

Multi-device test cycle **reduced** for a leading online video sharing company

HCLTech sets up a lab for automated
regression testing of various devices



A leading multinational video sharing platform company headquartered in California was facing negative business impact resulting from testing complexity, manual regression, increasing cost overheads and unfamiliar critical bugs when it came to multi-device testing. HCLTech examined the client's business requirements and objectives. The lab helped the client overcome test limitations, increase test coverage and significantly reduce testing time and effort.

The Challenge:

Conquering limitations to improve device testing

With continuous daily tests of multiple application versions, regression testing cycles and test cases with a short test window of 40 hours for end-to-end regression testing, the company's ability to carry out testing was constrained. Validating application experiences across a third-party device stack was a challenge. New device additions were leading to an increase in scope, translating to additional cost overheads. The lack of understanding of generic device testing was leading to high-priority bugs being missed. Furthermore, regression testing was mostly manual because of the variety of devices involved. As a result, the client couldn't get apps to market as fast as they'd hoped for.

The Solution:

Strategizing regression testing effectively

To support the client's complex testing needs, HCLTech set up an automated regression testing lab in India equipped with multiple testing devices. It developed the Electronic Device Automation Testing (eDAT) platform to address the rising scope in test cases and devices.

The eDAT platform utilized plug and play boxes to connect to devices-under-test and capture video and execute automated test scripts with ability to record and play actions. Leveraging device user interface (like infrared remote), the testing platform simulated real user experience and checked the

The objective:

To maximize regression testing ability and accelerate test execution

With an increase in device scope and limited regression testing capabilities in-house, the company entrusted the process of device regression testing to HCLTech. It sought to increase efficiencies while controlling cost overheads.



behavior of the device-under-test by analyzing the device's video output. Hosted on a digital cloud platform, it provides a web-based interface for role-based dashboards and real-time metrics visualization allowing testers to control devices, run on-demand testing and integration to various bug tracking systems. Application versions for testing were drawn from the cloud and test results were uploaded back to the company's cloud.



The Impact: Device testing maximized

HCLTech's Electronic Device Automation Testing (eDAT) platform helped the company navigate the challenges it was facing and deliver capabilities to execute approximately 6,000 test cases every day and absorb about 25% of increased scope in device testing in the last two years. It accelerated application releases while testing across 60+ devices in

four hours, leading to 80% reduction in test execution cycle time. HCLTech completed the lab and infrastructure set-up in four weeks' time.

Testing across
60+ devices
in four hours

80% reduction
in test execution
cycle time