



Case Study: IoT/Transportation & Logistics

Fleet uptime drives improved performance of 400,000 vehicles

End-to-end connected vehicle platform links trucks, buses and drivers to improve run-time on the road while maximizing value for the manufacturer and its broader ecosystem.

A leading manufacturer of commercial trucks and buses sought to improve the uptime of its vehicles, speed-up repairs and improve customer service by utilizing continuous data insights across the value chain. The company's key challenges included the high cost and unavailability of parts where they were needed, delays in determining the root cause of breakdowns and disparate, siloed systems that made it difficult to share information among dealers, owners, drivers' service partners and other stakeholders.

Maximizing vehicle value through connected data

The client wanted to enhance its revenue, profits and market share by making its vehicles more reliable and less expensive to operate.

Achieving this required an end-to-end connected vehicle platform to send data about vehicle performance and status to

At a Glance

Cognizant enabled a major truck manufacturer to link sensors on its vehicles to a cloud-based telematics and analytics platform. This helps the manufacturer differentiate itself in the market by improving the uptime of its 400,000 vehicles, increasing customer loyalty and generating new sources of revenue such as subscription-based services. A continuous integration and delivery platform will help speed these new services to market.

This platform will:

- Reduce customer repair and maintenance costs by 30% through preventative maintenance and warranty repair.
- Run applications on the platform to monitor driver behaviors that influence vehicle safety and fuel efficiency for cost savings.
- Deliver 73% improvement in responsive 24-hour repair across the enterprise portfolio of vehicles.

a command center that detects problems, schedules preventive maintenance, positions parts where they are likely to be needed and assures vehicles run at maximum efficiency. Cognizant's scope was to provide a solution architecture and implement the data-driven solution to help realize our client's vision to become a recognized leader in vehicle uptime, create a best-in-class warranty performance and shift from a reactive to a demand-driven parts supplier.

Solution

Cognizant conceptualized, designed, developed and deployed an elastic, innovative open architecture-based cloud platform that integrates with any telematics device or service provider, as well as a continuous integration and delivery platform to ensure speedy time to market of new capabilities.

We worked on the client's internet of things platform to deliver a high performance, low latency solution designed for scale and speed to support the manufacturer's vision for leveraging and sharing vehicle data. We also helped assure device and platform security, data storage and processing, predictive analytics and end-user applications.

The solution's centralized command center allows the manufacturer to ensure vehicle uptime by using all events that may require action (such as fault codes and repair orders) to improve the customer experience through more integrated, consolidated systems and communications.

An easy-to-use portal monitors, triages and triggers events for every vehicle based on the data provided by the telematics platform. Rapid communications between the fleet, dealers and the manufacturer speed

approvals for repairs and parts shipments, as well as updates to customers on the status of those parts and repairs. Remote diagnostics and vehicle location data help dealers plan vehicle repairs, while advanced filtering and sorting allows all stakeholders to quickly identify and locate vehicles and dealers.

Our client's end-to-end platform enhances the visibility of vital health and operational data with a unified view of disparate systems across the value chain. The solution integrates and enhances service-level communications among owners, dealers and service partners.

Centralized information within the portal enables fast, streamlined and documented communications to address vehicle downtime causes related to parts cost and availability, warranty exposure with access to real-time vehicle health and operational data. The solution delivers greater fleet uptime and lowers total cost of ownership while enabling more efficient management and utilization of assets.

Outcomes

- Lowers unplanned maintenance events by 30% across the manufacturer's vehicle models.
- Improves safety and fuel efficiency by monitoring driver behaviors.
- Delivers quicker approvals and updates using rapid, three-way communications between the fleet, dealers and the manufacturer.
- Increases vehicle repairs completed within 24 hours by 73%.

To learn more, visit www.cognizant.com/iot

About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 193 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us [@Cognizant](https://twitter.com/Cognizant).

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