

Project Design Phase-I
Proposed Solution Template

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| Date | 24 September 2022 |
| Team ID | PNT2022TMID33070 |
| Project Name | SMART WASTE MANAGEMENT FOR METROPOLITAN CITIES |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

| S.No. | Parameter | Description |
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| 1. | Problem Statement (Problem to be solved) | <ul style="list-style-type: none">✓ The manual monitoring of wastes in waste bins is a cumbersome process and utilises more human effort, time and cost.✓ Irregular disposal of wastes causing trouble to people.✓ Foul smell around the place with uncollected wastes or garbage. |
| 2. | Idea / Solution description | <ul style="list-style-type: none">✓ This process is achieved by using a ultrasonic sensor to know the levels of garbage bin through cloud connection.✓ Creating an app, there by the corporation of a particular locality inside a metropolitan city can check the garbage bins whether they are filled or not. |
| 3. | Novelty / Uniqueness | <ul style="list-style-type: none">✓ Unlike the conventional methods for collecting garbage bins, this method tells us to use the transport only in required places✓ To reduce the human-effort and difficulty in monitoring the garbage bins. |
| 4. | Social Impact / Customer Satisfaction | <ul style="list-style-type: none">✓ People can experience a clean environment.✓ Reduces the human effort involving in the garbage disposal process.✓ This idea will be very much beneficial for a city corporation for monitoring the cleanliness of various parts of the city. |
| 5. | Business Model (Revenue Model) | <ul style="list-style-type: none">✓ This reduces a huge fuel cost to the city corporations by reducing the unwanted transport expenses to unnecessary places. |

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| | | <ul style="list-style-type: none"> ✓ This project aims to support the municipal corporations. ✓ Provide a clean environment. |
| 6. | Scalability of the Solution | <ul style="list-style-type: none"> ✓ A huge time is saved from frequent monitoring of garbage bins through human labours. ✓ It can be updated to automated garbage collection through vehicles. ✓ There is no need of new establishment of things. ✓ Already present garbage bins are modified slightly. |