Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID48570
Project Name	Project – smart waste management in metropolitain 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)	The garbage trucks receive timely alrets when bins are ready to be emptied.Forecast when bins will be full: over time,historical data collected by sensors can be used to identify fill patterns,optimize driver routes & schedules.Reduce operation cost by 50%
2.	Idea / Solution description	Smart waste management is about using technology & data to create a more efficient waste industry based on iot technology smart waste management aims to optimize resourse allocation reduce running costs & increase the sustainability of waste services
3.	Novelty / Uniqueness	Due to using smart dumpsters there will be no need for a physical check for every container .This smart waste management solution reduces fuel consumption & cost
4.	Social Impact / Customer Satisfaction	Waste management services can benefit the citizens &the cities from IoT smart device solutions.using the technology,the companies can increase efficiency & enhance customer satisfaction ,ensuring minimal overflowing bins
5.	Business Model (Revenue Model)	Waste management generates revenue through the provision of various waste management & disposal services &recycling solutions to residental commercial ,industrial & municipal clients .the company derives its revenue in the form of various fees associated with its service offerings
6.	Scalability of the Solution	In this regard, smart city design has been increasingly studied and discussed around the world to solve this problem. Following this approach, this paper presented an efficient IoT based and real-time waste management model for improving the living environment in cities, focused on a citizen perspective. 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