Project Design Phase-I - Solution Fit Template

Project Title: SMART WASTE MANAGEMNET SYSTEM FOR METROPOLITAN CITIES

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Define CS, fit into CC

CUSTOMER SEGMENT(S)

CS

The customers of smart waste management system are Municipal officers , Common people , Families and Cooperation.
A smart waste management system allows sanitation workers and employees to obtain real-time data, which helps prevent the bins from overflowing, contributing to healthier and smarter cities.

CUSTOMER CONSTRAINTS

- Lack of waste collecting points
- Inadequate waste collecting vehicles
- Limited access to waste bins
- Irregularity of waste collection
- Large amount of waste and space limitations

AVAILABLE SOLUTIONS

- Reduce, Reuse and Recycling method .
- Segregation of wates
- Focus on waste prevention.

Explore AS, differentiate

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

JOBS-TO-BE-DONE /PROBLEMS

Proper employee placement

Employee retention

Excessive downtime

Overcoming poor quality recyclables

RC

PROBLEM ROOT CAUSE

Improper waste management

Rising population

Urbanization and through industrial waste

Hospitals and drug companies

Construction that includes dust, cement , rocks etc.

BE

BEHAVIOUR

The customer will be notified if the bin gets filled and it can be emptied before the waste gets littered on the ground. Notification will be given to the customer whenever the trash bin is about to fill.

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

Identif

TRIGGERS

- Worry about littering of garbages.
- Animals may eat plastic waste
- Fear about spreading of diseases
- Environmental Pollution.

TR

EMOTIONS: BEFORE / AFTER

BEFORE:

Worry about environmental pollution

Fear of high life risk to cattle.

Fear of spreading of diseases

AFTER:

Hygiene environment

Less pollution

EM

YOUR SOLUTION

Our solution is to implement ultra sonic sensor which senses upto some distance can be used.

Using IOT technology, the garbage level monitoring and notification are done.

If the level of the trash bin goes beyond a certain threshold level then the sensor devices notifies.

This activity is monitored by the municipality cooperation and the trash bin is made to be cleared.

SL

CHANNELS of BEHAVIOUR CH

ONLINE:

The authorities keep a track of the trash bin with the help of the ultra sonic sensors, Arduino board and the lcd display.

OFFLINE:

The workers reach the location immediately
and empty the trash bin before it gets littered on the ground.