Automation Testing Solution

We get you past the bottlenecks!
Pyramid’s Automation Solution

Overview
Application landscapes become more complex with the addition of multiple environments, mobile devices, and social networking applications. Pyramid’s Automation Testing Solutions significantly reduce manual intervention and testing cycle times, helping to minimize time to market while driving higher productivity and greater predictability.

Pyramid can improve testing efficiency and productivity for clients with limited resources, time-to-market pressures, complex applications, and shorter cycle times. Our process begins with a review of customer needs and processes, then QA designers recommend appropriate automation strategies. Solutions are implemented based on agreed services and scheduling that best align with the customer’s business plan and budget.

Pyramid Automation Testing Solution (ATS)
The primary challenges companies face in adopting test automation are the high cost of tool procurement and selection of the right automation framework. Pyramid addresses these challenges with robust, comprehensive solutions that enhance and optimize embedded test lifecycles through test automation.

Domain-Specific Accelerator Creation
Pyramid provides test automation frameworks for all types of software applications across multiple domains. Our QA designers are experienced in creating domain-specific automation frameworks, test data generators, ROI calculators, component-based designs, integrators, API connectors, and more.

Pyramid Automation Implementation Methodology (AIM)
AIM Solutions are consistent, change-adaptive, and tester friendly, enabling frequent application releases by reducing maintenance effort without compromising testing quality. Pyramid’s QA designers work with customers to select the right automation tools, testing process, practices, and teams—all critical to ensuring successful automation.
Study Feasibility
It is essential that organizations use a robust test automation process, beginning with a feasibility study. This enables the automation team to determine whether testing should move forward.

Evaluate and Selecting Tool
Tool selection is a challenging step as testing tools must be carefully paired to the application that is being tested. The right tool, expertly selected, yields optimal results.

Identify framework
The right framework/scripting technique helps control development and maintenance costs. Pyramid selects from among four types of framework in software automation testing:

1. Data-Driven
2. Keyword-Driven
3. Modular
3. Hybrid

Plan, Develop, and Execute
Test development standards must be defined and followed. Pyramid QA Designers identify test procedures and create standards and guidelines to ensure automated tests are reusable, repeatable, and maintainable.

Report and Analyze
Comprehensive test reports are produced and pass/fails are analyzed to determine false positives/negatives and ensure proper evaluation of test metrics.

Review and Maintain Test Scripts
As new functionalities are added to the system under test with successive cycles, automation scripts are added, reviewed, and maintained for each release cycle. Pyramid QA designers help maintain and improve the effectiveness of automation scripts.

Advantages of Pyramid’s Software Automation Testing Solutions
- Automate functional testing of Web, Mobile, Cloud, Windows, and Java applications.
- Our frameworks support the needs of both beginners and experienced testers.
- Easily generate quality metrics reports for management.
- Pyramid ALM solutions help organizations more effectively automate tests to improve quality.
- Experience in designing and implementing test frameworks (modular, data-driven, keyword-driven, object repository, and descriptive, among others).
- Technology expertise for implementing custom automation harnesses and utilities in different languages, such as C#, .Net Java, Perl, and Python, among others.
- Proven expertise in the industry’s leading testing tools, such as HP Quick Test Pro, Selenium, Rational Robot, and Silk Test.
- Strong capabilities in emerging open source testing tools, such as Fitnesse, Selenium, Watir, and others.
- Robust test script writing, review, execution, and maintenance process.
- Customized to run in different environments (alpha/beta/integration/production).
- Integrated dashboard views with automation solutions for status-at-a-glance reporting for all stakeholders.
- Expertise in migration of test solutions/scripts from licensed tools to open source tools.
- Strong technology leadership and consultancy by QA industry experts.
Pyramid Automation Testing Key Features

Flexible framework: facilitates scalability (e.g., easy addition of test scripts).

Low-maintenance scripts: scripts are easy to maintain and require less intervention.

Fine-grained test execution control: run one script or a suite of scripts at user’s discretion.

Highly modularized libraries: modularity reduces redundancy and saves time.

Early automation: On confirmation of test requirements, test automation can be conducted concurrently with preparation of manual test cases.

Faster time to market and increased ROI: Our techniques provide competitive advantage and enable cost savings.

Pre-built function libraries: Our function libraries reduce the cost of developing an automation test suite by up to 40% by enabling generation of automated scripts after documenting the logical flow of test cases.

Offline automation: Test tool licenses are required only during test execution and creation of the object repository for the application under test. By limiting the need for multiple test tool licenses in the test execution phase, offline automation lowers the cost of these licenses.

Reusable business components: Automated test cases based on the design of business processes result in higher reuse of scripts. Reusable business components enable reduced effort during maintenance.

End-to-end automation framework: Pyramid’s scalable and extensible automation framework covers multiple application technology platforms and packages. The framework is well defined, easy to use, robust, and scalable, ensuring lower investment cost and faster ROI.

Automation methodology: Business users and manual testers are able to develop automated test scripts, reducing development cost.

With our custom test automation frameworks and methodologies, industry best practices, and in-depth expertise in both open source and industry leading commercial test tools, Pyramid helps clients reduce test cycle times and accelerate time to market.