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

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

CS

Who is your customer?

1) Farmers

2) Elderly people, infants (individuals)

3) School, College, Hospital etc..

6. CUSTOMER CONSTRAINTS

CC

What constraints prevent your customers from taking action or limiting their choices?

1)Requires high-quality and efficient water quality analysis at a low price.

2)Unawareness of the new advanced water quality methods.

5. AVAILABLE SOLUTIONS

AS

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

1)Ozone treatment
2)Reverse Osmosis
3) Chlorine Treatment

Pros:
Provides water without harmful microorganisms and unwanted minerals.
Cons:
It is not cost-effective and requires regular maintenance.

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.

2)The dataset is updated regularly.

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)Individuals' lack of awareness

2) Requires that the machine and water storage devices be properly maintained.

7. BEHAVIOUR

BE

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

1) Convenience, flexibility, and service

2) Consider the project's budget.

3) Determine the precision of the water quality

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

3. TRIGGERS TR

What triggers customers to act?

Advertising and educating the people about the importance of water quality for good health.

4. EMOTIONS: BEFORE / AFTER EM

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

Before:

1) **Because the consumer consumes impure water, he is concerned about his health.**

After:

2. Customers feel that by drinking our project's high-quality water, they are protecting their health.

10. YOUR SOLUTION SL

Gathering data from many water bodies for the analysis.Our solution incorporates machine learning to find the water quality analysis and give the user more precise findings and some analysis to predict the outcome and generate the outcome.

8. CHANNELS OF BEHAVIOUR CH

8.1 ONLINE

What kind of actions do customers take online?

The consumer carefully reads the information and descriptions when making purchases, and they figure out the overall cost, taxes, services, and other costs.

8.2 OFFLINE

What kind of actions do customers take offline?

1)Consuming filtered water
2)Installing a reverse osmosis system