



CLIENT SPOTLIGHT

A deeper perspective

How Daimler Trucks Asia utilized data-driven insights to proactively change the course of the entire organization.

Daimler Trucks Asia (DTA), an integral subsidiary within the world's largest truck manufacturer Daimler AG, has a clear vision—to lead the commercial vehicle industry into the future. But within that very industry, new challenges have emerged, demanding the speed of change to be swift and innovation innate. In order to stay at the leading edge, DTA is continuing to evolve traditional modes of thinking and operations.

DTA's Chief Information Officer (CIO) Lutz Beck certainly isn't afraid to venture into the uncomfortable in order to catapult the organization to the top of the digital realm. A fourteen-year Daimler veteran with five years in his current role, Mr. Beck drives the technological vision and works diligently to help create one of the most effective IT benchmark organizations.

He also aims to transform DTA's entire business model into one that leverages the power of insights—a deep understanding of data and its value to the business. For DTA to be able to achieve this, disruption is not only inevitable, it's mandatory. "We need to use all the technologies and innovations available to redefine

our business model," Mr. Beck notes. "We have to be a disruptor in the industry and disrupt our own company to prepare it for the future."

Quality Management steps into the spotlight

That disruption began in an unlikely place, one that wasn't well known for its innovation—Quality Management. Its department head Mr. Michael Moebius admits that what it lacked in future-forward thinking, it made up for in data. Data filters through Quality Management from over 150 countries, but their conventional analysis system was outdated and relied on siloed internal sources captured through traditional means.

As a result, quality and safety issue identification and investigation times were reactive, and focused on historical analysis after the problems had already matured. This long and sometimes inaccurate process yielded high warranty costs and delayed recalls. Mr. Moebius elaborates, "The faster we are in detecting quality issues and addressing customer complaints, the less damage will be done to the brand's image and its financials." The

+ IMPACT

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Refinement of insights from the IoT, DTA connected trucks and Deloitte's cognitive system could enable a 6-12-month future view into the lifetime of a vehicle.

+ IMPACT

DTA averted thousands of trucks from being produced with a faulty part, thanks to smart, proactive insights.

key question was, how could the team utilize insights to detect issues *before* they even occurred?

Solidifying a future-forward foundation

Mr. Moebius likens it to weather forecasting, an industry that has created analytics models based on patterns and data from the past in order to generate predictions. "We transferred this idea to Quality Management," he explains. "Let's look at past data to see if there are patterns—and if they can be applied to the future."

While the Quality Management department had access to a wealth of data, they didn't necessarily know how to analyze it most efficiently. CIO Lutz Beck confirms, "We were collecting data, but not *using* it in a way in which you could make decisions or create business models out of it."

This gap in skills highlighted a key area of attention for Mr. Beck, who believes that the foundation for everything within a company is its people. "The better educated, skilled, motivated and committed people you have, the better you can do your job," he states. It was this desire to lay the correct foundation for DTA's digital transformation that led to the relationship with Deloitte. Ashwin Patil, Deloitte Consulting LLP Managing Director for Global Manufacturing Analytics remembers, "We were able to gather folks from strategy, cloud, digital tech, data scientists—we brought key people to the table to help drive this."

Looking into the crystal ball

First, Deloitte analyzed all of the available data from forty-five of the last major DTA recalls. This included structured data like metrics correlated with their vehicles to unstructured data, such as call center records, warranty claims, dealer and technician comments and social media engagement. Based on this combined analysis, Deloitte discovered that eighty-percent of these recalls



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MICHAEL MOEBIUS
Head of Quality Management,
Daimler Trucks Asia

could've been detected in advance based on the historical data patterns.

The opportunity to look even further into the future became possible with the introduction of live data through DTA's launch of Fuso Super Great, the first connected truck they produce and sell, and their first foray into the Internet of Things (IoT). As the truck is driving, geographical data and data from the vehicle's system like oil pressure, coolant temperature and battery voltage is combined with the historical data, providing DTA with the insight to see the overall health situation of a truck. According to Mr. Moebius, this proprietary cognitive system dubbed "proactive sensing" enables DTA to implement "predictive intelligent maintenance and service planning, which ultimately helps us get ahead."

Powered by collaboration

The success of Daimler Trucks Asia and Deloitte's proactive sensing project hinged on the teams' desire to function as an innovative client relationship. They embraced the "flavor of a startup," where

constructive criticism flowed freely, enhanced by regular meetings at the staff and management levels to create an open environment for questions and ideas.

Deloitte also took a second look at DTA's internal resources and developed skill profiles to identify gaps in capabilities. So while Deloitte didn't *find* the people, they were instrumental in helping to *define* what kind of people would be most likely to make the company successful.

Smarter insights, stronger outcomes

And success certainly did come. The proactive sensing project is expected to save DTA \$8 million in warranty costs during the first 24 months and even more in recall costs. The system is also able to predict and prioritize quality issues thirteen months ahead of their previous process, which helps keep their customers on the road with less downtime. The impact of this data-driven perspective has been felt company wide. "By doing this project, we were able to generate awareness for data at a management level," Mr. Beck states. "The project helped us shape an overall business case for the big data topic. Now everyone wants to have it. The whole company is pushing for it."

The road less traveled

The journey for DTA doesn't stop here, however. The constant cycle of disruption continues, not only for the organization and the industry, but also for the ever-changing world that is becoming increasingly reliant on connectivity, data and the Internet of Things. Mr. Beck's intent is clear; "Proactive sensing has helped us shape an overall business case for big data, but if we don't do something new soon, then we may be at risk." Through the continuation of innovation and its new dedication to the power of insights, Daimler Trucks Asia is positioned to help lead the industry into the future, to create new services and claim its spot as a truly innovative and future-oriented global organization.

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