Softura

Digital Consulting. Technology. Innovation

Softura IOT in a Box Case Studies

Case Studies

Heavy Equipment Manufacturer

The **Problem**

A heavy Equipment OEM with 250K+ machines across the globe was working with legacy & modern Telematic controllers and several Global & Regional business applications which needed telemetry data to be processed.

Prior to Softura coming in it would take 5+ hours to get the data needed for these critical business applications. They needed to significantly reduce these timelines to be near Real-time. In addition they needed to;

- Avoid duplicate processing of Raw-Telemetry Data to enable reusability.
- Enable Business applications to leverage full telemetry data set.
- Store 10+ years of immutable telemetry data for quality & engineering purposes

The **Solution**

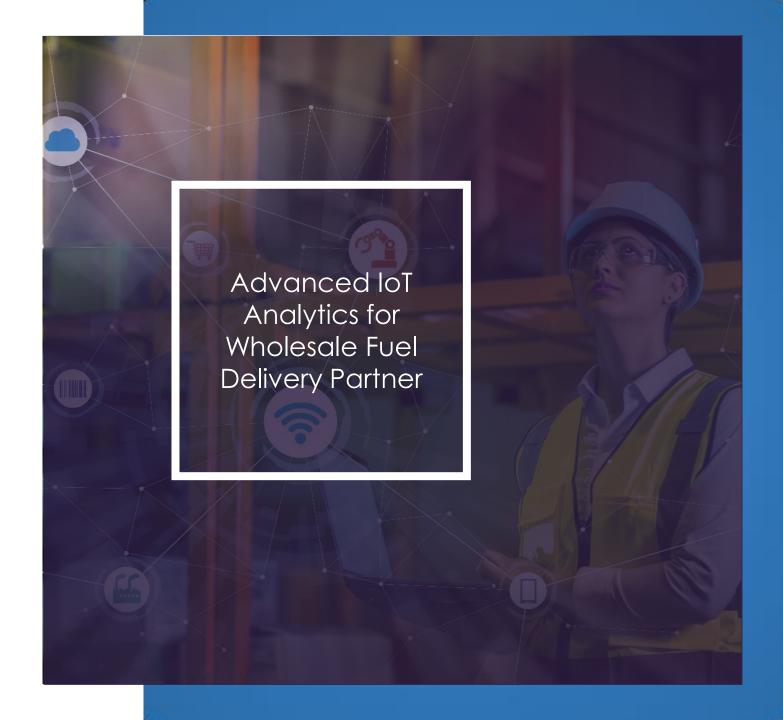Softura addressed these challenges by;

- Developing an Automated scaling framework to handle peak & non-peak hour volumes.
- Configuration of driven Data Pipes providing the ability to tune the parameters with No code changes.
- Creating adaptable Volume Simulators for load testing & validation purposes.
- Evaluating ~12.5 million geo fences (average 50 geo fences/machine) in < 30 mins.
- Developing a Prognostic Analytics solution to detect a foreseeable machine failure based on critical alerts.
- Established Framework to understand the TCO of the solution.
- Leveraged Azure PaaS offerings – Scalable, Pay per Usage & highly performant.

The **Problem**

A Wholesale Fuel Delivery provider reached out seeking an IoT & Analytical solution for their connected fuel tanks. They lacked real-time visibility of the tanks which resulted in the inability to properly plan for inventory & timely deliveries.

The **Solution**

- Created a Data Driven forecasting model to predict tank run outs in advance.
- The solution had the ability to support a variety of telematics devices that handled different messaging structures.
- Created personalized custom dashboards utilizing Predictive Analytics to forecast and visualize the tank level trends, sales consumption trends and delivery metrics.

Advanced IoT Analytics for Wholesale Fuel Delivery Partner

Digital Communications Company Looking for Real-Time Diagnostics

The **Problem**

A Digital Communication company approached us wanting to know real-time status and stats of their machines on the shop floor. They wanted to enable their teams to monitor and manage their machines from virtually anywhere. The existing process had data residing in multiple stand alone applications, which led to the inability to track or monitor status issues. This breakdown in communication meant that the machine issues were being communicated manually in a reactive manner. This led to excessive downtime costing the company production and money.

The **Solution**

- Configure On-premise Data Gateway setup, which allowed for secure access to real-time data from their machines from virtually anywhere.
- Centralized their production data which allowed for actionable insights.
- Developed a BI solution utilizing Power BI incorporating custom visuals.

Results **&** **Benefits**

- Reduced costs through custom Automation.
- Reduced machine downtime which improved overall production.
- Real-time monitoring and visibility of machine status's from any chosen location or device in the world.

THE Problem

A world leading Lawn Care machine manufacturer was looking for ways to help its customers tackle some of their biggest challenges, such as reducing costs, improving efficiency and providing visibility into their fleet of lawn care machines.

THE Solution

Softura built a scable end-to-end telematics solution using an OBD-2 device, phone Integration and a telematics backend to provide multiple features including:

- Remote health monitoring of the connected fleet
- Real-time alerts & notifications (Maintenance alerts – start/end)
- Driver behavior monitoring (Hard braking, acceleration, & speed alerts)
- Asset tracking & geo-fence
- Navigation assistance & route compliance
- Programmable firmware (Over-the-air updates)
- Printing invoices while at customer location

Results & Benefits

- Real-time visibility into a fleets health provided their customers with data on various diagnostics, which allows fleet owners to take preventative steps on maintenance. This approach **maximizes their vehicles up-time and helps reduce the total cost to ownership throughout the entire fleet.**
- Improved driver behavior and route compliance which optimized scheduling and operating costs. This included: **optimizing routes, reducing engine idle time, not exceeding speed limits and eliminating erratic driving habits.**

Connected Asset Solution for Multinational Lawn Care Manufacturer