

LITERATURE SURVEY :

1. Dr. N. Sathish Kumar, B. Vijayalakshmi, R. Jenifer Prarthana, A .Shankar, (2016), “IoT Based Smart Garbage alert system using Arduino UNO “, IEEE

-The author proposed a solution for waste collecting using an Arduino UNO board interfaced with a GSM module and an ultrasonic sensor, and also the author discussed the difficulties of smart dustbins such as its affordability, maintenance, and durability. When the waste are full upto the reference level, the ultrasonic sensor monitors the level of garbage and guarantees that the dustbin is cleaned immediately .

2. Bharadwaj B, M Kumudha, Gowri Chandra N, Chaithra G, (2017) “Automation of Smart Waste Management Using IoT to Support “Swachh Bharat Abhiyan” – a practical Approach “ IEEE.

-This is not an original idea, IOT based dustbin was implemented and effectuated much before. Some authors presented systems where the sensors in the bin checked if the bin are filled up to the brim or not. If it was filled an automated message was sent to the server end of the system, through the Arduino SIM module, which used the application of the Arduino board. Once the server received the message it forwarded the message to the worker in charge, if the worker was available, he would notify his/her presence by accepting the work and would reach the required destination. If the worker was not available, the work would be transferred to another worker.

3. F achmin F olianto, Y ong Sheng Low, Wai Leong Yeow , (2015) “Smartbin: Smart Waste Management System”, Tenth International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP) Singapore, 7-9 April, IEEE.

-As mentioned there are three types of sources where garbage is generated viz. residential, commercial and industrial. The garbage produced in the residential area can be collected directly from home or by making an arrangement for mass collection in that area and can be lifted using vehicles. In case of restaurants, malls and other commercial establishment garbage can be collected directly from the unit using vehicles. Industrial garbage which includes waste produced in construction sites, various industries can also be disposed using different ways. For effective handling of these wastes like collection and disposal, Internet of Things (IOT) concept is being used, which mainly deals with sensing, actuating, data gathering, storing and processing by connecting physical and virtual devices to the Internet.

4. Gopal Kirshna Shyam, Sunilkumar S. Manvi, Priyanka Bharti, (2017) ” Smart Waste Management using Internet-of- Things (IoT)” Second International Conference On Computing and Communications Technologies (ICCCT’17), IEEE.

-According to proposed method, a smart waste collection system on the basis of level of wastes present in the wastebins. The data obtained through sensors is transmitted over the Internet to a server for storage and processing mechanisms. It is used for monitoring the daily selection of wastebins, based on which the routes to pick several of the wastebins from different locations are decided. Every day, the workers receive the updated optimized routes in their navigational devices. The significant feature of this system is that it is designed to update from the previous experience and decide not only on the daily waste level status but also the predict future state with respect to factors like traffic congestion in an area where the

wastebins are placed, cost-efficiency balance, and other factors that is difficult for humans to observe and analyze. Based on this historical data, the rate at which wastebins gets filled is easily analyzed. As a result, it can be predicted before the overflow of wastes occurs in the wastebins that are placed in a specific location