

## Project Design Phase-I

### Proposed Solution

Date	20 <sup>th</sup> October 2022
Team ID	PNT2022TMID05196
Project Name	Smart Waste Management System For Metropolitan Cities
Maximum Marks	2 Marks

### Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>This project deals with the problem of Waste Management in smart cities, where the garbage collection system is not optimized. This project enables the organization to meet their needs of smart garbage management systems. This system allows the user to know the fill level of each garbage bin in a locality or city at all times, to give a cost-effective and time saving route to the truck drivers.</p>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>• Garbage level detection in bins</li><li>• Getting the weight of the garbage in the bin.</li><li>• Alerts the authorized person to empty the bin whenever the bins are full.</li><li>• Garbage level of the bins can be monitored through a web App.</li><li>• We can view the location of every bin in the web application by sending GPS location from the device.</li></ul>
3.	Novelty / Uniqueness	<p>Our automated waste collection system powers smart and sustainable cities around the world. Automated Waste Collection improves hygiene and minimises use of garbage trucks. Odour free bins using</p>

		fragrant releaser. Displaying the accurate location of the bins to the garbage collectors.
4.	Social Impact / Customer Satisfaction	There is no contact between the hands of the user and dustbin. It is an effective way of reducing trash and keeps the environment clean and more hygienic. It also saves the time of the user. It is more convenient and efficient. This is ideal for busy location. This can store in all kind of renewable and non renewable materials.
5.	Business Model (Revenue Model)	Waste Management generates revenue through the provision of various waste management and disposal services and recycling solutions to residential, commercial, industrial, and municipal clients. The Company derives its revenue in the form of various fees associated with its service offerings.
6.	Scalability of the Solution	Our solution that we provide based on IOT like Smart dustbin using Battery and Arduino UNO. So, here the solution scalability is about how the battery level runs and how long the Smart dustbin responds to the user.