

Project Design Phase-I
Proposed Solution Template

Date	17 NOVEMBER 2022
Team ID	PNT2022TMID07317
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)	<p>An inefficient waste management may create serious environmental impacts like infectious diseases, land and water pollution, climate changes.</p> <ul style="list-style-type: none"> ▪ Timely collection of trashes is an essential part of the problem ▪ Collecting wastes during morning and evening leads to more traffic in metropolitan cities
2.	Idea / Solution description	<ul style="list-style-type: none"> ▪ The proposed system constructed to the top of the bins to detect bin level status and alert the admin through a cloud service-based application ▪ The application provides a monitoring platform for the waste management institution to handle the alert records by creating orders for the garbage collectors/drivers which can be accessed via a mobile application system
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> ▪ All time monitoring system ▪ Alerting the authorised person once the bin about to fill ▪ Cloud based mobile application ▪ IOT based smart mechanised bin
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> ▪ Reduce traffic and time efficient ▪ Environmental and user friendly ▪ Reduce man power deployment in one time
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ▪ This initiative intends to assist municipal corporation ▪ By cutting back on unneeded transportation costs to pointless locations, this lowers a significant amount of fuel costs for city businesses ▪ Leads to a safe and healthy environment
6.	Scalability of the Solution	<ul style="list-style-type: none"> ▪ The constant monitoring of trash cans by human labour saves a lot of time

		<ul style="list-style-type: none">▪ It may be modernised to utilise automated rubbish pickup by trucks▪ There is no need to establish something new▪ Existing trash cans are somewhat changed
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