

- **REQUIREMENT ANALYSIS**
- **CUSTOMER JOURNEY**
- **DATA FLOW DIAGRAMS**
- **TECHNOLOGY ARCHITECTURE**

# Smart Waste Management System for Metropolitan Cities

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## Functional Requirements

### Objectives :

The main objective of the smart waste management system is to develop a new type of waste management in government and individual waste treatment industries to gather waste material for the purpose of recycling and disposal of human waste products, electronics, medical to be disposed safely with usage of multiple modern developed web-based user management and IOT devices based on the garbage bin.

### End result :

The garbage bin consists of IOT devices at the top and bottom of the garbage bin which helps to analyze the weight and the amount of space in the dustbin which helps the worker and the waste management to acquire data of waste products dropped by people at individual location in order to maintain and collect and cover a vast area of the city with the report given by the garbage bins.

### Focus :

The customer or the person who proceeds to drop waste in the dustbin must notify the type of waste that was dropped. The method will help prevent liquid matter which is dropped which may cause damage to the IOT devices in the bottom. Since the specification is known only to the Smart city management team, they must advise the worker to conduct a journey to analyze how people drop their waste based on their activities which help the worker to advise the customer to be aware of the device inside the dustbin.

### Essentiality :

The IOT device must send data to the Smart city waste management team in order to check the level of the dustbin space and the area location where it currently moves. It must send indication level time to time for filling of the waste products. The localized dustbin may vary from small dustbin to bigger truck as the IOT devices may be eligible for both of them.

# Customer Journey Map

	Awariness	Interact	Engage	Submit
Objectives	How much wastage you have ?	Identify the wastage ask to drop it	Maintaining the level and area of location	Statistics obtained to wastage department
Needs	Household bin to drop	Sharing of bin to department	Kind intraction with the worker	Satisfaction
Barriers	Weightage	Must provide the type of wastage dropping	Maintain distance while dropping	Convinced

# TECHNOLOGY ARCHITECTURE

