Project Design Phase-I
Proposed Solution

Date	05 October 2022
Team ID	PNT2022TMID47513
Project Name	Smart Waste Management System For Metropolitan Cities
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	This project is based on management of waste in metropolitan cities, where the garbage collection system is not optimized. An inefficient waste management creating serious environmental issues like bacterial infections, climate changes, pollution. Here smart waste management system is used for proper disposal of waste by using IOT.
2.	Idea / Solution description	The key objectives are, 1.The proposed system would monitor the waste and manage the overall collection using Internet Of Things (IOT) 2.The proposed system monitors the waste bins, whenever the waste bins gets filled, it notifies to the receiver. 3.In proposed system, the received signal indicates the waste bin status and controlling system.
3.	Novelty / Uniqueness	We are going to establish SWM in our college. But in practical the hard thing is to operate cleaner. So here our team planned to build a wrist band to them, that is indicated by light blinking when the bins are filled.
4.	Social Impact / Customer Satisfaction	A reduction in the number of waste collections needed by up to 80%, resulting in less manpower, emissions, fuel use and traffic congestion. A reduction in the number of waste bins needed. Analytics data to manage collection routes and the placement of bins more effectively. Major satisfaction of waste management-conservation of natural resources, reduction of air, water & land pollution, support for community development.

5.	Business Model (Revenue Model)	1.Waste Management generates revenue through the provision of various waste management and disposal services and recycling solutions residential, commercial, Industrial and Municipal clients. 2.Corporate and other comprising the Company's other activities, including its development and operation of landfill gas-to-energy facilities in India, and its recycling brokerage services, as well as various corporate functions.
6.	Scalability of the Solution	To make an city smart, moreover many discussion are undertaken all around the world to solve this issue. 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.