Cognizant Testing Services

Testing Engagement for a Leading Thrift/Mortgage Bank

**Duration:** Ongoing – June 2004 to present  
**Location:** On site – Pasadena, CA (USA)  
Offshore – Pune, India

**About the client:** The client is one of the top 10 largest thrifts nationwide (based on assets). Through its hybrid thrift/mortgage bank business model, the client is in the business of designing, manufacturing and distributing cost-efficient financing for the acquisition, development and improvement of single-family homes.

**About the engagement:** Cognizant provides testing support in an on-site/offshore model for the majority of systems within the core mortgage systems group; this constitutes almost 60% of the client’s software testing needs. The scope includes testing of their existing legacy systems as well as a new multimillion-dollar initiative to revamp existing client-server systems with an enterprise-wide, Web-enabled system. External-facing and complex internal-facing applications are part of legacy systems. They are:

**Seven external-facing Web sites catering to different business segments such as:**
- Bank to Broker
- Bank to Realtor
- Bank to Customer
- Home Builders Division
- Home Lending Services
- Home Construction Lending
- Consumer Banking Group

**Two internal-facing client/server systems that are used for:**
- Loan Origination
- Underwriting and Funding
These applications have interfaces to various third-party interfaces for:

- Credit check
- Borrower information
- Property evaluations
- Internal Pricing Engine which takes pricing from various indices.

The new multimillion-dollar initiative is designed to replace existing internal-facing client/server applications with a single enterprise-wide, Web-enabled system to be used across all business channels.

Testing Background & Problem Statement

The following are the facts about the client testing prior to Cognizant:

- No dedicated testing environments
- No dedicated testing organization/processes/practices
- Testing carried out on development and production environments
- Production environment was hit every week due to weekly releases
- Release planning was crunched with almost negligible documentation available
- Tester profile was of senior developers and business users
- Ad hoc scenarios were used for testing with no test cases being developed
- MS Outlook® (i.e., e-mails) was used as defect management tool

Such an approach toward testing often resulted in rollbacks and emergency releases to production environment.

Engagement Strength: On site – 11  Offshore – 34

Cognizant Solution: The client testing engagement saw several contributions from Cognizant in order to build a testing organization for the client. Broadly our solutions are categorized into the following areas:

Test Process Consulting

- Designed and successfully implemented a Test Methodology to be used across the client functional and performance testing. These methodologies detail out the approach to be followed for testing a release (e.g., identifying testable requirements for functional and performance testing, designing test suites, test execution approach). Introduced end-to-end traceability using Mercury Test Director.

Domain-Focused Functional Testing & Manual Test Execution

- Extensive focus given on domain by means of team training and trainings conducted by business analysts. Before test cases are designed, requirements are discussed and analyzed within the team for business understanding and end-user focus. Over 70% of all test cases written are focused on domain-specific business processes and user scenarios.

Test Automation

- Implemented the keyword-driven automation framework for the regression test suite using Mercury QuickTest Pro to reduce time to market while increasing test coverage. Over 70% of regression tests have been automated.

Performance Testing

- Provide as-needed Performance Testing using Mercury Loadrunner to detect critical performance bottlenecks.

Tool Administration

- Recommended, set up, administered and maintained a wide array for tools from the Mercury test suite, including tools for test and defect management, as well as test automation.

Client Benefits:

The client benefits are categorized into the following areas:

Test Automation

- Over 85% savings in regression testing costs.
- Overall resource requirements have been cut by 45% through the use of automation tools and frameworks.

Performance Testing

- Cognizant’s performance testing team helped the client identify critical system bottlenecks and scaling issues prior to production. This has resulted in the following key achievements:
  - Over a 91% improvement in average response time for critical system functionality.
  - Tripled the user capacity of the system.

For more information, contact Cognizant Testing Services at inquiry@cognizant.com or visit our Web site at: www.cognizant.com.