

Case Study: Quality Engineering



How to build quality into your deliverables and ways of working



Overview

Shift Left has embedded technical resources in a long-term managed service for a large client with a very complex IT estate to work on all aspects of Quality Engineering including unit testing, code coverage, code scanning, early performance testing, measuring technical debt, test automation and continual pipeline improvement through robust process automation.

The service is now delivering significant improvements in speed to value and reliability in production. This, combined with environments and data on-demand, has made DevOps a reality for the client.

Benefits



The service is driving a wide range of benefits including:

Business Benefits

- Speed to value
- Confidence to move at pace
- Lower risk of change
- Higher visibility of risk mitigation

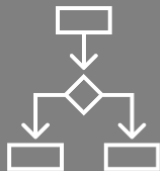
Technology Benefits

- Harnessing the latest technologies to drive testing earlier in the lifecycle
- Able to deliver higher rates of change
- Increased reliability
- Managed technical debt

Time and Cost Benefits

- Cost savings from production being protected by extensive regression testing
- Time savings from ensuring continuous testing and fast feedback loops

Process



Creating well engineered software products cannot be done by measuring quality at the end of the development process, it must be the responsibility of everyone involved throughout the whole process. There are many tools and approaches that can be used and these need to be tailored to meet each client's precise needs.

However, there are two fundamentals of quality that everyone needs to understand:

- It is much easier to embed quality in your company's DNA than trying to retrofit it, as fixing problems later in the IT lifecycle is much harder and far more expensive, due to the increased level of inter-dependencies
- Every deliverable and all ways of working can be continually improved, teams should not be shy about radical transparency of the present quality or seeking assistance in making improvements



Data

We have created CI/CD pipelines that run 1,000s of automated tests and use code scanning technologies to demonstrate high test coverage and code quality. We have helped our clients achieve:

- 100 x increase in the rate of deployments to production
- 60% decrease in the number of production incidents

People

Shift Left consultants have a deep understanding of all aspects of software quality. Our technical consultants also understand that Quality Engineering is required to build reliable products cost effectively.



We have found that the best way to improve Quality Engineering is to embed our quality engineers at all levels within a programme to ensure that both tactical and strategic improvements are made.



Credentials

Shift Left focuses on quality throughout all our services and Quality Engineering is at the heart of everything we do. This means that we have been able to advise all of our clients about how to make improvements that will lead to better quality outcomes.

Next Steps

If you would like to discuss the challenges you are facing in implementing Quality Engineering within your business or to find out more about how we operate please contact



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