

## Project Design Phase-1 Proposed Solution

Date	16/11/2022
Team ID	PNT2022TMID26538
Project Name	Smart Waste Management System For Metropolitan Cities - IoT
Maximum Marks	2 Marks

### Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"> <li>➤ Ravage and waste can cause environmental pollution.</li> <li>➤ Rotting garbage is the cause to produce harmful gases in the air and cause breathing problem to people.</li> <li>➤ Due to improper waste disposal, we may face several problems like unpleasant odour and severe health issues.</li> </ul>
2.	Idea / Solution description	<ul style="list-style-type: none"> <li>➤ To solve this problem of waste disposal , we can design a smart garbage bin with inbuilt sensors and IOT devices such like Arduino UNO , Raspberry pi, etc....</li> <li>➤ Garbage level and location intimation mechanism .</li> <li>➤ AI Recycling Robots.</li> </ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> <li>➤ Identify potential waste streams.</li> <li>➤ Create a waste management-focused community outreach plane.</li> </ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>➤ Neighbourhood of landfills to communities, breeding of pests and loss in property values.</li> <li>➤ The IOT solution uses the data and intimates the information to the local area of management department when it reaches the initial boundary line .</li> </ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>➤ It generates revenue through the provision of various waste management and disposal services.</li> <li>➤ Recycling solutions to residential , commercial , industrial, and municipal clients.</li> </ul>

6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>➤ Installing separate bins for collecting recyclable and non-recyclable wastes.</li> <li>➤ Recycling not only save energy but also prevent the material from going to landfills &amp; Incineration and provides raw materials for new products.</li> </ul>
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