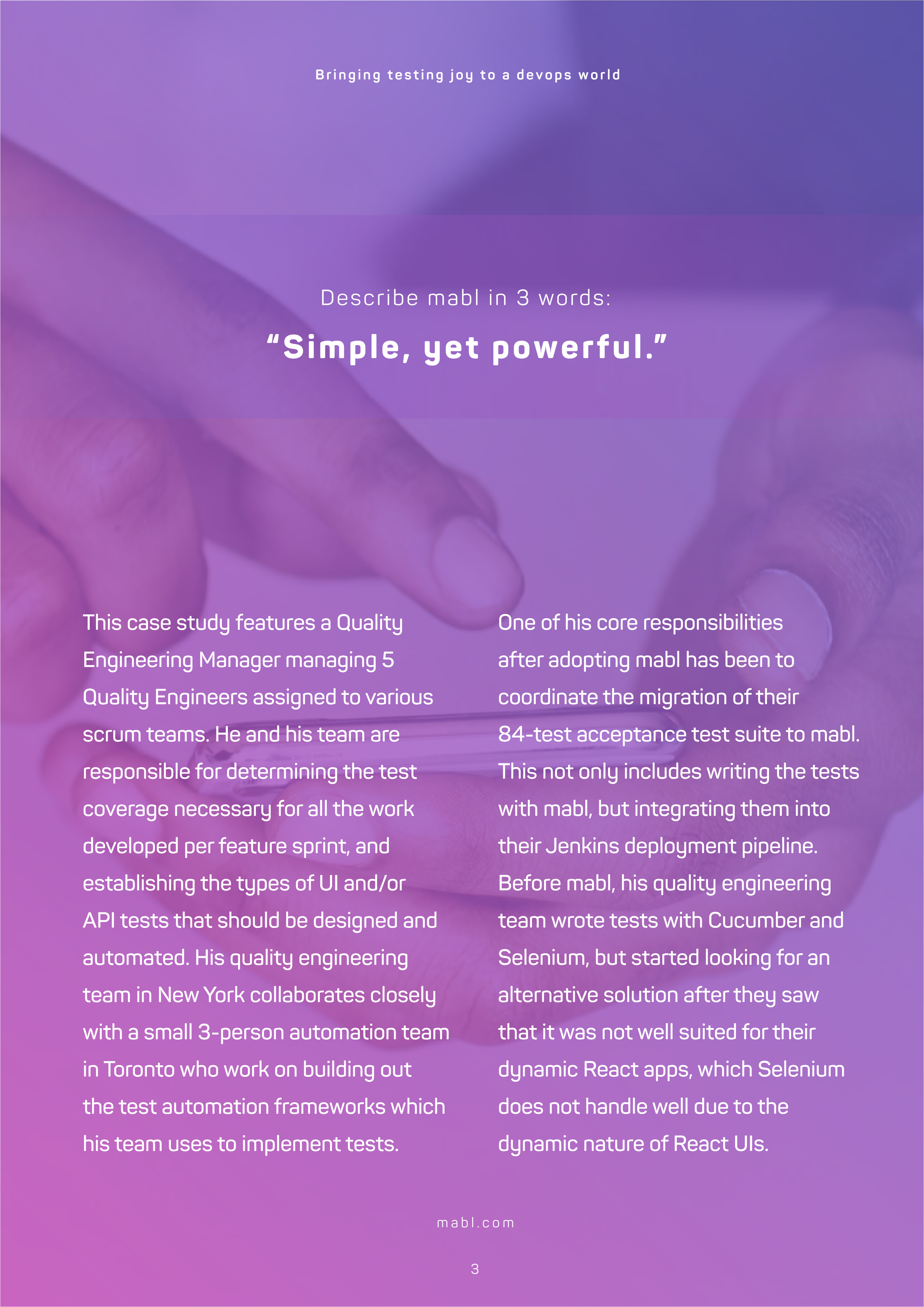
mabl

A FORTUNE 500 BUSINESS SERVICES PROVIDER

case study



Describe mabl in 3 words:

“Simple, yet powerful.”

This case study features a Quality Engineering Manager managing 5 Quality Engineers assigned to various scrum teams. He and his team are responsible for determining the test coverage necessary for all the work developed per feature sprint, and establishing the types of UI and/or API tests that should be designed and automated. His quality engineering team in New York collaborates closely with a small 3-person automation team in Toronto who work on building out the test automation frameworks which his team uses to implement tests.

One of his core responsibilities after adopting mabl has been to coordinate the migration of their 84-test acceptance test suite to mabl. This not only includes writing the tests with mabl, but integrating them into their Jenkins deployment pipeline. Before mabl, his quality engineering team wrote tests with Cucumber and Selenium, but started looking for an alternative solution after they saw that it was not well suited for their dynamic React apps, which Selenium does not handle well due to the dynamic nature of React UIs.

The Challenge

> *“We ran into a lot of the issues that a lot of people run into when using Selenium based frameworks. They took several days sometimes to code. Also, Selenium tests generally require a lot of maintenance resources... That wasn’t feasible for us going forward.”*

His team ran into issues common to Selenium-based frameworks. Tests were slow to code, taking 1-2 days to write a test for a single scenario. Tests required a lot of maintenance resources. Any change to the HTML or CSS of their apps caused a test to break. Tests were also flakey because steps in the tests weren’t always synchronized with the browser operations. Brittle and flakey Selenium tests led to false positives. Each false positive required several people to troubleshoot and fix the test. In this company’s case, this pulled time away from the automation team in Toronto, who were spending 20-30% of their time maintaining Selenium tests alone.

Current Challenges of Selenium

+ 1-2 day’s time to code per test

+ Brittle tests from changing and dynamic React front end

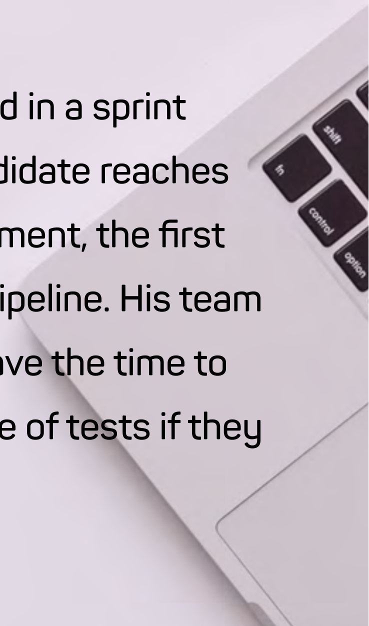
+ Flakey tests: Tests break when not synchronized with browser operations

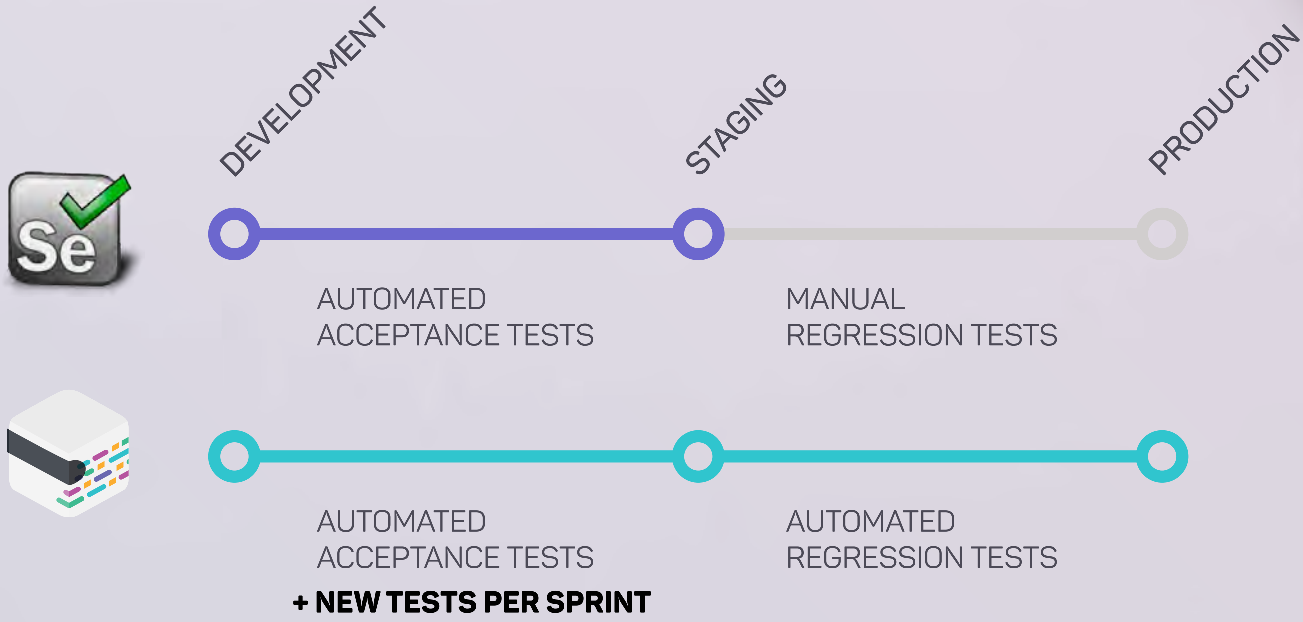
+ Requires 20-30% of automation team’s time to troubleshoot and fix failures

The Solution

> *"QEs are generally writing mabl tests for all the things being done in the sprint, so those tests are already in place for those features before they reach our staging environment, let alone our production environment. We're able to catch a lot of things earlier on."*

He is not only migrating his entire Acceptance Test Suite to mabl, but his team is incorporating mabl into each sprint. It only takes him 30 minutes on average to create a mabl test, so the team has been able to test earlier and more often. The team has been creating mabl tests for each feature being developed in a sprint before the release candidate reaches the integration environment, the first stage of their release pipeline. His team would otherwise not have the time to create the same volume of tests if they were using Selenium.





DEVELOPMENT

STAGING

PRODUCTION

AUTOMATED ACCEPTANCE TESTS

MANUAL REGRESSION TESTS

AUTOMATED ACCEPTANCE TESTS

+ NEW TESTS PER SPRINT

AUTOMATED REGRESSION TESTS

Summary

Benefits of mabl

+ Only 30 minutes to write a test

+ Auto-healing capabilities reduce brittleness

+ Intelligent heuristics-based built-in wait times reduces flakiness

+ Resources from Toronto automation team not needed for maintenance

ROI

mabl allows the team to create 24x more tests in the time it takes them to write a Selenium-based test.

The reduced man-hours required to implement his team's Regression test suite with mabl (1100 tests) yields $643,747 in savings in engineering hours.

ROI Findings	Hours to Implement 100 Tests	Post Implementation Hours	Total Hours Spent	QE Salary per Hour	Total Cost per 100 Tests	**Total cost per 1100 Tests**
Cucumber + Selenium	1200	300 (25%)	1500	$40.50	$60,750	**$668,250**
mabl	50	5 (10%)	55	$40.50	$2,228	**$24,503**
Savings	**1150 (24X gain)**	**295 (98% less maintenance)**	**1455**	**--**	**$58,522 (96% Cost Savings per 100 Tests)**	**$643,747 (96% Cost Savings per 1100 tests)**

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