Case Study: Transportation & Logistics

Modern Digital Foundation Empowers Freight Leader to Adapt to Changing Market Conditions

Cognizant Digital Engineering built a cloud-based platform to support automated order acceptance and payments and a trailblazing digital marketplace.

The freight shipping industry is in the throes of massive change. E-commerce has decreased the average length of haul, and customers have become accustomed to swift last-mile delivery. Freight volume exceeds truck capacity. Both truck owner/operators and carriers are eager for solutions that reduce costly “deadhead” miles driven with empty loads.

To adapt to rapid change, a leading North American trucking and transportation company realized it needed to modernize its core operational systems and infrastructure. To rapidly build digital solutions to increase operational efficiency and create an appealing experience for shippers and truckers, the company needed to replace on-premises infrastructure and waterfall development with scalable, cloud-based infrastructure, a modern technology stack and agile ways of working.

At a glance

A leading North American trucking and transportation company was saddled by legacy infrastructure and waterfall development. Cognizant built a robust cloud-native platform with smart business processes, well-integrated sub-systems, automated decision systems with high information visibility.

Outcomes

- Improved operational efficiency
- 80% more electronic orders accepted automatically
- 40% more carrier payments processed automatically
- New platform enables best match of Shippers to Truckers with intelligent algorithms that optimize dead loads and haul, thereby saving time and reducing carbon footprint
**Solution**

The company engaged Cognizant to collaboratively build a modern cloud platform and introduce agile methodology to its developers. We built a robust cloud-native platform on Microsoft Azure with smart business processes, well-integrated sub-systems, automated decision systems with high information visibility on assets, pricing, rating.

The Next Gen Transportation Management platform represents 1,200 person years of effort. Over the course of the engagement, we deployed more than 400 developers who worked in pods – self-contained teams of six to eight developers, testers and architects – in three U.S. locations and India. To coordinate the work across multiple locations, we used the Scaled Agile Framework (SAFe). During the engagement, the client’s IT organization gained experience with agile methods and tools by working with our developers and attending workshops to transition from a traditional waterfall mindset to an agile mindset.

**Results**

The new digital platform significantly improves operational efficiency in the following ways:

- 80% more electronic orders accepted automatically
- 40% more carrier payments processed automatically
- Up to 10 days advanced visibility for account representatives to create quotes
- Improved supply chain collaboration with trading partners
- Reduced operational costs across the value chain

What’s more, our client now has the digital foundation to swiftly build new applications that address emerging market needs. One is an artificial intelligence-powered digital marketplace that connects shippers and truckers to reduce deadhead miles. Similar to rideshare apps, the digital marketplace includes a mobile app used to bid on loads, view load location in real-time, rate facilities and receive payments. A strong competitive advantage, the digital marketplace would have been difficult or impossible to build without the underlying technology platform and agile processes.

**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 194 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.