# Standard Application Format for Submission of Idea/PoC

**Team Name: ITANZ**

**Name of Leader: Sangeeth S**

**Cell No & Email of Leader: 9789753846 & sangeethitselvam@gmail.com**

**Names of Co-Leaders:Praveenkumar S**

**IIC/Institution ID:**

**Institution Name and Address: K S Rangasamy College Of Technology,Namakkal**

**Idea/PoC Title: IoT Based Waste Management System.**

**Abstract of Idea/PoC:** In this project we going to develop structurally designed IOT based prototype material made up of IOT software and hardware with arduino NANO

The main motto of our project is to produce the most reliable method for bio-degradable waste collecting technique.

It is very easy to synthesis bio-degradable waste and toxic waste.

1. DefineProblemStatements(or)PainPoints:(Specifywithin100Words)

This Project presents a framework of IoT innovation for waste management system. The solution is to enrich the efficiency of waste bin collection activities and cost reduction. The proposed system on top of this framework can be further improved to perform real-time, reliable and efficient waste management system. Customer complaints module will be added and integrates with the message notification system to perform fast response. The map showing the waste bin actual coordinates stored in the database can be further leverage by integration with GPS technology to give the current waste bin location. Alert message can be produce if the waste bin has been reposition to other place or fall down. This monitors the waste collection status in real-time and based on the recorded information they able to measure their operational performance, predict future operation requirements and plan for better service to deliver.

1. Prescribesolutiontothedefinedproblem:(Specifywithin100words)

Our project is of three major advantages that are useful for the society in the ways such as

1) The effective collection of wastes and detecting the toxic waste.

2) To check the level of waste in the bin that is being filled.

3)After bin is filled then message will send to municipality government and also send the current location which the dustbin is placed.

1. What is the technological innovation associate with the solution: (Specify with in 50 words)?

Internet of Things (IoT) is a new revolution of the Internet. It makes objects themselvesrecognizable, obtain intelligence, communicate information about themselves and they canaccess information that has been aggregated by other things. The Internet of Things allowspeople and things to be connected anytime, anyplace, with anything and anyone, ideally usingany path/network and any service . This implies addressing elements suchas Convergence, Content, Collections, Computing, Communication and Connectivity.The Internet of Things provides interaction among the real/physical and the digital/virtualworlds. The physical entities have digital counterparts and virtual representation and thingsbecome context aware and they can sense, communicate, interact, and exchange data, informationand knowledge.

1. Define the social benefits associate with the solutions prescribed(forCategoryB).(Specifywithin50words)

All the waste is one of the important factors which have no impact for the environment. It acts as manure in domestic and rural areas. One of the main benefits of IoT based waste management system is time consumption. And another one of the benefits is that the cost of maintenance of the System that we have solution for. It is easy to repair or change the parts of the system that we have solution. And the price of the system is very low compared to any other.

1. How the prescribed solution is more relevant and suitable for adoption to current marketrequirement(Specifywithin100words)

It is suitable for our current market requirement is that it has IoT connected to it. And because it connected with IoT it has internet connected with our system. And it is connected with easy replaceable with any dustbin that is available in market.

# Is Prototype Ready? YES

**Submit a 1 Min Video of Team introduction and Idea/PoC**

<https://drive.google.com/file/d/1-H4k9G-kMc_tBGoXcbrrP5MWYqwDAyFT/view?usp=drivesdk>