A Dutch Truck Manufacturing Company

Connected Truck Platform for Data Analytics and Monetization

The Client

A large Dutch Truck Manufacturing company, the worldwide quality leader in the design and manufacture of premium light, medium, and heavy-duty commercial vehicles. The company also offers a Fleet management system for their vehicles that turns vehicle data into comprehensive information for its clients.

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.

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Connected Truck Platform for Data Analytics and Monetization

The Solution

- Scalable, cloud-agnostic telematics platform on Azure supporting multiple OBU providers, M2M gateway with device management, and an open API layer for seamless third-party integration.
- Integration with customer legacy systems, including Telco Management and engineering departments.
- Firmware application development and maintenance on TCU.
- Real-time fleet visualization, end-to-end data analytics, and vehicle health status alerts.
- Driver behavior tracking and trip data analysis for efficiency and safety.
- Data analytics for driver eco-scorecards, geo-fencing, trip tracking, and CO2 insights.
- Integration with subscription/billing providers, third-party systems, and BI/BA environment.
- Managing relationships among vehicles, customers, and users while adhering to GDPR.
- Infrastructure setup and service management.

The Impact

- Transitioned from selling CT-Solution as a truck option to a service revenue model, delivering standard OBUs with added services.
- Established an ecosystem for Truck OEM partners, enabling fast integration and onboarding of third parties, and supporting digital service revenue through subscriptions.
- Improved truck uptime with over 10,000 software updates and 200 client parameter updates daily, along with full diagnostics support.
- Supported connectivity to OBUs from multiple providers.
- Enabled real-time trip data monitoring and infrastructure health via Power BI, Service-Now, and Dynatrace.
- Utilized a highly configurable platform for subscription-based data access.
- Implemented data monetization through rFMS3.0/4.0 for selling data via a revenue-based subscription model.

Why Atos?

- Strong experience in the development of telematics (Connected Fleet) platforms for other large truck manufacturers.
- Extensive knowledge in the Connected Fleet domain.
- Atos proposed an improved time-to-market for the new platform services leveraging our connected fleet reference architecture.
- Atos proposed an end-to-end service model, which was a unique framework recognized by analysts for managing IoT projects.

A Large US Truck Manufacturer

Next-Generation Telematics Platform for Predictive Maintenance

The Client

The world's number one company in the truck business. Part of a global automotive brand having a strong portfolio including premium vehicles, off-road vehicles, SUVs, commercial vehicles, and financial services and revenue of $167 Bn. Manufacturer of buses as well as heavy, medium, and light-duty trucks.

The Challenge

- High maintenance costs due to sudden unexpected truck part failure.
- There is a high dependency on subject matter experts 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 priority fault events.

A Large US Truck Manufacturer

Next Generation Telematics Platform for Predictive Maintenance

The Solution

- Integration of IoT, cloud, and advanced analytics for a scalable platform.
- Real-time and predictive insights generated from seamless connectivity with vehicle data.
- Utilization of Azure IoT stack to develop a highly scalable telematics platform.
- Predictive analytics using a rules engine and complex events processing to foresee truck breakdowns.
- Alert data analysis based on failure criticality, communicated to fleet owners, drivers, and nearby dealers via mobile apps, SMS, and email.
- Geolocation data is harnessed to guide vehicles to the nearest dealer.
- Integration of failure analytics data and vehicle telematics information to improve vehicle component quality, benefiting the engineering department.

The Impact

- Atos IoT telematics platform reduced unplanned vehicle downtime by 30%. Predictive analytics enables preventive maintenance, helping drivers and fleet owners predict and prevent issues, reducing maintenance costs.
- A revenue-based model for dealers offers commissions on subscription renewals for the truck manufacturer. This data monetization approach allows dealers to track expiring subscriptions, reaching out to customers for renewals, thereby boosting after-market sales.

Why Atos?

- Has a proven track record with other groups within the organization.
- Atos was the primary vendor for the Telematics Area within the customer organization.
- We have been associated with telematics-related applications for more than 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 and support in the UI/UX area and working with the customer team to finalize the same.
- Process optimization, an ongoing operation as tools/technologies/applications were evolving @customer Telematics based on business requirements.