

Project Design Phase – 1

Solution Architecture

Date	19 september 2022
Team ID	PNT2022TMID48312
Project Name	Project – Real Time River Water Quality Monitoring and Control System
Maximum marks	4 marks

Solution Fit Document:

1. Customer Segment:

People and Industrial Companies are our customers. We take these ideas from industrial companies to people. They need this system to detect the water quality and monitoring.

2. Jobs to be done / problems:

Timing is the major problem in this system. Because of late detection cause severe water problems. They didn't use the water after detect the water problems late.



3. Triggers:

Water problems triggers the customers to act in various ways like, they complaint about water problems to government and protest take place.

4. Emotions:

The emotions are very frustrated, anger, fear and neglected. It makes the people so depressed

5. Available Solutions:

The solution of water quality monitoring and control systems using SMS to detect the problem quick in manner. Using different types of sensors to detect the water quality problems.

6. Customer constraints:

The customer constraints are network connections to make the system difficult and to build this system we need sensor to handle good.

7. Behavior:

Our customer addresses the problem, sometime the drink and use unsanitary water. This leads to health problems and it affects their children in future.

8. Channels of Behavior:

Online:

They can't interact with the physical components and



complaint the problems through online easily.

Offline:

They take the decision immediately offline and solved it quickly. After detecting the problem, they find their way to executing the system.

9. Problem root cause:

Timing is the real reason that this problem exists.

10. Your solution:

Using different types of sensors like PH sensor, turbidity sensor to monitoring the water and display the conditions in LCD. Additionally, SMS alerts for water conditions are good or bad.



Solution architecture diagram:



