SUCCESS STORY:
IN RESPONSE TO COVID-19, LHP SUCCESSFULLY DEPLOYS REMOTE TEAM OF AUTOSAR ENGINEERS

CASE STUDY

CHALLENGE

During the global pandemic, COVID-19, like many corporations around the globe, LHP had been forced to migrate the entirety of our customer-facing projects to an online platform, causing our engineering teams to work remotely. However, this did not derail the project we had with a Tier-1 automotive supplier. Before COVID-19 the Tier-1 supplier approached LHP about implementing software from supplier requirements.

Given LHP's expertise in supporting these types of engagements, a team of AUTOSAR experts were deployed to supplement the existing team working on the project.

After the team was engaged, the software development process improvements were identified and implemented in the project. The project became more challenging due to the sudden change in working environments. LHP's engineers had begun the project working side-by-side with the supplier as a collaborative team. However, due to the nature of COVID-19, LHP's engineers were forced to halt and migrate the remainder of the project to a remote work environment. Software development in a remote team is very challenging as it requires significant communication and interactions between team members to meet software release deadlines.

SOLUTIONS

Service Delivered: SW Project

Once the scope of the project was identified, the integrated LHP team began delivering AUTOSAR-compliant software quickly and efficiently. Tasks included mapping approved requirements with software artifacts, development of those artifacts, and releasing those into the ALM systems for other teams to review and approve for testing and integration.

The engineers also referenced Part 6 of ISO 26262, Product Development at the Software Level, to meet functional safety requirements.

ABOUT THE PROJECT

Industry
- Automotive

Customer
- Tier-1 supplier

Tools/Technologies/Skills
- ISOLAR A/B
- RTA-RTE/OS
- CANoe
- Lauterbach TRACE32 debugger
- IBM Rational Team Concert

Goals of the Project
- Implement software from requirements with limited ramp-up time

Application Area
- Powertrain

Scope of the Effort

The software team supported the design and implementation of modifications to the software architecture of several components to be compliant with functional safety. The team also performed unit tests on several software components remotely through a custom test-setup launch. Without the help of LHP and a fully-integrated GAP analysis and ISO 26262 implementation plan, the Customer would have risked losing the OEM as a customer due to future regulation requirements.

Service Delivered: Delivering Project Off-Site Due to COVID-19

LHP was able to provide a solution by collaborating with the Customer to support a transition to remote work. The primary objective of this transition was to support the mandatory "Stay Home, Stay Safe" Executive Order issued by government officials while minimizing program risk and delivery. LHP and the Customer worked jointly to create a coordinated asset management schedule so that tools, corresponding licenses, and required hardware would be available at the appropriate times. The supplier set up the hardware and licenses needed while LHP Technical Leadership accelerated and resolved other activities. With these modifications, LHP's support continued even through the COVID-19 pandemic and achieved critical milestones.

RESULTS

LHP's timely and organized response allowed the Customer to achieve their deadline to their OEM and produce a functional safety-compliant product through the COVID-19 pandemic. Impacts from COVID-19 were minimized and LHP was able to stay synchronized with the supplier while the project continued. The supplier recognized LHP's substantial role in the achievement. The success of the project has led to continuing discussions about leveraging LHP as a strategic technical partner on future product developments.