

Project Design Phase-I

Problem Solution Fit

Date	8 October 2022
Team ID	PNT2022TMID27888
Project Name	Smart Waste Management System For Metropolitan Cities

Define CS, fit into CL	1. CUSTOMER SEGMENT(S) CS Citizens of metropolitan cities.	6. CUSTOMER LIMITATIONS <small>EG. BUDGET, DEVICES</small> CL <ul style="list-style-type: none">• Proper management of waste must be required• Fear of advanced technology.	5. AVAILABLE SOLUTIONS <small>PLUSES & MINUSES</small> AS A reduction in the number of waste collections needed by up to 80%, resulting in less manpower, emissions, fuel use and traffic congestion. A reduction in the number of waste bins needed.	Explore AS, differentiate
	2. PROBLEMS / PAINS <small>+ ITS FREQUENCY</small> PR <ul style="list-style-type: none">• Causes pollution to the environment.• Acts as a breeding ground to insects such as mosquitos which causes diseases.	9. PROBLEM ROOT / CAUSE RC <ul style="list-style-type: none">• Lack of public awareness and poor attitudes.• Missed pick-ups.	7. BEHAVIOR <small>+ ITS INTENSITY</small> BE <ul style="list-style-type: none">• Directly related: If any malfunction occurs the customers can report to the concerned department.• Indirectly related: citizens can volunteer.	Focus on PR, tap into BE, understand RC
Focus on PR, tap into BE, understand RC	3. TRIGGERS TO ACT TR The heavy pollution or higher health issues due to the un-attended garbage triggers them to find out a solution.	10. YOUR SOLUTION SL The proposed system will be able to monitor and supervise garbage collection management process using IoT (Internet of Things).	8. CHANNELS of BEHAVIOR CH Create awareness through social media and share their views on issues.	Extract online & offline CH of BE
	4. EMOTIONS <small>BEFORE / AFTER</small> EM Before: the customers feel unpleasant with the environment. After: happy, pleasant and satisfied with the environment.		OFFLINE Create awareness through campaign.	
Identify strong TR & EM				