Project Title: Smart Waste Management system for Metropolitan Cities

Project Design Phase-I - Solution Fit Template

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

CS

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

Public sectors,private individuals , property owners , many other companies

people in any locality with municipal corporation in their area

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.

Being technology based, it needs an internet connection to work.

Customers may need some devices to access the bin

Alternative power sources like solar energy can beused.

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 note

Digital trash cans are a good alternative to traditional dustbin becausethey can monitor how full they are and send notifications to customers.

Think about ways to shop more eco-friendly by using reusable bags.

Explore AS, differentiate

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.

Proper Maintenance

Separate degradable and non-degradable wastes

Declining the capital investments

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.

irregular collection of bins .

municipal corporations donot know the informationregarding the bins.

difficulty in appointing proper pathway for garbage collection

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)

Take the survey of usage and faults

First setup a garbage monitoring system

setup the system after correcting the flaws

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

Identify strong TR & EM

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.

comparison by neighbouring areas

after using our product people will admire it

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 using our product , society suffered many health issues

air pollution due to the stagnant wastes

After using our product , they feel a clean society

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.

Using ultrasonic sensor to monitor the garbage bins.

An application for interactionwith customers

Identifying the filled bins and plotting the shortest pathwayfor the transportation

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: there would be an immediate complaint if the garbages are'nt collected

online: sometimes customers may feel difficult to use online applications

offline:
the offline process of knowing the details aboutgarbage bins is difficult one and time consuming.

Identify strong TR & EM