



## QualiTest Provides Improved and Efficient QA & Testing Services to Global Defense Contractor

### Client Overview

This Global Defense Contractor specializes in the development, manufacturing and integration of defense electronic and electro-optic systems worldwide. It also focuses on designing, developing, manufacturing, and integrating command, control, communication, computer, intelligence, surveillance, and reconnaissance (C4ISR) network centric systems. This includes unmanned vehicles for defense and homeland security applications. The client develops and manufactures avionic and aero structure products for commercial aviation market and performs upgrade programs for airborne, land and naval defense platforms.

The client is a \$2 billion company with approximately 10,000 IT employees.

### Business Need and Objectives

The client runs more than 150 IT defenses projects in at one time. The objectives were to improve the level of testing currently being performed and decrease the cost of testing by providing fixed price, turn key testing solutions.

Transfer of knowledge was lacking between the various projects. The client wanted to centralize the Testing knowledge by building a center focusing on shared knowledge and methods. This would create a unified structure for all processes at the company level.

Resources were allocated per project. There was no resource sharing between the various projects regardless of need or urgency.

Test Automation value was questionable as it failed to match the nature of the systems being developed. This failure occurred because most of the processes were GUI based and a multi layer architecture was needed for the Test Automation.

Part of the project included transferring 25 of the customer's employees to become QualiTest employees. Those employees were fully integrated into the new Test Centers organizational structure under QualiTest's management and responsibility.

### Solution

QualiTest built a comprehensive Test Center to meet the various requirements and needs of the client. Based on a comprehensive pre-study conducted, QualiTest created a formula that will calculate the fixed price of each project based on several parameters that influence the cost of testing. These include: amount of man days spent by development, amount of iterations and versions, amount of testable requirements, etc. This formula was implemented on all new and existing projects, as the data was verified. The formula assisted the customer by creating a budget and cost estimations needed for each project. Formula results indicate the final price being charged by QualiTest. This enables the client to avoid many of the cost risk associated with IT budgeting. SLAs were defined based on performance, the successful meeting of time tables and quality of the system. A prize/penalty system is used to ensure full commitment to meet the quality targets. A comprehensive central infrastructure was built to automate tests from all projects using QualiTest Keyword Driven Testing (KDT) practices. In some projects the Test Automation covered over 90% of the tests performed!

A dynamic resource model was implemented. Each project had a fixed resource allocated to it as well as an independent team assigned to the various projects. These assignments were based on project priority.

A Methodology team was established and a formal test process was defined based on standard approaches (ISEB, IEEE, ITIL and TMap). QualiTest used best practice to customize the various standards and approaches in order to efficiently meet the client's needs. The new testing process was enforced on all projects.

A training program was established with an emphasis on personal career paths. An ISTQB certification process was implemented, as well as a training program for each software tester.

## Results

- The Client saved 38% of his total Testing costs. Measuring the SLA's showed quality improvement of 8% by the end of the first year and 22% by the end of the second year.
- The professional level of software testers in the various teams increased considerably. Each software tester has a personal career path program. Increased commitment of team members is evident and personnel turnaround dropped by 63%.
- Test Automation cuts down on testing time and allows development to execute the tests before formal test are initiated by the testing teams. The quality of the system transferred to the testing team increased dramatically.
- A structured process was established. The flexibility of resources increased and moving resources from one project to another has been simplified.

### Project Business Card

Industry: Defense  
 Solution: Test Outsourcing  
 Location: On-shore, On-site  
 Project Size: 100 QualiTest employees  
 Customer size: \$2 billion Company, 10,000 IT People

"Think Globally – Test Locally" means providing QualiTest's Global practice, knowledge and proven experience with local services - either on site, or at one of QualiTest's OnShore Test Centers. Our unique combination of competitive pricing and service quality makes onshore QA and testing the smartest alternative to any offshore option.

**Think Globally ■ Test Locally**

QualiTest

QualiTest is a leading global provider of Quality Assurance and Software Testing services. QualiTest employs over 800 testing professionals in 11 countries, serving global Fortune 500 companies and many other large organizations. QualiTest's services enable its customers to build and maintain a leadership position in the QA and testing process. QualiTest uses its deep industry knowledge to put your company on top - and its proven track record of consistent and successful delivery keeps you there.

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