

**PROJECT DESIGN PHASE -1**

**PROPOSED SOLUTION**

Date	24 September 2022
Team ID	PNT2022TMID01046
Project Name	SMART WASTE MANAGEMENT FOR METROPOLITAN CITIES

**Proposed Solution:**

S. No	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"><li>✓ The manual monitoring of wastes in trash cans is a laborious operation that requires additional time, money, and human labour</li><li>✓ Unsafe trash disposal is generating problems for people.</li><li>✓ Bad odour all around the place from uncollected trash or rubbish.</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>✓ This procedure uses a cloud connection and an ultrasonic sensor to determine the level of a rubbish container</li><li>✓ By developing an app, the company of a certain neighbourhood inside a large metropolis will be able to check the trash cans to see if they are full or not.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>✓ In contrast to the traditional ways for collecting trash cans, this strategy instructs us to utilise the transportation only when necessary.</li><li>✓ Keeping an eye on the trash cans easier and less labor-intensive for humans.</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>✓ People can experience a clean atmosphere.</li><li>✓ Reduces the amount of labour required from humans for waste disposal.</li><li>✓ For a municipal corporation to monitor the cleanliness of different areas of the city, this proposal will be quite helpful.</li></ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"><li>✓ By cutting back on unneeded transportation costs to pointless locations, this lowers a significant amount of fuel costs for city businesses.</li><li>✓ This initiative intends to assist municipal corporation.</li><li>✓ Provide a sanitary atmosphere.</li></ul>

6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>✓ The constant monitoring of trash cans by human labour saves a lot of time</li> <li>✓ It may be modernised to utilise automated rubbish pickup by trucks.</li> <li>✓ There is no need to establish something new.</li> <li>✓ Existing trash cans are somewhat changed.</li> </ul>
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