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Testing Services

Trends and Challenges

Increasing awareness about Quality and the Cost of Quality

Independent and professional software testing has become a common activity and quite often even a mandatory activity in most software development projects. There is a growing consensus that testing, validation and verification generate added value. Software testing is an established best practice. At the same time, project sponsors no longer accept unstructured and "non-managed" testing. They rightfully demand a clear business case for testing based on formal test effort estimation techniques and a justified 'cost of quality'. **Testing is also a resource intensive activity** and thus costly. There is a need for cost efficient testing with thorough testing governance and management control in place.

Agility in software development and ever shorter time-to-market

Agility and shorter time-to-market are critical success factors for sustainable business development and growth in a competitive market. The elapse times for product development and software development are almost 'instant'. Software testing must follow this trend towards more flexibility.

Industrialisation and professionalization

Software development, including testing started as quite an 'artisanal' activity. Test strategies, test organizations and resources were 'ad hoc' and 'on demand'. In recent years, the processes and best practices related to software testing have been industrialised in different standards (ISTQB, IEEE, TMMI and ISO) and a globally recognized 'body of knowledge' for testing was established. The test professional is here to stay and the degree of professionalization and specialisation will further increase with a further differentiation based on test levels and test types.

Risk based testing provides a framework for deciding how to minimise the cost of testing without accepting undue business or technology risks. Effort may be wasted in non-critical areas, risk analysis and priorities are used to focus testing efforts and coverage. Risk based testing is also useful while establishing a test strategy for test automation and non-functional testing.

Smart sourcing and right shoring using local, near shore and offshore Testing Centers Of Excellence. Our global presence with continuous access to a consistent group of **ISTQB certified** testing, quality assurance, governance, regulatory, and risk specialists allows us to deliver risk-related services wherever and whenever you need them while carefully **balancing cost, efficiency and proximity**. Deloitte founded a workforce of more than 700 employees located in India. Deloitte India has a well-established Testing Centre of Excellence (T-CoE) with a proven track record. Services include Testing Advisory, Testing Delivery (test design, execution and defect management) as well as Test Program Management services along with the presales support by Global Deloitte teams.

Risk based testing by a Testing Centre Of Excellence optimizes test process efficiency and effectiveness while lowering testing OPEX

Industry specific expertise and experience leverages the test process effectiveness for Business Units and IT organizations across different market segments or industries. Deloitte has in-depth industry knowledge and understanding in more than 20 sectors across the market spectrum.

Technology
Specific technical knowledge and skills from across a variety of disciplines enable our test professionals to look at each situation objectively, to identify its unique opportunities and challenges and to devise an approach that addresses them as quickly and efficiently as possible. Deloitte has a major SAP practice. Our test consultants benefit from this as well. We can provide specific **expertise in the domain of SAP testing** and test tooling in a SAP context (SAP solution manager, SAP TAO and TDMS, Interfacing between SAP solution manager and HP Quality Centre).

A multidisciplinary approach embracing business process knowledge, compliance, risk management and numerous technical capabilities with finely honed methodologies and tools, developed according to relevant industry standards and in consultation with appropriate authorities. This means our clients benefit from the most advanced thinking of top professionals in each profession. The Deloitte methodology utilizes a multidisciplinary and phased approach with entry and exit criteria, key activities, and deliverables, driven by a meticulous quality management system to assure the outcome.

Governance with metrics and performance management to continuously improve quality
In order to assess the quality level of software products under test and update stakeholders on testing status, it is important to have standardised and meaningful metrics and reports.

Testing approach specific to the Software Development Life Cycle (SDLC)
Through our presence in several fields of expertise we are more than familiar with commonly accepted quality assurance and testing best practices. We have a meticulous understanding of the V – model approach, the most common lifecycle model for testing and structured development processes but we also support the agile or iterative lifecycle models which require very different and distinct testing organizations and test strategies.

Deloitte, a full range offering

Senior Test Consultancy
Deloitte provides "best in class" senior test consultancy services. We are experts in test process improvement, maturity assessments based on TMMI and the definition of (target) operating models such as Shared Service Centre, Test Competence Centre and Test Factory.

Which other services do we offer in this segment?
• Testing outsourcing maturity assessment
• Business case development, benchmarking and proof of concept for tool based test automation and non-functional testing (performance, security, usability…)
• Definition of a companywide test policy and test organization with segregation of duties and clear roles and responsibilities in testing
• Test training and coaching of test community members or other actors such as project leaders and asset managers

End-to-end testing and test management
We believe that quality is built in not tested in, so our framework incorporates testing in all phases of the Software Development Life Cycle. Deloitte has been rated by leading independent research firms as the leader in end-to-end risk management services including testing and quality assurance services. Our test managers are seniors able to manage all activities and the service delivery for multiple test levels and test types in large scale projects.

Performance testing, non-functional testing and test automation
Our Testing Centers Of Excellence (T-CoE) support functional testing as well as (tool based) non-functional testing such as:

Performance testing - Usability testing - Security testing - Automated regression testing - Configuration testing

Different test activities
Deloitte offers test and defect management, test design and test execution services. We use and manage **market leading licensed and open source tools** for test management, test design, test execution and defect tracking serving both functional and non-functional test types.

The need for technological innovation, increasing complexity of business processes and ever shorter time-to-market require agile, professional and 'industrialised' testing models with a high degree of automation

Contacts