



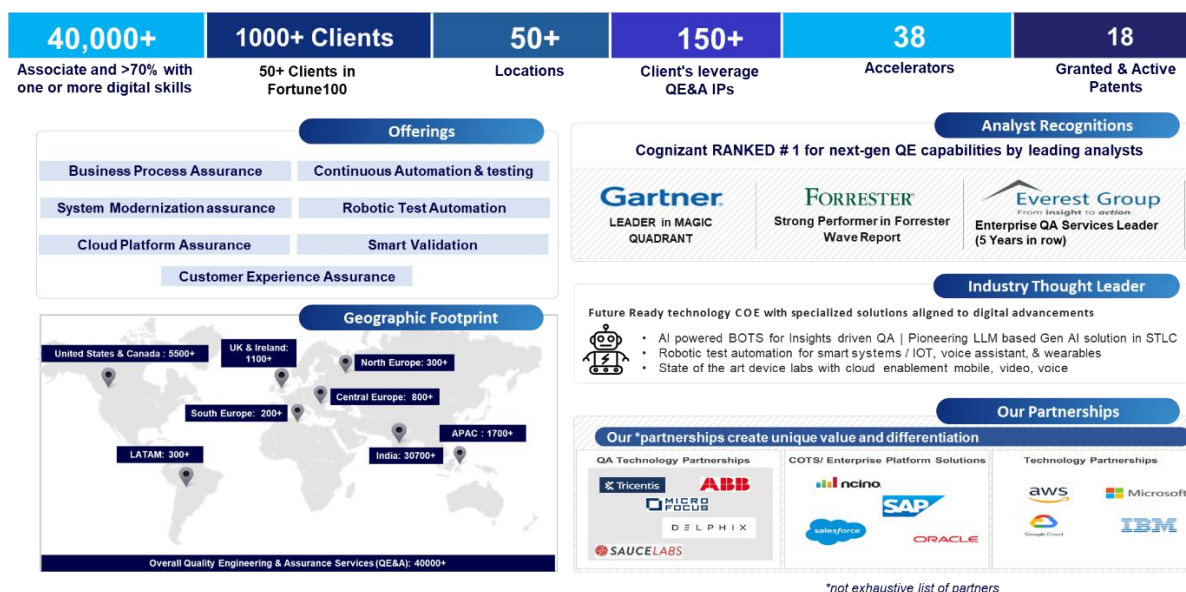
Cognizant Quality Engineering & Assurance - Service Definition Doc

G-Cloud Service Definition Document

Overview

Cognizant Quality Engineering & Assurance Practice

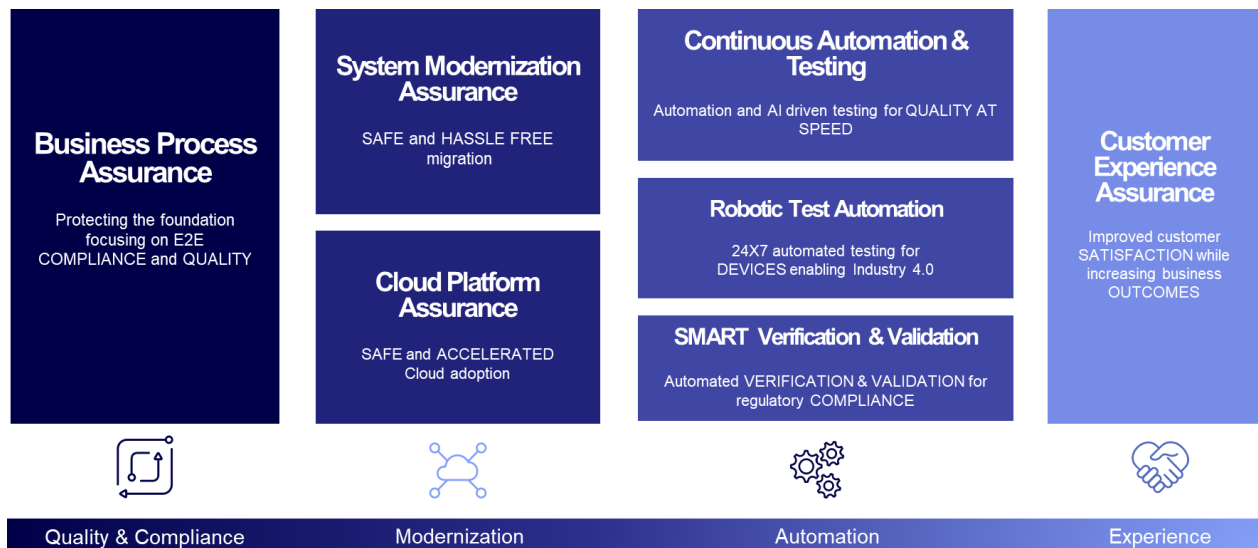
Cognizant's Quality Engineering & Assurance (QE&A) Practice is the world's leading provider of quality assurance and test engineering services. With a global strength of **40,000+ test engineers globally**, and **1100+ test engineers in the UK**. We have over **15,000+ Test Automation engineers**, **2,500+ seasoned Non-Functional Testing resources**, **1000+ IoT expert SMEs**, providing services to over **1000+ customers**, offering innovative and high-quality testing services globally. We successfully have setup large testing functions to support complex legacy application modernisation programmes for 7 of Top 15 UK Public sector organisations. Our major delivery Centres are spread across the globe.



Our large pool of career testing professionals is specialised in **Functional, Test Automation, Mobile, Test Data, Performance, Security, Accessibility, Resilience Assurance, Test Environment, Web Services/API, UAT** and other testing types that our elite clientele need. Testers, Test Analysts, Test Leads, Quality Engineers form 65% of our team; while the rest are aligned with Test Management and Technology (SAP, Oracle, Salesforce, etc.) QA specialists, Business Analysts, Test Quality consultants forming the rest.

Our Offerings

Below are our offerings on the quality engineering and assurance focusing on Next-Gen technology and sustainable growth.



- **Business process assurance** - Our business process assurance solutions bring an industry-aligned, efficiency-driven approach that ensures end-to-end quality and compliance of core IT for brand protection. With this offering we assure business processes, system resilience, regulatory compliance, and operational readiness.
- **System modernization assurance** - This offering assures intended modernization outcomes during migration, modernization, and transformation programs. For companies interested in app modernization, we follow a structured QA approach to avoid system breakdowns and high migration costs. As part of our system modernization offering, we deliver an Integrated Automation Platform, BOTs-driven predictive QA, and comprehensive testing frameworks for API, microservices and application technology platforms.
- **Cloud platform assurance** - We offer first-time-right assurance of cloud migrations, cloud-native applications, and cloud-based platform rollouts with the help of Cognizant Unified Cloud Assurance Studio and our rich partner ecosystem. We leverage COTS product deployment in a cloud infrastructure, including CMS and CRM, based on product team configuration recommendations.
- **Continuous automation and testing** - Speed delivery to keep pace with business. This offering helps to accelerate release cycles in Agile and DevOps by orchestrating automated tests, environments, and data, to expose risks early and protect integrity and brand. Testing is fully automated zero-touch and AI-driven to release features as fast as they are developed. We leverage AI-based intelligent testing automation bots and Cognizant's continuous testing platform.
- **Robotic test automation** - Because connected devices have frequent updates, businesses must automate testing of end-user actions on these devices. Robotic test automation offers collaborative robots to provide automated anytime/anywhere testing. The robot (also called COBOT, or "collaborative bot") performs fully automated physical and digital end-to-end testing using our QA automation framework. For this offering, we leverage our partnership

with ABB, Automata and Rethink Robotics. We also have experience in provided **IoT Assurance** ensuring Quality of Intelligent Systems. With the availability of state-of-the-art IoT device interoperability test studios, we help customers across various industries with predictive maintenance, Home Automation, Building management, Smart meter, etc.

- **SMART verification and validation** - Verification and validation (V&V) is a time and effort-heavy process that slows time-to-market. Our SMART V&V offering helps to speed regulatory compliance with better software quality and safety across all industries. SMART V&V offers an AI-driven platform to deliver real-time regulatory compliance for all IT systems and products within regulations. The platform enables continuous software delivery with continuous compliance by leveraging automation and AI technologies.
- **Customer experience assurance (CXA)** - In the current digital era, customers want better, faster and personalized services. CXA helps our clients deliver exceptional experiences and increase brand value. We help businesses consolidate CX goals across the organization, deliver high-quality digital products with best-in-class QA methodologies and visualize quantitative outcomes using business, marketing, and IT metrics. With Cognizant's CXA dashboard, you get a view of CX posture - across performance, accessibility, sentiment analysis and other metrics - for better data-driven decisions.

As this practice has grown and matured, we have developed a comprehensive set of frameworks, tools and accelerators that are already being used by customers across domains in the Quality Assurance space. We also have extensive experience working with clients to operate 150+ independent Test Centres of Excellence (CoE) with teams ranging from 25 to over 1,000 employees.

Industry Analyst Recognition

Cognizant has been the market leader in providing world class quality assurance and engineering services to top fortune 500 for many years. We continue to dominate the space across various industries and have been recognized as 'Leader' by industry leading analyst like Everest, iSG, Gartner and Forrester. Below are some of the recent recognitions received.

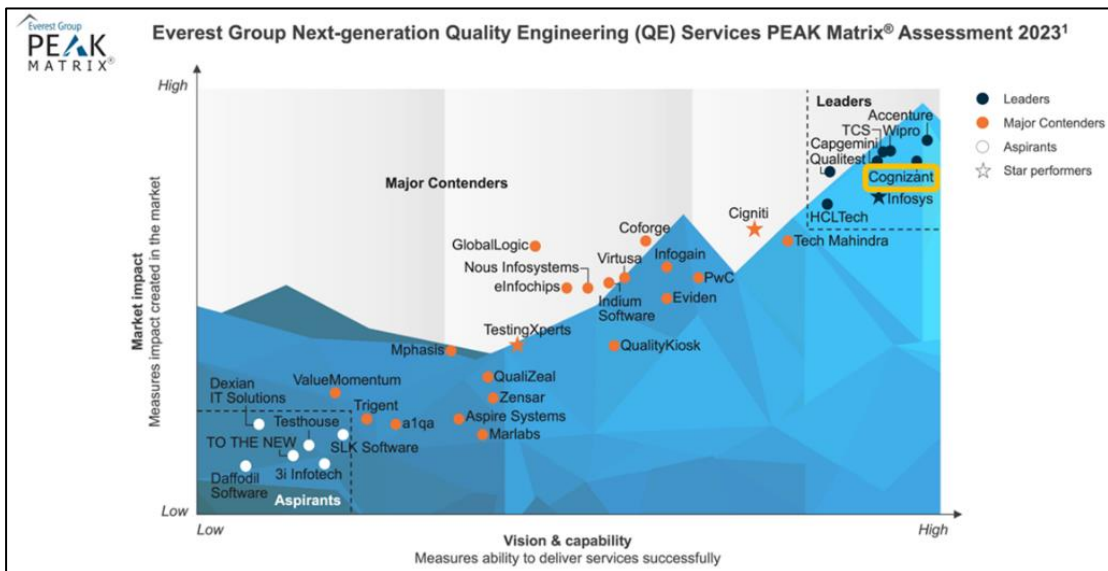


Figure:

High-Res PEAK 2023 Leader -
Next-generation Quality Engineering (QE) Services - Cognizant



Figure: iSG Provider Lens Leader -
Next-generation Application Quality Assurance (QA) Services 2023

ISG recognized Cognizant as a leader in Application Quality Assurance in the US and Europe. *“Cognizant has a robust application quality assurance practice, with more than 30 proven AI use cases in addition to IPs and accelerators across the testing lifecycle.”* — Akhila Harinarayan, ISG Senior Lead Analyst.

Cognizant ranked as “Leaders” in Continuous testing by Analysts

We know the strategy to leverage automation and make software delivery more efficient



Figure: Cognizant Analysts Recognition in previous years

Why are we the right partner for you?

We believe we are ideally positioned to support you through this journey due to the following:

- Our independent Quality Engineering and Assurance practice is the market leader in providing Engineering and Assurance services focusing on product quality as rated by top analysts such as Gartner and Everest Peak for the last 3 years in a row. Our immense talented pool of career testers with T-shaped skills in the domain, products and technology are globally delivering exceptional service quality to our customers. We have a focused testing practice with subject matter experts delivering the run and transform projects for leading insurers globally.
 - You can take advantage of the workforce transformation investments from Cognizant. Our resources go through or have gone through the QA to QE transformation training and has a step-by-step progression to becoming a top-notch professional.
 - Access to QE professionals trained across multiple dimensions – quality professionals who are aware and experienced in estimation techniques, defect management, test processes, test automation and frameworks, agile DevOps delivery etc.
 - As part of Cognizant learning goals, every associate is encouraged and required to have learning part of their annual goals, which includes internal and external certification. Cognizant Academy has several courses on Technology, Automation, Tools, Domain, Agile, DevOps, Predictive and Gen AI, COTS products, Test Management etc. at par with external certification either by partnerships or Cognizant investments for Industrial skillsets.

- Our quality engineering community has helped customers achieve their strategic goals and objectives through continuous integration and delivery. With our increased focus on Digital Engineering enabled by our Agile and DevOps specialists, we have experience delivering more than **250+ successful DevOps engagements** with various clients across industries and across geographies, providing them with highly Agile and DevOps maturity.
- Innovation-led Delivery through **in-house Tools, accelerators, IPs and frameworks** giving a head start to your journey to vision state. This provides scalability, security bringing in efficient processes due to better collaboration, leading to faster time to market, at reduced costs and control.
- Acknowledging and **embracing AI** as transformation's newest frontier. A plethora of initiatives to optimized QA with AI is being delivered by Cognizant covering Continuous Testing, Test efficiency, failure predictability, CX based QA, etc. With dedicated Lab and external training, we have expanded partnership with Hyperscalers & AI providers, resulting with 20+ Large Language Models (LLMs) evaluated for QA use cases, 8+ Code Assist Tools evaluated, **10+ QEA accelerators** – Ready capability demonstrations, Pilot with **14+ customers on 20+ use cases**.
- Testing of **AI Infused Applications (AIIA)**: Unlike testing traditional systems, which have pre-defined functional flows to validate, testing for AI is non-deterministic, in other words, there is no boundary to test AI infused applications. Cognizant's QA for AI solutions ensure AI infused applications deliver effective business outcomes. Cognizant takes a holistic approach to assuring AIIA, providing end to end quality assurance, as follows –
 - Assure Data Quality: Test data feature for correctness, completeness & quality.
 - Assure ML Model Quality: Evaluate ML Model for its correctness, completeness, and quality.
 - Assess ML Process Quality: Assess ML process and frameworks from a QA perspective.
 - Assure ML Performance & Security: Assure non-functional aspects of ML solutions.
- We are continuously innovating and thinking ahead. **18+ patents in Next Gen QA Automation frameworks, tools, cloud native frameworks and AI/ML based bots** which can predict and self-heal requirement gaps, automation scripts & defects and some of the key ones in automation are now open source. We believe some of these can make the testing in Buyer's organisation more effective and efficient.
 - Our **technology expertise covers vast areas of Test Automation**, with deep knowledge in Automation frameworks (Node.js, Angular, .Net, C#). Cognizant has established dedicated *Testing Groups* aligned to various products and domains to build expertise, custom solutions, and innovative accelerators. We have over 6000+ dedicated product testing experts supporting industry leading products and packages including SAP, Salesforce, etc.
 - From QEA perspective, there are 10s of 1000s scripts we deal with and run every day / every week in pipelines highlighting the scale of orchestration level.
- Cognizant delivers end-to-end Digital Assurance As-a-Service across various industries and thereby enhancing the efficiency, reliability and user experience of customer's digital applications and smart solutions. Cognizant helps customers, **assuring their Smart ecosystem of IoT** network, sensors, devices, and mobile apps in an immersive digital lab.

Cognizant also focuses on standardizing and automating the customer's QA processes, and driving innovation through virtualization, thus enabling the client to reduce the total cost of ownership, while creating a secure and scalable digital-ready technology backbone.

- Our **dedicated Technology Centre of Excellences** (such as Agile, Automation, Test Data, Mobile Testing, Data Testing, etc.) focuses towards improving the productivity, effectiveness and efficiencies of our Quality Engineering services across our clients.
- **Strategic partnerships and technology alliances** with all cloud hyper-scalers (AWS premier consulting partner and Microsoft Gold partner & Government partner of the year 2020), Digital.ai etc., which ensures the best training programs for our people and priority access to all 3rd party product support teams.
- We are **committing to deliver solid business benefits** as per Buyer requirements and expectations, as we have the required knowledge, skills, technology, and scale, through a right combination of people, processes, tools, and technology.

Cognizant Overview

Cognizant engineers modern businesses. As one of the largest global professional services companies we help clients in the UK modernise technology, reimagine processes and transform experiences so they can stay ahead in our fast-changing world. Together, we're improving everyday life.

We focus on IoT, AI, software engineering and cloud—the technologies that are changing the nature of business. Our global presence enables us to serve you locally.

What we do

- We **transform experiences** so our clients reach new levels of growth and brand loyalty
- We **reimagine processes** with automation and capabilities that instill insight, precision and speed.
- We **modernise technologies** that help our clients remain relevant and ready for the future.

We work with our clients to:

- **Deepen User Understanding:** We research user needs, preferences, and behaviors so that we can deliver more personalised, proactive, and responsive services.
- **Meet Evolving Expectations:** We implement solutions that mirror the speed, convenience, and accessibility that citizens expect from modern digital experiences, fostering increased satisfaction and trust.
- **Improve Service Efficiency:** Cognizant helps streamline processes, automate tasks, and optimise resource allocation for improved service delivery with reduced costs.
- **Strengthen Leadership Capabilities:** We offer analytics driven insights and tailored training to empower data-driven decision-making and equip public sector leaders for the digital age.
- **Innovative Policy Solutions:** Our teams bring experience and technological expertise to help identify and implement creative, effective digital approaches to complex policy challenges.

Our People

Our 8,000+ UK team bring both technical skills and experiences, and deep domain knowledge of the public sector landscape. We can provide staff that cover all SFIA roles and grades. Cognizant's Intuitive Operations and Automation's (IOA) practice have 90,000+ resources across the globe and over 5700+ in EU & UK.

We have employees across the UK, our major hubs include a dedicated Public Sector Centre of Excellence in Leeds, our Head Office in London, including an Advanced AI Lab and an AI public sector co-innovation lab, and a large design studio in Bristol specializing in DesignOps.

We can also draw on 280,000+ nearshore and offshore professionals for reduced cost options where you can take advantage of these.

Our Credentials

We have a rich portfolio of successful digital and cloud transformations across Central Government, Government Agencies, NHS, Local & Regional Government, Transport, and Utilities.

Awards and Recognitions

					
Analyst Accolades					
	Cognizant Named a Leader in the MedTech Operations PEAK Matrix® Assessment 2023	Cognizant Named a Leader in the Everest Group Next-generation Quality Engineering Services PEAK Matrix® Assessment 2023	Cognizant recognized as a Leader in the Everest Group Data and Analytics Services PEAK Matrix® Assessment	Cognizant Named a Leader in the Everest Group Life Sciences Operations PEAK Matrix® Assessment 2023	Cognizant Named a Leader in the Everest Group Property & Casualty Insurance BPS PEAK Matrix® Assessment 2023
	Cognizant Recognized as a Leader in ISG Provider Lens™ Salesforce Ecosystem Partners 2024	Cognizant Recognized as a Leader in the 2023 ISG Provider Lens™ Oracle Cloud and Technology Ecosystem	Cognizant Recognized as a Leader in the 2023 ISG Provider Lens™ Finance and Accounting Outsourcing Services	Cognizant Recognized as a Leader in ISG Next-Gen ADM Services 2023	Cognizant Recognized in ISG Future of Work Provider Lens Services Study, 2023
	Cognizant Recognized by Avasant as a Leader in Tech-enabled Sustainability Services RadarView 2023-2024	Cognizant Recognized by Avasant as a Leader in Data Management and Advanced Analytics Services, 2023	Cognizant Named by Avasant as Leader for End-User Computing Services, 2023	Cognizant Recognized by Avasant as a Leader in Digital Workplace Services, 2023	Cognizant Recognized by Avasant as a Leader in Banking Process Transformation, 2023
	Cognizant Recognized as a Leader in the Inaugural HFS Horizons, 2024	Cognizant Recognized as a Leader in Generative Enterprise™ Services by HFS, 2024	Cognizant Recognized as a Leader in Services for the Platform Economy by HFS Research, 2023	Cognizant Recognized as Market Leader in Travel, Hospitality, and Logistics Service Providers by Analyst Firm HFS, 2023	Cognizant Recognized as a Market Leader in Automation Services by HFS Research, 2023

Our Culture & Vision

Every choice we make aligns to our vision: to become the pre-eminent technology services partner to the world's top companies. Our values form the bedrock of our culture and define how we work together to serve our stakeholders.

- Start with a point of view
- Seek data, build knowledge
- Always strive, never settle
- Work as one
- Create conditions for everyone to thrive
- Do the right thing, the right way

Next Steps and Contact Details

Please send your requirements to inquiryPSandHealth@cognizant.com

Alternatively, if you wish to discuss your requirements in more detail, please send us the following information and we will contact you:

- The name of your organization.
- Your name and contact details.
- A brief description of your business situation.
- The service that you are interested in.
- Your planned timescales for the work.



About Cognizant

Cognizant (Nasdaq-100: CTSI) engineers modern businesses. We help our clients modernize technology, reimagine processes and transform experiences so they can stay ahead in our fast changing world. Together, we're improving everyday life. See how at www.cognizant.com or [@Cognizant](https://twitter.com/Cognizant).

UK Headquarters

Cognizant Worldwide Limited

280 Bishopsgate,
London EC2M 4AG England

+44 (0)20 7297 7600

Contact: inquiryPSandHealth@cognizant.com

© Copyright 2024, Cognizant. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the express written permission from Cognizant. The information contained herein is subject to change without notice. All other trademarks mentioned herein are the property of their respective owners.

