



Media case study

SPH Media improves time to market, product quality and CX

A new automated testing environment helps SPH Media become a best-in-class Asian media company in digital product quality.



The challenge

SPH Media is the leading mainstream media company in Singapore with media solutions in print, digital, radio and outdoor. The company operates six flagship publications, including The Straits Times, ZaoBao, Business Times, Berita Harian, Tamil Murasu and SPH Radio.

Although SPH Media was already using an intelligent test automation tool that promised a codeless, AI-powered approach to remove bottlenecks in quality assurance, the product's capabilities could not be fully realized.

SPH Media needed a technology partner to help address these challenges:

- **Issues with manual testing** – Running frequent production sprints alongside manual sanity and regression tests corresponding to each sprint extended time to market. Even though the digital product teams adopted an agile project management methodology for their bi-weekly product releases, the existing approach relied largely on manual testing and could only operate the test automation tool at 20% capacity, which prevented SPH Media from realizing its target ROI. The company needed a proper complementary test automation strategy and implementation to ensure that its existing team of manual testers could work on designing better test cases, especially for exception cases, to improve test coverage of new features.

At a glance

Industry

Media

Location

Singapore

Challenge

Accelerate digital product testing and release for the company's flagship digital publications by partnering with a vendor to develop and implement a robust test automation strategy and services.

Products and Services

Tricentis TOSCA, Cognizant Unified Automation Framework (UAF), managed test automation services

Success Highlights

- ~35% reduction in testing duration per sprint per product, leading to earlier products releases
- ~65% more test cases executed per sprint per product, improving overall robustness of digital products across multiple platforms
- Mobile crash-free rate and web uptime of >99% consistently over time for all products

- **Limited resources for regression coverage** – Because limited testing resources resulted in unsatisfactory regression coverage, SPH Media needed help automating more than 6,500 test cases. They also wanted to speed up time to market and improve cost efficiencies and quality testing.
- **Automating multilingual applications** – Help was needed testing across the company’s multilingual web, mobile browsers, mobile applications and APIs on different devices, operating systems and platforms.

Cognizant’s capabilities in digital, automation and innovation, as well as a detailed project plan and the ability to meet SPH Media’s requirements and timeline, convinced the company to choose us for the engagement.

The approach

Our Cognizant quality engineering and assurance consultants performed a discovery assessment on SPH Media’s original automation testing framework, which supported a few disparate applications. The team shared findings on the maturity of the current state of automation and the feasibility of automating the test scenarios that would maximize the investment and functionalities of the test tool.

We finalized the end-to-end automation framework, aligning the test team with the agile development team to ensure completed scripts are run on the SPH Media’s test environment before the hand-over (in parallel with new script creation for the next sprint). This approach allows SPH Media to realize benefits faster.

Our consultants combined two different automation frameworks to synergize the efficiency of automating the test cases:

- The existing Tosca 14.2 Vision AI was used to automate all the web-based testing (except audio, video and Mac Safari), API and multilingual test cases, wherever possible, as it has a self-healing capability and reduced script maintenance requirements.
- The Cognizant UAF framework was used to automate all mobile applications (both iOS and Android), mobile browsers (Android Chrome and IOS Safari), audio, video and Mac Safari web test cases.

Based on the new enhanced framework, we delivered this program in a fully offshore delivery model using a hybrid test infrastructure with devices on cloud and on premises. This delivery model not only reduced the implementation cost but allowed SPH Media to mitigate mobility restrictions of the COVID-19 pandemic without impact on the needed go-to-market timeline.



Business outcomes

As a result of the automation, SPH Media can now find and resolve issues much faster and more effectively. The new solution eliminated previous issues in the areas of application UI changes, version upgrades and functionality—these issues are now managed by scripts.

From a technology and operational standpoint, major improvements were achieved:

- Successfully automated more than 6,500 test cases, accounting for 70% coverage of total test cases
- Achieved a satisfactory first-time pass rate
- Reduced the time to run sanity and regression tests from four to six hours to 1.5 hours, without the need for manual intervention
- Initiated faster detection of pertinent issues such as application UI changes and version upgrades
- Enhanced ability to run concurrent test scripts on a third-party device farm service for cross-device validation

As a result of the consulting and automation expertise delivered through the partnership with Cognizant, SPH Media was able to address its challenges and achieve positive business outcomes:

- **Faster speed to market:** Average 35% reduction in testing duration per sprint per product, leading to earlier products releases
- **Better product quality:** Average 65% more test cases are executed per sprint per product, improving overall robustness of digital products across multiple platforms
- **Improved user experience:** Maintaining a mobile crash-free rate and web uptime of >99% consistently over time for all products

Today, with its automated verification platform in place, SPH Media has a foundation to support new initiatives and flagship digital products such as SPH Media News Tablet.



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