TestMu AI
Formerly LAMBDATEST

How a Life Sciences Company Expanded Mobile App Testing Cut Release Cycles by 80%

Success Metrics

10,000+ Real Devices Accessible

80% Faster Release Cycles

92% Reduction in User-Reported Issues

Industry
Life Sciences/Healthcare Technology

Location
United States

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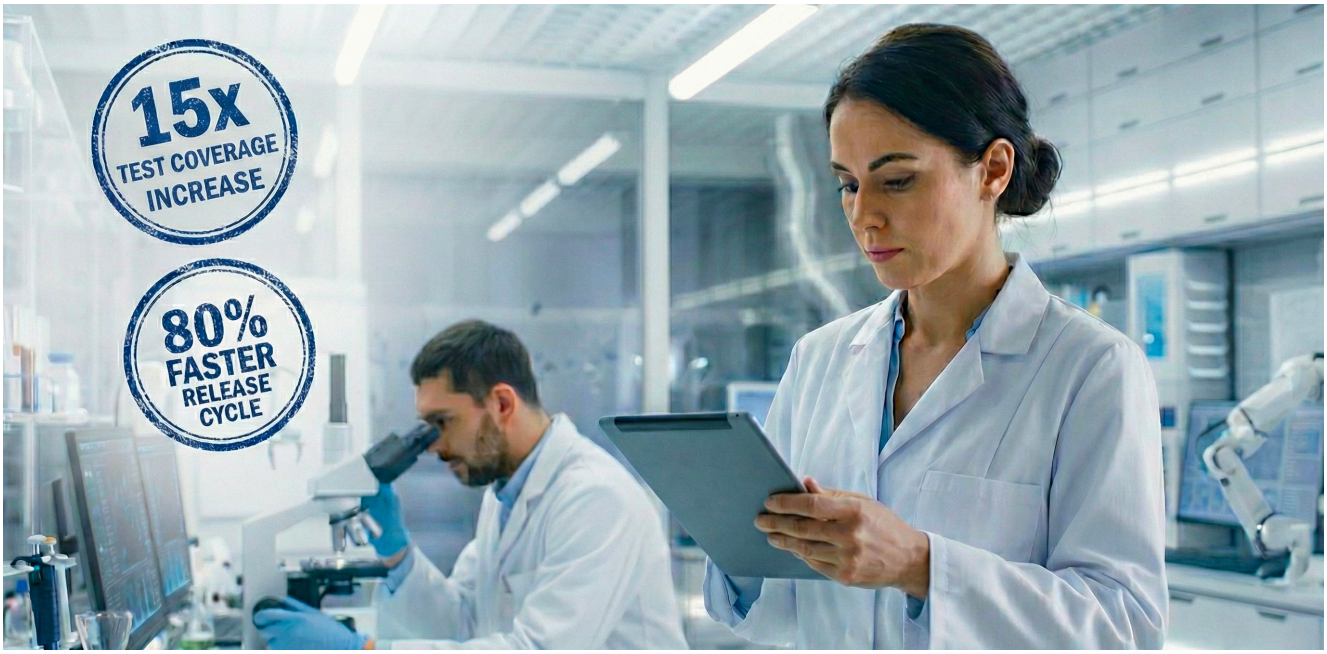

Company Profile

About:

A life sciences company that provides mobile and web applications that connect patients with clinical trial opportunities and health monitoring tools. Their platform serves research organizations and healthcare providers across multiple therapeutic areas.

The company built its reputation on reliable, user-friendly experiences. Their applications helped patients track medications, report symptoms, and communicate with care teams. The platform maintained strong user engagement and positive ratings.

But the QA team knew they had blind spots in their testing coverage.

> "We had a working app and solid engineering practices. But we were testing on just 10 devices when our users had a variety of phones and tablets. We didn't realize the scale of the problem until it hit us."
>
> — QA Team Lead

At a glance

Industry :
Life Sciences/Healthcare Technology

Challenge :
The company's patient-facing mobile application worked well in their testing environment, but they couldn't test across the range of devices their users actually owned. Sequential testing on limited devices created a bottleneck that slowed releases and left coverage gaps.

Location :
United States

Key Highlight :
Using TestMu AI's Real Device Cloud and HyperExecute, the company expanded testing coverage from 6 devices to 90+ real device combinations, reduced release cycles by 80%, and added accessibility testing to serve users with disabilities, all while maintaining regulatory compliance.

Solution Used :
HyperExecute
Real Device Cloud
KaneAI
Accessibility Testing Tools

When Registration Volume Exposed the Test Coverage Gaps

As the company launched a major expansion, it partnered with three new research institutions. Within a few weeks, patient registrations started flooding in, and app usage surged as hundreds of new users began daily interactions with the platform.

Then the support tickets started flooding in. Users reported photo uploads failing, forms not submitting properly, and screens displaying incorrectly. The issues appeared across different phones, tablets, and operating system versions that the QA team had never tested.

> "The first time we ran HyperExecute, we sat there watching all three test suites execute simultaneously. Epic integration, Oracle Health workflows, and patient portal tests, all happening at once. The 48-hour test cycle gave us breathing room we'd never had."
>
> **— QA Team Lead**

Sequential Testing Created Bottlenecks and Slowed Releases

The engineering team worked quickly, but QA became the bottleneck. Every release required sequential testing across their limited device inventory. One tester would complete iOS testing, then pass devices to another tester for Android validation. The process was methodical but slow.

Sequential testing meant releases took weeks instead of days. The team couldn't keep pace with development velocity. Worse, they knew they were missing coverage on devices their users actually owned.

The validation burden compounded the problem. Healthcare applications require complete documentation for regulatory compliance. Every test needed screenshots, timestamps, and audit trails. The manual documentation consumed hours of time each week.

> "We were organized and disciplined about testing. The problem wasn’t our process but our capacity. We couldn’t physically test on enough devices fast enough to match our users' reality."
>
> **— QA Team Lead**

The Search for a Better Testing Solution

The leadership team decided to solve the problem systematically. They needed testing infrastructure that could scale with their user base while maintaining regulatory requirements.

They evaluated cloud testing platforms, looking for real device coverage, parallel execution to eliminate sequential bottlenecks, integration with existing CI/CD workflows, and built-in compliance features. They also wanted a solution that could grow with them as they added more device types and user segments.

TestMu AI offered something specific: real devices, not emulators. For healthcare applications where camera quality, sensor accuracy, and real network conditions matter, testing on actual hardware was non-negotiable.

With this integration, the mobile-specific bug detection rate went from 20% (mostly caught by patients) to 100% (caught in testing). Patient portal defects in production dropped 91%.

Expanded Test Coverage to 10,000+ Devices Using Real Device Cloud

The team connected TestMu AI's Real Device Cloud to their testing infrastructure. Suddenly, they had access to 10,000+ device combinations that matched their actual user base.

They built a test matrix based on analytics data showing which devices patients actually used. iPhones from multiple generations, Samsung Galaxy devices, Google Pixels, and various Android tablets. Different OS versions, browsers, and screen sizes, all available instantly without purchasing and maintaining physical inventory.

> "We went from hoping we had the right devices to knowing we could test on exactly what our users had. The Real Device Cloud gave us confidence we were validating real-world scenarios, not just our best guesses."
>
> **— QA Team Lead**

The team also added accessibility testing to their workflow. TestMu AI's Accessibility Testing Tools helped them identify issues for users with visual impairments, motor disabilities, and other accessibility needs. They tested screen reader compatibility, color contrast, touch target sizes, and keyboard navigation across devices.

> "Accessibility wasn't only for the compliance requirements. We serve patients with diverse needs, and TestMu AI's accessibility testing helped us build a truly inclusive platform."
>
> — QA Team Lead

80% Faster Test Cycles with HyperExecute's Parallel Execution

HyperExecute allowed the team to run tests simultaneously across multiple devices instead of waiting for sequential completion.

What previously took weeks, now completed in hours, marking an 80% faster test cycle. Test suites ran across 10 concurrent devices, validating registration flows, photo uploads, form submissions, and data synchronization all at once. The architecture eliminated the sequential bottleneck entirely.

HyperExecute's test intelligence gave them visibility into test performance, flaky tests, and failure patterns. Detailed reports showed exactly where issues occurred, on which devices, and under what conditions.

The team could prioritize fixes based on actual impact on user segments.

> "HyperExecute didn't just speed up testing. It gave us smarter testing. We could see patterns in failures, understand which device combinations had issues, and make data-driven decisions about where to focus our efforts."
>
> — QA Team Lead

AI-Native Test Authoring Allowed Speeding Up of Test Case Creation

The team started experimenting with KaneAI to accelerate test case creation. Product managers and domain experts could describe test scenarios in natural language, and KaneAI would generate executable test scripts

This meant more test cases could be covered without waiting for QA engineers to write full automation scripts. The team could rapidly expand coverage for edge cases, accessibility scenarios, and new user workflows as the product evolved.

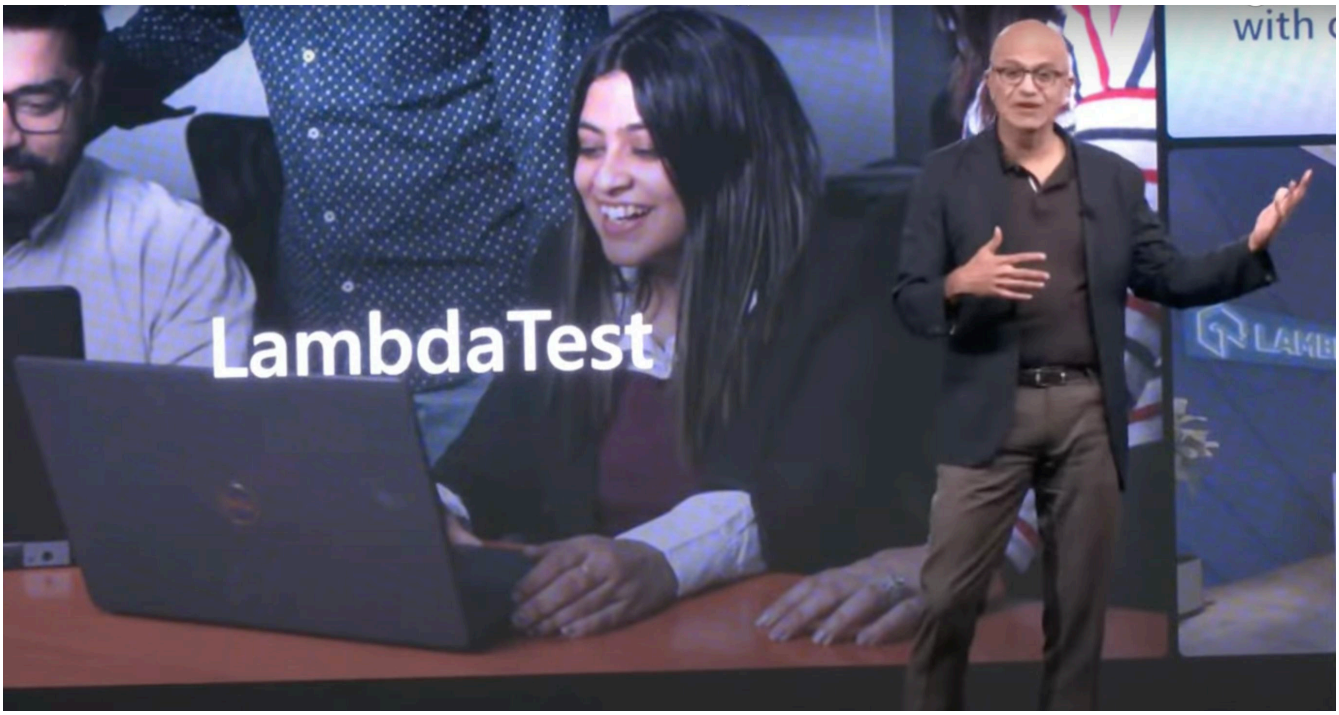

Image Source : Microsoft Future Ready Event

“

LambdaTest (Now TestMu AI) is creating that next level of efficiency around test automation so that people can actually focus on testing versus test orchestration.”

Satya Nadella, CEO, Microsoft

> "KaneAI let us scale our testing in a completely different way. Instead of QA being a bottleneck for writing tests, domain experts could contribute test scenarios. We're covering 3x more test cases than we could with manual script writing alone."
>
> **— QA Team Lead.**

Key Impact Metrics

- Release cycle time reduced by around 80%
- Device coverage expanded from 6 to 10,000+ combinations
- User-reported issues decreased by 92%
- Test execution visibility improved with real-time intelligence dashboards
- QA team capacity freed up for exploratory testing and quality improvement initiatives
- Zero regulatory compliance findings in recent audits

Looking Forward

The team continues expanding its testing strategy to support its growing user base.

They're integrating visual regression testing to catch UI inconsistencies across different screen sizes and resolutions, performance testing to validate app responsiveness under varying network conditions, and API testing to ensure backend reliability as they scale.

The accessibility testing framework they built has become a standard part of their development process, ensuring every new feature works for users with diverse needs.

Want to turn your healthcare testing infrastructure into scalable, intelligent testing? Book a demo with TestMu AI to discover how real device testing, parallel execution, and AI-powered test authoring can accelerate your releases while maintaining the quality and compliance your users deserve.

About TestMu AI

TestMu AI (Formerly LambdaTest) is a fully autonomous agentic quality engineering platform that empowers teams to test intelligently, smarter, and ship faster. Over 10,000+ customers and 2 million+ users across 132+ countries rely on TestMu AI for their testing needs.

1.2 Bn+ Tests

2M+ Users

10K+ Enterprises

132+ Countires

Exploratory Testing

Enhance web and app quality to ensure seamless user experience with real-time, live, exploratory testing on 10,000+ devices.

KaneAI

Boost testing efficiency with an AI platform that uses natural language to create, debug and evolve tests.

Test Manager

Streamline test creation, management, & reporting for improved efficiency with AI - native unified Test Manager.

Automation Cloud

Accelerate product releases with secure, scalable, end-to-end test automation in the cloud.

Real Device Cloud

Test on 10,000+ real Android and iOS devices, and 3000+ browser combination cutting costs while ensuring compatibility.

HyperExecute

Accelerate testing speed by 70% with AI-Native orchestration for faster digital transformation.

Accessibility Testing

Ensure inclusive, accessible websites with TestMu AI's manual and automated Accessibility Testing tool.

Visual UI Regression

Achieve UI perfection quickly with AI-Native visual regression testing across all platforms.

TestMu AI
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