

The client

This major American daily newspaper with a worldwide readership is renowned for the quality of its reporting, which has been recognized with multiple awards. Boasting a total circulation of more than five million subscribers, it's ranked in the top 20 newspapers by circulation in the world.

Industry

Media

Solution elements

RWS Technology Operations: software testing and quality assurance (QA)

End-to-end app quality testing delivers conversions and user satisfaction

The challenge

As media consumption evolved to digital, this household name embraced a number of different multimedia formats and channels for its content.

The newspaper wanted its primary news application and numerous other small apps to deliver a variety of content types, so that users could get the full story not just by reading, but also by watching documentaries, listening to podcasts, and through augmented and virtual reality (AR and VR). VR uses footage captured with specific 360-degree video cameras, which subscribers can explore in the news app by moving and rotating their smartphones to look around and learn about what happened there. AR uses the smartphone's camera to display virtual objects or people as if they're in the user's real-world environment (just as the Pokémon Go game did with its characters). The app user can then learn more about the object in an interactive way or watch the person in action as if they're right there.

With news delivered through multiple formats and platforms, the newspaper wanted an end-to-end testing solution to verify the quality of its apps, with regression testing to support a continuous delivery model. It was important for the testing to cover a maximum number of devices, operating systems and browser combinations.



The solution

It was also important that the testing be delivered by an organization independent of the different development vendors working jointly on the newspaper's apps. The publication chose the dedicated quality assurance team from RWS Technology Services.

RWS first set up a project-specific device lab to ensure the apps functioned properly across platforms. This included examining product compatibility requirements and securing support for augmented and virtual reality testing.

The dedicated mobile testing team then started verifying app releases across multiple operating systems and devices. A large part of this effort was focused on minimizing bug leakage (the detection of a bug that should have been found in earlier builds or versions of an application). Testing included:

- · Smoke (or sanity) testing as required
- · Unit, component, integration and system-level testing
- API testing
- User acceptance testing, not just of 'traditional' app functions but also the rich AR and VR experiences
- Analytics testing
- Regression testing post-code-freeze

Immediate results

It didn't take long for the publication to see significant results from its new testing regime.

The apps performed more efficiently due to improved functionality and reduced bug leakage. The number of users grew tremendously, as did new app installations, account registrations, and subscriptions for additional access to content.

Customer feedback was positive and ratings for the main news app improved because of its expanded capabilities, which could be released with confidence thanks to the thorough testing. The focus on testing coverage over multiple devices and platforms also contributed to higher conversion rates.



Technologies used

- Charles Proxy
- All major mobile platforms (iOS, Android, Kindle)
- Jira and TestLink
- Zephyr

Long-term relationship built on quality and adaptability

RWS has continued as the publication's testing partner for more than a decade, In that time the team has continually improved delivery, even while the number of apps and volume of testing has grown. What started out as a small team of three now comprises more than 20 QA engineers testing the core features and functions of the news app, its ecommerce and advertising functions, separate audio apps, and game apps (for word games and other puzzles).

With continual new releases as often as twice a week, and periodic app launches and redesigns through the years, the team has consistently achieved zero bug leakage. This is possible not just because there are more people on the job, but because of intelligent redesign of the testing strategy to meet growing demands. It's now possible, for example, for the team to join together a variety of distinct test cases to focus on a specific user path. But equally they can split out a subset of test cases where analysis determines that only that subset is needed for a specific release.

These different ways of streamlining testing have greatly enhanced testing efficiency, without compromising the team's zero-tolerance approach to bug leakage. It's this 'can do' attitude and ability to adapt to different demands that is the foundation of a long and continuing relationship.

For more on RWS software testing and quality assurance services

rws.com/technology-operations/software-testing-quality-assurance

About RWS

RWS Holdings plc is the world's leading provider of technology-enabled language, content management and intellectual property services. We help our customers to connect with and bring new ideas to people globally by communicating business critical content at scale and enabling the protection and realization of their innovations.

Our vision is to help organizations interact effectively with people anywhere in the world by solving their language, content and market access challenges through our collective global intelligence, deep expertise and smart technology.

Customers include 90 of the globe's top 100 brands, the top 10 pharmaceutical companies and approximately half of the top 20 patent filers worldwide. Our client base spans Europe, Asia Pacific, and North and South America across the technology, pharmaceutical, medical, legal, financial services, chemical, automotive, government and telecommunications sectors, which we serve from offices across five continents.

Founded in 1958, RWS is headquartered in the UK and publicly listed on AIM, the London Stock Exchange regulated market (RWS.L). For further information, please visit: www.rws.com

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