

Client Case Study

Establishing a Dedicated Quality Assurance Practice for Improved Quality of Software Products

The client is a subsidiary of an American automotive manufacturer dedicated to enhancing mobility through a suite of products and services, from micromobility to microtransit.

The client is a transportation-as-a-service (TaaS) company that builds software for autonomous vehicles. Over the past few years they have been focused on building a commercial self-driving service for ride-hailing and goods delivery to launch in major American cities, although more recently the project was shut down due to a shift in strategy.

Challenge

Although the client had been established for a couple years, their product team didn't have proper software testing practices in place. The responsibility for end-to-end testing fell on Product Managers which was usually on an ad-hoc basis and wasn't thorough enough. This often led to software bugs making their way to production, costing the business a lot of time and money to address retroactively. Their Head of Software Engineering at the time recognized the need for a dedicated software testing team and practice to address these issues.

KEY RESULTS



Established a dedicated QA team, onboarding and training 6+ QA engineers.



Established a software testing practice for 4+ product teams.



Addressed 200+ bugs before they made it to production.



Built 2 automated end-to-end test suites.



Average Net Promoter Score (NPS): 10/10.

Solution

The client was in need of a partner with Transformation experience which made TribalScale the best fit, having years of experience with digital transformation in organizations of varying scale. Our team of QA engineers began by formally establishing Quality Assurance as an official department within the organization, creating a manifesto and engaging closely with their leadership team throughout the whole process.

From there our team collaborated with the team responsible for building the iOS interface for their self-driving vehicle platform. We built a tailored software testing process, integrating it into their existing software delivery lifecycle, and embedding ourselves into their delivery team to execute on it. We performed exploratory testing, documented test plans, and built a suite of automated end-to-end tests using Swift and XCUITest, delivering time bound results while remaining dedicated to quality. This involved daily collaboration with all stakeholders on the project, starting with daily standups all the way to pairing with their iOS engineers to develop the aforementioned automated tests.

TECHNOLOGIES

- + Rally
- + Swift + XCUITest
- + Cypress + Javascript
- + Git
- + Perfecto



Outcome

From the success of our engagement, other teams within the larger organization began reaching out with similar issues. Our next engagements were with 3 other product teams where we followed the same approach and began operating in pairs of QA engineers.

In order to track the results of our efforts with the various product teams that we interacted with, we built a simple app using Microsoft Lists that helped us stay on top of every build that we received, from what team, what the results/findings from testing were, etc. We also began to collect Net Promoter Scores from these teams as feedback in order to continuously iterate our processes, by the end of our engagement our average NPS score was 10/10.

Our partnership with this leading automotive manufacturer has led us to formalize Transformation as a specific QA service offering, working with clients to mentor their existing teams to be the best-in-class and adopt modern testing practices, tailored to the organization.

“The client lacked proper software testing practices and relied on ad-hoc testing by product managers, which often resulted in costly software bugs being shipped.

TribalScale was brought on board to establish a dedicated software testing department in the organization, onboard and train a team of software testing engineers, and engage with various product teams to enhance their software delivery process by building and executing test plans and automated test suites.

This resulted in a significant improvement in the quality of software being shipped with over 200 bugs being caught before reaching production, the implementation of a robust software delivery process, and overall confidence in the product.



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TRIBAL⁷ SCALE

TribalScale is a global innovation firm that helps enterprises adapt and thrive in the digital era. We have years of experience in digital strategy, design, and multi-platform engineering and through agile practices, we transform teams, build best-in-class digital products, and create disruptive startups.

Whether we're righting the ship for another company or creating a fresh end-to-end solution, we innovate for a better tomorrow.

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