

Project Design Phase-I

Problem Solution Fit

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| Date | 09 November 2022 |
| Team ID | PNT2022TMID05331 |
| Project Name | Smart Waste Management System For Metropolitan Cities |

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| Define CS, fit into CL | 1. CUSTOMER SEGMENT(S) CS <p>The term solid waste management mainly refers to the complete process of collecting, treating and disposing of solid wastes</p> | 6. CUSTOMER LIMITATIONS <small>EG. BUDGET, DEVICES</small> CL <p>Waste in different forms such as solid waste, gaseous waste and liquid waste increases due to population increase, urbanization, and industrialization and affect the globe.</p> | 5. AVAILABLE SOLUTIONS <small>PLUSES & MINUSES</small> AS <p>The objectives of writing this paper is to study the current practices related to the various waste management</p> | Explore AS, differentiate |
| | 2. PROBLEMS / PAINS <small>+ ITS FREQUENCY</small> PR <ul style="list-style-type: none"> smart waste management aims to optimize resource allocation increase the sustainability of waste services. | 9. PROBLEM ROOT / CAUSE RC <p>#This category presents a set of theories that aid in understanding the nature and causes of individual WM behavior</p> <p>It is an intervention model that has been applied in the behavioral analysis of pro-</p> | 7. BEHAVIOR <small>+ ITS INTENSITY</small> BE <p>Waste management is an integral part of a sustainable Canberra and is an issue that affects every individual and organisation in the ACT</p> <p>unwanted and unusable materials and is regarded as a substance</p> | |
| Identify strong TR & EM | 3. TRIGGERS TO ACT TR <p>reusing materials that would otherwise be discarded, by recycling materials and by using recycled</p> | 10. YOUR SOLUTION SL <p>To help minimize unnecessary trips to and from landfills, companies and communities can install waste level sensors in bins or dumpsters of any size.</p> <p>These devices collect and store data on fill levels, allowing collection services to predict how often bins</p> | 8. CHANNELS of BEHAVIOR CH <p>We can significantly reduce the amount of solid waste</p> <p>by following some basic principles of reducing the amount of waste that is created</p> | Extract online & offline CH of BE |
| | 4. EMOTIONS <small>BEFORE / AFTER</small> EM <p>System requires more number of waste bins for separate waste collection as per population in the city. This results into high initial cost due to expensive smart dustbins</p> | | | |