

## Project Design Phase-1

### Solution Kit

DATE	14 October 2022
TEAM ID	PNT2022TMID32043
PROJECT NAME	Real-Time River Water Quality Monitoring and Control System

Define CS, fit into CC

**1. CUSTOMER SEGMENT(S)** CS

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

People living in rural areas near to the river, who uses river water

**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.

Water quality monitoring system is used for identify the water pollution on specific area. People may find it hard to recover if any fault occurs, this system prevent people from water pollution.

**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

Individual notification to each people could be sent, it is not possible. This system will still notify the corporation and they can further notify the people to aware.

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 river water quality monitoring system that checks periodically, the dust particles, temperature and PH level and gave notifies for the public when the water quality varies

**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.

We know that the sensor are expensive and the system needs more than one sensors to work, these sensors are used periodically to check the quality of water and if any problem, need to be replace frequently.

**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)

The customer could use the user guide provided to overcame the problem or else they can report and contact the corporation. They will take care of the problem.

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