# **Problem-Solution fit** canvas 2.0

Purpose/Vision: Real-Time River Water Monitoring To Address The Issue Of Degrading Water Quality

### 1. CUSTOMER SEGMENT(S)

CS

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

People residing near the banks of river and Government sectors which monitors the water auality

### 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.

- Sensors used to monitor the river quality require high maintenance and handling of security aspects.
- Real time monitoring of quality of water sometimes doesn't work well when the network connection is improper.

### 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

Since Real time monitoring doesn't work in all conditions of environment customers can periodically monitor the quality of river

# Explore AS, differentiate

## 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.

- To monitor the amount of different chemicals discharged by industries.
- To monitor the level of oxygen in water which is essential for the life in underwater.
- To find main source which emits major pollutants.

### 9. PROBLEM ROOT CAUSE

RC

SL

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

- Being careless and irresponsible about the negative effects of dumping huge amounts of waste in rivers.
- Lack of enlightenment among citizens and business workers and people involved in polluting of water about the long-term effects and its huge impact in turn on them.

### 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)

- Customer tries various methods of water purification to make it potable for their daily usage
- People have started taking water saving and preventing wastage in every place possible

### 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.

People when coming to know about the marine life dying and water becoming unfit to drink become conscious. Education triggers customers to act.

### 4. EMOTIONS: BEFORE / AFTER

EM

Before they get to the point of realizing their implications, the customers expressed no regret about their actions. After the problem goes live, some feel guilty, some still don't express regret, while the other are ready to combat the problem

### 10. YOUR SOLUTION

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.

There are plans to possibly include alert systems, warning LEDs, buzzers, and utilization of ML algorithms like ECLAT and wA\* method to evaluate the frequency at which a river is being polluted and to estimate future pollution levels using existing metrics while the river is being monitored

### 8. CHANNELS of BEHAVIOUR

CH

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

The customers discuss the issue in Reddit Forums, write cover page articles, make short-films, and use Quora/Medium to shed light on the issue

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

Some organize campaigns, fundraisers, awareness drives, or get in touch with NGOs and other welfare executives while a few make it their agenda



ä

Define

Focus on J&P, tap into BE, understand

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