

Project Design Phase-I Problem - Solution Fit

| | |
|---------------|--|
| Date | 30 September 2022 |
| Team ID | PNT2022TMID39755 |
| Project Name | Smart Waste Management System for Metropolitan Cities |
| Maximum Marks | 4 Marks |

Problem – Solution Fit:

| | | |
|--|--|---|
| 1.CUSTOMER SEGMENT(S) CS <ul style="list-style-type: none"> Metropolitan City citizens People whose house near the trashcans. Municipal Officers Trashvan Drivers & Workers | 6.CUSTOMER CONSTRAINTS CC <ul style="list-style-type: none"> Internet is necessary to use the web app The device may send wrong information | 5.AVAILABLE SOLUTIONS AS <p>The citizens can send the message about the smart dumpsters if any damage on the IoT device occurred.</p> |
| 2.JOBS TO BE DONE/PROBLEMS J&P <ul style="list-style-type: none"> The dustbins need to empty after it got filled. The overflowing needs to avoid. Clean India should be maintained | 9.PROBLEM ROOT CAUSE RC <ul style="list-style-type: none"> High population in cities. Poor waste mangement system High amount of wastages produced by people | 7.BEHAVIOUR BE <p>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.</p> |
| 3.TRIGGERS TR <ul style="list-style-type: none"> To keep the city clean Hygienic environment | 10.OUR SOLUTION SL <p>Monitoring the dumpsters and send the information about the garbage level to the authenticated person to empty the trashcans using arduino device.</p> | 8.CHANNELS of BEHAVIOUR CH <p>8.1 ONLINE Sends the information to the head office.</p> |
| 4.EMOTIONS BEFORE/AFTER EM <ul style="list-style-type: none"> Before:Unhealthy environment After:Clean city and healthy environment | | <p>8.2 OFFLINE Trashvan collects the garbage from trash cans.</p> |