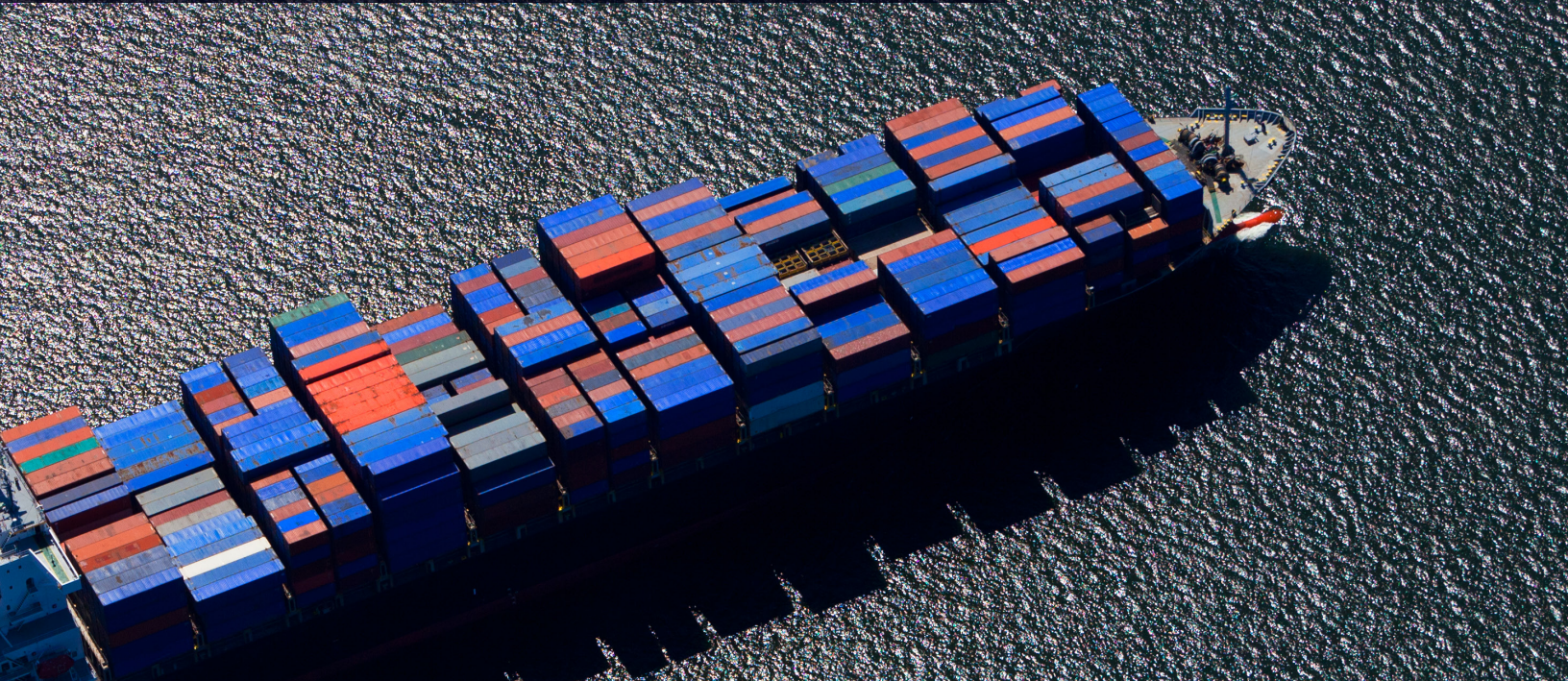# Reducing Cost & Manual Effort by Testing Automation

Mindtree partnered with a global shipping & logistics leader to transform their testing ecosystem reducing manual effort and accelerating time to market

Client Background

The client delivers innovative and sustainable global shipping and logistics solutions for manufacturers of heavy equipment, cars, trucks and specialized cargo. It is amongst the leaders in transporting automobiles, farming, construction and mining equipment, trains, yachts and other heavy machinery. It offers supply chain solutions and services in freight shipping, inland distribution, terminal handling and also technical services.

Opportunity

The client was looking for a partner who could design, implement and execute automation and performance tests across their ocean, terminal, financial and web businesses. The client also wanted to reduce the testing effort by increasing the regression automation test coverage to ~80% and reduce the turnaround time for test execution, with an on-demand execution suite solution.

Business Outcomes

80%

reduction in the execution period for the automated test scenarios

Automated **50 to 60%** manual test cases in each of the applications

90%

reduction in the effort spent for regression testing of integration scenarios

Mindtree Solution

A proof of concept (POC) was conducted to assess the feasibility of automating client applications using HP tool QTP and Mindtree proprietary Framework HTAF (Hybrid Test Automation Framework). Mindtree customized our proprietary framework HTAF aligning it to the client needs and implemented automation approach with more reusability to increase efficiency and productivity. Mindtree automated 20+ applications using HTAF which include web and desktop applications. We also developed a new keyword based automation framework, an enhanced version of HTAF, in alignment with the client testing environment.

Mindtree has now established a standard performance testing process across various applications for the client.

Technologies Used:

- Oracle 11G, SQL Server and DB2
- HP Quick Test Professional/Unified Functional Testing 11.53 & 12.51
- Mindtree Hybrid Test Automation Framework (HTAF)
- Java, J2EE, Ajax, Power Builder, Java Swing

Highlights of Solution:

- Developed script based framework on top of UFT and being used to test the configuration based GUI functionalities for about 130 master screens of WITS Online web application
- Followed functional decomposition approach and created test scripts using UFT to validate DW and STRATA reports.
- Automated 100+ EDI test flows to validate integration configurations and data flows across various applications
- A standard tool LoadRunner being identified and implemented for all the performance test activities
- Mindtree's performance and automation test processes, scripts, execution design, analysis results and other artifacts were certified to be of excellent quality by HP

Business outcomes (Continued from Page1)

- Improved coverage and reliability through robust regression suite.
- Standard testing processes established ensuring repeatability of tests.
- Reduced cost and time to market by maintaining the regression testing timelines.
- Reduced service maintenance and framework license cost by optimal license management.