

## 80% Reduction in Regression Testing Time

### Background

Cobb Systems Group (CSG) is an award-winning, 8(a) minority-owned business enterprise headquartered in Montgomery County, Maryland. CSG provides both technologies for talent and talent for technology.

CSG's patented talent engagement and analytics platform, ProForm™, delivers the features of traditional job boards, resume builders, and applicant tracking systems along with robust assessment, matching, and insight capabilities. ProForm™-enables practices to reduce time and cost to hire, enhance candidate pipeline quality and job fit, increase inclusion, and lower ongoing workforce costs.

### Challenge

With ProForm™, privileges determine what menus, screens, and features are accessible to each user. ProForm™ has over 250 privileges. This level of granularity allows for thousands of custom configurations. These configurations must be regression-tested across multiple datasets and browsers, further expanding the number of test scenarios to be run with each code release or infrastructure change. CSG needed an automated test platform that would ensure test scenario coverage within release timeframes.

In addition, CSG was starting to embrace Agile methodologies and knew the test automation solution would need to support their existing release process and timeframes, as well as the accelerated approach that the company was starting to embrace.

### Solution

CSG evaluated a number of commercially available, software as a service (SaaS) and open-source test automation solutions. However, all other solutions effectively required the test automation resources to have software development and coding skills. This was determined to not be a commercially viable option since the company would incur the cost of



*"Subject7 is an easy to use SaaS test automation platform that allows testers to create and configure data-driven test scenarios without relying on software developers. Using Subject7, we reduced the time and level of effort needed to perform regression tests by 80%, freeing resources to work on other tasks such as creating new ProForm™ product features without compromising the features in commercial use."*

deploying software and upskilling its labor force. The combination would be time-consuming, costly, and would not meet the needs of the business. Creating a new testing team was also determined to be impractical due to the high cost of hiring technical testers that could write code. This approach would have doubled operational costs rather than reduced them.

CSG discovered Subject7 and became interested in the simple manner of test automation that the company offered. In Subject7, CSG found a product that met and exceeded their critical business requirements:

- Easy to implement SaaS with no burden to existing IT resources or infrastructure. Zero installation and seamless upgrades were supported with no intervention by current IT staff.
- Scalable with the power and security of AWS.
- Simple to use (wizard-driven test creation), requiring no software development or scripting skills
- Robust and reliable capability to execute multiple test suites across multiple browsers with real-time status reporting
- Robust ability to support data-driven testing, enabling one test scenario to automatically re-run with varying inputs.

### Results

Using Subject7, CSG was able to automate regression testing and:

- Decrease regression testing cycle time from 2-3 weeks to 3-4 days, and drive further reductions by scaling up the virtual machines
- Enhance team productivity
- Free valuable test resources for other activities
- Ensure test execution consistency and coverage

CSG continues to improve its continuous integration processes using Subject7 as a critical component in its test and validation efforts.