

CASE STUDIES OF REAL PROJECTS SOLVING REAL PROBLEMS WITH LoRaWAN®

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CASE STUDIES OF REAL PROJECTS SOLVING REAL PROBLEMS WITH LoRaWAN® 2



Smart Agriculture



Smart Water Management



Smart Parking



Manufacturing



Smart Agriculture

Use Case: Crop Monitoring

SMART AGRICULTURE: CROP MONITORING

Requirements

Customer wants to monitor the farmers tobacco curing process in order to know when the crop is ready for shipment.

Customer expectation is to collect data from all farmer's in the area and use the data to improve the quality of their products and reduce loss.





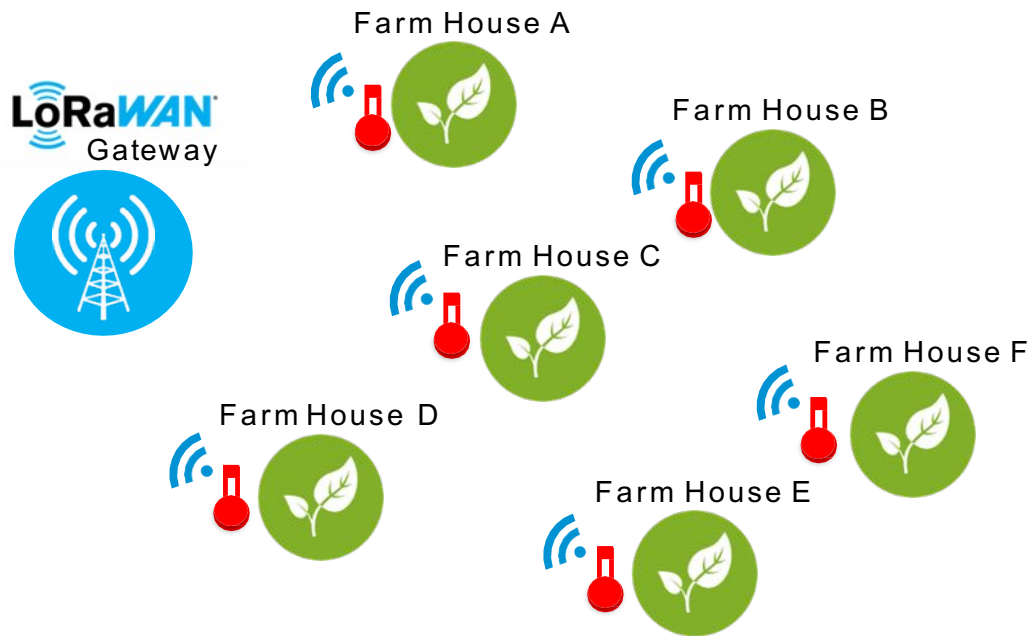
Challenges

- Farmers curing process start at different times and it is difficult to know when the crop is at its ideal curing stage
- Last mile connectivity is difficult to achieve in rural farms /villages
- Sensors need to be low-cost and run for months at a time on same battery.

SMART AGRICULTURE: CROP MONITORING



Reduced Crop
Loss by
8%



Solution



Smart Water Management

Use Case: Smart Water Metering



Requirements

Smart city authorities want to automate their domestic water metering services, to include monitoring water flow, leakage, consumption, and real-time meter availability for their citizens.

Challenges

- No real-time meter reading availability
- Operational costs are too high
- Billing system was not streamlined
- Unable to determine the source of water and revenue loss

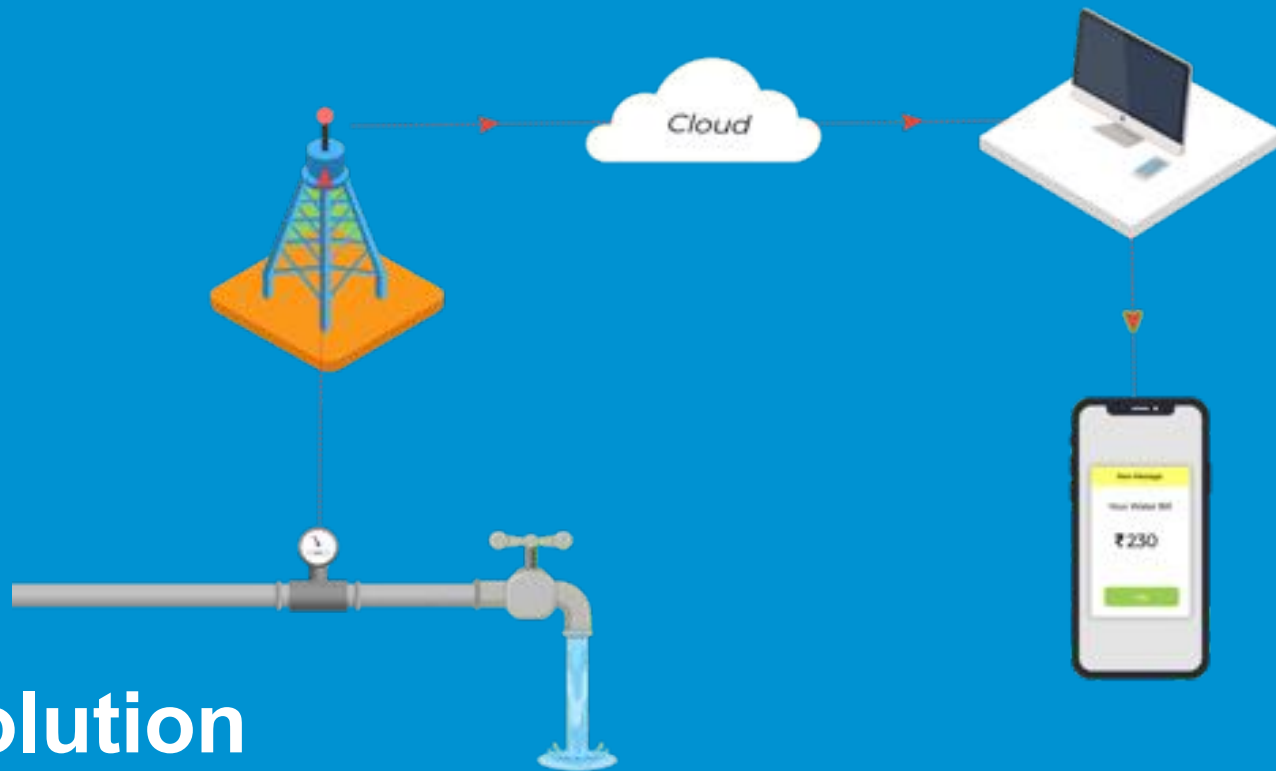


SMART WATER MANAGEMENT: SMART WATER METERING



Solution

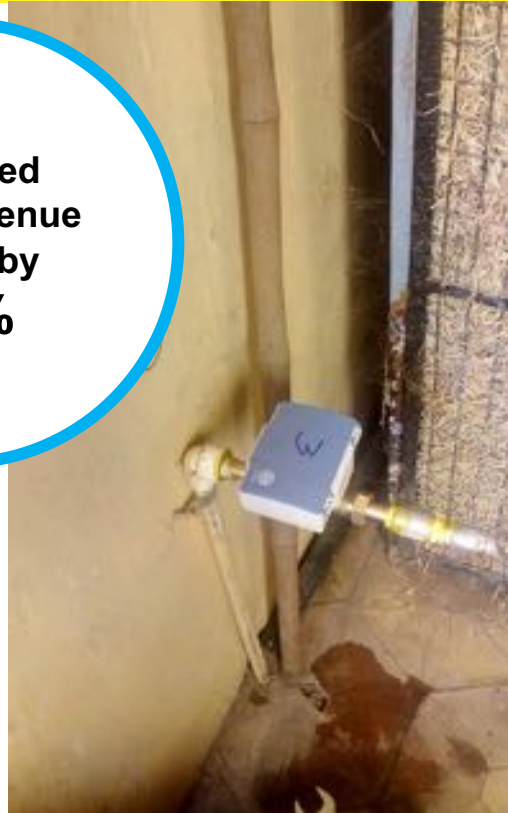
SMART WATER MANAGEMENT: SMART WATER METERING



Solution

SMART WATER MANAGEMENT: SMART WATER METERING

Reduced
Non-Revenue
Water by
10%





Smart Parking

Use Case: Automated Illegal Parking
Management

Requirements

Smart city authorities want to reduce traffic congestion at intersections where vehicles are illegally parking.

Smart city authorities want to send automatic notifications to the police when a vehicle has parked in a “No Parking” zone in real-time.





Challenges

- Police are unable to physically monitor the illegal parking at all times
- Parking ticket issuance is not tracked properly
- Existing illegal parking solutions do not work

SMART PARKING: AUTOMATED ILLEGAL PARKING MANAGEMENT



Solution



Solution



Connected Operations in Manufacturing

Use Case: Vehicle Tracking



Requirements

Customer wants to monitor the movement of vehicles (trucks) through out the manufacturing campus to include visited warehouses.

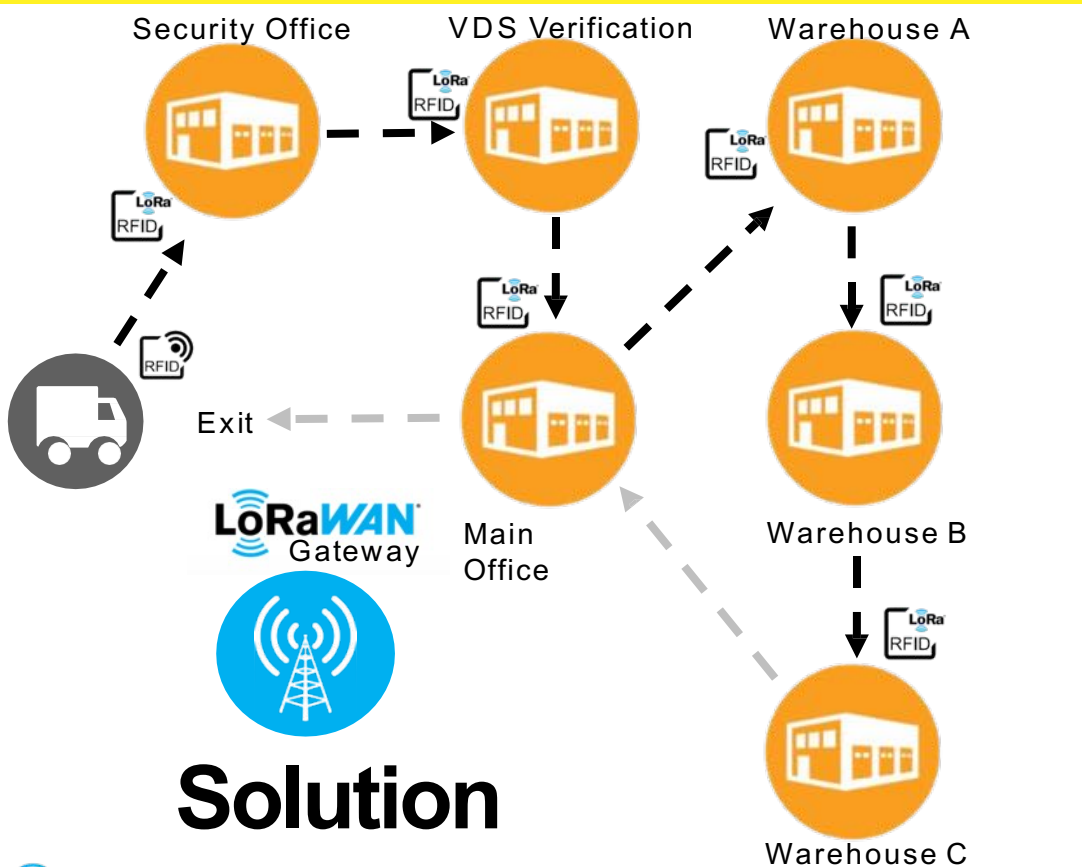
Customer expectation is to know the vehicle throughput (inwards and outwards) across the entire campus in hopes to improve the warehouse logistic operations.

Challenges

- 8 Hectares need to be covered
- LAN is not available at all warehouses
- Existing RFID readers are unable to send data to the cloud



CONNECTED OPERATIONS: VEHICLE TRACKING



Solution



Reduced transportation costs on site by **50%**

DEMONSTRATED SAVINGS LEVERAGING LoRaWAN®



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