Project Design Phase-I
Problem - Solution Fit

Date	30 September 2022
Team ID	PNT2022TMID46943
Project Name	**Smart Waste Management System for Metropolitan Cities**
Maximum Marks	4 Marks

Problem – Solution Fit:

1.CUSTOMER SEGMENT(S) `CS`

- Metropolitan City citizens
- People whose house near the trashcans.
- Municipal Officers
- Trashvan Dirvers & Workers

6.CUSTOMER CONSTRAINTS `CC`

- Internet is necessary to use the web app
- The device may send wrong information

5.AVAILABLE SOLUTIONS `AS`

The citizens can send the message about the smart dumpsters if any damage on the IoT device occured.

2.JOBS TO BE DONE/PROBLEMS `J&P`

- The dustbins need to empty after it got filled.
- The overflowing needs to avoid.
- Clean India should be maintained

9.PROBLEM ROOT CAUSE `RC`

- High population in cities.
- Poor waste mangement system
- High amount of wastages produced by people

7.BEHAVIOUR `BE`

The sensors senses the amount of waste in trashcans and the device sends the notification to the head office, they will come and collect the wastages.

3.TRIGGERS `TR`
- To keep the city clean
- Hygienic environment

10.OUR SOLUTION `SL`

Monitoring the dumpsters and send the information about the garbage level to the authenticated person to empty the trashcans using arduino device.

8.CHANNELS of BEHAVIOUR `CH`

8.1 ONLINE
Sends the information to the head office.

4.EMOTIONS BEFORE/AFTER `EM`
- Before:Unhealthy environment
- After:Clean city and healthy environment

8.2 OFFLINE
Trashvan collects the garbage from trash cans.