

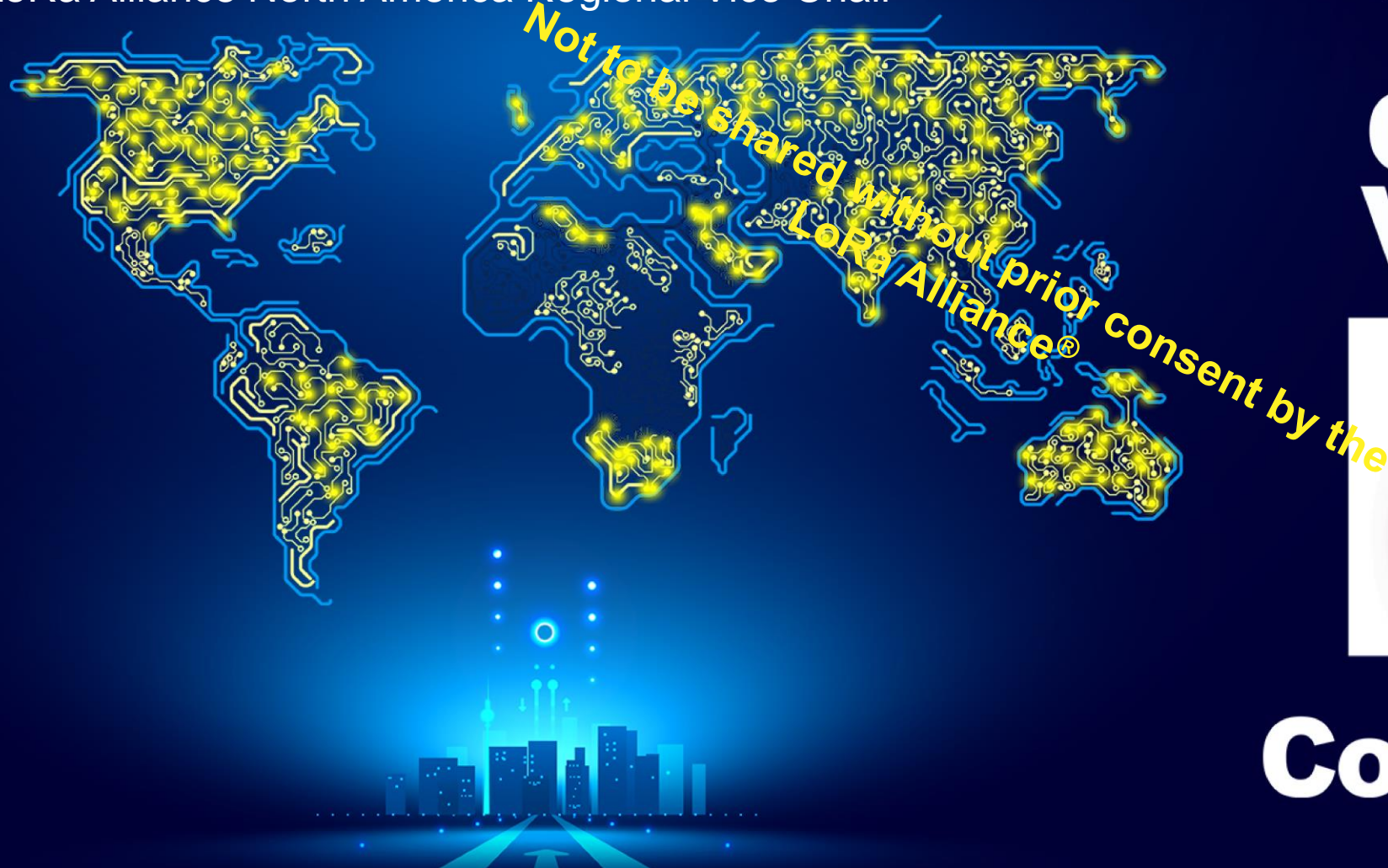
# Benefits of Private LoRaWAN® Networks

Derek Wallace, Director of Product Management, MultiTech  
LoRa Alliance North America Regional Vice Chair

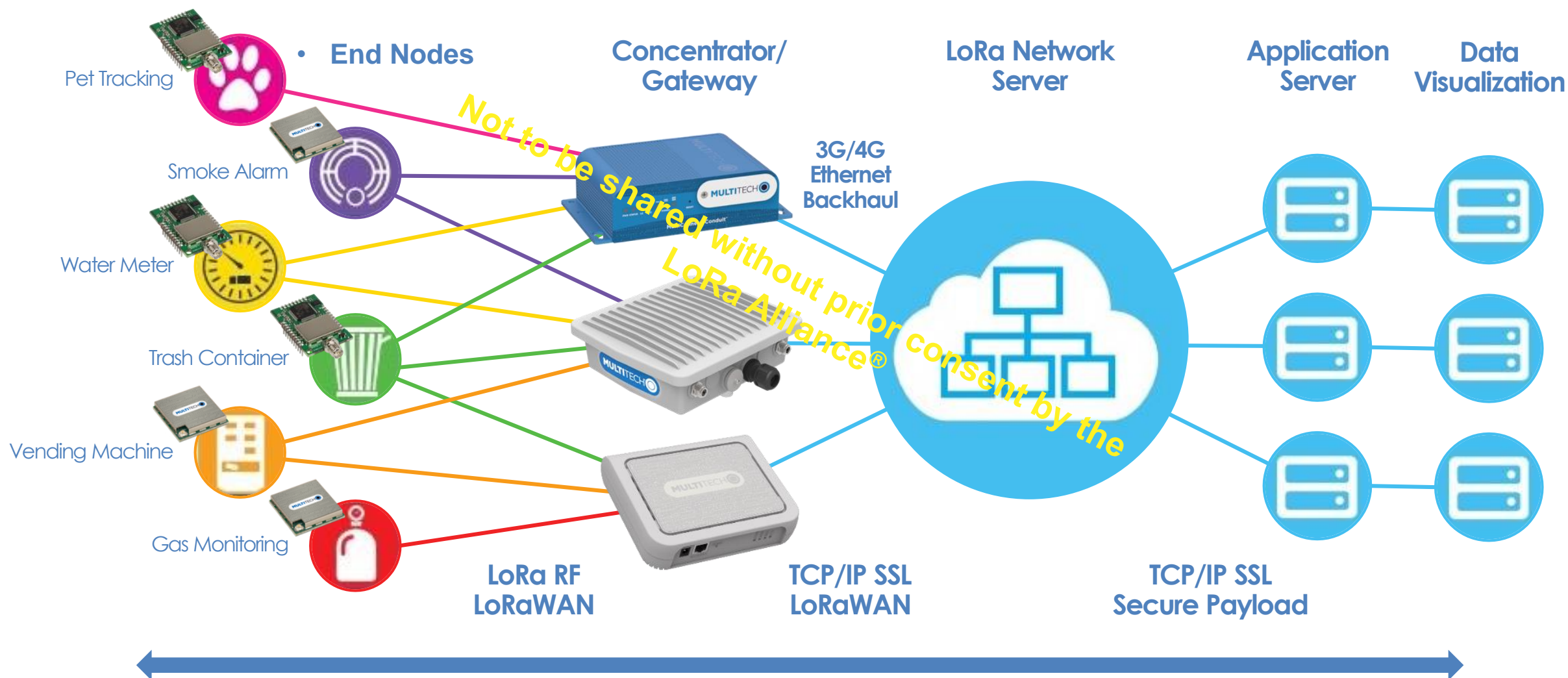


**Creating  
Valuable**

**IoT  
Connections**



# Traditional LoRaWAN® – NS, JS, & AS in Cloud





# What is Driving Enterprise Networks

## **Demand for Robust & Agile Local Connectivity:**

Cost Efficient deployment architecture  
Improved Resiliency & Security

## **Lowest Total Cost of Ownership**

Less data backhaul, cloud routing, storage and compute costs and OpEx

## **Deep Local Coverage**

Clustered assets mostly Static

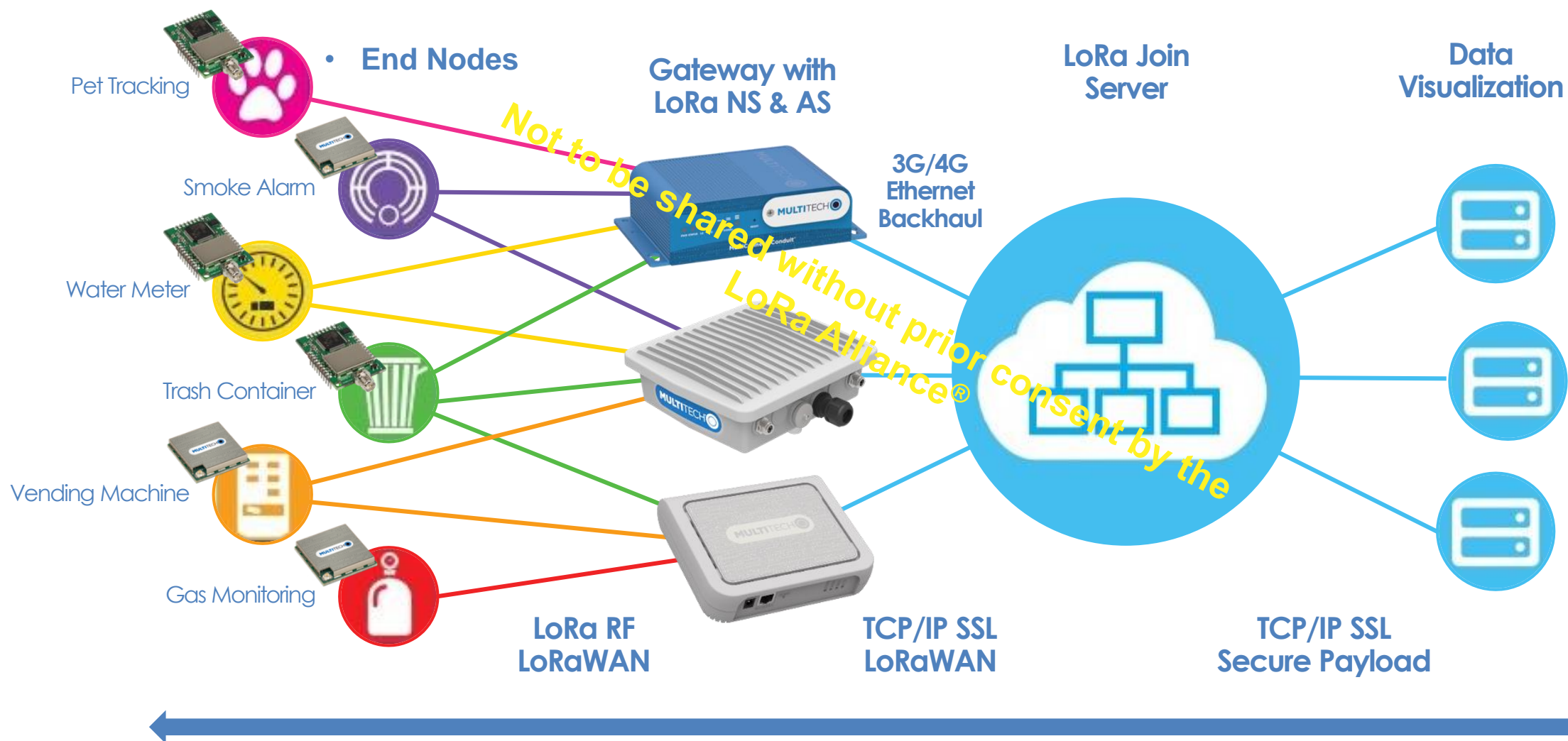
## **Data Privacy**

Data remains On-Prem  
Own keys for secure data transfer

## **Network designed to serve an Enterprise**

Deployed to cover specific Enterprise Application needs  
Improved coverage, range, density with custom QoS

# Lens LoRaWAN®- only Join Server in Cloud



# NETWORK TYPES

## Public

Subscription Based  
Just like a cell phone

**Well-established network providers**

**Better for:**

- Low CapEX
- Mobility
- Speed of deployment
- QoS/SLA-based Network Management

## Enterprise (private)

Owner Operated  
Mission-Critical System

**Well established companies**

**Better for:**

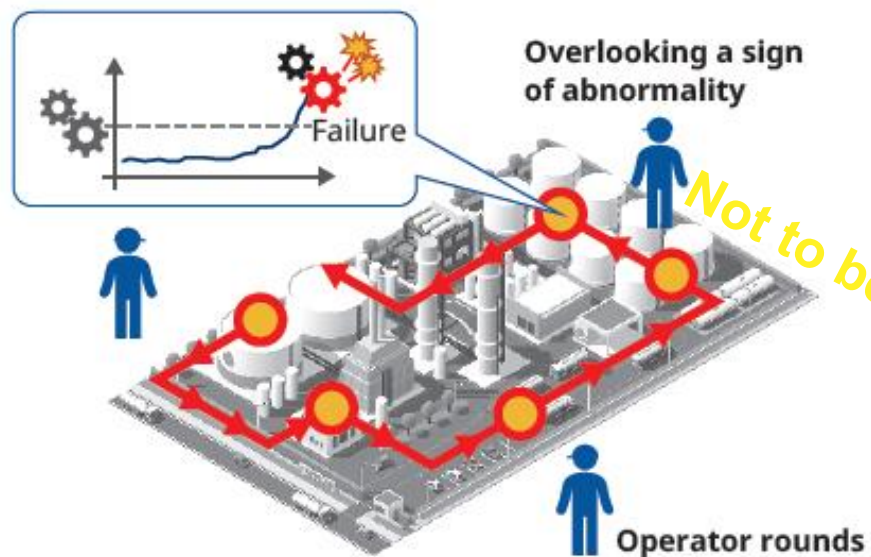
- Low OpEx
- Control of Data over own network
- Leveraging edge intelligence
- Reduced backhaul costs

Higher Ongoing Opex Costs

Higher Upfront Capital Expense



# Case Study: Yokogawa Sushi Sensor – Efficient Field Work



## Before

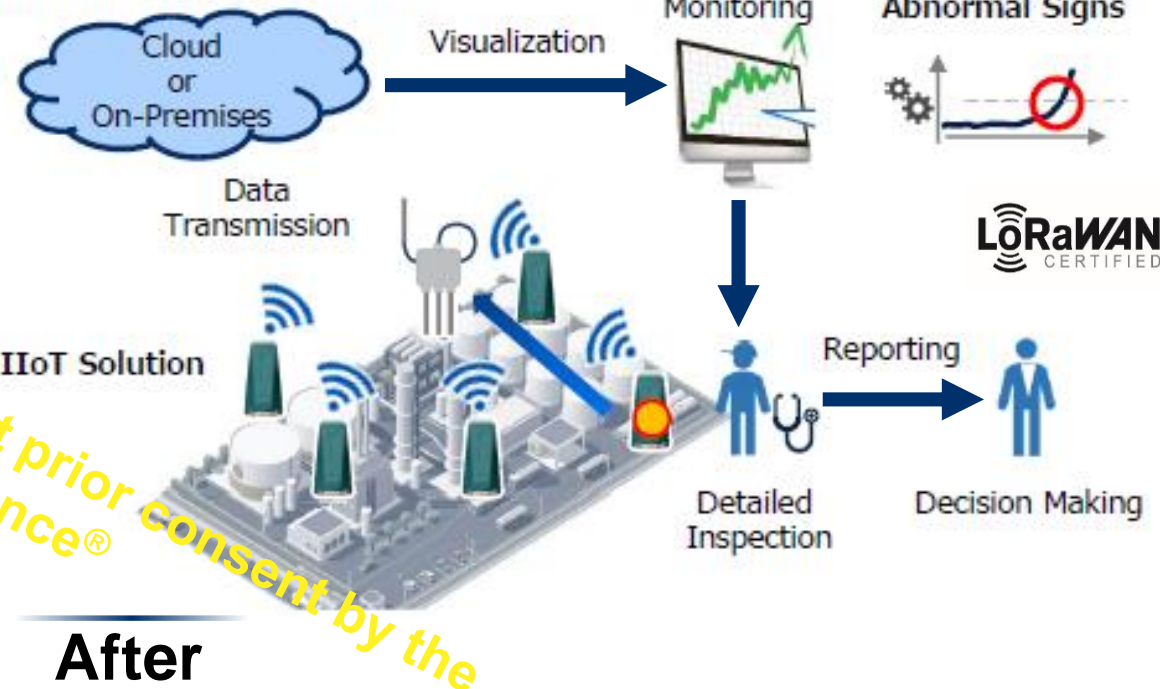
Outsourced vibration measurement for 200 items

$$\$20 * 12 * 200 = \$48,000 / \text{yr}$$

Inspection results were not digitalized.

→ Customer could not utilize the data.

## After implementation



## After

No recurring fees

- Realtime equipment status check
- Automatic warnings to technicians.

→ Enables digital transformation.

# LoRaWAN® Digital Pest Management Use Case

## Overview

**Industry:** Digital Pest Management

**Description:** Operates as a life science company through four divisions including Pharmaceuticals, Consumer Health, Crop Science, and Animal Health segments



## Business Issue, Solution, and Business Value

### Business Issue

- “Build a better mouse trap” and create a rapid-response system that enables companies to spot, thwart—and eventually predict—rodent incursions before they grow out of control. Wanted local decision-making and networks to reduce backhaul costs, control data flow over network and mitigate against internet loss.

### Solution

- MultiTech® partnered with the customer and added sensors to the rodent trap, paired with a LoRaWAN radio to transmit capture data to a central gateway, which relays the real-time data to a cloud platform.

MultiConnect® Conduit®



MultiConnect  
xDot®



### Business Value

- This system **reduced** the time needed to manually inspect traps by an average of **60%** while enabling improved food safety and compliance monitoring and reporting

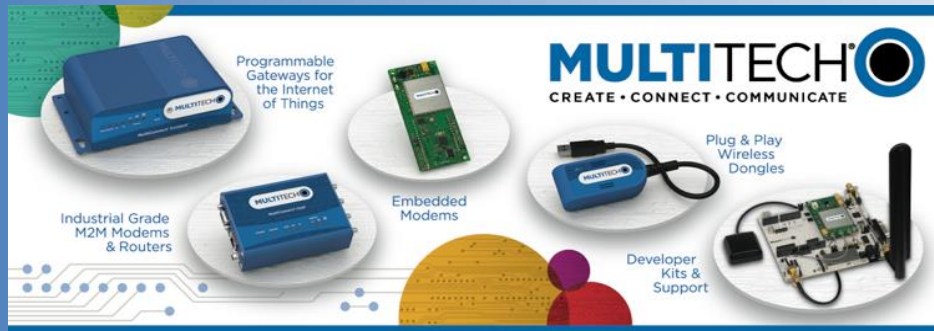
# LoRaWAN® Private Network Benefits

- Custom application deployment
  - Load and manage your application on gateways
- Reduced cost and greater control of data packets
  - Only Join Request packets sent to the cloud
  - Your custom application decides what data is sent to the cloud for visualization
  - Network Availability
- Realization of edge intelligence and event processing capability
- No geographic restrictions
- Your own private LoRaWAN® network



# About MultiTech

## MultiTech Industrial IoT Assets



Not to be shared without prior consent by the LoRa Alliance®

**WELCOME TO LoRaWAN® LIVE**  
**BUSINESS TRACK 2.00PM – 6.00PM**

BERLIN, JUNE 13, 2019



**Creating  
Valuable**

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