



Market Analysis

IT Services

Quality Engineering/Software Testing: Continuous Testing and AI

Report Abstract

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66 pages

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Who is This Market Analysis For?

NelsonHall's "Quality Engineering: Continuous Testing and AI" report is a comprehensive market assessment report designed for:

- Sourcing managers investigating sourcing developments within software testing services/Quality Assurance/Quality Engineering
- Vendor marketing, sales, and business managers developing strategies to target testing services/QE opportunities
- Financial analysts and investors specializing in the IT services sector.

Key Findings & Highlights

NelsonHall's market analysis of the quality engineering (QE)/software testing services market consists of 66 pages. The report provides an in-depth understanding of the dynamics at play in QE, and looks specifically at continuous testing, cognitive and QA, UX testing, model-based testing, and cloud testing.

The current global software testing services market size stands at ~\$36bn. NelsonHall expects a rebound in 2021 (+4%), led by a catch-up, after a moderate deceleration in 2020 (+2.5%) in testing services spending. This 2020 deceleration was much softer than expected with clients pushing external testing expenses, cloud, and digital projects. Growth in 2022 will slow down somewhat to +3%, impacted by the end of the catch-up effect. Spending will reach \$38bn in 2024, representing a +4% CAGR 2020-2025.

The market remains structured around BFSI, which represents ~41% of testing service spending (and 45% including U.S. healthcare payers). The sector, with its large custom applications and regular updates, fits well the traditional multi-year contract model.

Functional testing (including manual activities, automation, COTS, and digital testing) represents ~84% of spending. Specialized services account for the remaining 16%, with non-functional representing 9%.

Scope of the Report

This report examines high-potential testing services offerings, including accepted ones (e.g., continuous testing) with still room for growth, and emerging areas (e.g., infrastructure-as-code).

The quality engineering (QE) offerings covered are:

- Continuous testing
- Application migration to the cloud testing
- Infrastructure as code (IAC) testing
- Model-based testing
- AI-based analytics for more focused testing
- AI-based automation, usually for automating the creation and maintenance of test cases/scripts
- Testing of RPA bots
- Testing of chat- and voice-bots
- Testing of AI models
- Explainable AI
- UX testing across usability, compatibility, accessibility, and content testing
- Application security testing.

It addresses the following questions:

- What is the current and future market for QE/software testing services?
- What are the client segments for software testing services, and their characteristics? What are the drivers, benefits, and inhibitors for each segment?
- What is the size and growth of the software testing services markets by client segment, geography, service line, activity and sector?
- How did spending grow in 2021 and how will it increase in 2022 and onward?
- How is the market organized? Who are the main vendors? How can they be assessed and compared? What are vendor challenges and critical success factors by market segment?
- Has continuous testing reached maturity or is there still room for innovation?
- What offerings have high potential?
- How is AI shaping the testing market for bringing test automation and also testing cognitive technologies such as AI models, RPA/business process automation, and virtual assistants
- What is the maturity of application security testing?

Quality Engineering/Software Testing Vendor Assessments Available for:

- Amdocs
- Atos
- Capgemini
- Cigniti
- eInfochips
- Expleo
- Infosys
- LTI (L&T Infotech)
- Qualitest
- TCS
- Tech Mahindra
- TestingXperts
- Trigent
- ValueMomentum
- Wipro.

About The Author

Dominique Raviart is the IT Services Practice Director at NelsonHall, with global responsibility for IT Services research programs.

Dominique covers IT Services research in the areas of Software Testing/QA, Big Data and Analytics Services, Salesforce services, and IoT Services. Dominique has been part of NelsonHall's IT Services analyst team since 2007, providing comprehensive and insightful coverage of IT services markets in the world. In particular, he is widely known for his extensive knowledge and coverage of software testing, having examined recently digital testing and DevOps/continuous testing. Dominique assists both buy-side and vendor organizations in assessing opportunities and supplier capability across IT service lines.



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About NelsonHall

NelsonHall is the leading global analyst firm dedicated to helping organizations understand the 'art of the possible' in digital operations transformation. With analysts in the U.S., U.K., and Continental Europe, NelsonHall provides buy-side organizations with detailed, critical information on markets and vendors (including NEAT assessments) that helps them make fast and highly informed sourcing decisions. And for vendors, NelsonHall provides deep knowledge of market dynamics and user requirements to help them hone their go-to-market strategies. NelsonHall's research is based on rigorous, primary research, and is widely respected for the quality, depth and insight of its analysis.

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