

Smart City – Waste Management

Waste management has become one of the critical challenges that cities have to deal with. The volume of waste generated across the globe is expected to increase exponentially. The traditional waste management system involves trucks moving around the city on designated routes for collecting waste, despite whether containers are full or empty. This inefficient way of managing the waste is time consuming, incurs high costs of transportation, and adds to the traffic congestion and pollution. This increase in waste requires adoption of smarter waste management systems beyond the traditional approach of labor-intensive, carrier trucks and landfills.

McKEN's Offerings

McKEN's Waste Management solution optimizes waste management and reduces operational and maintenance costs, besides reducing the contamination associated with waste collection. Both municipal corporations and citizens will benefit from an optimized system, which will result in huge cost savings and reduced urban pollution.

Waste Management achieves this by installing a smart device inside the waste containers with a sensor to determine the filling level of the container. The data from the containers is automatically sent to a central unit in real time to determine the collection time for each container. This information gets transmitted to the carrier trucks based on their location to dynamically update their collection routes. The solution also includes a dashboard for monitoring the service through a web app.

The solution combines the data from the devices on the field in a centralized database to optimize collection timing. The solution also pushes the data to business intelligence suites, service management frameworks, IT systems, and customized frontend dashboards.

Data is securely exposed through a REST API and all the business logic is built on McKEN's platform, and it includes:

- Alerts
- Routes
- Events tracking
- External IT communications
- Device communication
- Security

McKEN Waste Management is a perfect solution for:

- Municipal and government entities
- M2M network operators
- Wireless device manufacturers
- Internet of things (IoT) OEMs
- System integrators