A Large US Truck Manufacturer
Next-Generation Telematics Platform for Predictive Maintenance

The client

The world's number one company in the truck business. It is part of a global automotive brand with a strong portfolio that includes premium vehicles, off-road vehicles, SUVs, commercial vehicles, and financial services, with a revenue of $167 Bn. It manufactures buses and heavy, medium, and light-duty trucks.

The challenge

- High maintenance costs due to sudden unexpected truck part failure.

- High dependency on SMEs to diagnose the fault and suggest the next best action

- The existing platform was not scalable to support a high volume of sensor events

- Email was the only option to notify truck drivers of high-priority fault events

A Large US Truck Manufacturer

Next-Generation Telematics Platform for Predictive Maintenance

The solution

- Integrating IoT, cloud, and advanced analytics to create a scalable platform for real-time fleet efficiency insights and predictive analytics.

- Utilization of Azure IoT stack for a highly scalable telematics platform, incorporating a rules engine and complex events processing module for predicting truck breakdowns.

- Data analysis for alert prioritization based on failure criticality, delivering notifications to fleet owners, drivers, and nearby dealers/car shops via mobile app, SMS, and email.

- Leveraging geo-location data and alerts to direct vehicles to the nearest dealer for maintenance.

- Integration of failure analytics data with vehicle telematics information to provide engineering departments with insights for enhancing vehicle component quality.

The impact

- Atos's IoT-enabled telematics platform helped the client reduce unplanned vehicle downtime by 30 percent. Predictive analytics help with preventive maintenance, empowering drivers and fleet owners to predict issues, prevent downtime, and minimize maintenance costs.

- Revenue-based model for dealers to get a commission on every subscription they renew on behalf of the truck manufacturer. This is the effective use of a data monetization approach where dealers can track subscriptions getting expired on vehicles and reach out to the customer to renew them, thus generating after-market sales

Why Atos?

- Had a proven track record with other groups within the organization.

- Atos was the primary vendor for the Telematics Area within Customer Organization

- We have been associated with Telematics applications for over 6 years (72+ months).

- Maintaining(Development and support) critical applications (backend and Front end) in the Telematics Area

- Lowered maintenance costs by leveraging Machine Learning

- Proposed for optimized development & support in the UI/UX area and working with the DTNA team to finalize the same.

- Process optimization, an ongoing operation as tools/technologies/applications were evolving @Customer Telematics based on business requirement

Atos

A Dutch Truck Manufacturing Company

Connected Truck Platform for Data Analytics and Monetization

The client

A large Dutch truck manufacturer. The previous Connected Truck (CT) version was a Fleet management system that turns vehicle data into comprehensive information for the company and its clients. The truck OEM requested Atos implement an enhance version of CT solution based on a full ecosystem, which will help them realize their business objectives with an improved backend solution.

The challenge

- Total cost of operations for fleet operators as a true pain to remain profitable

- No real-time observation of the fleet operation instead of only historical analytics-enabled reactive solutions

- No significant differentiation to other truck manufacturers, e.g., through digital, value-adding services for fleet operators

- Enable business Ecosystem for 3rd parties and customers

- Vehicle data for analytics to the engineering department

- Time to market too long.

- Not fully GDPR compliant.

- Missing complex interrelationships and visibility.

A Dutch Truck Manufacturing Company

Connected Truck Platform for Data Analytics and Monetization

The solution

- Scalable telematics platform on Azure

- Support for multiple OBU providers

- M2M gateway with device management

- Open API for 3rd Party integration

- Integration with legacy systems and engineering departments

- Real-time fleet visualization with analytics

- Driver behavior tracking for fuel efficiency, speed, braking, etc.

- Eco-scorecard calculation and CO_2 emissions insights

- Interfacing with subscription/billing providers and third-party systems

- Multi-dimensional relationship management for vehicles, customers, and users

- Adherence to GDPR

- Infrastructure setup and end-to-end service management

The impact

- Transition to a service revenue model, delivering standard OBU on trucks with additional services.

- Ecosystem for Truck OEM partners, enabling fast integration and onboarding of 3rd parties and clients for digital services revenue.

- Increased uptime and OTA updates, with 10,000 software updates/day and full diagnostics support.

- Connectivity to OBUs from multiple providers.

- Real-time trip data and infrastructure health monitoring via Power BI, Service-Now, and Dynatrace.

- Highly configurable platform for subscription-based data access.

- Data monetization through FMS implementation for selling data subscriptions.

Why Atos?

- We won this opportunity because of our proactive capability presentations and series of design thinking workshops with the client.

- Our strong experience in developing a telematics platform for another large truck manufacturer and our capability to execute faster time to market with our accelerators helped us make a winning strike.

AtoS