PROJECT DESIGN PHASE-I
PROPOSED SOLUTION

Date	24 September 2022
Team ID	PNT2022TMID19946
Project Name	**Smart Waste Management Systemfor Metropolitan Cities**
Maximum Marks	2 Marks

1.PROBLEM STATEMENT

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.

1.IDEA/SOLUTION DESCRIPTION

In this case,the user can use the dustbin Indoors and Outdoors.

1. Garbage level detection in bins.
2. Getting the weight of the garbage in the bin.
3. Alerts the authorized person to empty the bin wheneverthe bins are full.
4. Garbage level of the bins can be monitored through a webApp.

5. We can view the location of every bin in the web application by sending GPS location from the device.

PROBLEM STATEMENT

The dumping of waste in the surroundings leads to serious health issues and there is no proper method to manage the waste generated.

2.NOVELTY/UNIQUENESS

Our automated waste collection system powers smart and sustainable cities around the world. Automated Waste Collection improves hygiene and minimises use of garbage trucks.
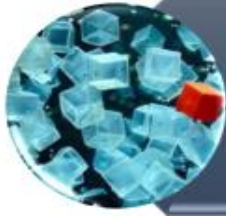
SOLUTION DESCRIPTION

A smart way to manage the waste generated and thereby providing an alert message to the authority.

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.

NOVELTY

Once the level of the waste reaches a threshold level,
an immediate message is given to the authority.

so that the dustbin is replaced before it gets filled completely thereby
preventing the overflow of waste in the surroundings

3.BUSINESS 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.

CUSTOMER SATISFACTION

There is no need for manual monitoring,the time is saved,
prevents from several health issues.

4.SCALABILITY OF 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 how long the Smart dustbin response to the user.

FINANCIAL BENEFIT

It is userfriendly.It is beneficiary for all kinds of people.

SCALABILITY OF SOLUTION

It is possible to implement in any surroundings and
it can withstand any kind of temperature and pressure