



TPI™ - Test Process Improvement Assessment and Implementation Helps a division at a Fortune 500 Company Improve Quality and Reduce Costs

Client Overview

The customer is a world leading conglomerate active in numerous industries such as Media, Healthcare, Energy, transportation, Industrial products and financial services.

The work was done through a direct engagement with the medical imaging division of the customer's Healthcare subsidiary.

The customer has several R&D centers each focusing on a different set of products. Prior to working with QualiTest, the customer's testing was performed in-house with some of the work performed onsite and the rest being done off-shore at testing centers in India.

Business Needs and Objectives

The customer was concerned with rising QA and testing costs combined with a growing lack of overall control over the QA and testing process. The customer indicated that a lack of quality and process metrics (in a highly regulated industry) meant that the overall amount of work was growing but quality was not improving.

The customer indicated that he felt that some QA and testing areas were lacking but was not sure in which of these areas to invest not knowing which investments would offer the best quality improvement and the highest value.

After evaluating a number of alternatives, the customer selected QualiTest to perform an assessment according to TPI (Test Process Improvement) model.

Of all the criteria's defined for selecting an approach, simplicity, difficulty of implementation, flexibility and the focus on the testing processes were the main criteria's which the customer had indicated ultimately lead to selecting TPI.

Challenges and Requirements

Following is a partial list of the challenges which were quickly identified as part of the initial TPI assessment:

- The customer was investing more and more in documentation and test planning but was still not getting an overall control over the process effectiveness or a sense of the upcoming releases maturity.
- QA and testing activities were performed on multiple locations which made it more difficult for the teams to communicate effectively and made the evaluation more challenging as well.
- The testing team's moment of involvement left little time for test execution and usually led to delays and the testing process staying in the project's critical path for too long.
- A significant investment in Automation with problems in both questionable ROI as well as tests not focused on the real critical issues which had to be tested. The automation team was very strong technically but was lacking business knowledge in how and what should really be tested.
- Lack of compatibility to standard testing Automation tools due to unique platforms, limited GUI interface and Rapid development processes.

Overall, the challenge was a growing QA and testing budget with no tangible increase in defect detection or higher assurance of quality.

Solution Structure

QualiTest conducted an assessment of the existing QA and testing processes in order to establish a base line which describes the current situation under the 20 known key areas in TPI. The evaluation was conducted by a senior test specialist and supervised by the QualiTest Professional Services team. The evaluation performed by QualiTest included interviewing key customer employees in the areas of QA, Testing and IT followed by analysis and presentation to the customer. The final assessment report included both short and long term recommendations milestones.

Following the Assessment, a steering committee was established consisting of members of the client's QA team, development team and QualiTest Sr. Test Specialist. Five months after the TPI Assessment completion, the following achievements have been widely recognized:

Test Strategy: a motivated consideration of the product risks took place, for which knowledge of the system, its use and its operational management is required. A risk-based approach was implemented. Each high-level test determined its own test strategy. Exploratory Test Techniques were implemented.

Metrics - metrics were defined and implemented. A real-time dashboard was created collecting data from various systems allowing the QA team to base its decisions on a valid state while providing management and stakeholders with full visibility to the activities performed by the QA team.

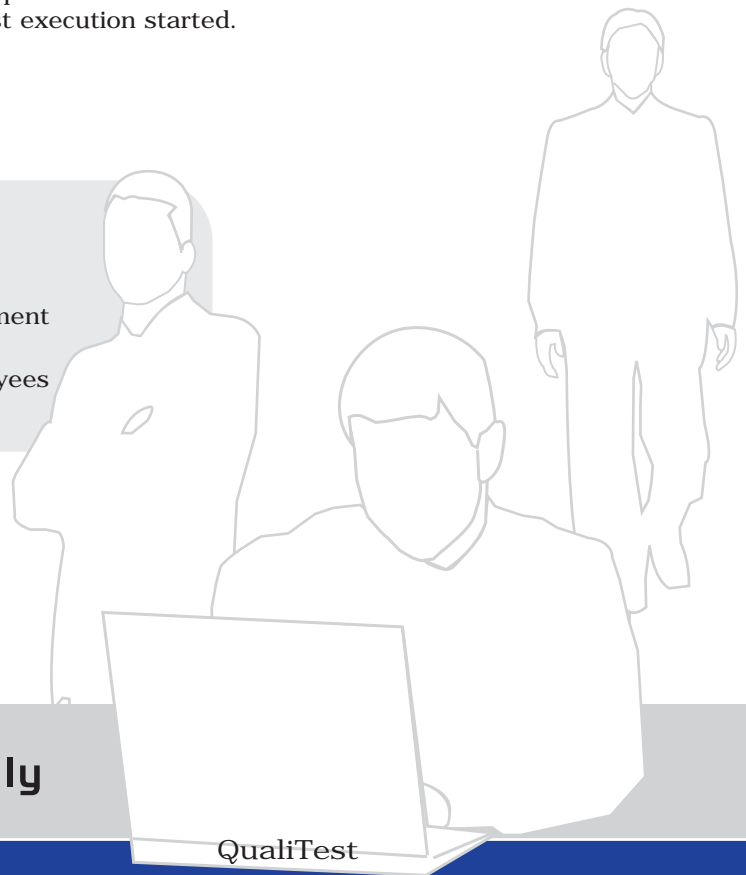
Moment of involvement - Testing was started in parallel to requirement definition. Allocating the defects early in the development stages allowed the QA team to focus on deep testing during the late stages of development.

Test Automation - Keyword Driven Approach (KDT) was implemented allowing various members of the team to participate in the Test Automation effort. Test Automation was integrated as part of the daily build allowing the development to benefit from Test Automation and to locate defects early in the process, even before test execution started.

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Project Business Card

Industry: Software
 Solution: Test Process Improvement
 Location: On-shore, On-site
 Project Size: 4 QualiTest employees
 Customer size: Fortune500



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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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