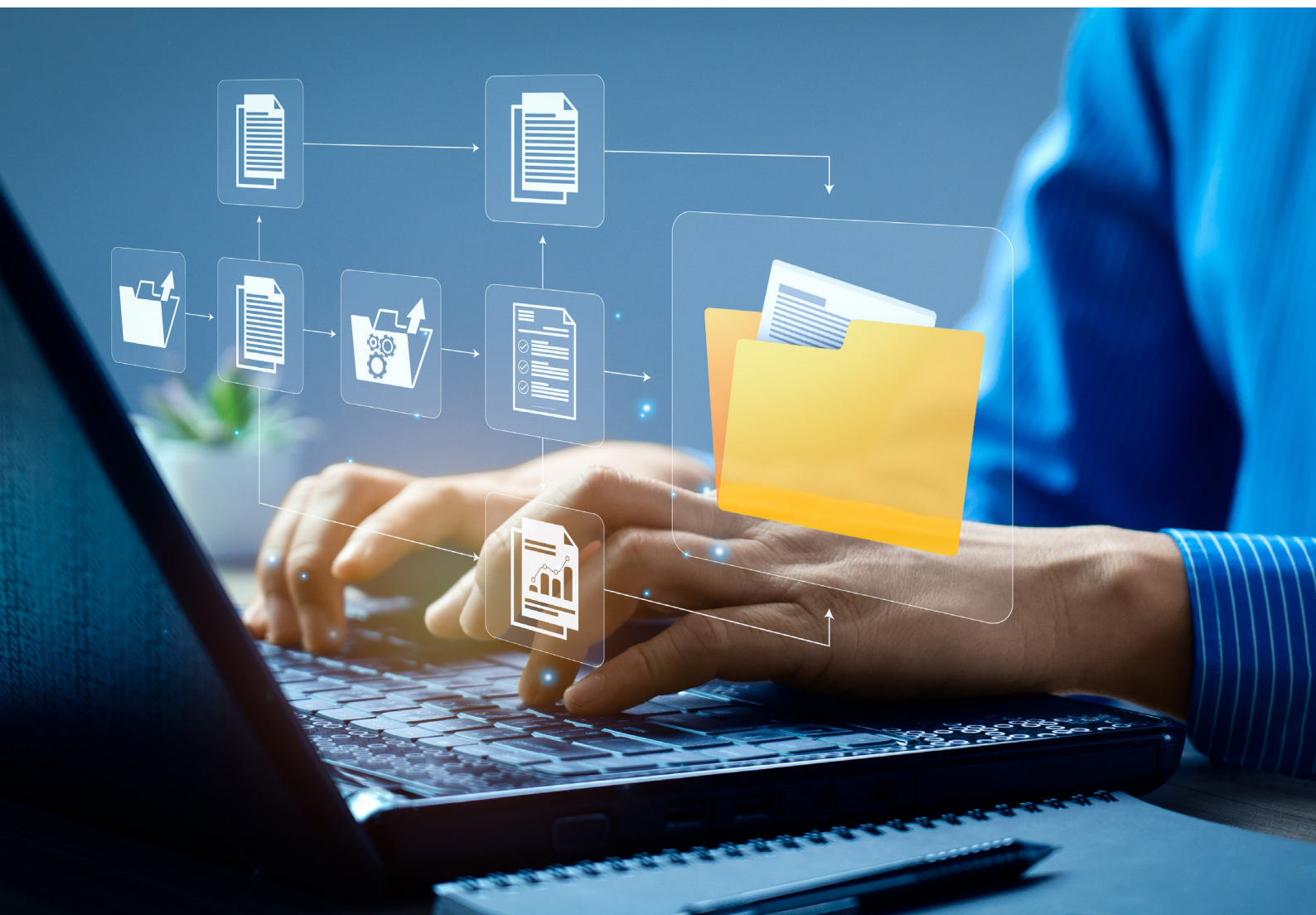




Global Enterprise Information management firm saves 6000 person days testing efforts per month with faster but high-quality releases using **AI-powered Test Automation framework AFTA 4.0.**





Challenges:

- Humongous test pack with very little time to test
- Shortened release cycles
- Integration to external applications & services
- UI and Regression issues across release builds
- Repetitive manual testing across different device, browsers, and platform fragmentation
- Limited time, resources, and bandwidth

About the Customer

The customer is a globally well-known information management and meta-data driven content management solution that helps organizations manage, organize, and secure their documents and information. They provide a unified platform for managing both structured and unstructured content, allowing users to access and work with their documents and data from a single interface. The platform is popular across various industries, including manufacturing, finance, healthcare, legal, and professional services, where efficient document management and information governance are critical. 5000+ customers use on-premise and cloud application from 100+ countries. The product has desktop, web and mobile products available in 33 different languages.



The Need

The customer product spread touched upon multiple tech stacks and platforms right from desktop apps to web-based apps to the recently launched native mobile apps. This increased the need for providing a consistent quality experience for their customers across platforms and it eventually boiled down to having the testing be an enabler rather than a bottleneck. The need of the hour was a multi-layered, simple and reusable test automation framework that can help release their features faster to market without compromising on quality.



Solution:

- Reusable Test Automation Framework with continuous testing for each build
- Page Object Model (POM) design pattern to separate test scripts and application elements
- ML-powered report portal and extent report for quick result analysis
- Self-healing testing scripts
- AFTA 4.0 integrated with Appium to cover iOS and Android devices for mobile automation
- Cross-browser testing

Results:

- 6269 person days testing effort saved every month due to test automation
- Ability to stay competitive with up-to-date releases
- Monthly releases made possible with setup of DevOps culture
- Migration to Azure Service fabric made easier with existing Test Automation system

The Challenges

The primary challenge they had was supporting the testing needs of desktop applications, along with two versions of web and mobile. Testing multiple product features for maintaining high quality was time consuming as each release has a requirement to run around 10,000 tests in different environments. This was virtually impossible to test within the short release cycles without compromising on the regression testing.

This affected their ability to deliver their product upgrades on time and achieve customer satisfaction.

Coupled with these were other challenges such as

- Integration to various external applications and services
- Compatibility Testing across browsers and devices
- Internationalization and localization testing

Aspire's Solution

Considering the need for a robust test automation solution that doesn't cause maintenance nightmares, Aspire came up with a tailored Test Automation solution from Aspire's in-house ML Integrated multi-layered test automation framework – AFTA 4.0. AFTA 4.0's range of features as listed below was the exact need for the customer.,



AFTA 4.0 Features

Applicability

Support with Web, Desktop, Mobile, APIs	Yes -with integrations
Reusable Methods to reduce scripting time	Yes
Auto Web Object Scrapping	Yes
Self Healing Scripts	Yes
AI Powered Failure Analysis/Results Dashboard	Yes
CI/CD Enabled	Yes
Test Parallelization	Yes
Compatibility Tests - Browsers & Mobile Devices	Yes

The framework’s versatility to cover desktop, mobile and web applications and support functional and regression testing came into use. The framework was then integrated with Team city pipeline and is now used for release execution every month. The solution also used CI &CD for early and parallel testing along with continuous testing for every developer build.

AFTA 4.0 addressed challenges like testing multiple product features using common test suites and triggering tests for every major and minor release.





Snapshot of our solution

- **12,000+** test automation scripts were automated for different products like Desktop, web, Mobile and API
- Close to **200,000** automated test scripts are executed every month using Jenkins and Teamcity
- Machine Learning based result analysis saved **70%** result analysis time
- Framework Components Snapshot Functional Regression using
 1. Selenium
 2. Page Object Model (POM) design
 3. Pattern/Page
 4. Factory and Loadable Components



Results and ROI:

Aspire's solution using AFTA 4.0 provided significant savings to the client in the following manner:

- **6269 person** days effort saved every month due to test automation
- Defect leakage was less than **3%**
- Feature releases were up to date which improved their customer experience
- Enabled scalability - Migration to Azure service fabric was made easier with test automation in place.



Aspire Systems is a global technology services firm serving as a trusted technology partner for our customers. We work with some of the world's most innovative enterprises and independent software vendors, helping them leverage technology and outsourcing in our specific areas of expertise. Our core philosophy of "Attention. Always." communicates our belief in lavishing care and attention on our customer and employees.

For more info contact: info@aspire.com or visit www.aspiresys.com

USA

+ 1 630 368 0970

SINGAPORE

+65 3163 3050

INDIA

+91 44 6740 4000

BELGIUM

+ 32 3 204 1942

NETHERLANDS

+ 31 (0)30 800 92 16

POLAND

+48 58 732 77 71

MEXICO

+52 222 980 0115