Project Title: Efficient Water Quality Analysis and Prediction using Machine Learning

Project Design Phase-I - Solution Fit Template

Team ID: PNT202022TMID35159

Problem-Solution Fit canvas

Purpose / Vision

Version:

Define CS, fit into CL

1. CUSTOMER SEGMENT(S) — CS

- Urban people's
- Stakeholder's of RO based companies.
- Manufacturing companies.

6. CUSTOMER LIMITATIONS — EG. BUDGET, DEVICES — CL

- Spending power
- Budget
- Lack of efficient computer system
- Untrained customers

5. AVAILABLE SOLUTIONS — PROS & CONS — AS

- Chemical methods
- AI techniques

Explore AS, differentiate

Focus on PR, tap into BE, understand RC

2. PROBLEMS / PAINS + ITS FREQUENCY — PR

- Urban people are mostly self-employed their livelihood are not stable. So, this method will be a cost efficient method for them.
- To check whether the water quality is in compliance with the standards, and hence, suitable or not for the designated use.

9. PROBLEM ROOT / CAUSE — RC

People think that testing the water quality for normal usage are bad investment right now because their too expensive , and possible changes to law might influence the return of investment significantly and diminish the benefits .

7. BEHAVIOR + ITS INTENSITY — BE

- Choosing of efficient providers .
- When their expected standard of water is achieved we can expect this behaviour

Focus on PR, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS TO ACT — TR

- Seeing their neighbours using efficient water quality analysis method for their individual purpose.
- Reading about innovative and efficient solutions

4. EMOTIONS — BEFORE / AFTER — EM

- Before the implementation of this system people were infuriated about their water needs.
- After accomplishing this system they will be reimbursed .

10. YOUR SOLUTION — SL

This ML technique is an extension of the artificial neural network method; it has additional complex architectures that make this approach suitable for managing multi-dimensional inputs because of its high model configuration flexibility, greater generalization power, and robust learning capacity.

8. CHANNELS of BEHAVIOR — CH

ONLINE

Extract channels from behaviour block

OFFLINE

Extract channels from behaviour block and use for customer development

Extract online & offline CH of BE