

Project Design Phase -1

Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID28956
Project Name	Smart Waste Management System For Metropolitan Cities
Maximum Marks	2 Marks

Proposed Solution Template :

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	This project enables the organizations to meet their needs of smart garbage management systems. This system allows the authorized person 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.
2.	Idea / Solution description	<p>The key research objectives are as follows:</p> <ul style="list-style-type: none">• The proposed system would be able to automate the solid waste monitoring process and management of the overall collection process using IOT (Internet of Things).• The Proposed system consists of main subsystems namely Smart Trash System(STS) and Smart Monitoring and Controlling Hut(SMCH).• In the proposed system, whenever the waste bin gets filled this is acknowledged by placing the circuit at the waste bin, which transmits it to the

		<p>receiver at the desired place in the area or spot.</p> <ul style="list-style-type: none"> • In the proposed system, the received signal indicates the waste bin status at monitoring control system.
3.	Novelty / Uniqueness	<p>We are going to establish SWM in our college but the real hard thing is that janitor (cleaner) don't know to operate these thing practically so here our team planned to build a wrist band to them, that indicate via light blinking when the dustbin fill and this is Uniqueness we made here beside from project constrain.</p>
4.	Social Impact / Customer Satisfaction	<p>From the public perception as worst impacts of present solid waste disposal practices are seen direct social impacts such as neighborhood of landfills to communities, breeding of pests and in property values.</p>
5.	Business Model (Revenue Model)	<p>Waste Management organizes its operations into two reportable business segments: Solid Waste, comprising the Company's waste collection, transfer, recycling and resource recovery, and disposal services, which are operated and managed locally by the Company's various subsidiaries, which focus on distinct geographic areas; and Corporate and Other, comprising the Company's other activities, including its development and operation of landfill gas-to energy facilities in the INDIA, and its recycling brokerage services, as well as various corporate function.</p>

6.	Scalability of the Solution	The proposed system uses sensor and communication
		technologies where waste data is collected from the smart bin, in real-time, and then transmitted to an online platform where citizens can access and check the availability of the compartments scattered around a city.