



▶ HARMONIZING TEST AUTOMATION.....1



▶ HIDDEN COSTS OF OFF-SHORING..2



▶ TEST AUTOMATION SUCCESSES.....3

Software Testing *focus*

A NEWSLETTER ADDRESSING THE NEEDS OF THE SOFTWARE TESTING COMMUNITY

Harmonizing Test Automation

*“Harmony heals my hurting hunger for heroics”
- Author unknown*

Putting automated testing in harmony with the speed of business is difficult when the strategy depends upon a single, resource-limited group to perform the heroics. Adding to this difficult balancing act are automated tool vendors who suggest that business organizations write manual test cases in an unstructured manner to ease the automated scripting effort.

History proves that doing something/anything twice results in two totally different results. Whatever happened to doing it right the first time?

Historically, the responsibility for test automation has been relegated to a select few technical scripting staff members. There was really no way for the balance of the organization to assist with the development of automated test scripts because of the specific skill-sets required.

How does your company address automation? Do you direct technical staff to write scripts with limited specific direction, test architectures, or goals to make writing automated test scripts easy for non-scripting staff?

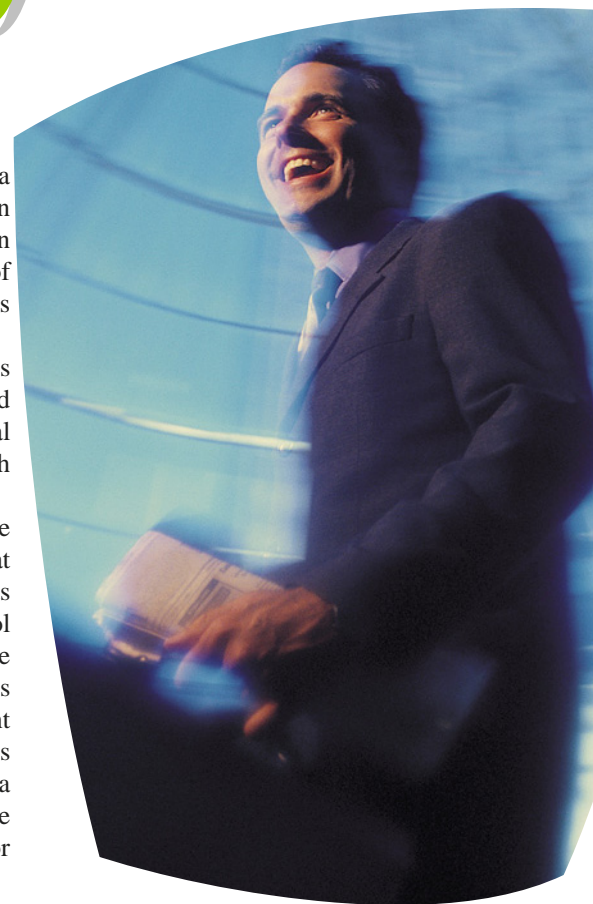
It has been a long-standing custom within the testing industry to stress the value of creating specialized testers with unique skill-sets rather than building infrastructure around developing ease of use.

Count yourself lucky if you work for a company that is addressing test automation as an easy to use company asset rather than succumbing to the mounting pressure of writing technical automated test scripts faster within a shorter period of time.

Innovative companies address resource constraints with technology and process inventions while operational companies continue to find ways to stretch existing commoditized resources.

In most cases, test organizations are acting as slaves to the approach that leading tool companies have termed as “best practices.” The automated tool industry has long been at odds with true best practices in that automation continues to be addressed late in the development lifecycle with little time for reaction. This creates a big need to scale resources in a short period of time. This may be the single most important factor of the need for multiple test tool licenses.

- Continued on Page 3 -



“Innovative companies address resource constraints with technology and process inventions while operational companies continue to find ways to stretch existing commoditized resources.”



Hidden Costs of Off-shoring

Over the past 5 years, Systemware TS has witnessed projects that have embraced the idea of leveraging a low-cost worldwide workforce to reduce costs for testing engagements. Lessons learned from those engagements can help us predict future success.

Six basic motivational patterns for off-shoring projects have emerged which are as follows (in no particular order):

- 1) Refocusing Subject Matter Expertise staff to the core competencies of the business.
- 2) Assisting with the acquisition and implementation of 3rd party application(s) of which subject matter expertise is not a company asset.
- 3) Leveraging third party knowledge of industry practices for areas of business in which core competencies have not been established or are in conflict because of a merger and/or acquisition activities.
- 4) Lower operating costs.
- 5) Overcoming a lack of confidence in the testing function.
- 6) Overcoming a lack of testing resources to deliver projects on a timely basis (scalability).

Regardless of the motivation for the off-shoring effort, a common set of unexpected costs were encountered across all off-shoring motivations. Below are the categories of unexpected costs:

Duplication of Effort

Although it was mandated that an off-shore resource act as the single point of contact, the "off-shore" team resources encountered turnover on a regular basis including this single point of contact. As a result, this issue was resolved by assigning an off-site Project Manager for the duration of the project. This resolved the turnover issues but created duplicate on-site and off-site project managers which added cost.

Connectivity/Security

Off-shore vendor marketing presentations and verbal assurances about off-site facility security led us to believe that we could tap into the existing security and connectivity infrastructure. Real-world experiences demonstrated that this is a relatively unaddressed issue and that significant time and energy is required to make both parties comfortable with security and responsiveness.

Additional Communication Cycles

A well thought-out contract office with little real-world experience in off-shore testing relied on technical staff's terminology to convey expectations.

Significant undiscovered confusion concerning basic terms such as "Acceptance Testing" led to missed expectations by both the IT and business community. As a result, communication issues lead to large re-work efforts such as re-doing the acceptance test effort to utilize business terms rather than IT terms.

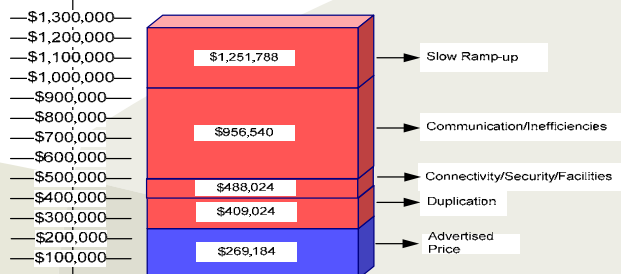
Slow Ramp-Up

Off-shore vendor executive management politicized their firm's shortcomings by emphasizing the patience needed to make a partnership agreement valuable. As a result, knowledge transfer cost and piloting costs consumed projected first-year savings within the first 6 months.

Bottom Line

Historically, off-shore testing effort costs have expanded 4.8 times greater than the advertised price. The illustration below shows a typical off-shore project expanding from an advertised price of \$259,000 to \$1,250,000.

The Systemware TS approach to test automation quickly implements automation in a consistent and scalable fashion eliminating the expansion of costs incurred during off-shoring projects while reducing manual testing efforts.





Harmonizing (continued)

(continued from page 1)

Systemware TS is an innovator that realizes that test automation must be easy to use and available to staff members beyond the test automation team. One of our specialties is creating automated test cases in a natural testing language which are executed by leading test automation tools available in the marketplace today.

For a personal presentation of the Systemware TS approach to test automation, please contact our offices in Dallas or Atlanta. We are interested in your feedback or comments. Please feel free to email them to focus@systemware.com.

UPCOMING TOPIC

**TEST
AUTOMATION
SNAKE OIL**



Systemware TS Addresses Test Automation Myths of the Past 10 Years

Recent Successes with Test Automation

- 1 test case drives 160 scenarios based upon data conditions – without writing a script.
- Test cases within business-based keyword approach are still operating and finding defects after more than 1 year – attributed to the ability of the test case to adapt to differing data within the test environment and differing object names within the application using metadata tags, SQL, and logical object names.
- Business keyword approach delivers a self-service mode for non-scripting staff as a superior method to built-in methods provided by test tool vendors.
- Business analysts write and maintain automated test cases without knowing scripting language or relying upon test automation team resources to provide automated scripts.

Myths/Snake Oil

- 1) It is untrue that test automation will allow you to reduce the time for product testing.
- 2) It is untrue that test automation will reduce the need for testing resources.
- 3) Test automation is hard.
- 4) Test automation should only be focused on regression and/or stable functionality.
- 5) Test automation will eliminate manual testing

Test Automation Innovation

Southwest Region
 15601 Dallas Parkway
 Suite 150
 Addison, TX 75001
 Voice: 972-239-0200



Southeast Region
 One Premier Plaza
 5605 Glenridge Drive
 Suite 630
 Atlanta, GA 30342
 Voice: 404-847-9444

systemware
 TESTING SOLUTIONS