Nordic Region

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Important trends

- Up to 82% of the Nordic region's IT executives interviewed for the World Quality Report 2015 see customer experience as an important IT priority.

- Up to 87% of those interviewed in the Nordic region are using DevOps principles and 42% use test and behavior driven development with continuous integration as a special approach.

- Security is ranked as an important or very important aspect of the IT strategy by eight of the 10 research participants in the Nordic region. In fact, 78% of those interviewed say the core objective of their QA and Testing program is to protect the corporate image.

Digital Transformation is rapidly changing the enterprise IT landscape in the Nordic region. Across sectors, real-time and multi-channel connectivity is enabling faster access to consumers. In turn, consumers are expecting organizations to be 'always on' and to offer a consistent and secure experience across channels. These changes are leaving a lasting impact on Quality Assurance (QA) and Testing in the region. Up to 82% of the Nordic region's IT executives interviewed for the World Quality Report 2015 see customer experience as an important IT priority.

One of the fundamental changes Digital Transformation brings about is the need for speed in application development and testing. End-users expect shorter release-cycles: as many as a release per week or even per day for customer-facing applications in some sectors. Nearly a quarter of the research participants (24%) in the region say it takes too long to get solutions to the market. Some organizations are addressing these challenges by embedding testing within the development cycle, and aligning teams with business units.

Those changes need investments in talent, environments and tools. But above all, what's needed is a change in the mind sets of key decision makers. Up to 24% of the leaders interviewed in the Nordic region cite the reluctance in changing established business processes and organizational structures as a challenge in developing applications. Only 42% of the survey respondents — 8% short of the global average — use agile development methods, and 6% of those use distributed agile, while 50% benefit from exploratory testing. Some 38% cite a lack of the right test tools to create re-usable test sets as a major challenge in applying agile testing to application development, the highest percentage worldwide. There are, however, clear signs of an increase in budgetary allocations. The share of IT budgets allocated to QA and Testing has shown linear growth from 22% in 2013 to 26% in 2014 and a big jump to 36% in 2015. The 2015 allocation is 6% higher than that predicted for 2017 by last year's World Quality Report research participants. Up to

29% of the QA and Testing budget is invested in tools and licenses and 34% on staffing.

Organizations in Sweden spend as much as 37% on staffing; most of it on talent acquisition and training, given the need for senior testers with development and technical skills for agile and DevOps adoption. Up to 87% of those interviewed in the Nordic region are using DevOps principles and 42% use test and behavior driven development with continuous integration as a special approach. More than one-third (35%) use DevOps for 70-90% of their projects, indicating a high maturity of adoption and driving both IT conversations and budgets across the region.

As organizations expect QA and Testing to be integrated with development, the role of manual testing is being carefully scrutinized by IT and business alike. Up to 42% of those interviewed in the region see their reliance on manual testing as a barrier to achieving speed and agility in development. For instance, 44% manually review code for wrong coding as a security testing step. Manual testing dependence is less in other activities, such as environment management and deployment (14%) and generation of test data for multiple iterations of testing. Up to 13% use spread-sheets to manually generate new test data.

To counter their reliance on manual testing, environment and data management, almost all organizations (96%) use automation. Nearly half (47%) of the test cases in the Nordic region are automated. More than three quarters (76%) say they have reduced test costs with automation, while nearly two-thirds (63%) report reduction in test cycle times. Up to 29% use custom-built or purchased automation tools to generate new test data, and 35% use automated provisioning of test environments. Yet, challenges to automation arise in the form of frequent changes to application functionality, as reported by 45% of the executives interviewed. And, 27% don't even have the right automation tools, while 36% lack skilled test automation resources.

With the adoption of agile and DevOps gaining momentum, organizations in the Nordic region are also reporting a significant change in their approach to industrialization and centralization of the QA and Testing practice. The number of organizations leveraging fully operational Testing Centers of Excellence (TCOE) supported by an external partner has halved to 5%, compared to last year, although 14% plan to engage external experts. Only 8% plan to start an agile TCOE, with 27% citing the necessity to co-locate teams (denying cost-savings of a globally distributed model) as a challenge in setting up one.

Limited budgets and increasing business demands are encouraging IT leaders in the region to explore means to convert fixed capital investments to flexible operating cost. One such lever of optimization is cloud infrastructure, which enables scaling up or ramping down usage to align with business dynamics. Three quarters of those interviewed in the region say they test in the Cloud, with 43% — 13% more than 2014 — of their test cases already using cloud-based

infrastructure. Much of these, almost two-thirds (66%), are functional tests for cloud services. In fact, the increasing adoption of Cloud for hosting applications and as a test infrastructure, coupled with the demand for security testing expertise, has encouraged several IT startups with niche capabilities to set up shop in the Nordic region.

Security is ranked as an important or very important aspect of the IT strategy by eight of the 10 research participants in the Nordic region. In fact, 78% of those interviewed say the core objective of their QA and Testing program is to protect the corporate image. Nearly half (46%) say they systematically perform security testing activities on every release of each application. Much of this is planned and executed early, in the requirements definition phase of the application lifecycle, according to 61% of the survey respondents. That figure is 17% more than the global average. Half of the participants use internal security test teams with owned tools. However, 27% of the participants reach out for external expertise for security testing activities.

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If you desire more information about testing tools , please contact

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