**LITERATURE SURVEY**

Smart Waste Management System

For Metropolitan Cities

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| **TEAM ID** | **PNT2022TMID22555** |
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**Introduction**

The main objective of this project is to design a waste bin with real time monitoring presented and a smart waste management system is proposed using the recent technical advancement of automation and Internet Of Things. The capacitance sensor in the bin continuously monitors the level of the bin in real time and communicates to the central cloud where the bins are connected. Ultrasonic sensor is used to open and close the lid of the bin whenever the persons are nearby the bin. Such smart bins are connected to the cloud, where the bin status are communicated, recorded and monitored by the local bodies through and android app or a centralized server. Thus the designed smart bin and proposed waste management system have better level of smartness compared to existing ones in metropolitan cities in a centralized manner.

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| **S.No** | **Title** | **Author** | **Year** **of Publications** | **Description** |
| 1. | IoT based Smart Garbage System | Sivasangari  Ajitha  Upendher Rao Polishetty  Anandhi  Gomathi | 2021 | Detecting of the dustbin's refuse level is finished by sensors just as data is sent to the authority portable station by means of GSM and GPS module. On the web observing of the trash level at control room is made utilizing a WiFi Module |
| 2. | Smart Waste Management System for Crowded area | Rasha Elhassan  Mahmoud Ali Ahmed  Randa AbdAlhalem | 2019 | It use the sensors technique insite the container, as a lower level, to separate the waste into 4 categories [food, plastics, papers, and metal] and use actuator at a top level to inform the management system to collect the container. |
| 3. | SmartGarbage Management System | Pankaj Morajkar, Vikrant Bhor, Dishant Pandya, Amol Deshpande, Maheshwar Gurav | 2015 | The level of garbage in the dustbins is detected with the help of Sensor systems, and communicated to the authorized control room through GSM system. |
| 4. | IOT Enabled Smart Waste Bin with Real Time Monitoring for efficient waste management in Metropolitan Cities | Manju Mohan  Kuppan chetty  ramanadhan | 2019 | Here, the smart bins are connected to the cloud, where the bin status are communicated, recorded and monitored by the local bodies through and android app or a centralized server. |