World Quality Report 2022-23:
72% of organizations think Quality Engineering can contribute to the environmental aspect of sustainable IT

New report also highlights 85% of organizations consider Quality Engineering¹ to be pivotal in the implementation of emerging technologies into real-world use cases

Paris, October 3, 2022 – 14th edition of the World Quality Report, published today by Capgemini, Sogeti², and Micro Focus, examines the key trends and developments in Quality Engineering and Testing (QE&T) and highlights sustainable IT and Value Stream Management³ as new interest areas for quality teams. According to the report, there is also significant optimism around the future impact of emerging technology such as blockchain, the metaverse, and other Web 3.0 applications.

Sustainability was one of the new areas explored by this year’s edition of the report. Research revealed that while the role of quality within sustainable IT is still evolving, 72% of organizations think that QE&T could contribute to the environmental aspect of sustainable IT. Respondents are also optimistic about the benefits of green engineering as part of their sustainable IT strategies, with 47% of respondents citing improved brand value ranking as the most important benefit, followed closely by improved customer loyalty (46%).

The report also finds that organizations are increasingly looking at Quality Engineering and Testing (QE&T) to support the deployment and success of new technologies such as blockchain and Web 3.0 and to address associated business challenges in the fields of customer experience, time to market, security, and cost. To ensure seamless experiences for end-users, new technology needs to be tested in a different way than before, with a different approach and types of testing and quality validation.

Also, 96% of respondents believe they would face medium or high risks of cyber-attacks without a quality strategy in place for emerging technologies. As the pace of technological change is exponential, importance of adapting cybersecurity strategies to counter the risk of cyber-attacks also emerged in the research.

Quality assurance function is accelerating its transformation to quality engineering practices

While awareness is growing on how quality strategy can offset various risks associated with deploying new technology, the quality assurance function is transforming at speed from pure testing to actual quality engineering practices. For example, 88% of respondents agreed they were at medium to high risk of losing market share to a competitor and 90% agreed that they face risk of increased costs for the deployment of new technology solutions without a QE&T strategy.

¹ Quality engineering spans the entire product lifecycle, not just the software development process.
² Part of the Capgemini Group, Sogeti makes business value through technology for organizations that need to implement innovation at speed and want a local partner with global scale. With a hands-on culture and close proximity to its clients, Sogeti implements solutions that will help organizations work faster, better, and smarter. By combining its agility and speed of implementation through a DevOps approach, Sogeti delivers innovative solutions in quality engineering, cloud and application development, all driven by AI, data and automation.
³ Value Stream Management: method that allows to optimize the steps necessary to envision, implement and deliver software.
**Focus on data continues to grow**

There is unanimous agreement (89%) that robust data validation capabilities can improve decision making, efficiency, and improve bottom line profits. Test Data Management (TDM) is an integral part of the software testing lifecycle, however, only 20% of respondents have a fully implemented enterprise-wide test data provisioning strategy. Many organizations have serious challenges with the implementation of an effective data validation strategy; 42% see implementing data validation as a time-consuming exercise, while 47% of respondents said that having multiple complex databases itself acts as a challenge.

**More integration across business teams needed to realize the potential of Agile**

There is a growing recognition of Agile development and digital transformation as key enablers of further IT investment: To accompany the fast DevOps transformation, there is a recognition that integrating QE&T at every stage of product development is critical to leveraging the full potential of this function.

The research found that organizations are reporting significant improvements by adopting Agile development: 64% of respondents cited on-time delivery as the biggest improvement. Reduced cost of quality was another key improvement (62%), followed closely by improved customer experience (61%).

However, organizations continue to struggle to implement Agile development across packaged applications and enterprise systems due to the complex practicalities involved in breaking down Enterprise Resource Planning (ERP) workflows and end-to-end business practices into a single backlog.

Mark Buenen, Global Leader, Quality Engineering and Testing at Capgemini Group, commented, "Recent years have seen unprecedented acceleration for digital platforms and an overall modernization of applications. At the same time, supply chain challenges, cyber security threats, and the ongoing skills shortage mean the landscape for enterprises has never been more complex. In turn, investment in robust quality assurance and engineering are the foundation of an organization’s ability to remain flexible, responsive, and adaptable. By looking deeper, we can see that this vital function can have a tangible impact on broader business performance, including profitability and even sustainability”.

"The World Quality Report provides great insight into the current state and the future of IT, with an in-depth look at how emerging technologies are changing the quality needs and practices of organizations," said Rohit de Souza, Senior Vice President, General Manager - ITOM Product Group & ADM Product Group, Leader of the CTO office and Product Security, Micro Focus. "This year’s findings detail the fact that Quality Engineering and Testing is taking into account that change is continuous, and organizations must be flexible, adaptable and responsive to meet this challenge while reaching optimal business performance. At the same time, organizations are also focusing of generating value for customers and end users.”

The report and additional information are available [here](#).

**World Quality Report 2022 research methodology**

The World Quality Report is the only global report analyzing application quality and testing trends. It has been produced annually since 2009. This year’s edition has tracked and examined the most important trends and

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4 In software development, **Agile** practices include requirements discovery and solutions improvement through the collaborative effort of self-organizing and cross-functional teams with their customer(s)/end user(s), adaptive planning, evolutionary development, early delivery, continual improvement, and flexible responses to changes in requirements, capacity, and understanding of the problems to be solved. It aims to provide better responsiveness to changing business needs.

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Press Release
developments in Quality Engineering and Testing by surveying more than 1,750 senior executives across 32 countries and 10 sectors. The expert findings are complemented with commentary, examples and best practices from more than 15+ senior executives from various fortune 500 organizations, that participated in deep-dive interviews around these topics.

About Capgemini
Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of over 350,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2021 global revenues of €18 billion.

About Micro Focus
Micro Focus is one of the world’s largest enterprise software providers, focused on solving the IT dilemma—how to balance today’s needs with tomorrow’s opportunities. We deliver mission-critical technology that helps tens of thousands of customers worldwide manage core IT elements of their business. Strengthened by our strategic services and support organizations, and an extensive partner network, our broad set of technologies for security, IT operations, application delivery, governance, modernization, and analytics provides the innovative solutions organizations need to run and transform—at the same time.