

### 1. CUSTOMER SEGMENT(S)

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

- Municipality and
- Local authorities of Metropolitan cities of India

CS

### 6. CUSTOMER CONSTRAINTS

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.

- Lack of proper waste management technology within budget
- A robust cloud service to analyze and process the data acquired from the garbage bins

CC

### 5. AVAILABLE SOLUTIONS

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

- Collection of garbage from the trash bins by the trucks in fixed routine.
- If the garbage bins are not filled it will be a waste of manpower, fuel and time.

AS

### 2. JOBS-TO-BE-DONE / PROBLEMS

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

The fixed routine for waste collection is inefficient as the average citizen may not dispose of the same amount of waste every day leading to overflowing bins and no proper communication channel to alert the municipality of this issue and schedule pick-ups.

J&P

### 9. PROBLEM ROOT CAUSE

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.

- Alarming generation of waste due to population growth and urbanization.
- There is no way for us to know when the garbage cans are full.
- This leads to overflowing of garbage cans and an unhygienic environment.

RC

### 7. BEHAVIOUR

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)

- People wait for the garbage to be cleared by the trucks until the next day.
- There is no direct way to contact the truck drivers for the people.

BE

### 3. TRIGGERS

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

- News about disease-causing mosquitoes in uncleaned garbage bins.
- Garbage dumps lead to bad odor.

TR

### 4. EMOTIONS: BEFORE / AFTER

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.

People feel disgusting when seeing uncleaned garbage dumps.  
People feel relieved after cleaning garbage at right time.

EM

### 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.

A Web application is developed in which data of garbage bins collected are monitored.

Sensors are used to collect the required data.

The real-time monitoring system indicates whether the bin is full or not and alerts the authorized person to empty the bin.

SL

### 8. CHANNELS of BEHAVIOUR

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

Customers must complain the government online with uploading pictures of their uncleaned garbage bins and its consequences.

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

Customers must complain to the local authority by writing a letter about waste maintenance.  
Also can go to a private waste cleaning authority for help.

CH