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

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

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

> The people who works in agriculture sector (farmers) uses the river water for yielding corps.

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

> Water Quality Monitoring system (WQM) is a cost-effective and efficient system designed to monitor drinking water quality and reduce the pollution which makes use of Internet of Things (IoT) technology.

7. BEHAVIOUR — BE

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

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)

> pH test strips and color disk tests are widely available. More expensive, higher-tech options include electrode-based pH meters. pH is a measure of hydrogen ion activity, which means that it tells us how acidic or basic the

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

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Who is your customer?
i.e. working parents of 0-5 y.o. kids

> Using different sensors, this system can collect various parameters from water, such as pH, dissolved oxygen, turbidity, conductivity, temperature, and so on. The rapid development of WSN technology provides a novel approach to real-time data acquisition, transmission, and processing.

6. CUSTOMER CONSTRAINTS — CC

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.

> This system uses different sensors for monitoring the water quality by determining pH, turbidity, conductivity and temperature. The Arduino controller used will access the sensor data. With the use of IoT, the collected data is analyzed and the pollution of water can be investigated by a stringent mechanism.

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? i.e. pen and paper is an alternative to digital notetaking

> Smart water systems based on internet of things (IoT) sensors, big data and analytics can reduce the amount of water that's wasted during agricultural and manufacturing processes, improve the efficiency of water distribution systems and alert companies if toxins or other impurities are detected

Explore AS, differentiate

3. TRIGGERS `TR`

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

We are building a IoT based Irrigation System using ESP8266 NodeMCU Module and DHT11 Sensor. It will not only automatically irrigate the water based on the moisture level in the soil but also send the Data to ThingSpeak Server to keep track of the land condition

4. EMOTIONS: BEFORE / AFTER `EM`

How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design.

BEFORE:
- Before implementing this IOT project people faced some difficulties to enjoy boating, fishing, and provision safe drinking.
- They also face major problems in the development of industrial, hydroelectric, and agricultural water requirements in the water quality.

AFTER:
- After implementing this project people can be able to overcome all these above-mentioned difficulties easily with this..

10. YOUR SOLUTION `SL`

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

Water quality monitoring is demarcated as the assortment of data at set or desired places and at periodic intervals for providing information that might be accustomed to describe present conditions of water. The objectives of smart water quality monitoring system are:

1.To measure perilous quality metrics like physical, chemical and microbial properties.

2.To find the deviations in measured metrics and give timely warning in recognition threats or hazards.

8. CHANNELS of BEHAVIOUR `CH`

8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7

8.2 OFFLINE
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

ONLINE:
1.Public may provide review and rating for the system.
2.The software used should be properly studied by everyone to operate it.

OFFLINE:
1.Connectivity. This doesn't need too much further explanation.
2.Things. Anything that can be tagged or connected as such as it's designed to be connected.