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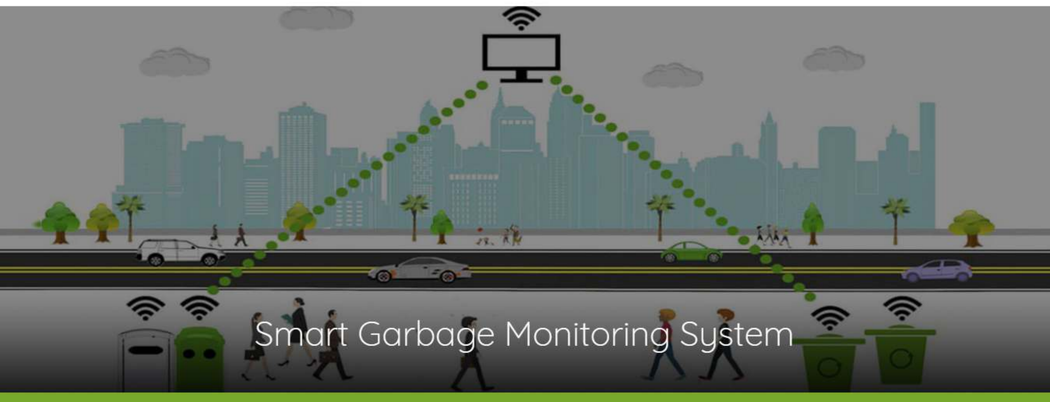


Smart Garbage Monitoring System

Introduction

By 2024, the global IoT market is expected to grow to $6.5 trillion. IoT is already enabling Smart City initiatives worldwide. Our IoT Development team provided a solution that will evolve waste management in such smart cities.

Challenge

The conventional way to detect, monitor and manage waste is wasteful. With the below challenges in mind, our IoT team was tasked with a solution to make waste management smart.

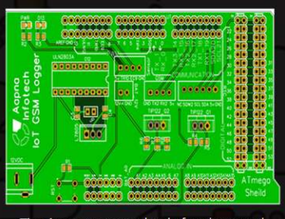
No real-time data used for collection

Overall inefficient allocation of labor, time and fuel

Unplanned waste collection leads to overflown garbage in some areas, resulting in a health hazard.

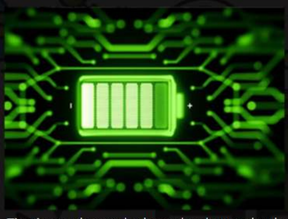
The Solution

A smart garbage bin is created that automatically detects levels of garbage at regular intervals using Ultrasonic sensors.



The device measures level of garbage and connects using GSM/cellular technology to the cloud, where it sends this data onto a dashboard.

A real-time clock enables all devices to sleep and then activate every six hours and gather data, thus helping the device achieve its purpose while also saving energy.



The device also sends alerts when battery levels of the system are low.

Transformation

The data gathered by our IoT solution will enable cities to deploy garbage collectors effectively. Due to resources being expended appropriately with data, not only will our IoT product help cities get cleaner, it will save labor costs, time and fuel – resulting in a cleaner, smarter and a more comfortable life.

Technology Used