Project Title: Efficient water Quality analysis and prediction using Machine learning.
Project Design Phase-I - Solution Fit Template

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

CS

Who is your customer?

1. Individuals
2. Farmers
3. Industrialist

6. CUSTOMER CONSTRAINTS

CC

What constraints prevent your customers from taking action or limit their choices.

1. Unaware of water suspended particles.
2. Lack of knowledge on scientific methods to measure water quality.
3. Lack of efficient water Quality measure technique.

5. AVAILABLE SOLUTIONS

AS

Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have?

Reverse osmosis filters.
Copper filters.

PROS:
1. Removes harmful water suspended particles.
2. Removes salinity.

CONS:
1. High maintenance cost.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE/COMPLETED

J&P

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

1. To analyze and predict the water Quality using scientific metrics.
2. Awareness on scientific method to measure water Quality.

9. PROBLEM ROOT CAUSE

RC

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

1. Water pollution.
2. Dumping of hazardous Industrial chemicals(waste) into river waters.

7. BEHAVIOUR

BE

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

1. Installing RO systems.
2. Installing Copper filters.
3. Bleaching the water stored in tanks.

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

3. TRIGGERS TR

What triggers customers to act?

Fear of water borne disease and frustration due to health issues.

4. EMOTIONS: BEFORE / AFTER EM

How do customers feel when they face a problem or a job and afterwards?

Before:
1. Frustration and Stress.
2 .Fear of water borne diseases.

After:
1. Happy and Secure.
2. Healthy life.

10. YOUR SOLUTION SL

Collecting water samples from different water sources and determining the essential components that improve water quality. Then, by using appropriate machine learning techniques on the data gathered, the water quality can be measured.

8. CHANNELS OF BEHAVIOUR CH

8.1ONLINE

What kind of actions do customers take online?

1. Browsing the web to learn about the techniques to measure water Quality.
2. Learning about hazardous water suspended particles.

8.2 OFFLINE

What kind of actions do customers take offline?

1. Installing Ro systems.
2. Drinking boiling water.