Project Title: Smart Waste Management System for metropolitan cities   **Project Design Phase-I - Solution Fit Template**   **Team ID:** PNT2022TMID42418

1. CUSTOMER SEGMENT(S) `CS`	**5. CUSTOMER CONSTRAINTS** `CC`	**8. AVAILABLE SOLUTIONS** `AS`
• For residential, industrial, commercial and municipal clients	• Unnoticed filled garbage bins leads to Clumsiness • Location of the filled bins unknown • Fuel wastages due to roaming	• Automating waste collection in streets. • Monitoring street bins at park, campus, city center or city center. • Waste monitoring of semi-underground and underground bins.
2. JOBS-TO-BE-DONE / PROBLEMS `J&P`	**6. PROBLEM ROOT CAUSE** `RC`	**9. BEHAVIOUR** `BE`
• To detect the level of the bin. • Accumulate information of the bin and sent the status of the in to the server and sent data to pickup truck.	• The main problem faced by the metropolitan cities are detecting the garbage level weather it filled or not and also we need to measure the weight of the garbage bin. Then alerts the authorized person to empty the bin whenever the bins are full3	• The strategy is implemented by relying solely on publicity and civic awareness, the impact is less significant. • The unknown waste dumping behavior of residents is a great challenge for decision makers to allocate resources for waste collection operations.

Define CS, fit into CC

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS

TR

- Efficient waste management is an essential requisite for a clean and safe Environment and keep cities away from the harm cause d by the mismanagement of solid waste produced in urban centers.

7. YOUR SOLUTION

SL

- Use a reusable bottle/cup for beverages
- Use reusable grocery bags
- Purchase wisely and recycle
- Avoid single use food and drink containers And Utensil.

10. CHANNELS OF BEHAVIOUR

CH

- The smart waste bin development process was people - centered and paid particular attention to human experiences, allowing for various interaction modalities.

4. EMOTIONS: BEFORE / AFTER

EM

Before:

- To imbalance between the production and the capability to manage it .The dumps are a source of complex pollution which threatens the public health.

After:

A reduction in the number of waste bins needs. Analytics data to manage collection routes and the placement of bins more effectively improved environment(i.e. no overflowing bins and less unpleasant