

# Utilizing OpenSource tools to execute digital transformation

**CLIENT**  
REAL ESTATE BROKERAGE

**INDUSTRY**  
REAL ESTATE

**TTC SOLUTION**  
OPENSOURCE TEST AUTOMATION  
USING SELENIUM AND CUCUMBER



# Big goals and tight deadlines

With offices in North America and Europe, this brokerage is a premier global provider of end-to-end commercial real estate and loan advisory services using proprietary and innovative applications. These applications offer life of loan and valuation management, asset management and analytic solutions.

In late 2018 the client was looking to undergo a digital transformation by enhancing its web-facing applications to improve its customer experience. While the client had no formal QA process or QA team in place, it had a goal to implement test automation into its integrated CRE platform within three months. TTC was brought in to implement solutions in tool selection, processes and personnel.



## Key client challenges

Within the brokerage team there were business analysts, but no specialized QA personnel. Additionally, there were complicated business workflows that needed to scale rapidly to maintain a satisfactory customer experience.

Software development leadership was primarily located in Houston, TX and Waverly, IA, but contract and development staff and subject matter experts were located in multiple offices around the world.

Very quickly, the team knew they needed external assistance in hiring a qualified QA team, implementing a test automation framework and writing test cases, and so began the engagement with TTC.

## TTC's approach

The first step TTC took was to assess the current situation and define an initial test strategy, which identified key workflows. Thereafter we commenced test plan development. This approach included:

- Implementation of a lean project management framework using industry best practices for software testing
- Engagement with subject matter experts to conduct a risk assessment and develop a prioritized risk model of the SUT
- Execution of regular demos, reviews and retrospectives to ensure value was delivered
- Implementation of exploratory testing and specified/scripted testing
- Use test case design techniques to develop an optimized test suite
- Shift to continuous testing by deploying test automation and integrating with SD pipeline to run tests continuously

TTC worked with the team to provide a solution that worked within their budget and needs. This resulted in a Selenium/Cucumber framework, coded in JavaScript. A mixture of onsite, offsite and off shore resources were utilized to enable test automation within six weeks, with three week sprints.

**“The out of the box framework TTC recommended enabled test cases to be automated rapidly. This was a game changer when starting test automation.”**

– Test Architect

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## The results speak for themselves

The success of test automation led by TTC has given this real estate brokerage the ability to:

- Create and implement a test framework and test automation
- Automate regression test for 32 user stories
- Automate 175 test cases
- Reduce regression testing time from 2 weeks to less than 1 day

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**“The test automation goals were met by the team at TTC within 2 months, and this exceeded our expectations.”**

– Test Architect

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## Let's talk

For more information, talk to a member of our team today.