

CASE STUDY

Application Lifecycle Testing for a Leading Investment Consulting Firm

About the Company

The company is one of the industry's largest independent, full-service investment consulting firm, serving over 300 retainer clients with total assets of about \$700b. Headquartered in Cambridge, Massachusetts it provides traditional and alternate investment consultancy, asset management, investment advisory and investment policy administrations to endowments, foundations, insurance and private wealth investments.

The Challenge

The company produces a performance book that exhibits investment funds' performance and historical records of the funds using various performance charts. These charts are used to analyze and evaluate funds' performance. The charts are either in a tabular or in a graphical format showing returns, risk/return performance, performance summary, relative returns, etc. Testing and verifying these charts to display correct results were of paramount concern for the organization.

The performance charts were built on .NET framework that retrieved data from disparate sources and used SharePoint for approval processes. The challenge was to test the functionality, data flow and integration between these systems. Frequent functionality changes in the UI demanded a higher level of regression testing. The challenges were repetitive testing and end user training for successive changes.

Trigent's Approach

- ❑ Trigent's team of seasoned experts comprising of testers, test lead and test manager assessed the requirements and prepared a test strategy
- ❑ The team prepared test cases, performance validation checklists and test reports.
- ❑ About 2000+ test cases were designed to cover the end-to-end system testing.
- ❑ The team performed end-to-end functional testing, UI and usability testing to ensure all features were working at their optimum level and typical regression bugs were identified.
- ❑ To test the accuracy of performance charts, the team prepared output validator excel sheet to verify calculations and graphs of performance books.
- ❑ Data flow and data integration testing were performed to verify data extraction accuracy, new data updates and to check whether the data updates were rejected accurately in the performance books.
- ❑ After executing all the test cases the overall code coverage was measured to be 80%.

Highlights

- ✓ Identification of most bugs during functional testing
- ✓ Significant reduction in test cycle time
- ✓ Increased confidence in product quality
- ✓ Reduced number of low severity issues