

Automating Application Testing for the Retail Industry with **UiPath Test Suite**



UiPath has made it easier than ever for manufacturers to fully maximize their enterprise automation capabilities. Building on its status as the leader in business process automation, UiPath consistently looks for ways to help retail customers transform their organizations through automation—including automating the testing process with UiPath Test Suite.

In the retail industry, 73% of consumers use multiple channels to shop. This requires IT teams to spend an average of 25% to 35% of their budgets on application testing, just to ensure that all potential purchasing scenarios are tested. Even with extensive testing, most retail applications still only have 60% test coverage, which can result in 30+% of software defects leaking to production and impacting customer experience. According to the World Quality report, only 45% of retail organizations have adopted some form of test automation in their processes. While most retailers recognize the benefits of test automation, legacy testing solutions can be difficult to automate and slow to adopt.

Enter UiPath Test Suite, the resilient testing solution powered by the UiPath Business Automation Platform. UiPath Test Suite has helped retail organizations deliver high-quality and secure retail services through automation-led testing. With the AI-powered UiPath Business Automation Platform, retailers can ensure that their applications follow customer data security and compliance guidelines, provide positive consumer experiences, and seamlessly integrate with one another. UiPath customers have reduced test cycles by as much as 50%, improved automated test coverage by two to three times, and reduced overhead costs by up to 30%. The UiPath Platform is also purpose-built for enterprise automation. It features reusable component libraries that organizations can share across test, IT, and business process automation teams.

An easy-to-learn, low-code approach empowers testers to create their own test automations, which frees up application developers for other mission-critical work. UiPath Test Suite also integrates seamlessly with your existing testing tool landscape and can interact with any type of application. These capabilities allow you to test full-scale, end-to-end processes across legacy applications, desktop applications, modern browser applications, and consumer banking mobile applications.

After 20+ years, the time has come to stop paying the testing tax

35%

of a typical retailer's IT budget is allocated to application testing

55%

of retailers rely solely on manual testing and haven't yet adopted test automation

30%

of software defects in the retail industry aren't identified during testing, thereby leaking to production and impacting customer experience

What makes UiPath different?



A single tool capable of automating diverse, complex application landscapes

The retail industry relies on a diverse range of applications to support its various business processes, from customer engagement to inventory management. Salesforce Commerce Cloud, for example, is a widely-used platform for creating seamless shopping experiences across multiple channels, while Magento, a popular e-commerce solution, powers numerous online stores. Retailers also use point-of-sale (POS) systems like Square and Shopify for in-store transactions and inventory management tools such as Fishbowl and TradeGecko to optimize supply chain processes. Furthermore, retailers depend on enterprise resource planning (ERP) systems like Microsoft Dynamics 365 and SAP to integrate and streamline operations across different departments.

In this complex application landscape, UiPath emerges as a comprehensive automation solution capable of addressing both process automation and end-to-end testing needs. UiPath Test Suite's robust capabilities, such as cross-platform compatibility and integration with popular testing frameworks, make it an ideal solution for the retail industry. As a result, retail organizations can enhance the reliability and performance of their applications, providing customers with a smooth and enjoyable shopping experience while also streamlining their operations and reducing operational costs.



Seamless hand-off between robots and humans to support automated usability testing

Usability testing often requires human observation and interpretation of user behavior, feedback, and emotional responses. As such, test automation is often avoided in these common retail testing scenarios.

UiPath Test Suite combined with UiPath Action Center enables "human-in-the-loop" user acceptance testing (UAT). By providing a central platform for managing human tasks within automated workflows, the platform allows users to assign, prioritize, and track test steps that require human intervention. With UiPath Action Center, automations can be paused, passed to a human for interpretation, and resumed by a robot to take screenshots and complete test reporting. Now test teams can streamline their usability testing, reduce navigation errors, and accelerate testing timelines, allowing manual testers to walk through two to three times more test scenarios.



AI automation capabilities for testing Point-of-Sale (POS) systems

Point-of-sale systems offer complex, dynamic interfaces applications and often must be tested across multiple device configurations. UiPath Test Suite offers retailers a single tool that can automate functional, integration, and regression testing across remote mobile devices and web browsers without the need for complex integrations or custom scripts. Even in non-traditional POS software, UiPath AI Computer Vision leverages advanced image recognition and machine learning technologies to ensure high accuracy and reliability when interacting with POS screens.



Synthetically generate realistic consumer data for dynamic data-driven testing

Retail companies handle sensitive customer data, such as payment information and personal identification data. Even in test environments, data security is of utmost importance. UiPath Test Suite significantly reduces data risk by allowing retailers to generate realistic customer test data synthetically, update test environments with this information, and use the data in data-driven testing to test multiple scenarios. If tests fail, test environments can be quickly reset so that test scenarios can be re-executed to ensure robust testing of applications.



Guaranteeing compliance, every step of the way

Compliance with regulations such as General Data Protection Regulation (GDPR) and the Health Insurance Portability and Accountability Act (HIPAA) requires regular checks to ensure personal data is collected, processed, and stored in a secure and confidential manner. User consent must be obtained before any personal data is processed, and data processing activities must be thoroughly documented. Software upgrades, instant fixes, and other changes can't be allowed to impact data privacy and compliance.

UiPath Test Suite helps automate these checks and repeatedly tests these scenarios when application changes or upgrades occur, ensuring compliance every step of the way.

UiPath Test Suite is part of a converged automation platform



UiPath Business Automation Platform



Discover
Process and Task Mining



Automate
Test Automation



Operate
Orchestration



Manage
Test Management



Business Process Automation



Run
Test, Attended, and Unattended Robots

End-to-End UI and API Automation

Automation Cloud



Hybrid



On-premises



3-5x

Automation Development

90%

Automation Rates

3x

Release Speed

70%

Component Reuse

30-40%

Cost Reduction



For more details, please visit us at:

<https://www.uipath.com/solutions/industry/cpg-retail-automation>

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