

Project Design Phase - I Solution Fit Template

Project Title : Real-Time River Water Quality Monitoring And Control

Team ID: PNT2022TMID19515

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Team Members:

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3. CUSTOMER SEGMENT(S)

CS

Peoples,Farmers,Government authorities,

6. CUSTOMER CONSTRAINTS

CC

They have no proper devices to monitor the river water condition, and it is not possible for a person to continuously available near water resources and to check the condition of the water.

5. AVAILABLE SOLUTIONS

AS

Manual testing of water on periodic time intervals, which includes chemical test for ph, conductivity, turbidity etc..

4. JOBS-TO-BE-DONE /

J&P

- Check the water quality
- Check the PH level
- Check the chlorine level
- Check the temperature of water
- Check if the water is suitable for drinking and aquaculture
- Check the turbidity and conductive of water

9. PROBLEM ROOT

RC

- Global warming
- Deforestation
- Industry, agriculture and livestock farming.
- Rubbish and faecal water dumping.
- Maritime traffic
- Fuel spillages

7. BEHAVIOUR

BE

The customers can inform about the issue in the website. Then it can be verified by the local authority.They can even call via the website to the local authorities

3. TRIGGERS

TR

customers can be triggered when they came to know the dust content of the water, Authorities can be triggered when they find their people became ill because of the river water

4. EMOTIONS:BEFORE/AFTER

EM

Customers felt sad on thinking about the water condition, as normal people can't test the water daily, they need some device, eventhough when devices are available, they don't know where to report this issue.

10. YOUR SOLUTION

SL

- The process starts with extracting information from water resources like ph, dust content, and if the value reaches above certain value it should alert the authorities, so that they can go and announce the localities not to drink that water
- The node red platform is also a part of IBM Cloud, where it act as a backend, with graphical interface
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- The alert message will be sent to particular with the help of sms service platform Fast SMS

8. CHANNELS of BEHAVIOUR

CH

ONLINE :

- They can inform about the issue in website
- They can call the authorities via website

OFFLINE :

They can approach the local authorities via the location shown by the website.

Explore AS, differentiate

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

Identify strong TR & EM

Define CS, fit into CC

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

Identify strong TR & EM