

# LITERATURE SURVEY

## PAPER 5:

TITLE: Prototype Development of IoT Based Smart Waste Management System for Smart City

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PUBLISHED ON: 2019

CONCEPT: To overcome the inefficiency of the waste collection system problem and to achieve smart cities, an IoT (Internet of Things) based smart bin prototype is proposed. This is an automatic centralized monitoring system that provides the timely status of a bin, enables optimal route planning for collections, reduces collection times, and saves costs as well as fuel consumption. This is because of inefficient waste collection systems result in smell pollution, unpleasant views, breeding of insects are left overloaded and uncollected. As one of the efforts to overcome the inefficiency of the waste collection system problem and to achieve smart cities, an IoT (Internet of Things) based smart bin prototype.

### ADVANTAGE :

1. It reduces manpower requirements to handle the garbage collection process.
2. It reduces infrastructure, operating and maintenance costs by upto 30%.

### DISADVANTAGE:

1. Process is not always cost-effective.
2. The resultant product has a short life.

## PAPER 6:

TITLE: Smart Waste Segregation and Monitoring system using IoT.

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PUBLISHED ON :2019

CONCEPT: The amount of waste has been increasing due to the increase in human population and urbanization. In cities, the overflowed bin creates an unhygienic environment. Thus degrades the environment, to overcome this situation & quot; Automatic Waste Segregator & quot; is developed to reduce to work for the rag pickers the wastes are segregated by the human beings which leads to health problems to the workers.

### ADVANTAGES:

1. It saves time and money by using smart waste collection bins and systems equipped with fill level sensors.
2. It decreases traffic flow and consecutively noise due to less air pollution as result of less waste collection vehicles on the roads.

### DISADVANTAGE:

1. Waste bins for separate waste collection as per population in the city.This results into high initial cost due to expensive smart dustbins compare to other methods.
2. Sensor nodes used in the dustbins have limited memory size.