  

INSTUTION’S INNOVATION COUNCIL

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Idea/PoC Title : Smart Trash Bin

Abstract of Idea :

The Smart Trash bin can be used to monitor the amount of waste in the dustbin. It checks the level of the trash, weight of the trash and the presence of organic waste by sensing methane. It continuously monitors and analyse these values and sends a notification if the value exceeds the threshold limit that we set. The values are stored in the cloud. From this we can prevent more man power and reduces the time to clean the environment. Our project makes the world free from pollution.

Sector of Focus : Internet of Things

Detail about Idea/PoC :

1. Define Problem Statement (or) Pain Points

In the corporation office, they were not aware of all the area dustbins due to this some dustbins are not visited. In some of those unvisited dustbins are fully filled with trashes. People feel uncomfortable when they cross such dustbins. Sometimes some dustbins were broken and that produces unpleasant smell. This creates some health hazards and pollutions.

1. Prescribe Solution to the defined problem

In order to detect whether the dustbins are fully filled, we have to check their level and we have to monitor the weight to know about that the dustbin can withstand such weight. And to detect any unpleasant smell that dustbins produce.

1. What is the technological innovation associate with the solution

IoT is our main idea. For detecting level, weight and smell we have used Ultrasonic sensor, load cell and gas sensor respectively they are connected to the RaspberryPi and it also alert the person with a message.

1. Define is any Intellectual property (IP) component associate with the solution prescribed

No, there is no Intellectual property component associated with the solution.

1. How the prescribed Solution is more relevant and suitable for adoption to current market requirement

Our solution helps to identify the dustbins which are in a critical stage. And the workers can move to those dustbins and collect the wastes. This will reduce the time and man power and this also eliminates the health hazards and pollutions.