

Continuous testing: from Dev to Ops

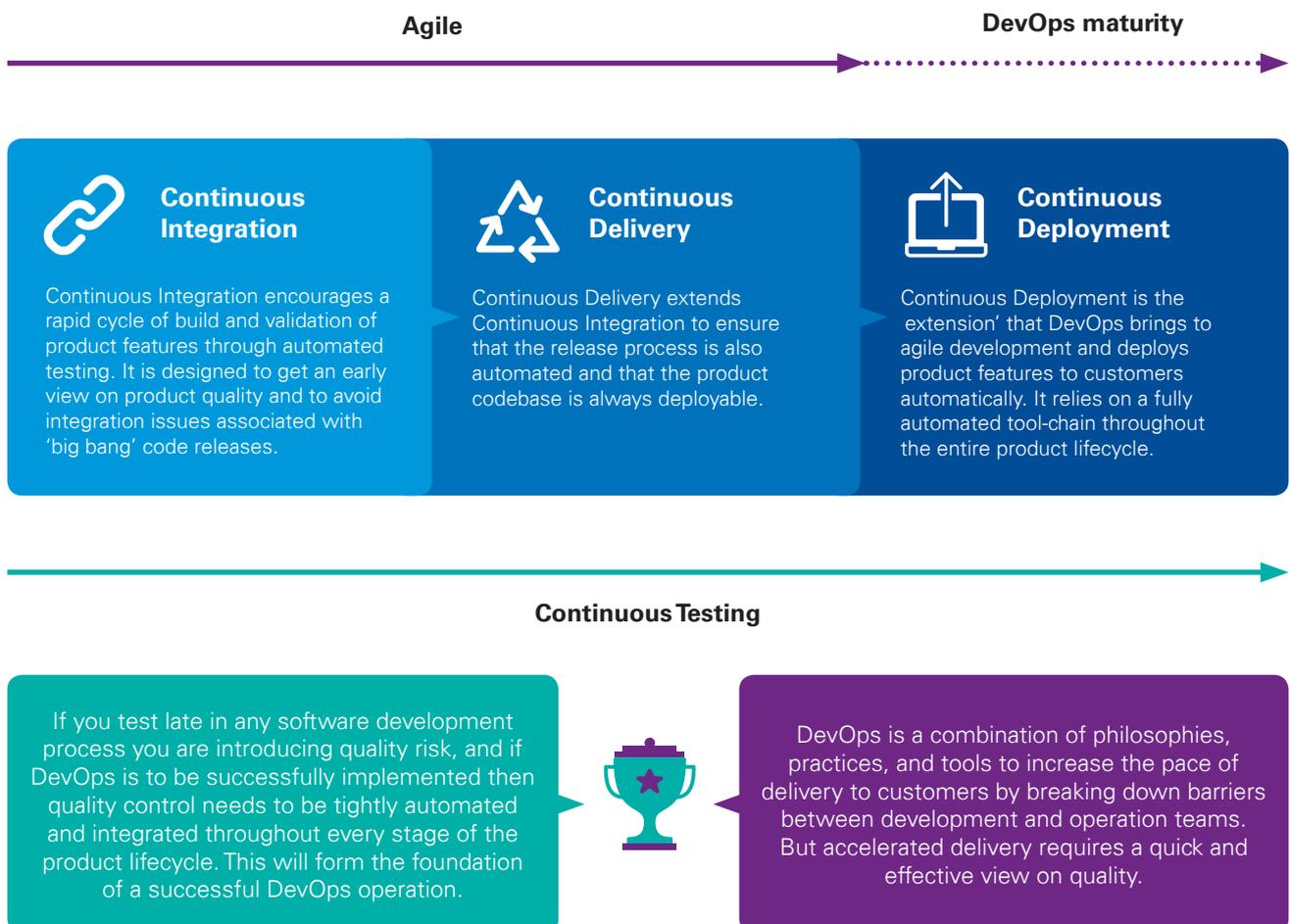
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For over a decade, organisations have implemented Agile techniques to accelerate service delivery. More recently, an increasing number are turning to DevOps to improve their success and productivity by implementing a Continuous Deployment delivery model.

The reason is straightforward; there is no longer a choice between speed and quality. Organisations need and demand both to stay competitive. And when delivering software at speed, the rapid verification of product quality is paramount. In this new paradigm, Continuous Testing is the centrepiece of achieving DevOps maturity.

Continuous Testing supports the DevOps journey



When surveyed, DevOps practitioners have cited quality assurance and testing as being the biggest bottleneck to fully realising the benefits of DevOps, and a significant percentage said that quality was being sacrificed as a result.

This is because testing is still often treated as a siloed, discrete activity as part of the software delivery chain and any DevOps endeavour that views testing this way will struggle to rapidly produce quality software.

To make DevOps a success, Continuous Testing must be implemented. It mandates that testing is embedded throughout the development process to provide fast and continuous feedback on quality, and expose risks as soon as they are introduced.

This enables organisations to control their risk in the light of the increased complexity and pace of modern software delivery.

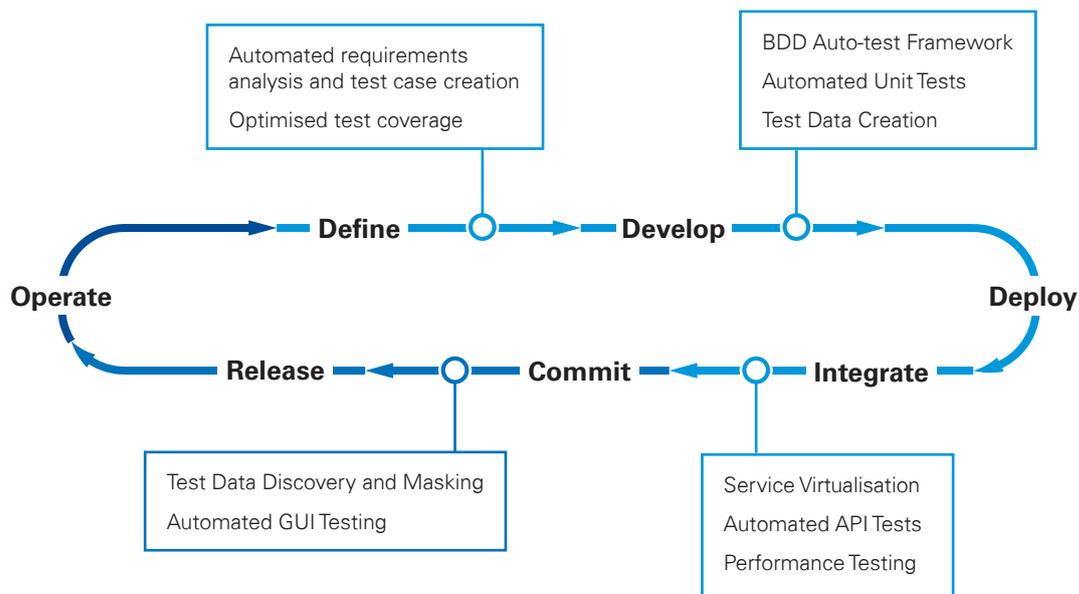
Automation

Continuous Testing relies on high levels of test automation. DevOps will not succeed if it needs to rely on manual processes. The test automation techniques need to extend far beyond the traditional execution of tests; DevOps teams should be automating test data management, environment creation and services.



Integration

Testing must be a cross-functional operation across the SDLC (Software Development Life Cycle) and take a production line approach that validates software quality throughout the DevOps chain. Even if the testing is highly automated it will be of little benefit if the testing cannot be done early.



Continuous testing

- Enables deployments in hours, not days
- Bridges the gap between Continuous Integration and delivery
- Assesses business risk throughout the SDLC
- Shifts testing left

KPMG aims to restore efficiency and business focus to testing. Our approach to Continuous Testing uses innovative tooling that supports testing throughout the SDLC, supported by deep expertise working in DevOps programmes.



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