Project Title: Smart Waste Management for Metropolitan Cities. Project Design Phase-I - Solution Fit Template

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1. CUSTOMER SEGMENT(S)

Who is your customer?

Our customers may be municipal corporation and private company in charge of emptying the dustbin and reinstalling.

6. CUSTOMER CONSTRAINTS

What constraints prevent your customers from taking action or limit their choices of solutions?

Proper infrastructure and mainly funding for the digital IOT device .

5. AVAILABLE SOLUTIONS

Which solutions are available to the customers when they face the problem?

LORA module to send the sensor data and GPS module to send the trash bin location. $\label{eq:localization} % \begin{center} \end{center} % \begin{center}$

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Weight sensor to detect the weight of the bin.

2. JOBS-TO-BE-DONE / PROBLEMS

We would mainly concentrate in the checking of overflow of the bin and clear the waste as fast as possible.

9. PROBLEM ROOT CAUSE

Mainly there is no proper monitoring system for corporation and private companies who collect the waste, which is also creating the overflow of the dustbin in local bin.

7. BEHAVIOUR

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

The customer which is either corporation or the private company may install other sensor such as ultrasonic sensor for better sensing.

3. TRIGGERS

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This would trigger other area people to install smart bins because of its great efficiency.

10. YOUR SOLUTION



I would have proposed the same IoT device that we are currently working on for waste management.

8.CHANNELS of BEHAVIOUR



8.1 ONLINE

The bin level related data would be obtained in online dashboard

8.2 OFFLINE

They would be able to get the fully filled trash bins and would be removing the waste and loading in truck.

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4. EMOTIONS: BEFORE / AFTER

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How do customers feel when they face a problem or a job and afterwards?

They would be frustrated because of the overflowed garbage bins.