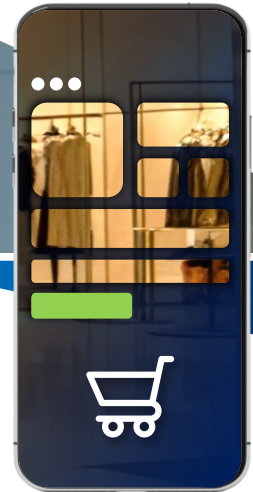


Case study

# Faster innovation, improved cx and long-term scalability for a luxury retailer



## At a glance

For a leading American luxury retailer, ensuring a high-performing mobile experience was a top priority, but manual testing slowed release cycles, drove up costs, and limited scalability. To overcome these challenges, the retailer implemented a custom-built mobile automation framework, leading to:

2x

Faster test script creation



40%

Faster execution



20%

Lower maintenance efforts



70%

Reusable scripts



## About the customer

The retailer is a premier name in the luxury shopping space, known for its high-end products and commitment to exceptional customer experiences. With a strong digital presence, the company continuously invests in cutting-edge technology to enhance mobile and online shopping.

## Strategic value

Beyond faster testing, the automation framework delivers long-term business impact:

### Faster innovation

Accelerates feature rollouts, keeping the retailer ahead.

### Stronger CX

Ensures seamless, bug-free mobile interactions.

### Scalability

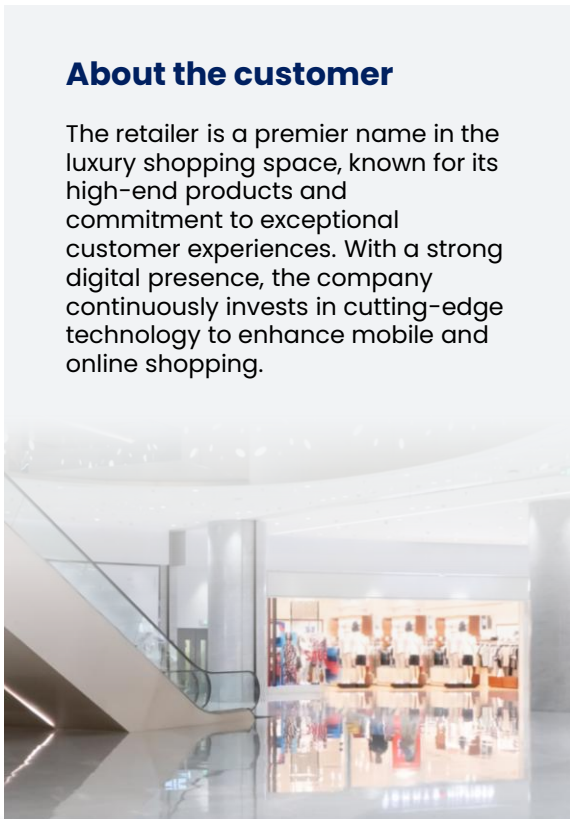
Adapts to new platforms and evolving needs.

### Lower costs

Cuts manual effort and maintenance overhead.

### Market agility

Speeds up go-to-market, staying ahead of disruptions.



## The business need

The retailer's customer engagement mobile app was key to its digital strategy, but its testing process lacked automation, creating several roadblocks:



Slow, manual testing cycles delayed new feature releases.



High maintenance effort as testing relied heavily on manual intervention.



Limited scalability across iOS and Android platforms.



Inefficient debugging due to a lack of structured reporting and logging.



No cloud execution, making device-based testing time-consuming and costly.

With customer expectations rising, the retailer needed a modern, scalable testing framework that could improve efficiency, reduce costs, and accelerate mobile innovation.

## The solution

To address these challenges, a custom mobile automation framework was developed from the ground up. The solution focused on:



### Scalable & future-ready automation

- Built a hybrid, modular framework supporting both iOS and Android on real and virtual devices.
- Implemented a Page Object Model (POM)-based structure for improved maintainability.
- Designed a highly reusable codebase to minimize duplication and maintenance effort.



### Optimized execution & integration

- Enabled parallel and sequential execution, reducing test run time.
- Integrated with BrowserStack, enabling cloud-based mobile testing for better coverage.
- Implemented real-time Appium server start/stop functionality to optimize test runs.



### Advanced reporting & debugging

- Configured automated screenshot capture for better failure analysis.
- Implemented structured logging and reporting using Allure, Extent, and TestNG frameworks.



### Seamless CI/CD automation

- Integrated the automation framework into the retailer's CI/CD pipeline, enabling automated, hands-free test execution.

This transformation not only enhanced testing speed and efficiency but also ensured that new features reached customers faster without compromising quality.

## ROI and Business Impact

By adopting a future-proof mobile automation framework, the retailer achieved measurable business benefits:

### Challenge

### Before

### After (with Automation)

**Test execution speed**

➤ Slow, manual, time-intensive

➤ **40%**  
faster execution

**Script creation**

➤ Lengthy, requiring heavy manual effort

➤ **2X**  
faster test scripting

**Code reusability**

➤ Low, high rework needed

➤ **60–70%**  
reusable scripts

**Maintenance effort**

➤ High manual intervention

➤ **20%**  
reduction in maintenance

**CI/CD automation**

➤ Limited automation, slowing releases

➤ Fully integrated CI/CD pipeline

★ ★ ★ ★ ★

## Automation is not just about efficiency

– it accelerates innovation. By automating mobile testing, the retailer reduced release cycles, cut costs, and improved agility, ensuring new features reached customers faster.



## Tech stack

➤ Appium | Selenium WebDriver | Java | TestNG | Maven

➤ Allure Report | Extent Report