



INTELLIGENT TEST AUTOMATION FOR MERCHANT PAYMENTS SYSTEM (POS) :

Overcoming Regression
Testing Challenges



Overview:

This case study highlights how an Intelligent Test Automation solution was implemented to address the challenges of frequent changes in a merchant payment system's POS, mobile, and web applications. The solution involved using IA tools to automate and execute around **218 test cases** in less time, providing entire test execution results within **6 hours**, and **saving 80%** of execution time.



About Client:

This Indian fintech provides payment solutions to merchants, including a POS device, mobile app, and web app. Its secure and reliable payment system, along with value-added services, has made it a top choice among merchants in various industries.

The company's focus on innovation has led to continuous updates and growth.

Challenges:

To ensure the quality of the payment system applications, clients need to perform full Regression Testing before releasing new features or updates.

The manual testing process is time-consuming, error-prone, and unable to cover all the test cases, which can result in production defects.

The company faces a challenge in performing full regression testing on its payment system applications, which require the execution of 218 test cases on different devices and browsers.

The process is time-consuming and unable to meet the release cycle deadline, leading to the risk of production defects, which can impact the financials.

Solutions:

The STEP team proposed an Intelligent Test Automation solution that leverages IA tools to automate the execution of web and mobile test cases. This approach aims to improve the quality of the application by automating 218 test cases, including the functionality that interacts with the POS system, mobile app, and web app.

Some of the key highlights of the implementation are:

STEP IntelliRTA Framework:

1. Fast and efficient test case development
2. Modular structure for scalability
3. Highly customizable for flexibility
4. Supports custom activities, libraries and plugins
5. Suitable for complex and diverse processes

HTML Report:

1. Comprehensive details of test case execution
2. Testing metrics, dashboard, step-wise details, screenshots, logs, etc.
3. Helps senior management, manual QA, and automation developers to analyze and understand the test run

Data-Driven Testing:

1. Execute test cases using multiple sets of input data
2. Random data generation for dynamic data needs
3. No data dependency on the user

Multi-Platform & Environment Testing:

1. Supports testing on different browsers, devices
2. Supports testing on different QA, UAT, PROD etc env.

Object Repository:

1. Objects managed in a common repository
2. Changes made in repository modify all test case objects

Business Scenario Testing:

1. Automated test cases with validation checks at every step
2. Executed end to end business flow

Maintenance Time Saving:

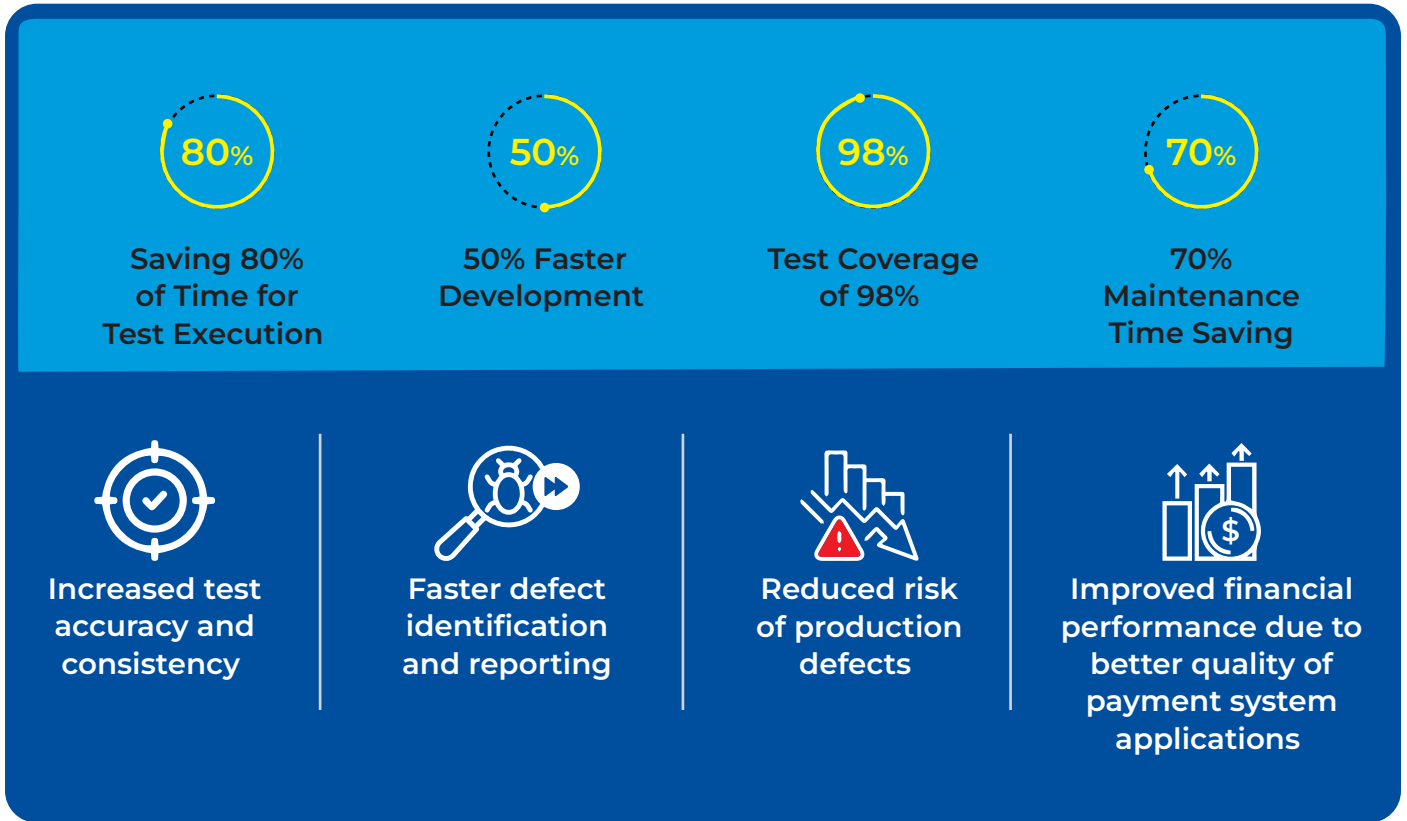
1. Configuration management, object repository usage, and common workflow usage

ALM Integration:

1. Update the Test Execution in JIRA
2. Auto log the defects in JIRA

Results:

After implementing the Intelligent Test Automation solution, Customer achieved significant improvements in their testing process, including:



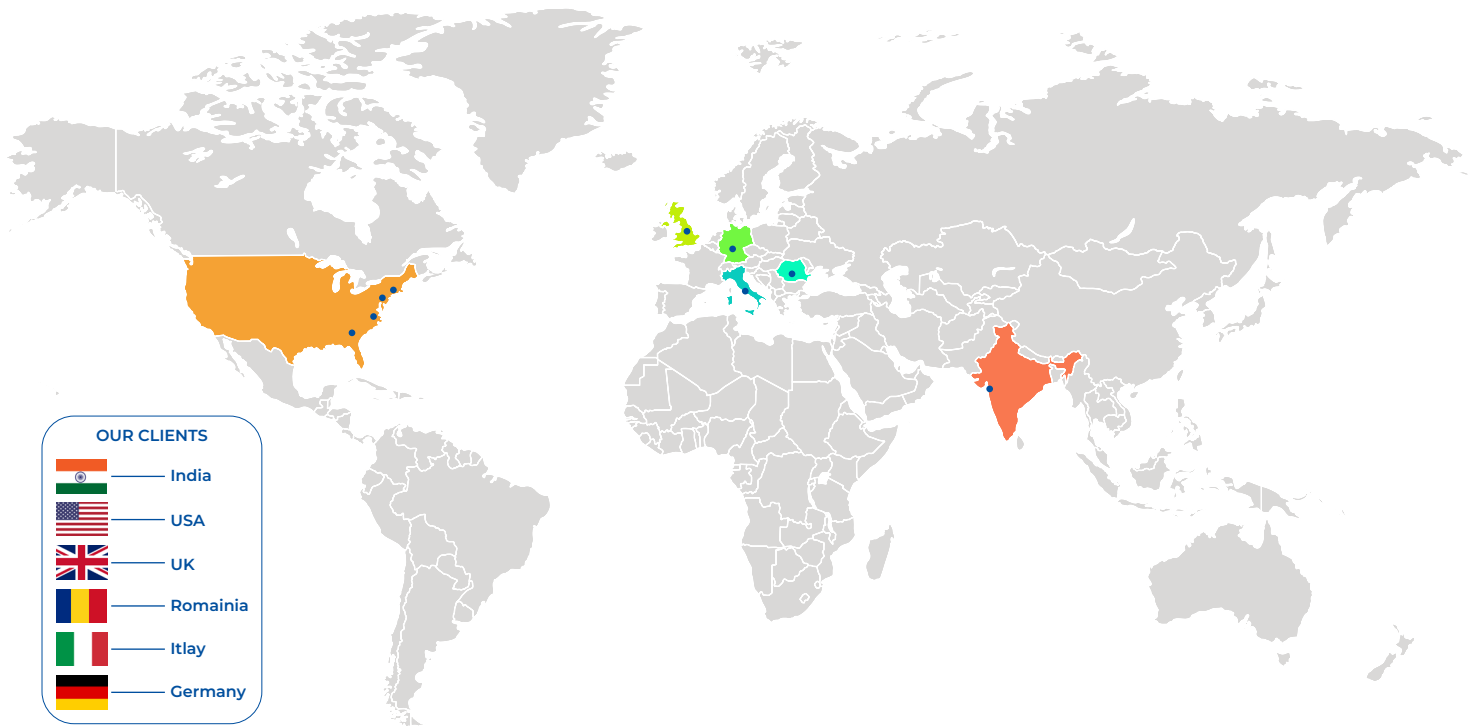
Conclusion:

The Intelligent Test Automation solution provided by the STEP team has helped customer to overcome their testing challenges and improve the quality of their payment system applications. The solution has reduced the testing time, improved test coverage, and increased the accuracy and consistency of the testing process. As a result, client can release new features and updates with confidence, knowing that the payment system applications have been thoroughly tested and are free from defects.

ABOUT US

Step One Step Ahead is a prominent global player in the realm of digital transformation, with a particular focus on Robotic Process Automation (RPA) and Artificial Intelligence (AI). Committed to fostering innovation and boasting a proven history of successful projects worldwide, we empower businesses to streamline their operations, elevate customer experiences, and foster growth through state-of-the-art technological solutions. We have a strong track record of delivering successful Digital Transformation solutions for clients in the USA, UK, and the Asia region.

Our Presence In



STEP
ONE STEP AHEAD

To know more about STEP, visit
www.steponestepahead.com

Follow us on :

