The Hitachi Vantara team built a powerful, extensive UI Toolkit to use across numerous solutions and teams. As the Toolkit became widely adopted and grew more complex, it overwhelmed the manual testers and validation became a bottleneck.

The Applitools Ultrafast Test Cloud allowed the team to implement a reliable test automation suite that scaled as their needs did. Executing all tests now takes just minutes and the confidence level of the team is extremely high.

Releases now happen nightly instead of every other week, and can even happen on-demand. Other teams can easily contribute UI updates that are automatically validated, resulting in a faster velocity while also freeing up the team to focus on other top priorities.

“With Applitools, the confidence we have for every release is high, and we don’t worry about potential regressions. Applitools allows us to close our eyes and not worry because we know it will flag anything we need to worry about, and we can pay attention to other things.”

Diogo Mariano
Product Owner at Hitachi Vantara
Who is Hitachi Vantara?

Hitachi Vantara, a subsidiary of Hitachi Ltd, provides hardware, software and services to help companies manage their digital data. Their goal is to help customers with digital challenges. Hitachi Vantara builds solutions to empower data-driven decision-making, unlocking new revenue streams and the full digital potential of their clients.

The Impossibility of Manual Testing at Scale

The Hitachi Vantara team, which is responsible for applications used by numerous teams across many organizations, wanted to ensure the quality and consistency of their UI to improve the customer experience. Different teams on differing release cadences needed to be able to implement the same UI easily, so the team knew they’d need a highly responsive process that could handle changes quickly. They developed a UI Kit for key components, and set it up so that members of different teams from across the globe could easily submit changes as needed. It was recently made open source and publicly available as well.

As the UI Kit launched with just a handful of components, it was possible to keep up with manual validation of any changes. However, the complexity grew quickly. Not only did they continually add more components to the UI Kit, but the highly extensible components gained new configurations and could live on multiple different browsers, each of which needed to be tested.

"We wanted to grow, and automation was critical to enabling that growth. We couldn’t keep doing visual validation manually," said Duarte Teixeira, Director of Engineering.

Automation was clearly needed to remove the bottleneck created by manual visual validation, and the team began to research the best test automation options.

Fostering Collaboration, Quality and Growth

Any automation tool the team implemented had to meet a series of requirements:

1. Seamless integrations with existing CI/CD tools and Storybook, their component library
2. Support for cross browser testing on a large set of popular browsers
3. Enable a high level of frictionless collaboration, so that a growing number of team members around the world could easily submit a change and get it approved quickly
4. Give the team confidence that the tool can cover not just today’s needs but also future needs, such as mobile testing
Using Applitools, the Hitachi Vantara team is able to easily invite more collaborators and still keep up with full test coverage, even as the Toolkit grows and release cycles speed up.

**From Bi-Weekly to Daily Releases, and Beyond**

The increase in delivery speed has been dramatic. Previously, while using manual visual validation, the team had only been able to release once every other week – and major releases were even more intensive. The team knew they needed to automate to get faster, and considered building their own solution.

“We did a lot of research of the solutions on the market, and Applitools was the only one that ticked off all the boxes and gave us the best long-term perspective... we know we can evolve in the future without starting from scratch,” noted Duarte.

“We thought about doing screenshot validation in-house, but we wanted to prioritize developing our tests and the components themselves. That’s where Applitools came in,” said Diogo Mariano, Product Owner of the team.

With the Applitools Ultrafast Test Cloud, the massive pool of over 3500 tests is now run nightly for a daily release cadence. What’s more, the total time for the entire suite to execute is just 26 minutes, so on-demand releases can now be supported with full test coverage when necessary.

The best part of all this? There was no sacrifice to the quality of the tests to achieve the enormous speed boost. In fact, quality increased, giving the team the confidence they need to rely on the automated tests and devote their attention to other high priority goals.

“The word is confidence. With Applitools, we have a high level of confidence now with each release. The reliability of automated visual validation means we can ‘close our eyes’ and be confident that Applitools will catch everything we need to look at. Reviewing the issues on their dashboard is easy too, and makes collaborating across teams simple,” explained Diogo.
What’s Next for Hitachi Vantara

Despite having already achieved a 14x increase in delivery speed, the Hitachi Vantara team wants to go further. They have plans to build out their automation infrastructure to enable automated validations on every pull request, resulting in immediate release. Their goal is for necessary changes to get released as fast as possible with an uncompromising level of quality, to develop faster and deliver a flawless customer experience across all their products.

Additionally, the demand for mobile testing is rising, and investing in a tool like Applitools with automated mobile testing capabilities is part of preparing for future requirements that they know are coming soon.

About Applitools

Applitools delivers a Next Generation Test Automation Platform through Visual AI and Ultrafast Test Cloud. We enable engineering teams to release high quality web and mobile apps at incredible speed and at a reduced cost.


Hundreds of companies from verticals such as Tech, Banking, Insurance, Retail, Pharma, and Publishing — including 50 of the Fortune 100 — use Applitools to deliver the best possible digital experiences to millions of customers on any device and browser, and across every screen size and operating system.

Applitools is headquartered in San Mateo, California, with an R&D center in Tel Aviv, Israel. For more information, please visit applitools.com.