**Project Title: Real time river water quality monitoring and control system Project Design Phase-I** - **Solution Fit Template**

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| **Focus on J&P, tap into BE, understand RC** | **2. JOBS-TO-BE-DONE / PROBLEMS**       * The water quality parameters datas are obtained using the sensors and the datas are stored and monitored   continuouslly     * If the water is polluted an sms alert will be sent to the specified customer | **J&P** | **RC**      **9**  **. PROBLEM ROOT CAUSE**      Due to industrial waste and  other pol  l  untants such as  plastics    ,    nitrates    ,    bacteria    ,  Fertilizers etc  . T  he water is  polluted very much so it is  difficult to convert the riv  er  water into drinking water  . | **7. BEHAVIOUR**  **BE**    If the water is polluted very much install the water quality monitoring system which is proposed in this project so that the customers gets the details about temperature, turbidity and pH of the water and with the help of those details necessary actions can be taken to improve the quality of the water. | **Focus on J&P, tap into BE, understand RC** |

**Team ID:** PNT2022TMID03606

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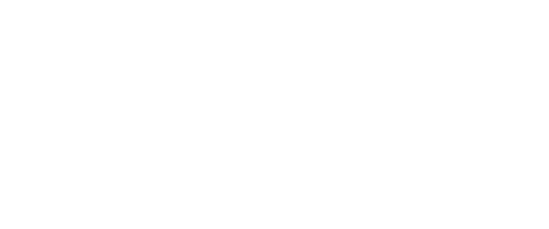
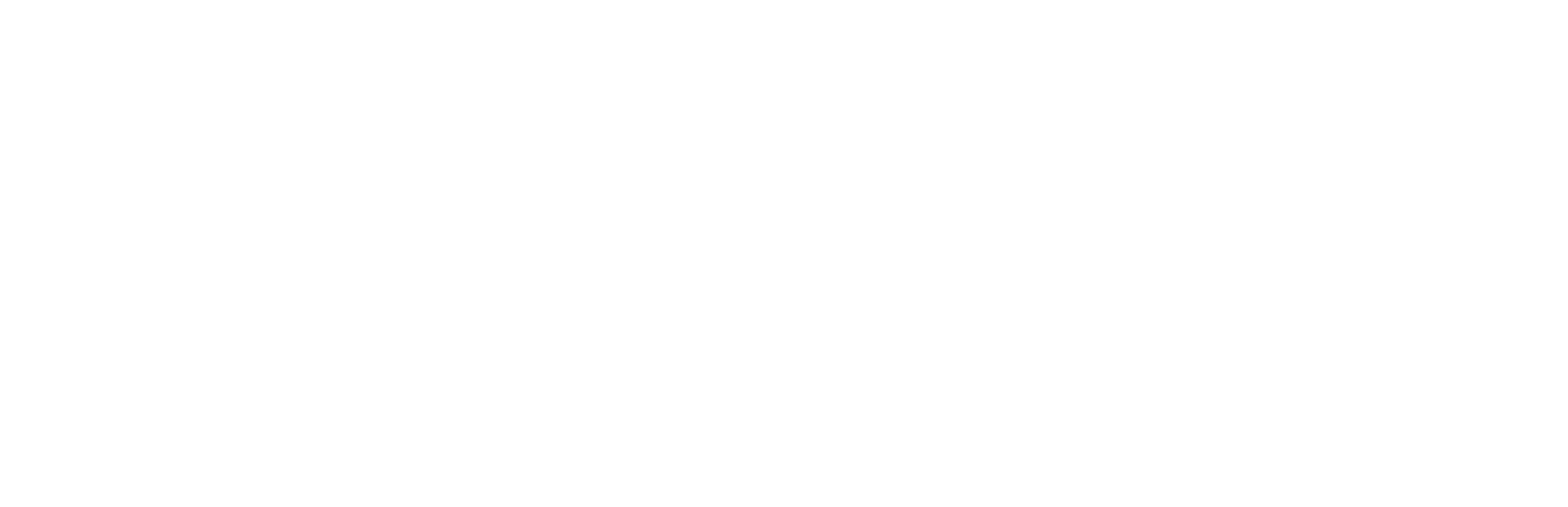
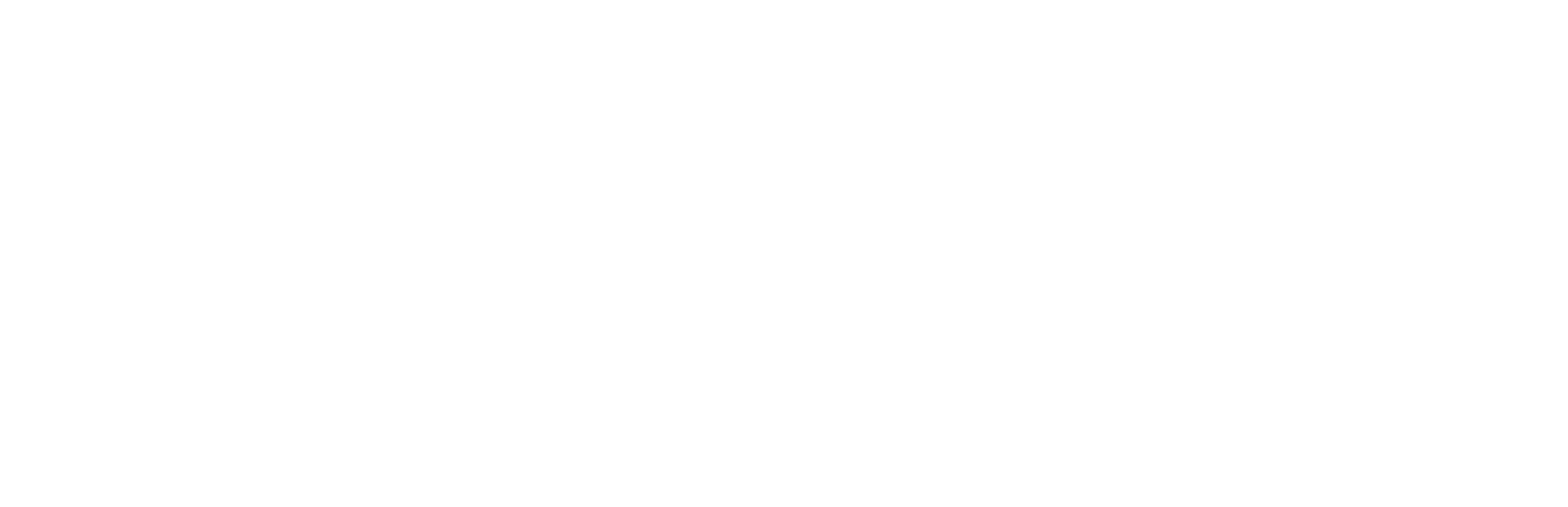
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The current water quality

monitoring system is a manual

system with a monotonous

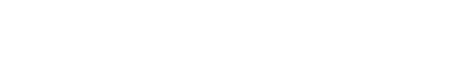
process and is very time

consuming

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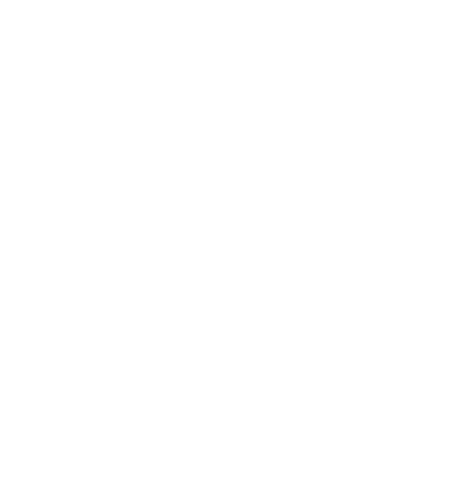


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**. AVAILABLE SOLUTIONS**



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B

udget

is

the

main

factor w

hich limits

the customers in

taking actions . The

proposed project is

cost effective .

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Man power is the

another factor .

The

proposed system

needs no man power



**CC**

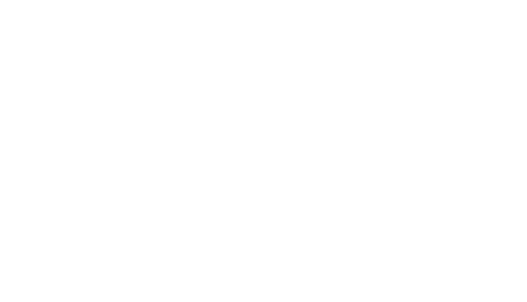


**. CUSTOMER CONSTRAINTS**

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**CS**



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**. CUSTOMER SEGMENT(S**

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Water quality checkers

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Enducers (public) ,

organizations responsible

for supplying drinking

water are the customer

’s



**Explore AS,**

**differentiate**



**Define CS, fit into CC**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **3. TRIGGERS TR**     * It reduces the time required to calculate the water quality * It helps in reducing the water pollution | |  | **10. YOUR SOLUTION**      This project proposes a sensor-based water quality monitoring system. Using pH sensor, Turbidity sensor, and temperature sensor. The pH, turbidity and temperature of the water can be measured . If the acquired value is above the threshold value automated warning SMS alert will be sent to the specified customer. | **8. CHANNELS of BEHAVIOUR**  **ONLINE**  Water quality details will be updated in website with respect to time.    **OFFLINE**  All the water quality details will be sent through SMS by using these details necessary cleaning actions can be taken. | **CH** |  |
|  | |  |
| **4. EMOTIONS: BEFORE / AFTER** | **EM** |
|  | |  |
| Before the implementation of this project th water quality parameters are calculated manually which needs more time and man power which makes the customers feel frustrated. After the implementation of this project The work pressure is reduced whic makes the Customers feel happy . | | e  h |