

Software Factory

Our Software Factory offering delivers the framework (including staffing, training, and Agile transformation) that supports the establishment of a Software House. In addition, our offering helps automakers and their key partners to kickstart the production of automotive software applications and software components according to specific, externally defined end-user requirements. This includes all the skills, methodologies, technical frameworks, solutions, testing, and tooling capabilities that a modern Software Factory requires.

The challenge

Modern vehicles are becoming increasingly software-driven. Yet while traditional automotive Electronic Control Units (ECUs) are involved in several functions, it is becoming increasingly common that these functions now span across multiple ECUs. As a result, automakers seek more flexible software capabilities and increased ownership of the software lifecycle. Automakers and their key partners need to transform their in-house software development capabilities and develop their insourced modular software product portfolio for the next generation of in-vehicle systems, to become more competitive, future-proof and respond to market changes. We help automakers and their key partners with challenges that include:

- The competence and experience to run large-scale software development activities
- A need to decouple hardware and software and to take ownership of the software platform
- A need to develop next-generation automotive systems that meet today's compliance and standards requirements

- A need for modular and reusable software capabilities in order to respond to rapidly changing markets
- A desire to introduce an Agile automotive Way of Working and CI/CD concepts

Our solution

Our Software Factory offering provides clients with a blueprint for their software development strategy. This blueprint includes guidance, information architecture, process templates, and best practices to support your in-house software development and establish Agile Ways of Working. This offering enables automakers to decouple hardware and software development, ensure product quality, and maintain focus on delivering value to their end customers.

Why work with us?

- The option of a full-service, full-scope software capability, with the empowerment to move rapidly towards software independence
- The option to deliver only to smaller subsets of the Software House/Software Factory offering, such as project management, implementing automation frameworks for CI/CD, or agile transformation
- The ability to decouple the platform development lifecycle from the vehicle program development lifecycle
- Improve competitiveness, innovation, and future-proof your production
- Available as full build, operate, transfer model, as managed delivery, or as a consulting model
- Reusable, modular software development capabilities, with standardized production and assets
- Co-create a Software Factory instance within a specific domain or domain subset (such as Digital Cockpit or HMI)
- We can provide scaling and relocation capabilities to address competence gaps and staffing needs

What makes us different?

- We bring hands-on automotive experience and the ability to utilize best practices based on a proven solution
- We can be a companion for the entire software lifecycle, from development strategy and best practices through to the production of software applications and software components
- We bring a focus on empowering you with true software independence, ensuring the knowledge transfer to make sure you own and control your software
- High scalability, global support, and localization capabilities for fast start and speed to market

Our customers

The challenge

A premium OEM wanted to define and establish a Software Factory, including a reference platform for future innovation, and a reusable platform for next-generation series production HU-IC systems

- A need to decouple hardware and software development
- A need for full-scale Agile software development, including supplier contributions
- A need to develop an HU-IC series production system based upon a reference platform

The solution

Through co-development with the OEM, we helped create a Software Factory, including the software platform. Our solution also included:

- Co-development of software for a converged Head Unit and Instrument Cluster
- A blueprint for scaling up Agile development, including the use of DXC Luxoft PELUX platform and as a basis for a reference platform

The results

We helped the client to define and establish the project organization, including customer and supplier stakeholders, to achieve the following:

- **Established a new Way of Working**
- **Built-up a new development site with the customer, growing to 100+ in a year, up to 500+ people**
- **Established DevOps teams, focusing on CI/CD**
- **The ongoing development of a platform and series production system features**

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