

WORLD QUALITY REPORT

2011/12

CHINA

This is an extract from the *World Quality Report 2011-2012* which presents findings from a global survey completed online by over 1,200 CEOs, CFOs, CIOs, IT directors and managers, and quality assurance (QA) directors and managers around the globe. The goal of this report is to examine the state of application quality and testing practices across different industries and geographies.

The full report can be accessed at www.capgemini.com/testing or www.sogeti.com/testing.



The rise and growth of the Chinese economy has been big news around the world. Only 30 years ago, China was still a poor, developing country, opening its doors to the world and integrating into the global economy. Today, China is the world's second largest economy, and many experts predict that China will surpass the US within a decade and become the world's largest economy. It is now the world leader of industrial output such as machine building, textiles, petroleum, electronics, food processing, transportation equipment, and telecommunications equipment. Seen traditionally by many as mainly an export-focused economy, China has gone through a rapid modernization over the past decade and has emerged with very high potential and an attractive domestic market, highlighted by the increase of foreign investments, domestic entrepreneurship, and fast growth rate.

In this context, most of the companies that have reached a critical mass and maturity are embarking on IT rationalization and industrialization initiatives. The fact that China is becoming a preferred location as an alternative to India for IT outsourcing puts IT professionals in this country in high demand. In this year's *World Quality Report*, our research confirms for the first time that both China (14%) and Eastern Europe (11%) have surpassed India (9%) as the most preferred IT outsourcing location for global enterprises, even though India still dominates the global IT outsourcing market by far.

Although Chinese companies already rely on outsourcing for several IT domains and are quite mature in the design and development aspects of IT, the concept of professional QA and testing is still relatively new, and the outsourcing of the QA function as a managed testing service is still in its infancy. Most QA-related activities are performed mainly by a company's own employees or contractors based on staff augmentation models. Chinese companies follow a model of headcount-centric outsourcing as opposed to task- or function-oriented outsourcing. This model has proven to be problematic, as most companies do not have clearly defined testing processes, and QA is not conducted in a consistent or methodical way.

By George Wang, VP Global Delivery Center,
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Our research shows that test outsourcing is common and the market potential is high. As much as 94% of Chinese respondents have testers contracted or outsourced, although only 21% of respondents have more than 50% of their testing activities outsourced. Meanwhile, on average, 68% of the QA resources are still working in their own companies and only 32% of them are working from outside the company's main location. Corresponding to this fact, 94% of Chinese companies do not have an operational TCOE, indicating that the overall quality maturity is still years behind more mature markets.

Chinese companies are fully aware of their quality gaps and are especially sensitive to the Western perception of the country's manufacturing-related quality issues in the past years. Our report shows that Chinese companies are taking quality very seriously and are significantly increasing their budgets, with more than 83% of organizations confirming a large increase in QA budgets – the largest by far of any region in the world. Also, 82% of Chinese companies plan to set up a TCOE within the next two years, by either developing internally or using a third-party company with a TCOE capability.

Chinese companies are also showing interest in making investments in the latest technologies to help drive quality efficiencies and improvements. In order to improve the accuracy of test data and shorten time to provision data, most Chinese companies are looking to implement a TDM solution and are looking for external expertise for help. Nearly half of Chinese companies prefer to deploy their TDM solution on-site with the engagement of a third party. Learning from early adopters in other regions, Chinese organizations have specific expectations from a robust TDM solution in terms of integrating with other testing tools and the ETL tools.

Chinese companies are showing great interest in cloud computing – with the highest expected adoption rate in the world. As many as 99% of survey respondents confirm that they are planning to host or migrate some of their applications to the cloud over the next year – as compared to 81% for the rest of the world. In addition, 19% of Chinese companies are expecting to host or migrate more than half of their applications to the cloud over the next year – compared to only 10% for other geographies. Companies expect significant performance and security risks as they migrate to the cloud environment.

Application security is especially concerning to Chinese companies. They actively participate in application security assurance activities in many phases of the application lifecycle, including requirements definition, design, coding, and testing. The Information Security Team is normally considered to be the primary responsible party for application security, and one common way to ensure application security is through in-house audits. The challenge of doing security testing and auditing during QA falls on the interaction and collaboration between the QA, security, and development teams. As a result, technologies that can help improve the communication and collaboration between these teams are in high demand among Chinese companies surveyed.

In summary, China is at the cusp of a QA and testing industrialization and modernization phase. Most companies realize the need and benefits of a professional, structured, and industrialized quality practice. The government and private sectors are taking quality seriously, and new investments are coming in to bring in world-class quality best practices and advanced technologies such as TDM and cloud computing. We expect China's quality industrialization to mirror that of its fast-paced economy.

Contacts

We value your comments and ideas. We welcome you to contact us in relation to any questions you might have concerning the 2011-2012 *World Quality Report*.

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About Capgemini and Sogeti

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Together, Capgemini and Sogeti have developed innovative, business-driven quality assurance (QA) and testing services, combining best-in-breed testing methodologies (TMap® and TPI®) and the global delivery model, Rightshore®, to help organizations achieve their testing and QA goals. Capgemini and Sogeti have created one of the largest dedicated testing practices in the world, with over 8,200 test professionals and a further 12,500 application specialists, notably through a common center of excellence with testing specialists developed in India.

More information is available at:
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