

Project Design Phase-I - Solution Fit

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

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1. CUSTOMER SEGMENT(S)

- *Farmers (agricultural use)
- *Village people, who are living near to river.

2. CUSTOMER CONSTRAINTS

1. Salination
2. Pollution
3. Algae & sewage

3. AVAILABLE SOLUTIONS

1. Turning Sewage Water Into Drinkable Water (On putting the purifier in any water container)
2. providing improved control, which reduces waste and defects.

4. JOBS-TO-BE-DONE / PROBLEMS

- Use Less Plastic
- Do Not Dispose of Oils in the Sink
- Handle Toxic Chemicals Properly
- Plant trees in catchment areas of rivers and also on banks.

5. PROBLEM ROOT CAUSE

- domestic sewage
- early rainwater and urban sewage
- industrial waste water

6. BEHAVIOUR

1. Sensors are fixed in river to continuously monitor the water.
2. After collecting data, the controller transmits to base station (monitoring area)

7. solutions

- Using Ph sensor, Turbidity sensor & temperature sensor for continue monitoring.
- Using purifier or by solar RO model controlling done

8. Triggers

1. To make use of river water efficiently and also pollution free.
2. To make use of river water for agriculture.

Overview of project

1. With use of effective sensor collecting data and transmitting is done with help of IoT and Controller
2. Analysing data and controlling of river quality is done.