

**Project Design Phase-I**  
**Proposed Solution Template**

Date	23/09/2022
Team ID	PNT2022TMID30107
Project Name	Project – Smart waste management system
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)	<ul style="list-style-type: none"> <li>❖ Rubbish and waste can cause air and water pollution.</li> <li>❖ Rotting garbage is also known to produce harmful gases mix with the air and cause breathing problem in people.</li> <li>❖ Due to improper waste disposal, we may face several problems like unpleasant odour and health problems.</li> </ul>
2. 002	Idea / Solution description	<ul style="list-style-type: none"> <li>❖ To solve this problem of waste management for disposal using a smart refuse bin built with technologies like Sensors, Arduino Yun.</li> <li>❖ Garbage truck Weighing Mechanisms.</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 selects optimum routes for waste collection trucks.</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 more bins fir collecting recyclables like paper, glass, plastic.</li> <li>❖ Recycling not only save energy but also prevent the material from going to landfills &amp; Incineration and</li> </ul>

		provides raw materials for new products.
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