

Equipping drivers for the next generation of regulations

Capgemini works with a German automobile manufacturer to fulfill requirements for the new Worldwide Harmonised Light Vehicle Test Procedure (WLTP)

Maintaining best practices around the world

In recent years, sustainability has become an increasingly central focus of the automotive industry, resulting in a variety of efforts to decrease emissions. One element of this push for more environmentally-friendly vehicles has come in the form of new regulations that call for better data.

The Worldwide Harmonised Light Vehicle Test Procedure (WLTP) ensures that passenger vehicles have accurate data for fuel consumption and emissions. It is used to calculate the consumption rates of all models and equipment, while ensuring that these values are both transparent and realistic. This testing procedure is compulsory for all new vehicle approvals in EU member states, as well as other countries such as Japan and India. As of September 2018, the WLTP regulations also apply to all existing vehicles as well as new vehicles, and a WLTP fleet target is planned for 2021.

Overview

Customer Name: BMW Group

Industry: Automotive

Location: Global

Challenge:

Introduction of the WLTP meant that customers needed access to more comprehensive emissions data

Solution at a glance:

Capgemini developed a secure system for managing the complexity of the WLTP process

Results:

- Development of the system for collecting the necessary data and calculating consumption and emission rates
- Successful and efficient type testing that complies with legal requirements
- Delivering on time in an agile cooperation paves the way to DevOps





Delivering WLTP-compliant emissions data for vehicle type approval

Following the introduction of the WLTP regulations, customers needed access to individual emission data based on the configuration of its system and ensure that each vehicle received its own energy efficiency label just in time at the end of the production line.

The consumption data generated by the WLTP is required for many different processes, such as vehicle type approval from the German Federal Motor Transport Authority or vehicle configurators used by potential and existing customers. New processes and IT solutions, as well as the adaptation of existing processes and IT solutions, were necessary. The first step was to collect the required basic development data, before completing various calculations and measurements.

Capgemini enjoyed a longstanding partnership with the BMW Group and was selected as a trusted advisor to provide extensive specialist knowledge. During the initial WLTP project phase, Capgemini developed EVE (Ermittlung von Verbrauchs- und Emissionswerten), a system that collects all necessary data, and calculates consumption and emission rates. EVE maps data and processes in line with WLTP criteria, which enables authorities and technical services to successfully test vehicle types for compliance with new regulations.

Capgemini steps in at critical moment

Capgemini was selected again as a partner to execute the final implementation. Capgemini's proven expertise was the key to completing the project within just 16 intense weeks before the established deadline in September 2017.

Capgemini quickly assembled an experienced team that could deliver the extensive infrastructure that would prove necessary to meet the legal and technical requirements. During this final intense phase, the team focused on implementing significant extensions in the data model, as well as launching new interfaces and subsystems.

Fulfilling new type approval requirements

Capgemini's engagement transformed a critical project into a success story. The resulting EVE system securely manages global WLTP procedures for the entire range of vehicle models and joins an innovative set of technologies. The agile project design and cooperation continue to pave the way for future opportunities.

The Collaborative Approach

The Collaborative Business Experience™ is central to the Capgemini philosophy and a pillar of our service delivery.

Throughout the WLTP project, the BMW Group and Capgemini worked towards the following mutual objectives:

- Strengthened competitive edge
- Increased efficiency
- Optimized performance
- Agile and DevOps transformation

About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of over 200,000 team members in more than 40 countries. The Group reported 2018 global revenues of EUR 13.2 billion.

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