realtor.com®

> " *OUR TEAM'S MISSION IS TO GROW THE BUSINESS FROM GOOD TO GREAT. BUT IT'S NOT ALWAYS EASY. THE KEY IS BUILDING UNIQUE DATA-DRIVEN EXPERIENCES TO HELP USERS FIND THEIR FUTURE HOME ANYWHERE, ANYTIME."*

FARIDA BUDIWARMAN, SENIOR DIRECTOR OF ENGINEERING, REALTOR.COM

CUSTOMER

Digital experience has become an essential part of the home buying journey.

Realtor.com, an online real estate platform and trusted resource for home buyers, sellers, and agents for over 20 years, is well aware of what it takes to help people move confidently through every step of this journey. The company logs 60 million unique monthly visitors viewing 1.7x more pages and spending 1.3x more time each site visit compared to its closest online real estate competitors. Thanks to high traffic and strong user engagement, Realtor.com took home the gold Stevie award for the best real estate app in 2018.

Before all of this success, Realtor.com was under tremendous pressure to deliver compelling and innovative digital experiences, and do so quickly without sacrificing quality. While there was no shortage of ideas, implementing them quickly without running into problems is a difficult balancing act for any company, made all the more challenging for Realtor.com given the high-stakes competition in the burgeoning online real estate sector.

CHALLENGES

With the growing sophistication of its digital experiences, Realtor.com began to encounter data quality issues and inconsistencies across platforms and devices. Increasing traffic, an expanding portfolio of digital tools, and the need to support various platforms and operating systems created a lot of growing pains for the internal and development teams, which struggled to cover all the bases.

COMPANY
Realtor.com

INDUSTRY
Real Estate

TESTING TYPES
Functional | Usability

APP TYPES
Mobile

CHALLENGES

- Create data-driven experiences that serve potential home buyers
- Improve quality while maintaining agility and speed

SOLUTIONS

- Standardized strategies to eliminate silos and harden release processes
- Crowd-sourced testing to uncover issues only seen in the real world
- In-the-wild testing on innovative augmented reality features

RESULTS

- 70% reduction in time spent performing manual regression testing
- 1.5x jump in the ability to catch defects earlier

APPLAUSE°

A critical roadblock was juggling competing priorities of moving quickly and maintaining quality as new products and features were introduced.

"The team wanted to move fast, but if you're not careful, agile can turn into fragile, and that's what happened here," said Farida Budiwarman, Senior Director of Engineering at Realtor.com.

Specifically, quality began to suffer for a number of reasons, including lack of ownership due to random assignments with little accountability in addition to a lack of clearly-listed criteria and goals. The team found itself in a vicious break/fix cycle, and without a clear test strategy and too much reliance on manual testing, they were far too slow and ineffective finding defects early on before digital capabilities launched into production.

"We were not aware of our own blind spots—we were too busy executing and not spending enough time to understand test coverage and most importantly, what coverage was missing," said Budiwarman.

SOLUTIONS

To right the ship, Budiwarman launched a strategy that focused on three things: process, new tooling, and finding the right skill sets.

The team standardized its testing processes and strategies, eliminating silos and hardening its release process—steps that created accountability for staffers. Budiwarman also defined clear quality metrics, including specific CSAT (customer satisfaction) scores, and enlisted third-party functional testing services from Applause to augment its internal testing team.

Realtor.com leveraged Applause for functional and usability testing on its mobile app. By taking advantage of Applause's community of more than 400,000 testers worldwide, Realtor.com improved its device, demographic, and location coverage.

Having a partner like Applause was especially important to Realtor.com because of the amount of data it needs to sort. Realtor.com collects a massive amount of data on house listings, which all needs to be validated. Applause was able to streamline this validation process and make it much quicker and more efficient.

Making the data validation processes more efficient allowed Realtor.com to roll out new data-driven experiences. These new releases include Sign Snap and Street Peek, two augmented reality features that showcase details and relevant information about a home on a mobile device.

Applause's in-the-wild testing services allowed Realtor.com to see how these AR experiences were used by real people in the real-world, helping them uncover
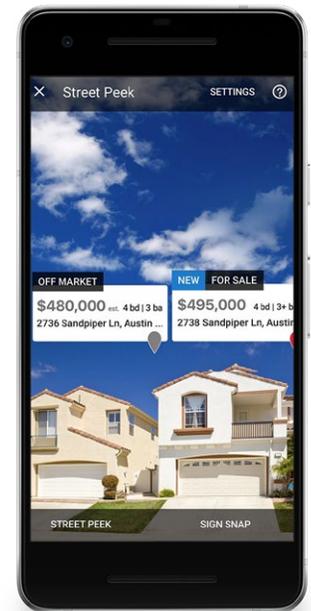
> " SOME TESTING WE COULDN'T DO GIVEN OUR TEAM'S SIZE AND LOCATION. IT WAS A DIVIDE AND CONQUER APPROACH."

FARIDA BUDIWARMAN, SENIOR DIRECTOR OF ENGINEERING, REALTOR.COM

edge use cases and bugs that couldn't be discovered in a lab setting. Community testers used Sign Snap and Street Peek in target locations across the United States to ensure graphics and information displayed correctly when using the AR features in everyday scenarios. In addition, testers validated that the presented information was up-to-date and accurate.

Applause also enabled Realtor.com's team to better utilize leading automation tools by doing the heavy lifting with manual testing.

RESULTS

Thanks to the changes, Realtor.com's testing processes are now highly automated and there is a new ownership model, which has eliminated redundancy of work. The centralized quality organization, along with standardized processes and tooling, has helped break down existing silos and improve employee engagement. Realtor.com's test team is also hitting targeted metrics out of the park. The team has seen a 70% reduction in the time it takes to perform manual regression testing and signs off on release candidates 80% faster today than in the past. The investment in a new automated test framework has enabled a 1.5x jump in the ability to catch defects earlier, and the team is no longer viewed as a bottleneck to delivering solutions. Even better, customer satisfaction numbers are up, and the team has achieved a 70% bug prevention rate.

The new test processes have been instrumental in Realtor.com's ability to successfully roll out innovative new digital features, specifically Sign Snap and Street Peek, which were released on time and without incident thanks in part to crowd-sourced testing services provided by Applause.

> " *TESTING NEW FEATURES LIKE THIS CAN'T BE DONE IN A LAB SETTING—THEY REQUIRE REAL-WORLD TESTING TO MIRROR THE UNPREDICTABLE NATURE OF CONSUMERS.*"
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> **FARIDA BUDIWARMAN,** SENIOR DIRECTOR OF ENGINEERING, REALTOR.COM

ABOUT APPLAUSE

Applause is the worldwide leader in crowdtesting and digital quality. Software is at the heart of how all brands engage users, and digital experiences must work flawlessly everywhere. With **400,000+ testers available on-demand around the globe,** Applause provides brands with a full suite of testing and feedback capabilities. This approach drastically improves testing coverage, eliminates the limitations of offshoring and traditional QA labs, and speeds time-to-market for websites, mobile apps, IoT, and in-store experiences.

Thousands of leading companies — including Ford, Fox, Google, and Dow Jones — rely on Applause as a best practice to deliver high-quality digital experiences that customers love.

Learn more at: www.applause.com