



Testing solutions

Case study: Lloyds TSB Sarbanes-Oxley

“While Sarbanes-Oxley is consistently called the broadest sweeping legislation to affect corporations and public accounting since the 1933 and 1934 securities acts, experts agree the resulting changes are just beginning.”
Forbes.com

In 2002, the Sarbanes-Oxley Act was introduced to rebuild trust and restore investor confidence in financial reporting. Section 404 of the Act requires that all registered companies regulated by the Securities and Exchange Commission (SEC) assert that they have adequate controls over their Financial Reporting processes.

With tight timescales and non-compliance meaning loss of market reputation and shareholder value, as well as potential fines and prison sentences for senior executives, Lloyds TSB needed to be sure all its material platforms and applications would support compliance with the Sarbanes-Oxley Act.

Based on its strong track record with Lloyds TSB and its ability to rapidly deploy a strong team of consultants, SQS was engaged to support the testing of Lloyds TSB’s material business systems and technical architecture for any Sarbanes-Oxley weaknesses.



The Challenge

The Sarbanes-Oxley Act (SOX) was introduced in 2002 to protect investors and restore confidence after several high profile malpractice and corporate failing cases in the previous few years, such as Enron and WorldCom. Hailed as the biggest change in public accounting in 70 years, section 404 of the Act requires most publicly registered companies to report on the effectiveness of the company's internal financial reporting controls.

With a deadline for compliance of 31 December 2006, Lloyds TSB needed to be confident that all its material platforms and applications were fully SOX compliant. The biggest challenge to a successful implementation was the sheer scale of the project – it covered more than 50 different applications spread over more than five platforms, with seven parallel streams of work being undertaken across multiple locations.

The scale and complexity of the project, coupled with the strategic importance of compliance to Lloyds TSB, meant that a comprehensive testing programme was essential. It was critical to reduce risk at the point of deployment to live and to make sure the live environment could continue to support the existing business processes without loss or impaired service.

Lloyds TSB chose SQS, the leading independent provider of software testing and quality management services with a world class track record, based on both its previous record within Lloyds TSB and on its capability to engage immediately with a testing team that would eventually scale to a peak of 20 people.



The Solution

SQS was engaged to define and execute a robust testing programme that would ensure any changes made to achieve compliance with SOX would not affect Lloyds TSB's operational effectiveness. SQS proposed a two-phase approach:

Phase 1 - to define the test approach, confirm the number of testing resources required and the test resource mobilisation plan for undertaking the functional and regression testing of the 52 applications affected. Delivered over a two week period, this included the following deliverables:

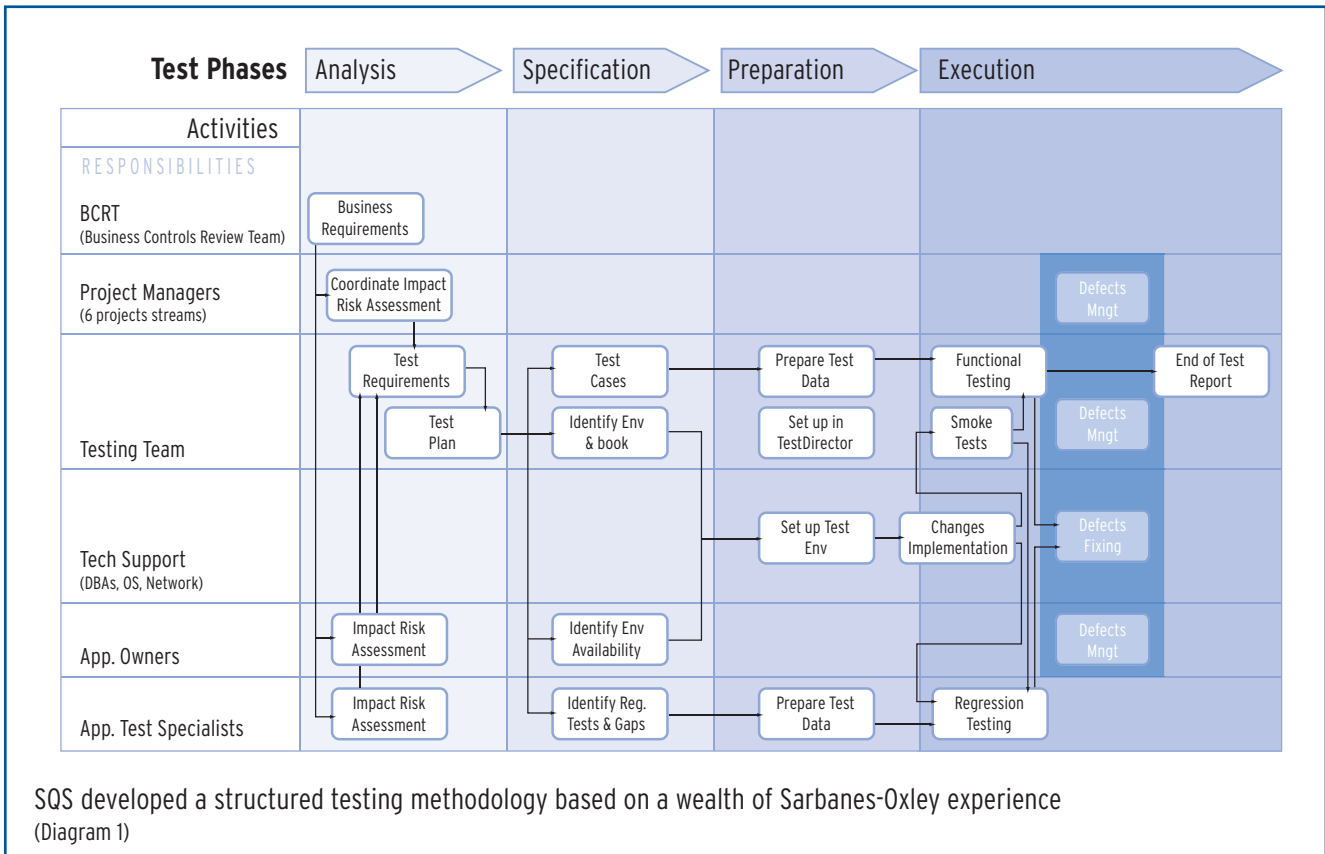
- > A test strategy to validate the application and platform changes
- > A test resource requirements and mobilisation plan
- > Analysis of any gaps in the required test assets
- > Estimated resource effort and costs for test implementation

Phase 2 - to include the execution of all the necessary tests, identification of any defects, identification of paths to resolve these defects and re-testing to ensure 100% test coverage was achieved. This was to be completed by 30 June 2006.

This approach enabled SQS and Lloyds TSB to accurately determine the nature, timing and extent of testing that was needed to ensure compliance before testing began. This helped to optimise the efficiency of the testing process.

Many parts of the test process required close cooperation with various departments and personnel within Lloyds TSB. These included:

- > Creating lists of contacts and working with subject matter experts for each application
- > Coordinating technical support resources
- > Analysing requirements and designing test packs to provide full coverage of risks
- > Working alongside Lloyds TSB testing staff to design, prepare and execute functional and non-functional tests
- > Working with Lloyds TSB Group IT to assist with the implementation of the SOX changes
- > Performing deployment tests to ensure correct implementation

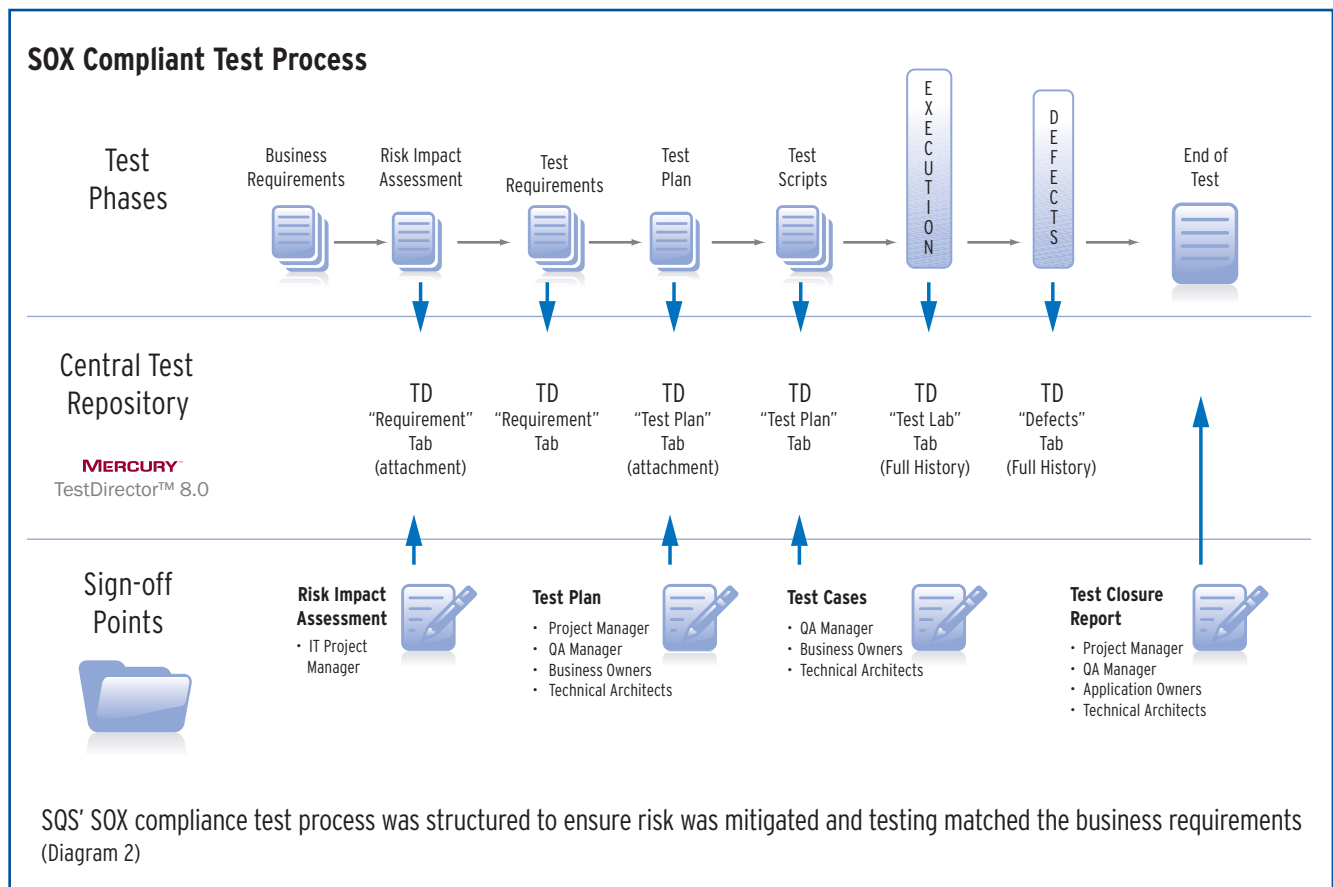


SQS developed a structured testing methodology based on a wealth of Sarbanes-Oxley experience (Diagram 1)

The Solution continued...

Once testing had been completed, all the updated test documentation was stored in a central repository allowing Lloyds TSB to prove any assertions on the effectiveness of financial controls across the Group – a big factor in ensuring compliance. The repository also enabled Lloyds TSB to track any remedial action required to address internal control deficiencies identified through testing.

HP (Mercury) TestDirector™ was used to capture all testing requirements, test scripts, test results and test defects.



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Lloyds TSB**

Key Benefits

- > Fully compliance tested in time to address areas of concern by 30 June 2006. Completion of final internal checks by the Business Control Review Team well before the 31 December 2006 deadline
- > Project delivered on time and under budget
- > Reusable test assets generated – test packs, test environment and contact information for all applications tested
- > Auditable test documentation stored in a central repository to help prove compliance
- > Minimal disruption to ongoing business processes, operations and applications



The Benefits

The testing programme performed by SQS helped ensure that Lloyds TSB could be confident of full SOX compliance.

Lloyds TSB set an internal date of 30 June 2006 for compliance. This date was met due to the dedication, strong teamwork and mutual cooperation of everyone involved with the programme. The test process was a contributory factor to the overall project and ensured that all SOX remediation was discovered and resolved before the internal compliance date.

Bob Spencer, Head of Group IT Information Security at Lloyds TSB, commented about the success of the whole SOX programme **“As a team we have shown what is possible and produced a major success for Group IT at the same time”**.

SQS' testing principles

The following test principles were central to the success of the Lloyds TSB SOX compliance programme:

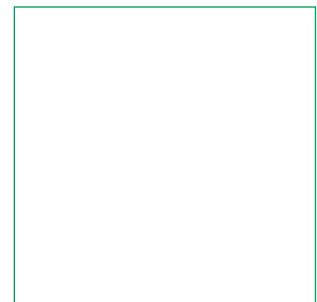
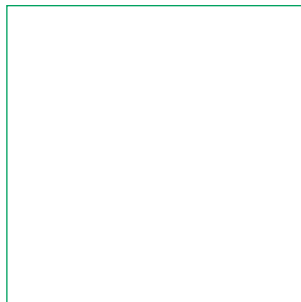
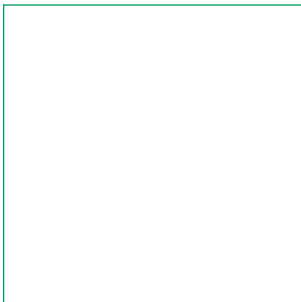
- > **Test to mitigate risk** - with limited time available, the test team ensured that testing focussed on high risk areas first and covered the major risks in order of priority.
- > **Test visibly** - weekly update reports were issued. The TestDirector management system was used to monitor test execution progress and test defect resolution.
- > **Test independently** - testing and development were kept separate to ensure integrity. Testing reported objectively on quality to all project stakeholders, ensuring that key decisions could be made on a fully informed basis.

Web Links:

- > **SQS** www.sqs-uk.com
- > **Lloyds TSB** www.lloydstsb.com
- > **HP (Mercury)** www.mercury.com

Contact us -

- SQS is Europe's largest testing group with over 800 consultants.
- We set the standard for managing quality to ensure that business critical systems are implemented effectively.
- SQS is committed to helping you manage your business risks and achieve significant reductions in time to market implementations.
- As market leader we continually seek to raise awareness of issues that affect executives in business and IT.



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