

# Quality Assurance for Software and Data Migration Initiative

## ORGANIZATION

Our client is a property and casualty insurance company, ranked among the top 75 in the United States. The company was founded in 1894 and provides personal and business insurance products to home, auto, and business owners. Its personal insurance products include home and highway, auto, homeowners, condo owners, identity theft, renters, personal umbrella, and sports and recreational vehicles insurance.

## CHALLENGE

The client under the insurance group was restructuring the design of its insurance software application while migrating to a newer version. They also expected that the new version of the software should be straightforward for access to policies, quotes, and claims by agents with user-friendly navigation, widgets, and dashboards. The company needed to conduct both web and mobile testing to ensure that everything that existed on the business level in the previous version would continue to work in the new version.

This application is a business-critical system that handles client policies, quotes, claims, and money transfers. With fraud evidence and proof, the insurer can claim insurance money which could mean a loss to the company. The client also faced the risk of losing the customers' loyalty if the release of the new solution was slow and buggy.

A few considerations this client needed from a testing partner are highlighted below:

- Testing in a comprehensive and timely manner, keeping up with the frequency of changes
- The necessity to test within multiple browser versions like Microsoft Edge, Safari, and Google Chrome.
- Compatibility with iPad Pro, Surface Duo mobile devices with varying resolutions to make sure display of widgets and dashboards are defect-free without breaking the application's navigational appearance.
- Applications have different user groups (like Underwriter, Agent, Principal) to create and approve quotes, policies, and claims. Every user group has its own security restrictions and can only see its own operations data. It was very challenging to create users in third-party software to verify the data for different user groups and role-specific functionality.
- The application also interacts with Liferay, Duck Creek, and other third-party tools. Testing was performed to make sure data flows securely with third-party applications without any business logic effects while the system interacts with policies, quotes, and claims transactions.
- QA processes and complete testing are seen to during the development and evolution cycle.
- The client employed the testing team once the project lifestyle had already begun, so adaptability and flexibility were key.

## SOLUTION

Working within the Scrum framework with short iterations of two weeks, the XTIVIA testing specialist performed functional, integration and regression testing after each new feature was developed. This included testing across browsers like Microsoft Edge, Safari, and Google Chrome and mobile devices such as an iPad Pro and Surface Duo. The XTIVIA testing specialist also worked across multiple resolutions to ensure the UI remained intact in different resolutions selected by the end-user. Despite having deployed very late in the project lifecycle, the XTIVIA testing team has ensured that the understanding of legacy application workflow with minimal support is not compromised. With minimal access privileges to the legacy application, the testing team successfully:

- Identified the dependencies on different internal and third-party systems
- Understood the data flow and the lightweight transformation that happens after the data is consumed
- Developed comprehensive testing artifacts to ensure no functionality is left untested
- Identified the regression test suite that had to be executed whenever new features were introduced
- Tested the application for compatibility with various browsers and devices
- Provided functional guidance to other teams
- Validated production environment
- Provided deployment checklist and test scenarios for all modules

## BUSINESS RESULT

Our team implemented test suites for functional, usability, security, and migration testing. XTIVIA's testing team's effort in ensuring the application's reliable data flow, functionality, performance, and compatibility with the popular browsers helped to accept the application widely by various end customers of our client.

### SOFTWARE

Azure DevOps, Microsoft Tools, Playwright, VMware, VSTS, VS Code, Postman, Tomcat, MS SQL, Git Bash

### KEYWORDS

Application Integration, Application Programming Interfaces (API), Liferay 7.3, Elastic Search, Azure Cognitive Search, Azure Functions, Azure WebJobs, ReactJs frontend, Typescript, Playwright, Postman, API Testing

## ABOUT XTIVIA

XTIVIA is a proven technology integration and innovation company known for delivering leading-edge technology solutions to our clients' specific requirements, regardless of project complexity. We bring next-level business operations to reality through Application Development, Business Intelligence, Data Warehousing, Database Support & Management, Enterprise Information Management, Digital Experience Solutions and Enterprise Resource Planning. Our success stems from a demonstrated ability to deliver deep expertise via professional services, empowering clients to leverage their chosen technology successfully, competitively and profitably. XTIVIA has offices in Colorado, New York, New Jersey, Missouri, Texas, Virginia and India. [www.xtivia.com](http://www.xtivia.com)