Problem-Solution fit canvas 2.0

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

IoT Based Smart Garbage System which indicates directly that the dustbin is filled to a certain level by the garbage and cleaning or emptying them is a matter of immediate concern.

6. CUSTOMER

CC

This prevents lumping of garbage in the roadside dustbin which ends up giving foul smell and illness to people. The design of the smart dustbin includes a single by ultrasonic sensor which configured with Arduino Uno with this research

5. AVAILABLE SOLUTIONS

AS

The new waste management system covers several levels of enormous workforce. Every time labourerS must visit the garbage bins in the city area to check whether they are filled or not.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS

J&P

This Waste management is one of the serious challenges of the cities,the system now used in cities, we continue to use an old and outmoded paradigm that no longer serves the entail of municipalities

9. PROBLEM ROOT CAUSE

RC

General Load Cell related information A load cell is meant to measure the size of a mass but actually is a force sensor which transforms force into an electrical signal. The load cell needs the earth gravity to work.

7. BEHAVIOUR

BE

The waste management system in [9] was developed using RFID, GIS and GPS inter-faced with a low-cost camera for monitoring of solid waste [9]. The main goal of the system was to monitor the waste content of the bin using an RFID tag attached to each bin.

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

Identify strong TR & EM

3. TRIGGERS

TR

The system under consideration consists of smart trash bins with a real-time monitoring system which integrates multichoices, such as ultrasound distance, along with a LoRa E32 TTL-100 433 MHz transmission module. Low energy use was considered throughout the design process.

4. EMOTIONS: BEFORE / AFTER

EM

a common theme across all of the reports was the fact that where a reduction in food waste arisings had been observed, there was limited data to confirm how much food waste had simultaneously been diverted from the residual waste stream to home composting and how much was
a result of at source waste prevention behaviour.

10. YOUR SOLUTION

SL

Sensoneo is redefining smart waste management. Its leading enterprise-grade waste management solution provides cities with a robust, scalable, secure and easy-to-deploy solution hosted in the cloud-based MS Azure, enabling high availability and redundancy capabilities. As such, Sensoneo can scale its solution according to customer's' needs and can connect any number of sensors per city.

8. CHANNELS of BEHAVIOUR

CH

The waste management system currently used in cities still follows an old and outdated model that no longer meets the needs of municipalities. It is inefficient and practiced through large fleets of collection trucks that travel daily long distances, often by unnecessary routes, where others are discovered, and with daily or weekly service schedules. These aspects bring unnecessary costs, waste of time and, more significantly, environmental damage, not only by the emission of gases from the burning of fossil fuel.

Extract online & offline CH of BE