

United Kingdom

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Important trends

- Data privacy regulations and the wider availability of English-speaking talent allow UK-based organizations to use low-cost offshore support more aggressively than their continental peers;
- Improved testing efficiency, driven by collaboration with external partners at competitive price points, is beginning to ease talent costs in the UK. HR and staffing costs have stabilized this year at 34% after a sharp increase from 23% in 2013 to 36% in 2014;
- Newer principles of application development and methods of aligning testing organizational structures, such as DevOps and agile, have magnified the complexity in calculating pure testing spends.

Moderately-paced economic growth and relative decoupling from the fiscal disturbances in continental Europe have improved the outlook for enterprise IT in the UK. Accordingly, the priorities of IT decision makers have altered. Cost optimization and legacy modernization — key topics driving IT budgets and conversations last year — are now replaced by customer experience and security, according to the World Quality Report 2015. Nearly 82% of the IT executives interviewed for the report rate customer experience as an important IT priority, followed closely by security (79%). Cost optimization, including a push for more value and efficiency, is not entirely off the table. At 5.87 on a scale of 1-7, it's the third most important aspect of IT strategies in the region.

There are no year-on-year spikes in the budgets allocated to Quality Assurance (QA) and Testing in the UK. It has risen gradually from 23% in 2013, to 24% in 2014 and by 3% this year to 27%. The year-on-year rate of change in QA and Testing budgets is perhaps the most gradual among developed economies as a result of three factors:

- Data privacy regulations and the wider availability of English-speaking talent allow UK-based organizations to use low-cost offshore support more aggressively than their continental peers;
- Improved testing efficiency, driven by collaboration with external partners at competitive price points, is beginning to ease talent costs in the UK. HR and staffing costs have stabilized this year at 34% after a sharp increase from 23% in 2013 to 36% in 2014;
- Newer principles of application development and methods of aligning testing organizational structures, such as DevOps and agile, have magnified the complexity in calculating pure testing spends. Additionally, Digital Transformation projects often receive separate budgets in certain organizations. As such, year-on-year changes may not offer the most accurate perspective on budgets.

WORLD QUALITY REPORT 2015-16

SEVENTH EDITION

Notwithstanding the stabilization in HR costs, a strong demand for testers with application development and predictive analytics (reporting) backgrounds has added to the cost pressures. Up to 22% of the survey respondents are spending more than 40% of their QA and Testing budget on HR and staffing costs. However, organizations from the UK are allocating 53% of the budget to new transformational projects, suggesting efficient deployment of the funds at their disposal. At 47%, the proportion of QA and Testing funds spent on traditional maintenance is one of the lowest, on a par with Germany and 4% lower than France.

Nearly 83% of the participants use DevOps principles. Further, two in three organizations (67%) are using these practices to improve the pace of delivery to drive business strategy and execution. Higher responsiveness to business demands is an important IT priority for 73% of the UK survey respondents.

Much of the demand for specialist testers with technical backgrounds is from organizations adopting agile testing and DevOps principles to enhance time-to-market. Up to 80% of the IT executives interviewed in the UK say they are using agile development methods, substantially higher than those in the USA, Germany or France. In fact, 8% say they plan to start an agile Testing Center of Excellence (TCOE), and 66% are looking to decentralized TCOEs for improved agility and efficiency.

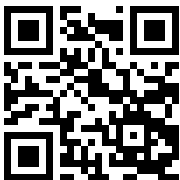
However, one-third of those using agile see the lack of professional test expertise in agile teams as a severe challenge, second only to the lack of an appropriate testing approach that fits with agile. The lack of professional test expertise is also the second highest scoring challenge in agile projects globally. This challenge must be viewed in the context of increased adoption of agile methods and the growing importance of applications being developed using agile methodology. As a consequence there is a clear understanding that the level of testing in agile projects should be increased.

Almost all participants see their reliance on manual testing as a hurdle in application



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development. At 42%, the proportion of automated test cases in the UK is 3% lower than the global average. However, they confirm that automation has progressed beyond regression testing to continuous integration, and 88% say they have realized material reduction in test cycle times with automation. This exceeds those for whom automation has reduced test costs (84%). Frequent changes in application functionality are seen as a barrier to achieving the desired level of automation, cited by 60% of all UK respondents.

Agile testing is also driven by the increasing focus on Digital Transformation. Led largely by the Financial Services and Retail sectors, Cloud, mobile solutions, analytics and front office (customer channels) consume up to 70% of the QA and testing budgets allocated to new development, on a par with Germany (69%) and lagging French and North American organizations by 3%. Growth in digital activity is also corroborated by 83% of the UK participants that either already have a Chief Digital Officer leading these efforts, or plan to recruit one before the end of 2017.

There are, however, significant challenges in both mobile and customer experience-oriented testing. Although only 7% do not yet test mobile, 44% don't have in-house testing environments for the activity. Globally, the average number of those lacking in-house mobile testing environments is a little lower at 38%. In addition, nearly half of the research participants state that identification of systems (and apps) to be covered in customer experience driven tests for multi-channel applications is a major challenge.

Up to 80% of the survey respondents in the UK actively participate in application security assurance activities in the development or coding stage. Managed application security testing is used by 38%. An equal 53% use internal security teams with owned tools and external ones on a project basis — many reach out to niche security testing experts. The willingness to work with external teams for security testing is far higher than the global average of 34%.

Additionally, 31% say they prefer time and material staff augmentation to further their security testing drive. Clearly, the figures suggest a strong demand for security assurance expertise as organizations unlock multiple customer interfaces providing consistent and high-quality engagement. In mobile testing too, some 58% of IT executives from the UK focus their efforts on mobile security for the protection of data on devices or over the air. Further, 55% of the organizations testing in cloud-based environments pay special attention to data security requirements and risks while testing software applications delivered as a service, including their plug-ins.

Cloud-based testing has largely remained flat with 37% (36% in 2014) of the cases tested in what is now an environment of choice for three in four of the UK research participants. Much of the cloud-based testing is functional testing of cloud services, an area where UK testing is far ahead of global and regional averages. Nearly three quarters (73%) of the IT executives say they use cloud-based environments for functional testing of cloud services. In contrast, only 60% of the participants from continental Europe (Eastern, Western, Southern Europe and the Nordics) opt for cloud-based testing environments for functional testing of cloud services, due to more stringent data residency regulations.

Organizations in the UK continue to reach out to external partners for comprehensive test environment and test data management solutions. This includes data-masking and setting up environments, which can be maintained independently and sustainably. Half of the participants cite maintenance of multiple versions of hardware, middleware and systems under test as a major challenge encountered in provisioning of test environments. Yet, 43% of the research participants from the UK maintain and use permanent test environments.