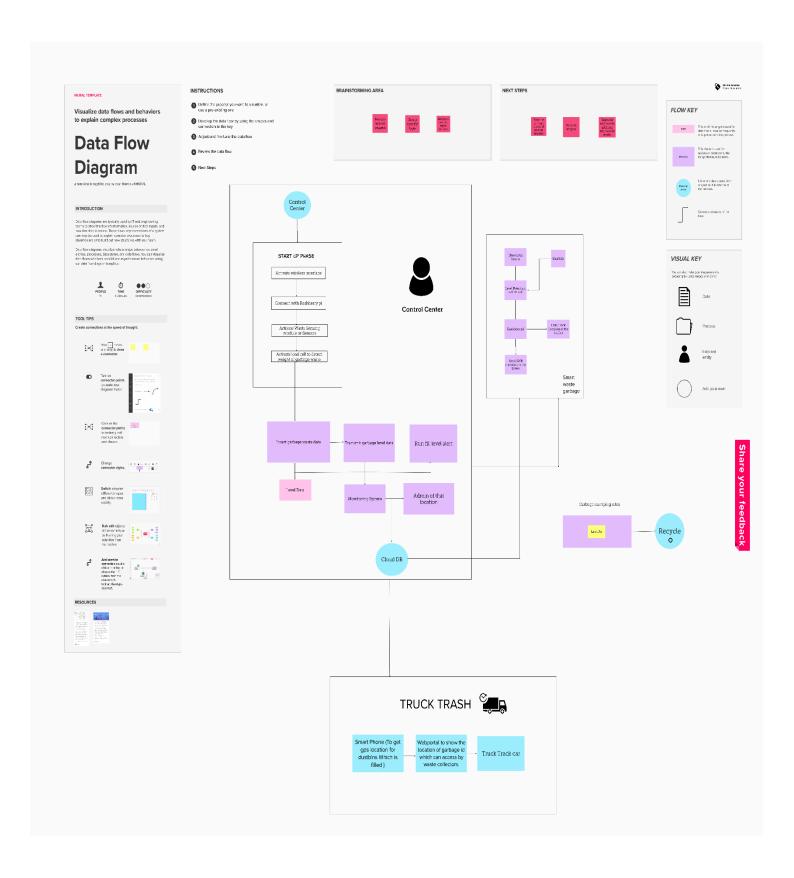
## Smart waste Management system for Metropolitan Cities Team ID:PNT2022TMID47513



## **Data Flow Diagrams:**

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically.

It shows how data enters and leaves the system, what changes the information, and where data is stored.

A smart waste management platform uses analytics to translate the data gather in your bins into actionable insights to help you improve your waste services.

You can receive data on metric such as:

- 1. The first test conducted is the situation where the garbage bin is empty or its garbage level is very low
- 2. Then, the bin is filled with more garbage until its level has surpassed the first threshold value, which is set to 80% then the first warning SMS is being sent, as depicted
- 3.The first notification SMS sent by the system, once the waste reaches the level of 85% full. The second notification SMS sent by the system, indicating that bin is at least 95% full and the garbage needs to be collected immediately.
- 4.Locations prone to overflow.
- 5. The number of bins needed to avoid overflowing waste. The number of collection services that could be saved.
- 6. The amount of fuel that could be saved.
- 7. The driving distance that could be saved.

## **User Stories**

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User Type	Functional requirement (epic)	User Story Number	User story / Task	Acceptance Criteria	Priority	Release
Admin	Login	USN-1	As an Admin, I gave user id & password for every workers & manage them.	I can manage web account / dashboard.	Medium	Sprint-2
Co Admin	Login	USN-2	As a Co admin, I'll manage garbage level monitor. If garbage get filling alert I'll post location & garbage id to trash truck.	I can manage garbage monitoring.	High	Sprint-1
Truck Driver	Login	USN-3	As Truck Driver, I'll follow the route send by Co Admin to reach the filled garbage.	I can drive to reach the garbage filled route in shortest route given.	Medium	Sprint-2
Local Garbage Collector	Login	USN-4	As a Waste Collector, I'll collect all the trash from garbage & load into garbage truck &send them to landfill.	I can collect trash & pulled to truck & send off.	Medium	Sprint-2
Municipality	Login	USN-5	As a Municipality, I'll check the process are happening in discipline manner without any issues.	I can manage all these process going good.	High	Sprint-1