


Ideation Phase

Brainstorm & Idea Prioritization

Date	24 September 2022
Team ID	PNT2022TMID34114
Project Name	Smart Waste Management for Metropolitan cities
Maximum Marks	4 Marks

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



Brainstorm & idea prioritization

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.

- 10 minutes to prepare
- 1 hour to collaborate
- 2-8 people recommended

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

10 minutes

- A Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.
- B Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.
- C Learn how to use the facilitation tools**
Use the Facilitation Superpowers to run a happy and productive session.
[Open article](#)

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

People need methods to dispose wastes so they can lead a healthy lives.

Key rules of brainstorming

To run a smooth and productive session

- Stay in topic.
- Defer judgment.
- Go for volume.
- Encourage wild ideas.
- Listen to others.
- If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

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

🕒 10 minutes

TIP
You can select a sticky note and hit the pencil (switch to sketch) icon to start drawing!

ARFIYA

Compost pit having shredder helps to decompose waste faster

Waste-to-Energy processes prevent waste from ending up in landfills

Cloud server helps to send alerts according to level of waste bins

Composting helps in segregating waste to recycle

Intelligent GUI is used to view the status of every trash bin

Automation helps in sorting the waste

ALFHA

Bio-degradable waste can be turned into compost

Keeping the lid closed by using sensors until the bin gets emptied

Transparency on waste situation and bin level

Sorting of waste inside the bin itself

Compressing the waste into biogas and CNG to power the vehicles

Using Solar power to compact the waste

ASMITHA

Eco-ATM devices for recycling the E-waste

P-Blocks bricks method to construct a sustainable rural infrastructure

Pune 's waste picker is converting plastic waste into filaments for 3 D printing

Transforming waste into useful metallurgical products

Lighting devices made from secondary paper sludge waste

Plasma classification to replace environment hazardous energy production

AMRIN FARHA MOHAMED ASLAM

Biodegradable and non biodegradable waste should be separated using sensors

Vacuum suction can be used to empty the trash.

AI recycling robots to reduce the amount of trash.

Pneumatic waste disposal bins can be connected with underground pipes.

Sensors can be placed in receptacles to measure fill levels

Waste to energy process to prevent overloading

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

FUTURE PLAN

Plasma classification to replace environment hazardous energy production

P-blocks briks method to create sustainable rural infrastructure

Lighting devices made from secondary paper sludge waste

Pune's waste picker and plastic waste into filaments for 3D printing

SENSORS

TIP
Add customizable tags to sticky notes to make it easier to find, browse, organize, and cluster important ideas as you work in your mural.

Keeping the lid closed by using sensors until the bin gets emptied

Biodegradable and non biodegradable waste should be separated using sensors

Sensors can be placed in receptacles to measure fill levels

AI recycling robots to reduce the amount of trash

WASTE TRANSFORMATION.

Transforming waste into useful metallurgical products

Waste-to-energy processes prevent waste from ending up in landfills

Waste to energy process to prevent overloading

Compressing the waste into biogas and CNG to power the vehicles

RECYCLE

Composting helps in segregating waste to recycle

Using solar power to compact the waste

Eco-ATM devices for recycling the E-waste

Bio degradable waste can be turned into compost

DETECTION

Cloud server helps to send alerts according to level of waste bins

Transparency on waste situation and bin level

Vacuum suction can be used to empty the trash

Intelligent GUI is used to view the status of every trash bin

SORTING TECHNIQUE

compost pit having shredder helps to decompose waste faster

Sorting of waste inside the bin itself

Pneumatic waste disposal bins can be connected with underground pipes

Automation helps in sorting the waste

Step-3: Idea Prioritization

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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

