

### THE CUSTOMER

A NYSE listed company and a Global leader in education and learning technology that serves more than 5 million US preK-12 students.

Their Instructional Management System has been used by some of the largest school districts, including Chicago Public Schools and the School District of Philadelphia.

### **CHALLENGES**

The customer was utilizing an increased number of resources in each of their test cycle, which translated to associated additional costs and increased Test Execution time((3-4 sprints, duration: 1.5 month to completely test the product). So they looked for ways to automate their QA process in order to minimize the execution duration and reduce the number of resources.

Other Key Challenges include:

- Setting up an agile QA process to accommodate complex validation across multiple clients
- Frequent releases and long regression cycle affected the quality of the application

Customer chose to partner with Aspire based on our expertise in test automation of desktop, client-server, mainframe and web-based products. They were impressed with Aspire's Propel Q framework for its features like reusability and flexibility.

### **OUR SOLUTION**

After conducting a test automation tool evaluation exercise, QTP emerged as a clear choice because of its features that include: support for application's Custom Objects, Dynamic Objects, Uniform Parameterization Support, Advanced Key Word Driven Testing and Exception Handling.

Aspire's QA team set up a test harness using QTP and adopted an incremental migration testing approach to all modules. We designed a Test Automation process, based on **15 factors-impacting short term and long term reusability and cost of maintenance.** 

# Phase-1- Planning and Training

- · Identified modules that need to be automated
- Set up QA environment Test Automation Plan and estimating time, effort and cost
- Deployed Senior Automation Experts on the Automation Framework that had to be designed for automation of the existing application Testcases

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### Phase-2 - Designing and Preparation of

- Converted close to 600+ MTM built-in functions and code construct to QTP
- Developed automation test scripts using a hybrid framework comprising a keyword driven framework and test script modularization along with supporting test library architecture
- Developed automation regression testing suite for 10 of the major modules, comprising 600 scenarios
- Developed automated scripts using reusable components(adding comments, parameterization & results generation) to automate browser compatibility testing

### Phase-3 – Testing, Execution and Integration with Quality Center

- Scripts were run independently on multiple machines and Tested for consistency and reliability and exception Handling
- · Integration of Scripts with Quality Center

### **BENEFITS**

- Expedited on-time deployment and faster test cycles
- 90% improvement in efficient execution
- Automated more than 80% of the system
- 3 times lesser cost than manual process

## **ABOUT ASPIRE SYSTEMS**

Aspire Systems is an Outsourced Product Development firm committed to helping our customers build software products better and faster. We work with some of the world's most innovative Independent Software Vendors and software-enabled businesses, ranging from start-ups to established industry leaders, transforming the way software is built.

Aspire provides complete product lifecycle services, ranging from new product development and product advancement to product migration, re-engineering, sustenance and support. Our product development teams are spread between our Global Innovation Center in Chennai, India and offices in the United States, UK, Germany and UAE.

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