

## Ideation Phase

### Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID35869
Project Name	Smart Waste Management For Metropolitan Cities
Maximum Marks	4 Marks

#### Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

#### Step-1: Team Gathering, Collaboration and Select the Problem Statement

1

##### Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕒 5 minutes

##### PROBLEM

How might we manage the amount of waste produced everyday by the Industries and the households.?

Due to the Increasing waste, the public bins which are used for collecting this waste are overflowing, the locality is jumbled of trash, causing not only malodorous streets but also a negative impact on the health and environment.

## Step-2: Brainstorm, Idea Listing and Grouping

2

### Brainstorm

Write down any ideas that come to mind that address your problem statement.

⌚ 10 minutes

Alerts the authorized person to empty the bin whenever the bins are full.	Route optimization for trucks for efficient pickup	Smart boats collecting wastes from water bodies	<b>Kablihan P</b>
Provide more Trash can for higher population density areas	Rewarding people for separation of waste	Using rovers for collection wastes in public parks	<b>Poornesh S</b>
A mechanical setup can be used for separating the wet and dry waste into separate containers here sensors can be used for separating wet and dry	Measuring the weight using load cell	We can view the location of every bin in the web application by sending GPS location from the device.	<b>Faarah Farheen M</b>
Establish Incentives for participation to minimise residual waste	A communication system that transfers this data to Cloud, data is processed in the Cloud, thus, the route of collection trucks is optimized.	Make source segregation mandatory	<b>Charu Sri J</b>

3

### Group Ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

⌚ 20 minutes

COLLECTION AND TRANSPORT OF WASTE		
Smart boats collecting wastes from water bodies	Route optimization for trucks for efficient pickup	Using rovers for collection wastes in public parks
IMPROVEMENT WITH RESPECT TO SOURCE(WASTE) SIDE		
Measuring the weight using load cell	Make source segregation mandatory	Provide more Trash can for higher population density areas
IMPROVEMENT WITH RESPECT TO AUTHORITY		
Alerts the authorized person to empty the bin whenever the bins are full.	Route optimization for trucks for efficient pickup	A communication system that transfers this data to Cloud, data is processed in the Cloud, thus, the route of collection trucks is optimized.
SPREADING AWARENESS AND USAGE OF TECHNOLOGIES		
We can view the location of every bin in the web application by sending GPS location from the device.	Establish incentives for participation to minimise residual waste	A mechanical setup can be used for separating the wet and dry waste into separate containers here sensors can be used for separating wet and dry

### Step-3: Idea Prioritization

4

#### Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

🕒 20 minutes

