**Project Title:**-**REAL TIME RIVER WATER QUALITY**

**MONITORING AND CONTROL SYSTEM Project Design Phase-I** - **Solution Fit Template Team ID:** PNT2022TMID48076

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

**Explore AS, differentiate**

**Deﬁne CS, ﬁt into CC**

All people are our customer

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**AS**

**5. AVAILABLE SOLUTIONS**

Which solutions are available to the customers when they face the problem

Iot device using various types of sensors to collect data

Turbitity,ORP,temperature,PH, conductivity also Iot devices have capability to stream the array of collected

data wirelessly to remote data aggregator server in the

cloud

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.

The devices are arduino board temperature sensor,PHsensor,turbitity sensor. Some monitoring sensor is inconvenient.

**Customer limitationas are CCustomer limitationas are high. The devices are in ARDUINO,TEMPERATURE SENSOR,TURBIDITITY SENSOR,PH SENSOR**

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**CC**

**6. CUSTOMER CONSTRAINS**

**CS**

**1. CUSTOMER SEGMENT(S)**

Who is your customer?

i.e. working parents of 0-5 y.o. kids

**Explore AS, differentiate**

**Define CS, fit into CC**

*Which problem do you solve for your customer? There could be more*

*than one, explore different sides.eg. existing solar solutions for private*

*houses are not considered a good investment (1).*

Drinking dust and chemical water

Leads to death its difficult to monitor a water flow

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)

**BE**

**7. BEHAVIOUR**

What does your customer do to address the problem and get the job

Using sensors detect impure water andusing filter purify water

**RC**

**9. PROBLEM ROOT CAUSE**

What is the real reason that this problem exists? What is the back story behind the need to do this job?

1. e. customers have to do it because of the change in regulations.

Additional budget is required for further improvement of the over all system

**J&P**

**2. JOBS-TO-BE-DONE / PROBLEMS**

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

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

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Identify strong TR strong TR & EM** | **3. TRIGGERS**  What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efﬁcient solution in the news.  Seeing their near by district getting purified water from river reading about innovative more beautiful and efficiency solution | **10 .YOUR SOLUTION**   1. The main aim is to develop a system for continuousmonitoring of river water quality at remote places using wireless sensor networks with low power consumption low cost and high detection accuracyPH conductivity turbitidity level etc.are analyzedto improve the water qualityTThe main aim is to develop a system for continuous monitoring of river water quality at remote places using   wireless sensor networks with low power consumption, low-cost and high detection accuracy. pH, conductivity,  turbidity level, etc. are analyzed to improve the water quality.The main aim is to develop a system for continuous monitoring of river water quality at remote places using  wireless sensor networks with low power consumption, low-cost and high detection accuracy. pH, conductivity,  turbidity level, etc. are analyzed to improve the water quality.The main aim is to develop a system for continuous monitoring of river water quality at remote places using  wireless sensor networks with low power consumption, low-cost and high detection accuracy. pH, conductivity,  turbidity level, etc. are analyzed to improve the water quality.he main aim is to develop a system for continuous monitoring of river water quality at remote places using  wireless sensor networks with low power consumption, low-cost and high detection accuracy. pH, conductivity,  turbidity level, etc. are analyzed to improve the water quality. | **8.CHANNELS of BEHAVIOUR CH**   * 1. **ONLINE**   2. **OFFLINE**   **ONLINE**  People will access the monitor quality service in online mode.  **OFFLINE**  People will access the monitor quality service in offline mode. |  |
| **4. EMOTIONS: BEFORE / AFTER E**  How do customers feel when they face a problem or a job and afte  Using communication stretegy |

**Identify TR & EM**