KPMG

KPMG Testing Services

Accelerate Business Change

Today's business needs tomorrow's testing

Headline–grabbing reports of major IT system failures are increasingly commonplace. Blamed on "software errors", the root cause of these problems is more complex, and solving them invariably needs more than a simple code fix.

Fifty years of layered IT change has effectively made many companies core systems impractical to maintain. Legacy applications are retained far beyond their intended shelf-life, resulting in a complicated IT landscape. And with an increasing volume of regulatory-driven change, companies often lack the development capacity to refresh their core infrastructure or applications. It is no surprise therefore that, as these systems age, they become prone to defects, failure or outright collapse.

But CIOs today need to do more than just keep the lights on. Business continues to demand operational efficiency, innovative products and faster time-to-market. Fulfiling these demands requires a step-change in the way IT is both sourced – and delivered.

IT leaders are therefore introducing accelerated software development methods, migrating to cloud-based software, and offering products across an ever-increasing number of channels. Navigating this complex landscape inevitably brings a host of new challenges – and risks.

Cost

Quality

Efficiency

Unfortunately, in this new world, software testing is playing catch-up. Methods and skills are still largely manual - and therefore poorly suited to support accelerated delivery. And since testing consumes anywhere from 25 to 50%[*] of a software development budget, it is imperative that testing industry suppliers find innovative ways to deliver value and efficiency.

Traditionally, value for money has been associated with reduced costs - and testing is often one of the first IT functions to be outsourced or offshored. But when testing teams are functionally or geographically disconnected from business and development teams, critical defects can go undetected until late in the software lifecycle. Defect detection may be cheaper, but fixing them is more expensive – and the opportunity for defect prevention is missed.

Bluntly, testing can actually end up contributing to increased business risk and putting the brakes on innovation.

Lowest cost, in KPMG's experience, rarely means best value. If testing is to be restored as the most certain way of assuring business outcomes , then quality should not be compromised for cost savings.

Worldwide IT spending forecast to reach $2.7 trillion in 2020[**]

Testing consumes anywhere from 25% to 50%[*] of a software development budget

Inefficient testing can contribute to increased risk and put the brakes on innovation

KPMG aims to restore efficiency, innovation and business focus to testing. Our approach combines broad industry knowledge and innovative tools with experienced resources to make software testing an enabler and accelerator of Business Change.
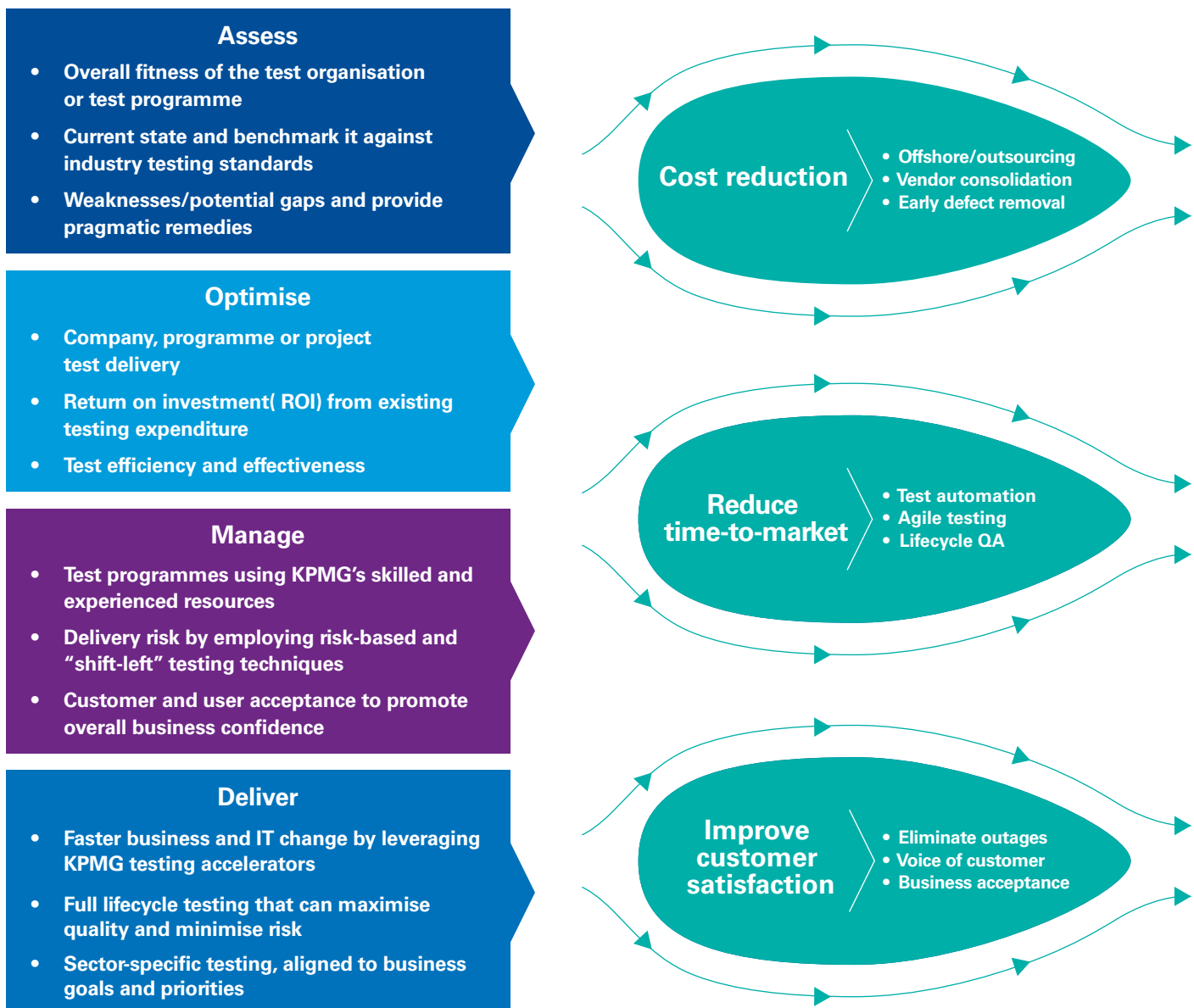
* Source: Iyengar and Karamouzis. "Offshore Application Testing Drives Greater Business Value." Gartner Research, August 17, 2007, ID Number: G00150394
** Source: International Data Corporation (IDC) Press Release 29 Aug 2016

Deliver quality....

By combining innovative tools, established practices, skilled resources and broad industry knowledge, we strive to make testing more than just a search for defects.

Our service lines enable key business outcomes

Assess
- Overall fitness of the test organisation or test programme
- Current state and benchmark it against industry testing standards
- Weaknesses/potential gaps and provide pragmatic remedies

Optimise
- Company, programme or project test delivery
- Return on investment(ROI) from existing testing expenditure
- Test efficiency and effectiveness

Manage
- Test programmes using KPMG's skilled and experienced resources
- Delivery risk by employing risk-based and "shift-left" testing techniques
- Customer and user acceptance to promote overall business confidence

Deliver
- Faster business and IT change by leveraging KPMG testing accelerators
- Full lifecycle testing that can maximise quality and minimise risk
- Sector-specific testing, aligned to business goals and priorities

Cost reduction
- Offshore/outsourcing
- Vendor consolidation
- Early defect removal

Reduce time-to-market
- Test automation
- Agile testing
- Lifecycle QA

Improve customer satisfaction
- Eliminate outages
- Voice of customer
- Business acceptance

...at speed

Introducing Accelerated Testing from KPMG – a combination of leading tools, applied methodology and domain accelerators, which our experienced resources use to automate the most time consuming aspects of the testing lifecycle.

Accelerated Testing can benefit:

Test Organisations

- Achieve rapid test creation
- Create representative test data without relying on production
- Achieve automation of test cases before coding completes
- Perform end-to-end testing that avoids the constraints of legacy systems with limited availability

Programmes:

- Achieve full test coverage with the minimum number of tests
- Remain compliant with current and future data protection regulations
- Execute more tests, faster - and more frequently
- Reduce infrastructure costs

Businesses

- Achieve faster time-to-market without sacrificing quality
- Improve stakeholder confidence and customer satisfaction

> Accelerated Testing can deliver a 25% reduction in test delivery time and cost

Test design
- automated
- optimised
- unambiguous
- maintainable

Test execution
- data-driven
- automated
- repeatable
- traceable

Test data
- secure
- sanitised
- manageable
- accessible

Test environments
- always available
- integrated early
- cost effective
- realistic
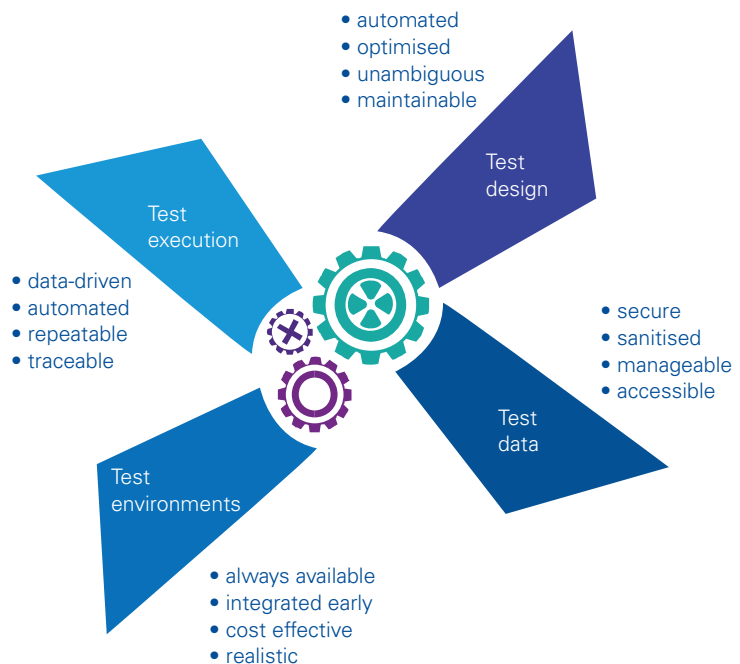
KPMG Accelerated Testing is a unique combination of powerful tools, applied methodology and domain accelerators.

Methodology

✓ Brings testing solutions to our clients in a systematic and structured manner.

✓ Avoids delays and failures in tools implementation and enables our clients to achieve ROI faster.

✓ Tailored methodology adapted to client's specific needs and state of capability/ IT maturity.

Domain accelerators

✓ KPMG have leveraged their significant industry expertise to create sector and application specific testing packs.

✓ Accelerated Testing includes pre-built automation libraries to accelerate the testing of common IT systems and technologies such as ServiceNow and Oracle.
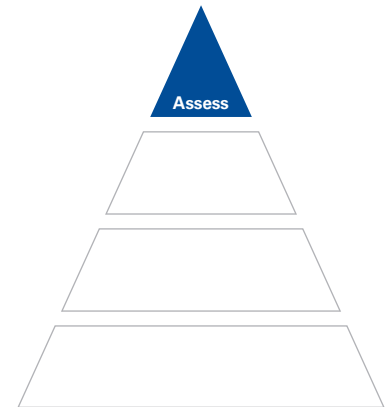
Tools

✓ Accelerated Testing integrates both proprietary and market leading tools to automate the entire testing lifecycle from test case design to test execution.

✓ With our expertise across a wide range of tools, we can choose the right tool for our clients based on technology, operational and delivery requirements.

✓ KPMG's relationship with IBM and other leading tool vendors not only gives us access to cutting-edge tools, but also allows us to influence development roadmaps to cater to market trends or key client needs.

✓ We continuously invest in innovating in-house tooling and integrate with external tools to stay ahead of emerging trends.
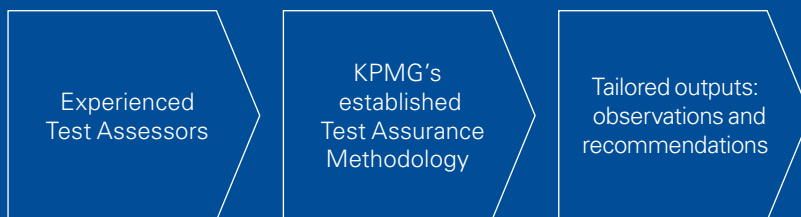
Assess

Companies need to understand whether their testing regimes are effective. The "Assess" phase of our service is valuable as it can enable a business to:
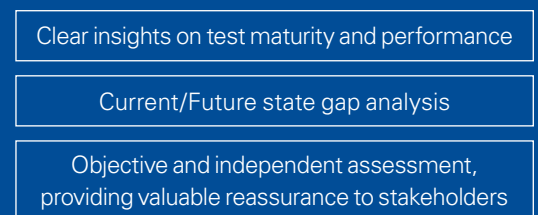
- Gain confidence that applied test approaches will be successful, that risks and mitigations have been identified, and delays to project timescales have been avoided

- Avoid end-user or customer dissatisfaction, brought about by ineffective testing

- Successfully deliver complex strategic programmes using multi-vendor distributed teams

Assess

The KPMG Way

Experienced Test Assessors → KPMG's established Test Assurance Methodology → Tailored outputs: observations and recommendations

Potential benefits

Clear insights on test maturity and performance

Current/Future state gap analysis

Objective and independent assessment, providing valuable reassurance to stakeholders

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How KPMG delivers

- Determine key goals and priorities for the assessment

- Apply the appropriate assessment model, depending on the area of focus (testing for a particular project, testing delivered by a supplier, or an in-house test function)

- Apply our experience to benchmark current test maturity against Good Practice and Best Practice models, applying industry standards as appropriate

- Deploy an Assessment approach that is designed to be efficient and ensure consistent results

- Perform Gap analysis over current and desired "future states" for Process, People, and Technology

- Define the "future state" test organisation, including road map of practical recommendations and "quick wins" aligned to critical business drivers aligned to critical business drivers
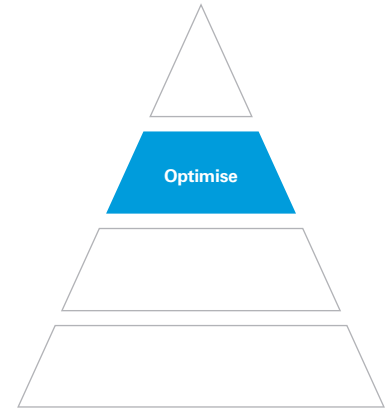
Potential benefits to you

- A tailored assessment that suits your current needs (from a brief tactical review, through to long-term strategic recommendations)

- A clear, independent view of the maturity and performance of your current test organisation or programme

- A defined end-state, aligned to your business and IT priorities

- A clear roadmap to transform and accelerate your organisation to its desired "future state"

- Practical recommendations for cost-effective, short and long-term improvements, appropriate to specific business needs

Optimise

Companies will seek to optimise testing capabilities and performance where they are:

- Looking to reduce the overall cost of testing
- Deciding on a significant testing investment (e.g. tools or automation)
- Seeking a step-change improvement in the effectiveness of the test organisation
- Considering outsourcing or changing suppliers

The KPMG Way

Senior Test Consultants → Significant industry knowledge → KPMG's Test Methodology and Accelerators

Potential benefits

Measurable performance improvements

ROI on testing

Increased business confidence

How KPMG delivers

- Perform Test Assessment if not already conducted
- Agree critical business and IT outcomes with key stakeholders
- Define detailed plan to achieve desired outcomes
- Agree Key Performance Indicators (KPIs) to track success of improvements
- Manage and deliver optimisation plan
- Make use of relevant KPMG testing assets to accelerate client delivery

Potential benefits to you

- Measurable improvements in the performance of your test organisation, with optimisations aligned with clear and transparent KPIs
- Increased ROI on testing investments, with automation tools deployed effectively and greater quality and performance delivered by offshore teams
- Increased business confidence in the quality of IT delivery, with the test team no longer seen as a bottleneck to progress, plus increased effectiveness and delivery efficiency from teams.
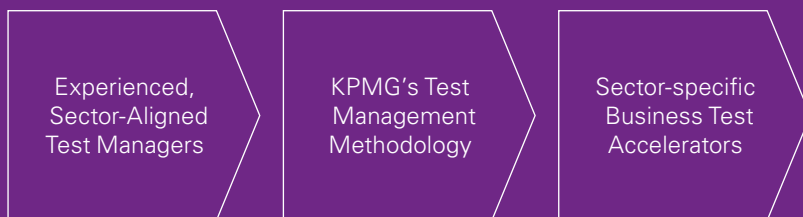
Manage

For businesses experiencing difficulties in getting the best out of their testing capabilities, our "Manage" service line supports clients with:
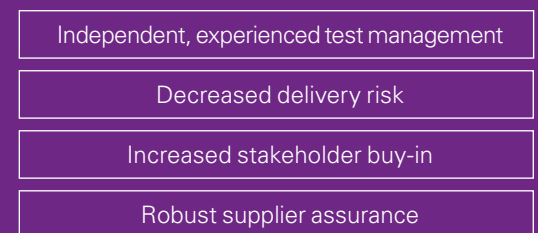
- Addressing low confidence in current testing vendors
- Delivering complex projects or programmes
- Large, distributed test teams that demand extensive coordination
- Stringent project/programme delivery timelines
- Managing multiple, senior stakeholders

Manage

The KPMG Way

Experienced, Sector-Aligned Test Managers

KPMG's Test Management Methodology

Sector-specific Business Test Accelerators

Potential benefits

Independent, experienced test management

Decreased delivery risk

Increased stakeholder buy-in

Robust supplier assurance
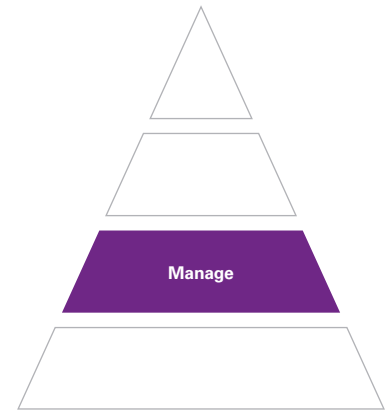
How KPMG delivers

- Deploy highly experienced, Sector-knowledgeable consultants with significant technical and management skills
- Establish early relationships with key business stakeholders/vendors to define and agree acceptance criteria
- Manage broad test lifecycle, including planning, budgeting, resourcing, test data and environments
- Align test effort to help maximise early identification and resolution of defects
- Make use of KPMG's Test Toolkit aimed to accelerate and control delivery
- Help ensure acceptance criteria are tracked and managed through to final implementation
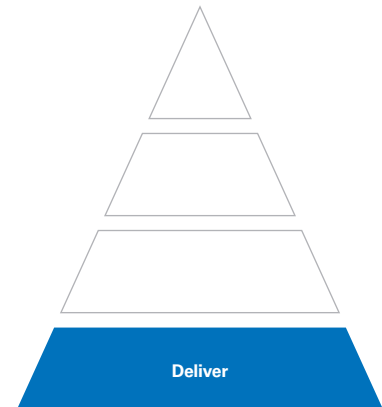
Potential benefits to you

- Robust, independent management of your entire test lifecycle
- Reduced cost of defect identification and resolution
- Enhanced alignment of business and IT teams, leading to increased business confidence in project outcomes
- Reduced delivery risk associated with offshored or outsourced suppliers
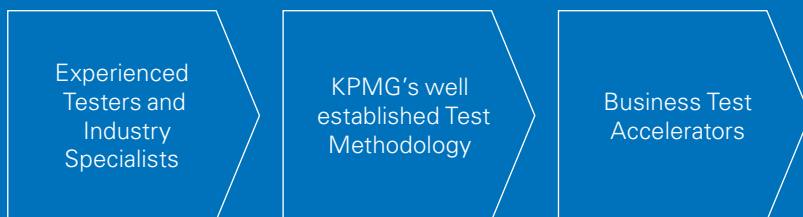
Deliver

Sometimes it is neither possible nor practical to deliver testing using in-house resources. KPMG can support test delivery when:
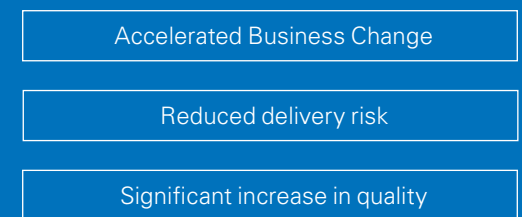
- Business knowledge is required for successful delivery
- Time to market is critical
- Resources with regulatory experience are required
- On-shore test delivery is preferred

Deliver

The KPMG Way

Experienced Testers and Industry Specialists → KPMG's well established Test Methodology → Business Test Accelerators

Potential benefits

Accelerated Business Change

Reduced delivery risk

Significant increase in quality

How KPMG delivers

- Implement Accelerated Testing framework to reduce the overall cost of change
- Deploy mixed teams of industry subject matter experts (SMEs) and test specialists
- Make use of sector-specific KPMG Business Test Accelerators to increase productivity while seeking to maximise quality
- "Shift-left" testing focus for early identification and resolution of defects
- Increased test coverage using data-driven automation
- Business-focused testing to improve business and operational acceptance process

Potential benefits to you

- Accelerated Business Change, with faster time to market and a standardised, repeatable and efficient test process
- Reduced delivery risk by identifying defects earlier in the lifecycle
- Improved quality of final product due to increased test coverage

KPMG delivers testing services globally...

KPMG member firms have combined experience delivering full lifecycle testing and test assurance to more than 300 clients in 22 countries.

KPMG has more than 1.000 professionals working across member firms' testing practices. We offer extensive engagement experience in all phases of technical testing (system, SIT, E2E, non-functional); in defect prevention (requirements validation and verification); as well as in pre and post go-live assurance (user acceptance, business assurance, operational trails and beta testing).

With our dedicated assurance capability, KPMG is the only "Big 4" firm accredited to deliver both TMMi and CMMI maturity assessments.

Over
300
clients

Across
22
countries

1000+ resources

The experience of KPMG professionals underpins our capabilities as independent testing assurers. Our consultants complement their sector expertise with qualifications in one or more of the following:

- TMMi
- Certified ISTQB
- CAST-QA Global Certified
- CMMI Institute certified CMMI Instructors

- Certified Software Quality Analysts (CSQA)
- Certified Quality Managers (CQM)
- Six Sigma (Green and Black belts)
- BCS CITP / FBCS members

...using next generation insights, methods and tools

KPMG's Testing methodology is supported by KPMG Source - our Global Delivery Backbone - that enables business transformations

Methods

Where fragmented methods become integrated transformational journeys

Methods houses a definitive collection of methods, from strategy to implementation, that supports business led and technology enabled transformational projects

Insights

Where individual experiences become collective insight

Insights provide an extensive library of sector and service line leading practices, benchmarks, reference and maturity models from around the world to compare current and proposed business practice

Project Delivery

Where complexity becomes organised delivery

Project Delivery is a suite of world class tools to help successfully execute complex business transformation programs. This integrated tool set provide our teams with collaborative tools supporting project management, enterprise modelling, and tracing and managing activities from requirements through to testing and implementation

Communities

Where isolated teams become global communities

Communities - KPMG have leveraged the benefits of Social media and 'wiki' functionality, such as liking, commentary and sharing to support the effective collaboration amongst our teams

Key contacts
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THE EUROPEAN
SOFTWARE TESTING
AWARDS
2016
FINALIST

THE EUROPEAN SOFTWARE
TESTING AWARDS
WINNER
2017

THE EUROPEAN SOFTWARE
TESTING AWARDS
WINNER
2018

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