

– APPLAUSE CASE STUDY –

“APPLAUSE ALLOWS US TO DEPLOY UPDATES AND NEW FEATURES WITH A LOT MORE CONFIDENCE KNOWING THEY HAVE BEEN TESTED IN REAL-WORLD CONDITIONS WITH TESTERS WITH REAL VEHICLES. THAT IS THE BIG PICTURE.”

MATTHEW VANCE, QUALITY MANAGER (API MANAGEMENT, SERVICE BACKEND OPERATIONS), MYAUDI SOLUTION

CUSTOMER

Audi is among the world’s leading producers of premium cars. The brand stands for sporty vehicles, high build quality and progressive design — for “Vorsprung durch Technik” (“progress through technology”). The myAudi app wraps all Audi tech into one seamless experience between the driver, their vehicle and the internet. Through myAudi, Audi owners can lock their vehicles remotely, check fuel level or electric range, send routes to their vehicle, set alerts and more.

CHALLENGE

Many large-scale organisations like Audi use the Scaled Agile Framework (SAFe) to synchronise work done by different teams across multiple, interrelated products and services. In theory, organisations that use SAFe can integrate the power of Lean, Agile and DevOps to deliver innovative products and services faster, more predictably and with higher quality. The framework has four key values that represent the fundamental beliefs that are key to SAFe’s effectiveness: transparency, alignment, program execution and built-in quality.

For many organisations using SAFe, achieving built-in quality is especially challenging. Like many high-level frameworks, SAFe provides theories to follow without detailing how to implement them in practice. Cross-functional teams (known in SAFe as trains) have little guidance on how to deal with the operational hurdles they face each day, such as time pressure, limited resources or lacking expertise — especially when it comes to assuring product quality.

COMPANY

Audi

INDUSTRY

Automotive

TESTING TYPES

Functional Testing | IoT

APP TYPES

Mobile | Web

CHALLENGES

- Ensure end-to-end quality across the entire myAudi solution train
- Create a clear strategy for built-in quality within SAFe
- Transform solution train mindset when it comes to QA and testing
- Test in real-world, not simulated, environments and vehicles

RESULTS

- Set up a clear built-in quality practice at solution train level
- Created clear QA structures, processes and roles within trains and teams
- Ensured robust end-to-end and regression testing
- Secured reliable, real-world feedback on product quality

While the myAudi solution train recognised the importance of built-in quality, without a blueprint to follow, it was hard to apply the value in day-to-day work. Left to their own devices, each Agile team interpreted built-in quality differently, which resulted in a large discrepancy between approaches to QA and testing within the solution. Furthermore, as teams had no transparency into what other teams were (or were not) testing, it was impossible to identify gaps in test coverage and ensure end-to-end quality.

The lack of a clear strategy also meant that the myAudi solution train did not devote the focus and budget necessary to make built-in quality a success. Agile teams were ill-equipped to execute comprehensive end-to-end testing, let alone dedicate attention to topics such as accessibility, customer experience and payments testing — which can have serious repercussions for product quality from the end user perspective.

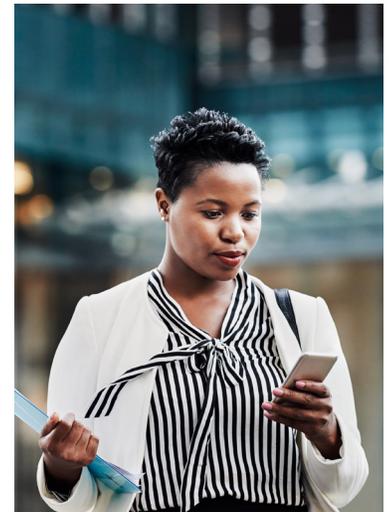
However, having the right strategy, resources and expertise are only part of the challenge when it comes to building quality. The myAudi solution train knew that achieving true built-in quality was also a question of mindset. The team nearly always prioritised new features over QA and testing, which were treated more as an afterthought than an essential part of product development. myAudi management knew that making built-in quality a success meant playing the long game and drilling it into teams that quality is just as important as new features for delivering business value.

SOLUTION

In a combined consulting and practical implementation approach, Applause helps the myAudi solution train to identify and resolve gaps in its SAFe built-in quality practice. Prior to each global release, on-demand tester teams from Applause's million-strong uTest community test the myAudi solution end-to-end in real vehicles, in real scenarios, in specific locations to ensure connected car features are working seamlessly for all users worldwide.

At the start of our collaboration, Applause worked with myAudi to build up its built-in quality practice. A crucial first step was to create a central QA team to provide strategy, tools and directions to each train, guarantee alignment and own end-to-end quality. Applause also provided each Agile team with a test analyst to collect information about upcoming feature changes and assess testing requirements, which they relay to the central QA team.

Once every two weeks, Applause performs regression testing for myAudi, with tests taking place over the weekend so that the results are ready on Monday morning. Applause also automates as many tests as possible based on myAudi's automation framework, focusing on tests that are stable and don't change often. This way, the community testers can focus on tasks where they create the most value, such as carrying out user acceptance tests for new features or executing end-to-end tests.



“APPLAUSE HAS DONE A GREAT JOB OF COORDINATING TEST CYCLES AND BRINGING THEIR EXPERTISE IN TESTING IN SAFE INTO WHAT WE ARE TRYING TO DO AT AUDI, NOT ONLY AT THE RELEASE TRAIN LEVEL BUT ALSO AT THE SOLUTION LEVEL.”

MATTHEW VANCE, QUALITY MANAGER
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Applause also plays a central role in myAudi's sprint planning, defining use cases, agreeing on acceptance criteria and estimating the work involved. During planning meetings, Applause test analysts attend breakout sessions to discuss strategy and answer QA-related questions, while the central Applause-myAudi QA team meets to discuss high-level goals for each sprint.

In order to ensure that the myAudi solution train continues to progress and refine its approach to built-in quality, Applause established a community of practice (COP). This is a tool Agile team members use to raise issues that require longer-term discussion and resolution and make suggestions for improvements. Every fortnight, Applause's solution consultant meets with the myAudi train management to analyse points raised on the COP and devise solutions.

RESULTS

The ability to test myAudi on demand in real-world conditions has been extremely valuable for myAudi. Instead of testing simulated vehicles in Germany as they used to, myAudi can now test in various EU countries quickly and easily. For some tests, Applause was able to source testers with hard-to-come-by vehicles, like a brand-new Audi RSQ8. Knowing that myAudi has been tested in real-world conditions, in real vehicles by real people enables myAudi to deploy updates and features with far greater confidence.

myAudi can now test right before release. The train uses test result summaries Applause testers provide after each regression test, which equip feature owners with a breakdown of bugs discovered on their feature, as a final check before releases. By coordinating all test cycles and sharing their expertise in testing in SAFe, Applause has transformed myAudi's built-in quality practice at both release train and solution level.

Applause continues to help myAudi to refine its built-in quality practice within SAFe and guarantee the consistent high quality of the myAudi product.

“ INSTEAD OF TESTING SIMULATED TEST VEHICLES IN GERMANY, WE CAN NOW TEST IN EU COUNTRIES QUICKLY AND FLEXIBLY. ONE TESTER HAD A BRAND NEW RSQ8, WHICH WAS REALLY FUN!”

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ABOUT APPLAUSE

Applause is a world leader in testing and digital quality. Brands win or lose customers through digital interactions, and Applause alone delivers authentic feedback on the quality of digital assets and experiences, provided by real users in real-world settings. Unlike traditional testing methods (including lab-based and offshoring), Applause responds with the speed, scale and flexibility that brands require and expect. Applause provides actionable testing results that help development teams build better digital experiences faster, and release them with confidence. The world's leading brands – including Google, American Express and Dow Jones – rely on Applause as a best practice and release partner to deliver digital experiences their customers love.

Learn more at: www.applause.com