

Pulse Systems transformation to structured QA



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Executive Summary

For over a year, Pulse System had run inefficient testing efforts on its products. Either the timelines were too short, or there were delays in deployment dates. In the end, there would always be issues with deployments or production errors that required immediate resolution.

An immediate introduction of a more structured Quality Assurance (QA) process to remove gaps started. Within a couple of months, there were noticeable improvements seen by the executive team.

Results

- No deployment rollbacks compared to 5 the previous year
- Reduction in Hotfix deployments to 4 from 17 during the last year.
- 40% reduction in test execution.

Challenges

Before the changes, the organization's QA process was inconsistent and creating more work for the team as initiatives going on. Without the use of basic best practices, the team was creating redundant test cases, executing them and not using metrics effectively to help with future improvements.

Although an Agile environment, the teams were intensely segregated within the units. The organization was a matrix environment, and it continued within the Agile teams themselves. Causing trust concerns and impacting overall productivity.

In the end, they needed to create an environment where collaboration and quality were the fundamental principles to ensure that clients were satisfied with the product.

Implementation of QA processes

A review of methods on the initial 30 days, a draft of the proposed changes was up for consideration by the QA team.

The proposed changes focus more on creating a more efficient process flow for the team to execute while improving documentation traceability across all aspects of the Software Delivery Life Cycle (SDLC).

Workshops conducted to walk through each process and discuss any changes that best meet the needs of the stakeholders in doing, so ownership of the changes was to the team and not one sole person. The timeline of acceptance and execution of the move was within weeks.

Results, Return on Investment and Future Plans

The first visible result occurred at the subsequent release of their cloud product. During deployments, involvement from the QA team to ensure the implementation was successful. Sometimes taking over two hours to complete, with the result of a back out occurring due to an

unforeseen issue due to ineffective testing. During the following release, testing completed within 90 minutes and the deployment was successful with no client issues called in the next business day. Test cycles were beginning to shorten. Before the changes, a release would take 8 to 10 weeks of regression testing to complete a release with no assurance of deployment success. After a year, the regression cycles effectively completed in 4 weeks with higher confidence of all the stakeholders of a successful release.

The customer found issues were reduced by 50% within critical issues requiring immediate attention reduced by over 75%.