

Coveros Test Process Assessment

A Pragmatic Approach for Assessing Software Testing



INTRODUCTION

Forward thinking organizations are examining ways to improve software quality, while still achieving software productivity and reducing software costs. *Agile testing methods and test automation* are often cited as ways of achieving these objectives, if they can be successfully implemented within the organization. Unfortunately, there is no 'silver bullet' to solving all of your software problems.

While many consultants offer a one size fits all solution, Coveros does things differently. For over eight years, we have helped businesses improve their software agility and agile testing processes by deeply understanding their business context and producing detailed recommendations that are specific to each organization. These recommendations not only address process concerns but recommend tooling and staff training to assure your teams have all of the necessary capabilities to succeed.

COVEROS APPROACH TO TEST PROCESS ASSESSMENTS

Coveros finds that organizations struggle with quality for several reasons:

- *Testing Not Integrated with Development*—Continuous deployments are not possible unless the software testing team is integrated into the organization's Agile / DevOps development and delivery model.
- *Lack of Overall Test and Automation Strategy*—Organizations tend to try to solve individual testing challenges (e.g., lack of access to third-party systems) instead

of trying to optimize the entire testing process.

- *Poor Agile Process*—Teams may be unable to define clear roles for their team members, properly plan their work, separate new development from maintenance activities, and drive toward a definition of done for each sprint.
- *Inefficient Test Automation*—Most test automation is focused at the user interface level, which increases the fragility of the automation and reduces its effectiveness. Automation should be performed at the lowest practical level to improve the stability and efficiency of testing.
- *Minimal Testing of Non-functional Requirements*—Requirements for performance, availability, security, fault-tolerance, and robustness are often not tested, and when they are, the tests only validate product features and do not consider the architecture, design, or code.
- *Not Automating the Entire Testing Process*—Some organizations only automate test execution instead of also automating test setup, test results verification, test teardown, and test data reset.
- *Tools before Process*—Processes, people, and organizational structure must be in proper alignment before test automation can be successfully adopted.
- *Inadequate Test Infrastructure*—Infrastructure such as version control systems and test environments must be in place to support automated testing efforts.

To determine which impediments to quality are a problem for your organization, Coveros will perform a test process assessment. Because we understand that many organizations want to receive quick

feedback on their testing processes without a large investment in time or money, we have optimized our full-scale assessment so that it can be performed over the course of two weeks. We will use this optimized assessment process to provide your organization with some short-term recommendations for improvement. The steps in this assessment include:

1. *Understand Your Systems and Process*—gather information and data regarding your software testing processes and automation, associated tools, organizational structure, and improvement objectives,
2. *Assess Test Process Maturity*—analyze your current software testing process methods against agile testing best practices, standards, and your business objectives to identify key agility gaps that must be filled,
3. *Recommend Improvements*—define improvement recommendations and develop an action plan for incremental improvement of your software testing and test automation tools and processes.

Two of Coveros' test process and automation experts will come to your organization to better understand your systems and processes. We will start by holding a kickoff meeting to make sure that all stakeholders understand the project goals and timeline and have bought into the assessment. Our consultants will then interview key members of your staff at all levels of your organization and, based on those discussions, determine which systems and artifacts should be reviewed.

Based on the results of the interviews and the review of key system and artifacts, our assessment team will measure the test process maturity of your organization. Coveros uses an enhanced version of the test process improvement (TPI) model to assess your organization across 19 key areas, including test automation, test strategy, defect management, reporting, and developer testing. We will compare your maturity with other organizations in your industry to identify areas in which you can improve.

After completing the assessment and identifying areas for improvement, our consultants will develop a detailed set of short-term recommendations that will help your organization move from its current state of test process maturity toward an optimized one. We will work with your management team to prioritize these recommendations so that you can realize ROI as quickly as possible.

Deliverables for our software assessment include:

- Testing maturity diagram that benchmarks your maturity against others in the industry. Coveros has collected testing information from a wide range of companies and industries and can help you understand where you are relative to your competitors.
- Recommendations presentation that highlights short-term test agility and process improvements that will

help improve your organization's test process maturity. These recommendations include improvements across software testing processes, testing techniques, automated tools, and staff training.

- An improvement backlog that is prioritized while considering your input so that your improvement efforts achieve short-term ROI.

RELEVANT CERTIFICATIONS

Coveros has partnered with the International Consortium for Agile (ICAgile) and American Software Testing Qualifications Board (ASTQB) to provide certifications to agile professionals. Through our training program, your organizational staff can receive certifications in:

Fundamentals of Agile (ICP certification)

Agile Testing (ICP-TST certification)

Mobile Testing (ASTQB certification)

DevOps (ICP-FDO certification)

SUMMARY

Coveros' Agile Test Process Assessment provides a rigorous, proven, end-to-end approach for identifying test process improvement opportunities. By embedding two of our experienced test process and

automation experts within your testing organization for a period of two weeks, we are able to provide deep insights into opportunities for enhancing your test processes and will provide a detailed roadmap on how to get there. This unique approach embraces our philosophy that every organization is different and demands a tailored agile testing process that best fits their culture, market, organizational structure, people, and business environment.

ABOUT COVEROS

For over a decade, Coveros has helped organizations accelerate their software delivery utilizing the latest DevOps and Agile methods. Our full complement of cutting-edge services help organizations assess and improve their software development, testing, DevOps, and application security practices.

Our clients include such leading organizations as UnitedHealth Group, Delta Dental, Department of Homeland Security, Symantec, US Air Force, Fannie Mae, RSA, WorldBank, and Advent.

Coveros is headquartered in Northern Virginia.

To learn more about Coveros and our Agile & DevOps Services, visit www.coveros.com.