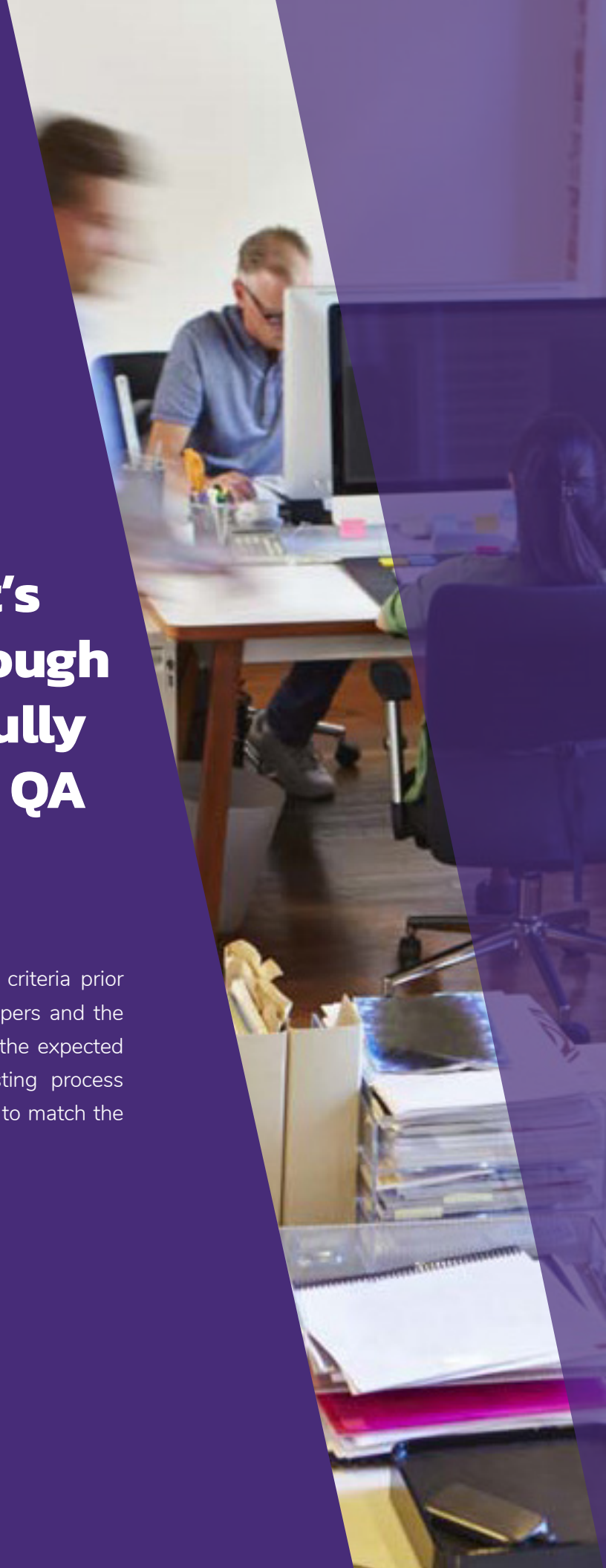


## CASE STUDY

# **Optimizing A Client's Testing Process Through Agile Testing and Fully Integrated Managed QA Services**

By working with the client to define the acceptance criteria prior to the new code being implemented, both the developers and the QualityLogic QA team have a clear understanding of the expected functionality. To maximize the efficiency of the testing process QualityLogic has aligned the working day of our team to match the working day of the client's team.



# Approach

## QA Team

QualityLogic team members are embedded directly into the client's development team and work symbiotically with their developers to optimize the integration of new features.

Each development team has a QA team member assigned to support the development efforts. The teams work together to establish priorities and focus areas to ensure that functionality is tested thoroughly and efficiently.

To maximize efficiencies in the testing process, QualityLogic has designed a workflow support system that aligns with the client's daily work schedule. This allows the developers to have continuous support from the QA team which in turn allows for a more dynamic and real-time workflow.

QualityLogic also supports the client during product releases which occur outside of normal working hours. In an effort to deliver seamless and transparent client support, the QA team is part of the release process from initial design through to the final production push.

## Test Planning

The QualityLogic team is involved in all aspects of the sprint planning, and actively participate to ensure that every new feature has clearly defined acceptance criteria. By working with the client to define the acceptance criteria prior to new code implementation, both the developers and QA team have a clear understanding of the expected functionality.

The QualityLogic standard is to focus on holistic testing to ensure that no unexpected behavior occurs during product integration. Once the acceptance criteria are fully defined, QualityLogic incorporates them into test plans which are used in end-to-end regression testing.

## Agile process

The agile development methodology enables the client to run a two-week sprint cycle which can feature multiple releases in support of a continuous integration approach. Multiple releases not only promise that new features are brought quickly to their customers but also ensures that any defects that are inadvertently introduced into the system are quickly remediated. The client can also employ a process of performing hotfix releases if any critical problems or features require immediate remediation.

QualityLogic supports this process by attending sprint planning and standup meetings as well as constant communication with the development team.

## Feature and Verification Testing

Client standards also include thorough testing before and after every release. In support of this approach, all new features and defect verifications are tested in several environments.

## QA Deployment

When initial development is completed, the new code is pushed to a QA server with the latest version of all code elements. The functionality is then tested on the server, and problems are reported and remediated.

## Staging Deployment

Once the functionality of the code has successfully passed review on the QA environment, the code is moved to a staging server. The staging server closely mirrors the production system. The code is then tested a second time to ensure the functions work correctly. If any issues are discovered, they are reported and remediated before the production release.

## Production Deployment

The final stage of the release is to push the build to the production server. The code is retested a third time to ensure the integration was made correctly and it functions as expected in the production environment. If any issues are encountered, the code is either rolled back to staging or a hotfix is applied.

The feature set is also tested periodically after implementation as part of an end-to-end regression test of the whole system. This regression test ensures all features remain operable as the product grows in maturity and complexity.

## Problem Remediation

The client's focus on delivering a functional system to customers is combined with a priority to deliver a high-quality user experience. To support this standard, the QA team monitors the help and support feedback system to look for reports that could be caused by defects in the code. If any support requests appear to be caused by defective behavior, the QA team investigates the issue, reproduces the problem, and reports the behavior for remediation.

The client takes the same three-stage testing approach for problem remediation as they do for new feature implementations.

## Conclusion

The quality assurance approach taken by the client and supported by QualityLogic provides a highly stable and functional experience for all users. Integrating the QA team with both the developers and support feedback systems ensures the highest quality product possible.

### For More Information

Visit us at [www.QualityLogic.com](http://www.QualityLogic.com) or call +1 208-424-1905