this system especially for residential areas.

8. CHANNELS of BEHAVIOUR — CH

8.1 ONLINE

Installing online continuous water quality monitors inorder to monitor pH, total dissolved solids, dissolved oxygen on continuous basis.

8.2 OFFLINE

Collecting water samples for laboratory analysis or by using probes which can record data at a single point in time, or logged at regular intervals over an extended period.

Identify strong TR & EM

	4. EMOTIONS: BEFORE / AFTER EM Repair leaks ,Protection of water source Improve water quality		