World Quality Report

Olivier Tourneur,
Testing Practice Lead, Capgemini Hungary

Dan-Andrei Bucureanu
Head of Testing, Capgemini Romania

Eastern Europe

Testing and QA in Eastern Europe are less mature than elsewhere in the continent, but it's a region that's keen to progress

The countries representing Eastern Europe in this year's World Quality Report are Poland, Hungary, and the Czech Republic. The economy here is fairly buoyant, and IT budgets are growing.

In survey terms, it's worth bearing in mind that businesses in this region tend to fall into one of two distinct groups. The first group constitutes local companies, typically employing fewer than 5,000 people, and in terms of testing and quality assurance (QA), these companies still have some catching up to do. For example, they are likely still to be only in the early stages of developing test automation frameworks.

The second group comprises the Eastern European elements of multinational enterprises. The picture here is rather different. Such companies sometimes have much larger headcounts, and they tend to be developing in the same way and at much the same rate as they do in their other operational geographies.

Key issues

For the first time this year, when asked to rank objectives in testing and QA, the option given the highest importance (54%) by Eastern European respondents is to "ensure end-user satisfaction." This is likely to be a sign of the extent to which markets here, as elsewhere, are increasingly consumer-driven. But more specifically, mobile apps are a fairly recent phenomenon in this part of the world, and this may be a contributing factor in its own right.

As we would expect, "enhancing customer experience" also ranks highly as an important aspect of IT strategy in the region, but we are a little surprised to see it outranked in this regard by "enhancing security." This may be because CIOs, who have more of a big-picture perspective, are answering this question. In our experience, while security is important for testing and QA teams, it's not top of mind. Similarly, cost optimization and cloud transformation also score fairly high, when we ourselves don't often hear them discussed.

The technical challenges that Eastern European organizations face in applications development include the lack of end-to-end automation. But for us, the most common issues we hear raised are the lack of sufficient development and test environments, and the lack of proper skills for QA and testing. These are volatile areas, and we'll return to them in a moment.

Challenges in agile and DevOps

Eastern Europe is, in many testing and QA respects, less mature than other parts of the continent, and we see this especially in the region's keenness to catch up on agile developments. This year's survey shows that the region is allocating a quarter (25%) of its project and team effort to testing in this area, which is consistent with the whole-world average. The principal challenge in this respect is the lack of appropriate test environments and data – the infrastructure simply isn't there yet. More than a third (35%) of Eastern European respondents also say they have difficulty in identifying the right areas on which their tests should focus. In our experience, many of the region's organizations do know what their focus should be, but they are less clear on how to achieve it. The answer is automation – and that is a greater challenge for the smaller and more legacy-oriented local companies we identified as our first group in the introduction of this article. It's probably why so many of our respondents say they automate all their test cases in agile and DevOps developments. When you're starting out, you're not sure what's best, and you cover all bases. It's only when you start to get a feel for things that you can prioritize.

Needless to say, our survey identifies significant agile and DevOps-related skills gaps – for instance, in terms of test environment and test data skills, knowledge of business processes, collaboration skills, generic coding skills, and more besides. We saw the same last year.

For similar reasons, there is even less reason to spend much time considering Eastern European activity in artificial intelligence (AI) and machine learning, or assessing the testing and QA implications in this area. We have seen very little sign of developments in these areas. For many, this domain is something that has been simply too far into the future.

The need to automate testing

We have already noted that test automation is still in its infancy in Eastern Europe. Organizations recognize its potential benefits, and they are keen to take advantage of them – but in order to get there, they are going to need to develop or bring in the requisite skills. Our survey this year shows that the region recognizes this requirement to a great degree than the rest of the world – and in every given skills area.

In which areas would Eastern Europe most like to put automation techniques to good use? Model-based testing – the design of automated test cases – is attracting a lot of interest, and other areas include test environment virtualization and robotics automation. In the field, we also see significant demand for the creation and decommissioning of environments in DevOps cycles, but this is an area not covered by this year's survey data.

Tackling test environments

Earlier, we described the Eastern European market as falling into two distinct groups. In the area of cloud-based test environments, it's the second group – the regional offshoots of major multinationals – where we see most activity. Testing types conducted in cloud-based environments include performance testing, security testing, and the functional testing of customer-facing applications, such as portals and those on mobile devices.

The region's organizations face significant challenges in this area. As many as 70% of them – against a survey-wide average of 55% – report defects due to the inaccurate configuration of test environments. This may partly be because they are investing less in this area, and partly because their relatively low levels of automation make configuration more difficult. They also face challenges in maintaining test data consistency across the different systems under test, managing the size of test data sets, and finding the relevant test data in large test data sets.

Change is coming

Overall, we sense that change is coming to Eastern Europe. In some countries, and in some sectors such as financial services and telecommunications, we are witnessing very high demand for data warehousing and also for business intelligence, and for the testing and QA that accompany them.

The vast quantities of data implicit in these demands are sure to create impetus for developments in test automation, and also in the use of artificial intelligence. It will be interesting to see what the pace of change might be.

Download the World Quality Report 2019-20:
www.worldqualityreport.com

Contact Micro Focus
If you desire more information about testing tools, please contact:

Riccardo Sanna
ADM Pre Sales Manager
riccardo.sanna@microfocus.com
+39 346 139 8055

In association with: