

Define CS, fit into CC

## 1. CUSTOMER SEGMENT(S)

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

- Public
- Garbage collection team, Municipalities.

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.

- Maintain clean environment.
- Lack of waste management.
- Automation of 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

- Separation of garbage into bio-degradable and non-biodegradable.
- Recycling of waste and making a useful byproduct.
- Digital information should be made in order to collect the data to achieve efficiency, transparency and sustainability.

AS

Explore AS, differentiate

RC

## 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.

- To reduce the contamination of disease.
- To control the overflow of garbage.
- To intimate the Municipalities when the garbage limit is exceeded.

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.

- The over flow of waste in garbage bins is not monitored regularly.
- Lack of proper waste management makes the environment unclean which may lead to various diseases.

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)

- In order to control the overflow of garbage a sensor is to be inserted and thus the overflow of garbage is controlled leading to a clean environment.

BE

Foc RC understand BE, integrate J&P on

Strong TR & EM

## 3. TRIGGERS

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

- By seeing the neighboring countries, it makes us to do things and by come to know the startup ideas.

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

- Before solving the problem people feels more difficulties such as unclean environment, bad odour due to overflowing and unattended waste.
- After solving the problem they feel comfortable than the previous system of the waste management and be less worried about the contaminated diseases..

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.

- In the present situation, the garbage overflow is not collected regularly sometimes thus results in pollution.
- Here we use IOT based application in which the garbage management is automated.
- Sensors are used to note the garbage level and send alert messages accordingly along with there's a web portal shows the location of garbage for easier access.

SL

## 8. CHANNELS of BEHAVIOUR

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

- With the results from the sensors and the corresponding location from the portal we can easily identify the garbage location i.e., from where the alert messages are received.

### OFFLINE

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

- The separated garbage on the basis of the given input were collected and the ones which could be recycled are converted into products.

CH

B