**PROBLEM SOLUTION FIT**

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| **Date** | **22-10-2022** |
| **Team ID** | **PNT2022TMID49801** |
| **Project Name** | **Smart Waste Management System For Metropolitan Cities** |
| **Maximum Marks** | **4 marks** |

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| 1. | CUSTOMER SEGMENT(S) | Our Customers are mainly peoples who own the organization like hotels,hospitals, muncipalites, corporation and so on.The situation is often seen where dustbin is not addressed even if it is filled and garbage is spread on open streets. This severely affects the health and hygiene of the people. |
| 2. | JOBS-TO-BE-DONE/PROBLEMS | Smart Waste Management System which is proposed here is to implement a smarter way of conventional waste management using smart sensors to gather fill-level data, presence of garbage around the dustbin and stinking condition from containers and garbage bins, and send it to servers in real time |
| 3. | TRIGGERS | In the approach of the smart cities mission, the objective is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment with the application of smart solutions. Smart cities don’t only mean smart buildings and smart parking areas but smarter waste management system is also a major issue to be addressed in developing a smart city |
| 4. | EMOTIONS: BEFORE/AFTER | The overflowed garbage bins are creating an unhygienic environment in most of the cities. This will further lead to create the different types of unnamed diseases and this will degrade the standard of living. An efficient smart garbage management method has to be developed to overcome these conditions. |
| 5. | AVAILABLE SOLUTIONS | Of course the solutions are available readily such as smat bins,automatic recycler, etc.... One such constraint the customers facing are cost are not affordable. |
| 6. | CUSTOMER CONSTRAINTS | While smart sensors are easy to use, you cannot just buy one and install it on your waste bin. There are other steps that need to be taken after purchase to ensure its effectiveness like ensuring there is a communication technology in place for your sensor. Truck routes that are not optimized lead to the use of the excessive fuel. |
| 7. | BEHAVIOUR | It ultimate helps to keep cleanness in the society. Smart collection bin works with the sensors will show us the various levels of garbage in the dustbins and also the weight sensor gets activated to send its output ahead when its threshold level is crossed. |
| 8. | CHANNELS of BEHAVIOUR | Due to the lack of care and attention by the authorities the garbage bins are mostly seem to be overflowing. Smart collection bin works with the sensors will show us the various levels of garbage in the dustbins and also the weight sensor gets activated to send its output ahead when its threshold level is crossed. If dustbins are not cleaned in time, the details will be forwarded to higher authority. |
| 9. | PROBLEM ROOT CAUSE | Considering the origination of the problem, Poor waste management contributes to climate change and air pollution, and directly affects many ecosystems and species. |
| 10 | YOUR SOLUTION | Our Team has highly been intending to develop an efficient solution to overcome all the flaws that the existing solutions hold back still. We are highly on demand to ensure the efficient functionalities of the developing module the way it will not fail at anytime. |