

PROJECT DESIGN PHASE-I
PROBLEM – SOLUTION FIT

Date	3 November 2022
Team ID	PNT2022TMID15286
Project Name	Project - Smart Waste Management System For Metropolitan Cities
Maximum Marks	2 Marks

Problem-Solution Fit

Define CS, fit into CL	1. CUSTOMER SEGMENT(S) CS <div>Private individuals who are waste holders, Property owners and companies that produce wastes</div>	6. CUSTOMER LIMITATIONS CL <small>EG. BUDGET, DEVICES</small> <div>Efficient waste management, provides better control over odor, reduce pollution</div>	5. AVAILABLE SOLUTIONS AS <small>PLUSES & MINUSES</small> <div>Eco-friendly usable bags Digital trash bins Buy and Sell groups</div>	Explore AS, differentiate
	2. PROBLEMS / PAINS PR <small>+ ITS FREQUENCY</small> <div>Separate wastes as biodegradable and Non-Biodegradable. Create a compost site Need an intimation whenever the bin overflows.</div>	9. PROBLEM ROOT / CAUSE RC <div> <ul style="list-style-type: none"> Between 30% and 35% waste occurred from building construction industries etc.. Manufacturing and Agriculture. Household trashes. Overflowing of dustbins Chemical emissions due to stagnant wastes </div>	7. BEHAVIOR BE <small>+ ITS INTENSITY</small> <div>Incase of improper function of smart bin with sensors then the customers might contact the customer care services.</div>	
Identify strong TR & EM	3. TRIGGERS TO ACT TR <div>The pickup of the bin should be on time. If the bin has been filled then it should give alert to the responsible person.</div>	10. YOUR SOLUTION SL <div>In lower traffic and remote locations, one of the best ways to prevent bin overflowing is to install a smart fill-level sensor in each bin and utilize a monitoring platform to plan the collections ahead of time. As a result, the containers get collected in time and collection companies increase their efficiency, ultimately reducing operational costs by up to 50 percent.</div>	8. CHANNELS of BEHAVIOR CH <div> ONLINE <div>By creating a web application through this the people can be able to post their queries, and the organizing person should solve their problems.</div> OFFLINE <div>Waste management methods are different in different environment, while the waste produced by the industries, management, and living areas is their responsibilities and managed by themselves.</div> </div>	Extract online & offline CH of BE
	3. EMOTIONS EM <small>BEFORE / AFTER</small> <div> Before :Has no idea on managing waste and doesn't have any awareness on proper disposal and waste management. After: Gets an idea of managing waste to provide a safe and clean environment </div>			

