Software development in the fast lane

Capgemini transforms a large-scale project into an agile delivery model that enables the flexible implementation of new requirements.

Pioneer of the automotive industry builds technology for the future

Gottlieb Daimler and Carl Benz invented the automobile and founded their companies with a pioneering spirit that still lives on in Daimler AG today. The international automotive group is also setting standards for the future of the industry in other areas. As part of this effort, Daimler is driving the development of efficient and locally emission-free engines, connected cars, autonomous driving, and new mobility and transport concepts. As software becomes more important, the speed of its development is also an increasingly essential success factor.

Overview

Client: Daimler AG
Sector: Automotive
Region: Germany

Client challenge: A solution for frequent changes during vehicle development in order to keep pace with rapid industry evolution

Solution: Transformation to an agile approach for the development of a product data management system

Results:

- Significantly faster implementation of new requirements
- Shortened release cycles
- Better coverage of requirements from business departments
- Higher level of automation

“Working in close collaboration towards common goals was key for our successful agile transformation.”

Ronald Kutschke, Delivery Executive, Capgemini
Changes at a faster pace

For the development and documentation of electronic vehicle components, Daimler uses the Electric/Electronic Product Data Management (EPDM) application developed by Capgemini. EPDM was implemented over the course of several years and is based on a classic waterfall model. A Capgemini team of 65 Indian and German colleagues worked at several locations on new releases that went live twice a year.

However, since the beginning of the partnership, vehicle development in this area has evolved very rapidly. Because the work using the waterfall method was no longer able to keep up with the fast pace of change, Daimler and Capgemini jointly decided to fundamentally change the delivery model. The established, classic software development project was to be transformed into a completely agile project with fast reaction times.

The transition from a waterfall to an agile delivery model involves far more than just the use of new tools. The transformation also takes place on a cultural and technical level, requiring new processes and ways of thinking. In addition to developers, it also affects project managers and entire business departments.

Agile development teams in Germany and India

Due to the wide scope of the development work, several scrum teams were established in Germany and India. The first was set up by Capgemini in Stuttgart with experts from Germany and India, who worked closely with the product owner and business experts from Daimler. After gaining enough experience, the offshore team members returned to India, where they founded a new agile team. Meanwhile, two more Indian colleagues joined the existing team in Stuttgart. Using this approach, a total of six agile teams for the EPDM development were created within a short period of time.

Fast development reacts to new requirements

The most important result of the transformation is the significantly higher reaction speed. Instead of going through a year-long process, Daimler can now implement and test important requirements within two weeks. With the release cycle shortened to three months and even shorter release cycles planned for the future, these changes can also go live far more quickly.

The transition of the entire development from a waterfall model to a fully agile approach took 24 months. Since the users are now more intensively involved in the process much earlier on, Daimler can more accurately and quickly develop what the business department and the users need. In addition, a higher degree of automation frees the developers from routine tasks and allows them to concentrate on implementing the requirements.

The collaborative approach

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

The transformation of EPDM development is a good example of how Capgemini works closely with its customers. The following factors were critical to the success of the project:

- Joint responsibility for the project
- Efficient communication structures and regular meetings at all levels
- The use of the established LargeScale Scrum (LeSS) framework for the scaling of the development across several shores.

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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People matter, results count.

About the client

The Daimler Group is one of the biggest producers of premium cars and the world’s biggest manufacturer of commercial vehicles with a global reach. Its diverse portfolio includes the brands Mercedes-Benz Cars, Daimler Trucks, Mercedes-Benz Vans, Daimler Buses, and Daimler Financial Services.

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