**sqs.com**

# SQS DevOps Services

Overcome the complexity wall for rapid time-to-market

## The DevOps Challenge

The pressures of rapidly changing markets and the increase in technological dependence across all industries are driving the need for organisations to reduce response times during software development to fulfil business requirements. Time-to-market demands for faster delivery, while competition from other vendors demands cheaper and better software at the same time.

The DevOps approach promises to deliver on all three of these demands at the same time. DevOps is the concept of stronger collaboration between Business, Development and Operations throughout the complete software development life cycle (SDLC) typically in combination with Agile/Lean software development principles also integrating other methods like Behaviour Driven Development (BDD).

While DevOps promises to deliver higher quality software it will not succeed without a strong focus on quality and expertise in applying measures to introduce and ensure this quality throughout a software product's life. Releasing poor quality software and inappropriate architectures can have a dramatic impact on the cost to maintain an application. This is especially true under tight time-to-market conditions and when the speed

and capability to deploy rapidly with low risk is essential. This is where SQS comes into the picture.
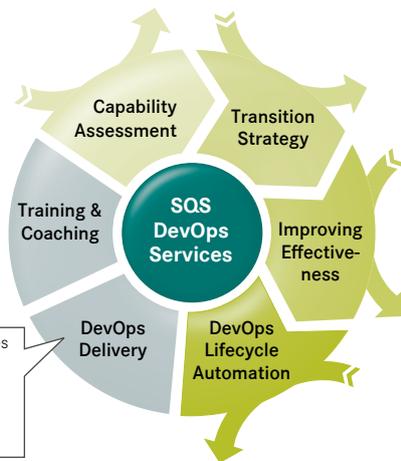
## Benefits of SQS' DevOps Services

In short, a well-executed DevOps strategy will enable an organisation to get more done. Continuous deployment of end-user features, with fewer faults overall ensure that customer satisfaction is front of mind and organisations gain a competitive edge.

The biggest shift in attitude in a DevOps environment is that there is one team composed of cross-functional team members taking on previously separate roles such as developer, test analyst, automation engineer, environments specialist or IT operator. Collaboration across these different roles delivers many benefits.

Assure a successful transition into the development and continual operation of a DevOps organization by analysing the current situation and defining the appropriate target organization. This analysis includes processes and roles to be achieved by improvement, coaching and DevOps service delivery.

This will impact the SDLC by:

- Higher Transparency by DevOps quality strategy and governance, architecture, release, and project portfolio management supported by statistics and dashboards

- Increased number of deployments from low cost test levels based on risks, adequate architecture and regression strategy, thus increasing the ability to deliver working features to end users

- Acceleration of testing in high complex environments by improved operation architecture and test processes, thus reducing the time required from idea to working implementation

- Shorter execution time, higher coverage, increased quality of processes and applications, and cost reduction by automation inside the complete SDLC

- High functional and non–functional feature quality by technical services for development and testing

- Improved productivity by introducing DevOps roles and services based on SQS global delivery from our centres of excellence, e.g. Development Operations Centre Belfast

- Consistent application of agile processes, methods and related open source or commercial tool landscapes for different technology layers like .NET or Java



- Technical Test Engineering Services
- Product Facilitation Services
- Quality Expertise Services
- Quality Management and Architecture Services

## The SQS DevOps Approach

SQS DevOps services are addressing different areas in the SDLC. Depending on the focus five different families are created:

**DevOps Assessing, Transitioning, Improving, Implementation and Coaching Services:** This change management service area includes all services necessary to successfully transition an organization from their current way of working into successfully employing the DevOps approach. Additionally, reviews of existing DevOps approaches to identify potential for continuous improvement are delivered as part of this area.

**Technical Test Engineering Services:** This technical and development service area making the life of feature developers as easy as possible. Frameworks for continuous build, deployment and integration are implemented and operated. Developers focus on high quality features which are supported. Additionally, technical quality services like automated code analysis with respect to code quality, maintenance, security or license compliance identify hot spots for improvement. Refactoring services help to optimize against findings in code and architecture.

**Product Facilitation Services:** This technical testing family is managing continuous delivery by risk and architecture based test strategies for applications. The deployment pipeline to operations is populated as soon as possible by managing feature developers and technical test engineers. Additionally the business related testing is executed in an agile manner supporting e.g. behaviour driven development (BDD) or explorative testing. Development and operation of test automation frameworks on different levels e.g. GUI or services is done.

**Quality Expertise Services:** Test management and execution on high integration level involves the full spectrum of functional and non-functional testing services in production like environments. These services are defensive in a sense that testing based on risks, business processes architecture and online or batch operation is strongly pushed to the left. Only remaining tasks are executed on this level supported by test data, test environment management and automation.

**Quality Management and Architecture Services:** This type of DevOps services is key because it combines all success critical aspects which need to be integrated on a domain or companywide level meaning the change into a DevOps organization, comprehensive release and project portfolio management but also sustainable software and infrastructure architecture management. Decision making and change are supported to simplify architecture to enhance continuous delivery by embracing development and operations.

Services can be orchestrated to a mixture of onsite and offshore delivery to involve our SQS DevOps experts e.g. from Belfast. Quality Management services are managing the interface to our delivery centres.

## Contact

For further information, or if you have any other questions, please do not hesitate to send us an e-mail:
info@sqs.com

**SQS – the world's leading specialist in software quality**