

## SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES

### PROBLEM STATEMENT:



->The current state of technology in the field of smart waste management involves the use of sensors that measure the fill level of the trash bin

-> Exploiting this data, trash collection can be planned as well as truck routes can be optimized.

->Despite this solution being an improvement of the conventional (sensorless) solution, it suffers from major drawbacks, poor sensor performance, and lack of any contribution to the trash sorting at the recycling facility.

->The solution presented in this article focuses on the mitigation of these disadvantages by the implementation of RFID based trash identification system and additional weight sensor for improved fill level estimation.

-> Smart cities essentially combine the use of ICT to provide services for better living conditions inside cities.

## Problem Definition

- 1) Some trash bins are overfilled while others are under filled by the trash collection time,
- 2) overfilled trash bins create unhygienic conditions,
- 3) un optimized truck routes result in excessive fuel usage and environmental pollution

## ADVANTAGE:

- 1) Improve Productivity and Performance.
- 2) Increase Profitability.
- 3) Boost Sustainability.
- 4) Superior Customer Engagement.
- 5) Become a Smart City
- 6) Enhance Safety.

## Conclusion

- 1) Components of waste management are not just with respect to waste collected from the household, commercial establishments, etc.
- 2) Waste is more of a Serious concern which impacts the health and sanitation factor of every citizen of the city.
- 3) Cleanliness is directly related to waste management and sanitation both.
- 4) Therefore successful implementation only happened of such policies when not only the city's local government but also the city's citizen involve to make their city clean healthy smart and for that strong bonding in between cities citizens and Urban local bodies of that cities must be important.



