Project Design Phase-I
Proposed Solution Template

Date	22 October 2022
Team ID	PNT2022TMID42867
Project Name	Smart Waste Management System For Metropolitan Cities

Proposed Solution Template:

S.No.	Parameter	Description
●	Problem Statement (Problem to be solved)	*Indiscriminate disposal of solid waste is a major issue in urban centers of most developing countries and it poses a serious threat to the healthy living of the citizens. *The rate at which solid wastes are produced in most developing countries is becoming alarming.
2.	Idea / Solution description	*The smart, sensor based dustbin will judge the level of waste in it and send the message directly to the municipal corporation. *It can sense all types of waste material either in the form of solid or liquid. *According to the filled level of the dustbin, the vehicles from the municipal corporation will choose the shortest path with the help of the "TRANSPORTATION SOFTWARE ", which will save their time. *It emphasizes on "DIGITAL INDIA ".
3.	Novelty / Uniqueness	* With the help of proper technology (GPS & SOFTWARE APPLICATIONS) we can guide the trucks to choose the shortest path. *It also favours the "SMART CITY" project and "DIGITAL INDIA". *Introducing Iot makes it smartest and easiest.

4.	Social Impact / Customer Satisfaction	*Reducing waste will not only protect the environment but will also save on costs or reduce expenses for disposal. *It keeps the surroundings clean and green, free from bad odour of wastes, emphasizes on a healthy environment and keeps cities more beautiful. *Reducing manpower required to handle the garbage collection. Reducing the diseases which are spread by the waste.
5.	Business Model (Revenue Model)	*By using this method the collection of waste in the city becomes easier. It helps in reducing air pollution, traffic flow, man power, time and money. *With the help of proper technology (GPS & SOFTWARE APPLICATIONS) we can guide the trucks in selecting the shortest path for garbage collection. *This project can add an edge to the cities aiming to get smart and people-friendly.
6.	Scalability of the Solution	*This project is very effective in managing waste in any big city. *Rather than using conventional periodic collection methods here priority system is used to ensure the city is clean all the time without any overflowing dumpsters. *It has been tested and verified properly to make sure all the different parts work together for a smooth function of the whole system.