

# PROBLEM SOLUTION - FIT

## 1. CUSTOMER SEGMENT(S)

Residential Areas  
and Streets

Government Buildings and  
College Campuses

House

Malls

Hospitals

## 2. CUSTOMER CONSTRAINTS

Lack of Waste Bins

Irregularity of Waste Collection

Inadequate Waste Collection Vehicles

Inadequate Access to Waste Bins

Alternatives to Final Waste Disposal  
(Burning and Illegal Dumping)

Improper Waste Separation Facilities.

## 3. TRIGGERS

Alert on improper disposal

Predictions for bin fullness.

Detailed database of bins and stands.

Interactive bin map including Street  
view. Route planning for waste collection.

## 4. JOBS TO-BE-DONE / PROBLEMS

- The dumps are a source of complex pollution (air, water, soil, and biodiversity) which threatens the public health.
- Mixed waste fractions (municipal, agricultural, construction and demolition, WEEE, bulk items), including hazardous streams, are disposed in such sites causing serious public health issues.

## 5. ROOT CAUSE

Smart waste management is characterized by the usage of technology in order to be more efficient when it comes to managing waste.

This makes it possible to plan more efficient routes for the trash collectors who empty the bins, but also lowers the chance of any bin being full for over a week!

## 6. BEHAVIOUR

First, setup Smart Garbage Management System in the public places

Take survey on the usage and drawbacks if any.  
If the people are satisfied with the demo, then  
Setup the smart Waste Management system in all places.

## 7. SOLUTION

If in any area waste overloaded is detected the admins will be notified along with the location.

In the web application, admins can view the sensor parameters.

The parameters like hazardous waste levels and location data are published to the Watson IoT platform.

The device will subscribe to the commands from the application and take decisions accordingly and sensor data is visualized in the Web Application.

