

Quality Engineering & Assurance



Offering summary

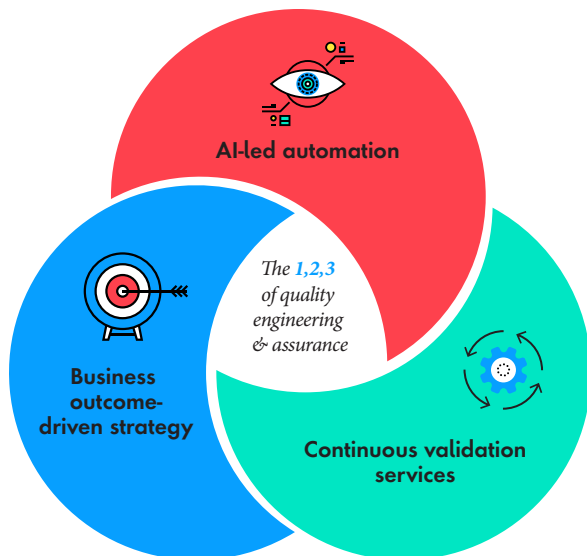
From early testing to AI-driven regression suites, our ready-to-use accelerators reduce set up time and speed up testing cycles. Our end-to-end orchestrated pipeline solution ensures seamless integration testing, resulting in a 20 to 30 percent reduction in defects and a 10 to 20 percent faster deployment of changes. Through our quality engineering framework, we ensure cross-functional collaboration and accountability throughout the development lifecycle. From accessibility to security scans, our solutions empower your team to deliver high-quality applications aligned with your business objectives, faster than ever before.

Stay ahead of the curve with continuous innovation

The changing technology landscape—amid new customer preferences and expectations—requires continuous adaptation. As new technologies emerge, testing methodologies need to be refined to ensure the quality of the products being developed. This necessitates a shift from traditional, reactive testing approaches to a more proactive and continuous approach, where quality is integrated throughout the entire development lifecycle.

Publicis Sapient's quality engineering services help businesses to transition the delivery lifecycle from being the sole responsibility of dedicated testers to a shared accountability across all development teams. We bring expertise in generative AI and prompt engineering, which are becoming increasingly important for creating and using automated testing solutions. We also understand that quality engineering needs to focus not just on technical functionality, but also on the end-to-end business value and customer experience.

By embracing these changes and fostering a culture of shared responsibility for quality, organizations can ensure that their products meet the ever-increasing demands of the market.



Our approach

In-house accelerators: Suite of production-ready QE accelerators that provide generic reusable automation frameworks for application testing using multiple tech stacks across functional and non-functional testing.

Value Stream Mapping: Identify waste and opportunities by mapping all activities required to transform Testing and Quality Assurance ways of working into Quality Engineering ways of working. A lean management method for analyzing the current state and designing a future state with the goal of identifying constraints and reusable assets.

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AI-led automation:

- Value-driven test automation—innovative methods and AI model-based testing approach
- Generative AI-led automation of automation processes
- Generative AI tools ecosystem
- Continuously measure and track testing trends
- QE engagement from beginning and during each phase of SDLC
- Scalable, agile-friendly test solutions
- Continuous testing by embedding testing in CI/CD pipelines and enforcing quality gates/thresholds

Validation services:

- AI-led test data management
- AI-led automation and CI/CD pipeline integration
- Smart execution of functional testing (e.g., web, UI and mobile)
- Smart execution of NFRs
- Performance engineering
- Smart accessibility testing
- Cross-browser and device testing
- Security testing (SAST/DAST)
- AI-led localization and language testing
- Planning and execution of cloud resilience testing
- Planning and execution of data testing, including data migrations and big data
- Quality dashboard and reporting

Advantages at a glance:

- Reliability and performance applications that align with your business objectives
- Generate **40%–50%** efficiency improvements in the entire SDLC lifecycle and faster time to market
- Reduce test time by **up to 80%** by using automated test documentation

How we've made an impact:



GLOBAL RESTAURANT CHAIN

The imperative for change:

- This restaurant chain needed to move from mass marketing campaigns with stale data to personalized campaigns
- They wanted to use their data to identify the best offers to provide in order to increase guest count, visit frequency and basket size

The transformative solution:

- Using cloud services for AI/ML and analytics, we developed a platform that automates campaign audience segmentation, automates testing and presents visualizations of campaign metrics
- We helped them build a platform of customer profiles by pulling in data from transactions, registration, loyalty and responses to previous offers



The business impact:

The marketing team conducts small, regional experiments to discover what kind of offers motivate customers to visit more often and spend more.

- **5x faster testing**
- **50% fewer resources required**
- **75% reduction in reporting time**



LAS VEGAS CASINO RESORT

The imperative for change:

- The resort had great brands, but guests had no incentive to cross-book experiences because they didn't know the brands were related
- The resort wanted to encourage cross-booking and establish a consistent brand across all digital touchpoints

The transformative solution:

- To help the casino's engineering teams sustain success, we introduced agile delivery, automation and CI/CD



The business impact:

Guests now enjoy a consistent experience on any touchpoint across the resort properties, encouraging them to book more activities within the brand. Direct bookings grew, the result of an enhanced customer experience, search engine optimization (SEO), analytics and A/B testing.

- **9% year-over-year revenue growth**
- **90% of website function testing is automated**
- **8% increase in direct bookings**

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The imperative for change:

- This company's 90+ websites were built with different technology, platforms and processes
- Manual testing and a lack of standards meant rolling out a new website took the better part of the year
- To thwart competitive threats, the asset management firm needed standardized technology and testing processes

The transformative solution:

- We introduced the company's teams to modern digital engineering practices, including Scrum and Scaled Agile Framework (SAFe)
- Automated sanity testing verifies that changes and bug fixes didn't cause new problems
- To cut development time, we built more than 40 reusable components, a complete CI/CD pipeline and a playbook so that the company's teams could take over from us to iterate continually and release quickly

The business impact:

Today, the asset management firm consistently builds new websites in one month—a fraction of the time it used to take.

- **100% sanity tests automated**
- **89% reduction in time to build new sites**
- **30% reduction in AWS license costs**
- **29+ sites delivered within 9 months**

What sets Publicis Sapient apart?

Publicis Sapient is revolutionizing the way businesses approach quality engineering and automation (QE&A). Our expert teams seamlessly integrate best-in-class tools and methodologies with a focus on business and customer needs. We champion innovation-led solutions, prioritizing AI-powered automation to streamline processes and accelerate value delivery.

Our commitment to speed shortens testing cycles, ensuring early problem identification and faster recovery. Using our comprehensive library of ready-to-use accelerators, we jumpstart your journey and use modern engineering practices, like value stream mapping, to optimize your workflow. This translates to a continuous feedback loop, empowering you to adapt, improve and deliver exceptional results.

For more information, visit <https://www.publicissapient.com/solutions/digital-engineering>.

WHY PUBLICIS SAPIENT?

Publicis Sapient is a digital business transformation company. We partner with global organizations to help them create and sustain competitive advantage in a world that is increasingly digital. We operate through our expert SPEED capabilities: Strategy and Consulting, Product, Experience, Engineering and Data, which combined with our culture of curiosity and deep industry knowledge, enables us to deliver meaningful impact to our clients' businesses through reimagining the products and experiences their customers truly value. Our agile, data-driven approach equips our clients' businesses for change, making digital the core of how they think and what they do. Publicis Sapient is the digital business transformation hub of Publicis Groupe with 20,000 people and over 50 offices worldwide. For more information, visit www.publicissapient.com.