

### HORIZONS REPORT

## Assuring the Generative Enterprise™, 2024

An assessment of quality assurance service providers, addressing the why, what, how, and so what

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A fundamental disconnect exists between the often lofty aspirations (and lip service) for quality assurance (QA) and QA functions' maturity and enterprises' willingness to invest in them. While the mature end of the market is pivoting toward quality engineering (QE) with a focus on achieving continuous testing, data-driven decision making, and crossfunctional collaboration, two-thirds of the market is stuck at a lower maturity level, often still working with a waterfall methodology.

The broader market is trapped in a technology mindset and struggles to articulate a clear vision for the progress toward QE. As with cloud-native transformation, the ultimate success is aligning technology and business objectives. Thus, the QA community should emancipate itself by focusing on business outcomes rather than getting lost in engineering jargon.

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**Tom Reuner**Executive Research Leader and Head of EMEA

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# Introduction and the HFS value chain

### Introduction

- The North Star, for most organizations, is embracing digital engineering and progressing toward cloud-native transformation. However, without putting assurance at the heart of these transformation journeys, they will unlikely progress or achieve their business objectives. Envisioning and assuring business outcomes must be central to any transformation.
- There is an enormous enthusiasm across the quality assurance community. Yet, the cross-fertilization with software engineering and delivery and broader business functions is modest. The Assuring the Generative Enterprise™, 2024 Horizons study focuses on transformation and innovation, not just functional testing and IT-centric use cases. Key aspects are transformational outcomes and assuring change agents such as automation and Al. A particular focus is being placed on how service providers are assuring emerging generative artificial intelligence (GenAl) capabilities.
- We are not seeking to assess the broad gamut of often commoditized quality assurance (QA) services. Instead, we want to learn what must be done to accelerate transformational journeys. With the same token, we urgently need insights into how we can assure the disruptive nature of GenAl capabilities.
- The report examines the capabilities of 18 service providers and pureplay consultancies offering differentiated approaches to meeting the transformation needs of clients. This research will assess how well service providers are helping their clients to envision and deliver transformation outcomes.
- Inclusion criteria: We've invited diversified providers of IT services and quality-assurance-focused providers. Participation guidelines include annual QA revenue of at least \$250 million. For specialized providers, we may make decisions based on the relevance of the quality assurance ecosystem in line with the scope of this study rather than a revenue threshold.
- We assessed and rated the transformation capabilities of these service providers across a defined series of value propositions, innovation capabilities, go-to-market strategies, and market impact.
- This report also includes detailed profiles of each service provider, outlining their placement, provider facts, and detailed strengths and opportunities.
- The report is global in scope and offers critical insights for enterprises, service providers, and ecosystem partners.

### **Executive summary**

| 1 | The leaders                                | We assessed 18 service providers across value propositions, innovation capabilities, go-to-market strategies, and market impact criteria. In alphabetical order, the leaders in Horizon 3 are Accenture, Capgemini, Cognizant, Infosys, Persistent, TCS and Wipro. These leaders' shared characteristics include blending a compelling vision of transformation QA with nuanced approaches to assure change agents such as GenAl. The wheat gets separated from the chaff when providers demonstrate assuring transformation outcomes enabled rather than depicting functional testing and an overreliance on tools and technology. The leaders are pushing the envelope on transformation with new themes such as cross-functional testing, zero-touch testing, black-box testing, and beyond. |
|---|--|---|
| 2 | Broadening the transformation scope        | Leading providers like Accenture and Wipro stand out; they clearly outline QA's evolution to quality engineering (QE). They shift the focus by depicting transformational journeys and outcomes. Yet, the reality is that more than two-thirds of the market has still not matured and is often still stuck using waterfall development methods. The broader market continues to pitch tools and technologies rather than accelerate the transformation journey. Consequently, the QA community requires a much more nuanced client segmentation. Technology centricity often aligns with a commodity mindset. Conversely, value is to be had around effectively delivering change agents and helping clients progress toward cloud-native transformation.                                      |
| 3 | QA community needs to emancipate itself    | The innovation delivered by the QA community continues to be stupendous. Yet, the community does a modest job of articulating the goals and outcomes those change agents achieve. Without snapping out of this tool- and solution-centric view of QA, it is difficult to articulate a more value-driven approach, where QA executives get the seat they crave at the table to discuss and decide the big sourcing issues. Stepping up to QE transformation and putting QE at the heart of transformation and software development is an opportunity for the community to emancipate itself from being boxed in technology.  |
| 4 | Compelling<br>transformational<br>outcomes | The outcomes tend to be equally compelling; we see compelling articulations of the transformation of the software development life cycle (SDLC), the progress toward QE, and the ultimate goal of cloud-native transformation. Yet, outside of Horizon 3, most providers are stuck in a technology-centric mindset. Compelling Horizon 3 outcomes include Accenture driving enterprise-wide transformation across six business units with more than 90% release testing automated. Cognizant drove a cloud-native transformation program that aligned DevOps with automation practices while infusing AI to achieve more predictability, resulting in a 35% reduction in policy issue cost and a 30% increase in gross written premiums.  |
| 5 | While transformative,                      | We have heard a lot about the infusion of QA offerings with GenAl but very little about assuring GenAl. In our view, this indicates the nascent state of adoption   |

assuring GenAl

nascent

capabilities is still

community needs to step up and have much clearer discussions on assuring GenAl rather than just talking about the use cases.

across the broader industry and is not just a reflection of the state of QA. Accenture, Capgemini, and Infosys stood out with well-balanced observations on

the implications and emerging use cases of GenAl. An executive from Capgemini aptly observed, "We need to show humility to the unknown." Here, the QA

# The HFS value chain for assuring the Generative Enterprise™, 2024

The focus of HFS' Assuring the Generative Enterprise™, 2024 Horizons study is on transformation and innovation, not just functional and acceptance testing. Key aspects are transformational outcomes, industry-specific solutions, and innovative use cases.

| Design   | Implement  | Manage  | Operate  | Innovate   |
|--|--|---|--|--|
| <ul> <li>QA advisory and transformation</li> <li>Performance test strategy</li> <li>Test case development</li> <li>Tool and product evaluation</li> <li>Business case development for testing services</li> <li>Global sourcing strategy</li> <li>Test automation consulting</li> <li>Industry-specific benchmarks</li> <li>Compliance and risk assessment</li> <li>Governance model and structure</li> <li>Assurance management office</li> </ul> | <ul> <li>Defect analysis</li> <li>Test environment provisioning</li> <li>Test value chain virtualization</li> <li>Packaged application testing</li> <li>Cloud testing</li> <li>Mobility testing</li> <li>Crowdsourcing testing</li> <li>Domain-specific testing</li> <li>Functional testing</li> <li>Non-functional testing</li> <li>Regression testing</li> <li>Business-process-driven testing</li> <li>Security testing</li> <li>Specialized testing</li> <li>Release and configuration management</li> <li>Accelerators</li> <li>Integration with industry frameworks</li> <li>Knowledge repository</li> </ul> | <ul> <li>Automated generation of test scenarios and test cases</li> <li>Test environment management</li> <li>Test-data management</li> <li>Upgrade support</li> <li>Helpdesk</li> <li>Ongoing integration</li> <li>Support and maintenance</li> <li>Service-level management</li> <li>Administration outsourcing</li> <li>New release and upgrade coordination</li> <li>Training and certification</li> <li>Acceptance testing</li> </ul> | <ul> <li>Testing center of excellence (TCoE) set up and management</li> <li>SSC approach and blended approaches</li> <li>Managed testing services</li> <li>Comprehensive outsourcing</li> <li>End-to-end QA ownership</li> <li>Testing as a service (TaaS) and service catalogs</li> </ul> | <ul> <li>Cloud-native testing</li> <li>Data and analytics testing</li> <li>MLOps assurance</li> <li>Test automation</li> <li>Agile, DevOps testing</li> <li>Low-code and no-code applications testing</li> <li>IoT testing</li> <li>QA for AI</li> <li>API testing</li> <li>Microservices testing</li> <li>Business resilience testing</li> <li>Customer experience validation</li> <li>Digital assurance</li> <li>Business assurance</li> </ul> |

## The HFS value chain for assuring the Generative Enterprise™ explained

HFS developed the concept of the value chain for assuring the Generative Enterprise to graphically depict our understanding of the ecosystem and transformative services. The key strategic levers for the broader QA ecosystem include:

- Supporting transformation outcomes: How do you help organizations achieve transformation outcomes such as cloud-native transformation or moving toward the Generative Enterprise? This is much broader than just technology consulting.
- Assuring change agents: How do you provide assurance for change agents such as automation, AI, and blockchain? What is your strategy for generative AI?
- **Driving innovation in QA offerings:** How are change agents such as automation, AI, and blockchain infusing your QA offerings?
- Delivering business assurance: How do you progress to and provide business assurance?

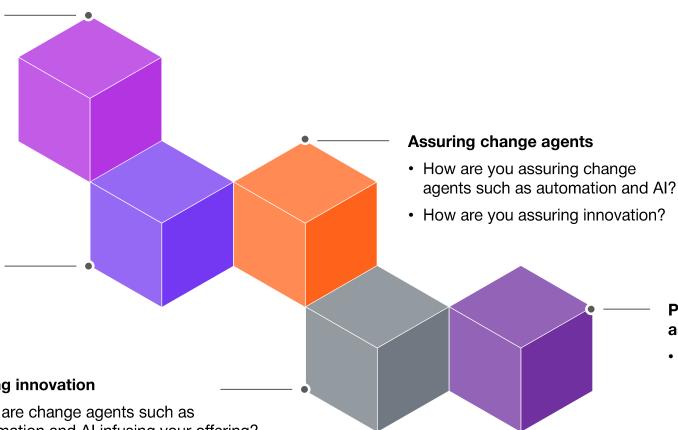
### What is the focus?

### Assuring transformation and business outcomes

- How do you help organizations capture value by transforming operations?
- Functional testing is implicit, yet the focus is on transformation.

### **Transformation outcomes**

- How are you driving QA across domains and functions?
- How are you progressing toward end-to-end assurance?



### **Proof points for business** assurance

- Can you demonstrate proof points for business assurance that support business transformation?
- We have heard much lip service but are keen on learning concrete examples.

### Offering innovation

- How are change agents such as automation and AI infusing your offering?
- How are you driving innovation?



## Research methodology

## 18 service providers covered in this report





































Note: All service providers are listed alphabetically

### Sources of data

This Horizons research report relies on myriad data sources to support our methodology and help HFS obtain a well-rounded perspective on service capabilities of the participating organizations covered in our study. Sources are as follows:



## **Briefings and information gathering**

HFS conducted detailed **briefings** with QA leadership from each vendor.

Each participant submitted a specific set of **supporting information** aligned with the assessment methodology.



### Reference checks

We conducted reference checks with **37 active clients** and **26 active partners** of the study participants via surveybased and telephonic interviews.



### **HFS Pulse**

Each year, HFS fields multiple demand-side surveys in which we include detailed vendor rating questions.

For this study, we leveraged our fresh-from-the-field HFS Pulse Study data featuring ~600 service provider ratings.



### Other data sources

**Public information** such as press releases and websites.

Ongoing interactions, briefings, virtual events, etc., with in-scope vendors and their clients and partners.

# Horizons assessment methodology—Assuring the Generative Enterprise™

This *HFS Horizons: Assuring the Generative Enterprise, 2024* research evaluates the capabilities of service providers across a range of dimensions to understand the *why, what, how, and so what* of their quality assurance offerings. Our assessment will be based on inputs from clients, partners, and employees and augmented with analyst perspectives. The following illustrates how we will assess your capabilities.

Distinguishing supplier characteristics

|                                |   |   | istinguisning supplier characte  | ensucs   |
|--------------------------------|---|---|--|--|
| Assessment dimension           | Assessment sub-dimension  | Horizon 1<br>service providers  | Horizon 2 service providers  | Horizon 3 service providers  |
| Value proposition:<br>The Why? | Strategy and roadmap  | Ability to drive functional optimization outcomes with selective QA capabilities  | <ul> <li>Horizon 1 +</li> <li>Ability to drive real business-<br/>experience-led outcomes and<br/>stakeholder experiences while</li> </ul> | <ul> <li>Horizon 2 +</li> <li>Ability to drive ecosystem synergy via<br/>collaboration across multiple<br/>organizations with common objectives</li> </ul>                             |
| (25%)                          | Clarity of vision for QA services and nature of outcomes  |   |  |  |
|                                | Differentiators—why clients work with you   |   | achieving enterprise-wide transformations  | around driving completely <b>new</b> sources of value  |
| Execution and innovation       | Breadth and depth of services across the QA value chain   | Strong implementation capabilities  | <ul> <li>Horizon 1+</li> <li>Ability to support clients on their end-</li> </ul>   | <ul> <li>Horizon 2 +</li> <li>Strategy and execution capabilities at scale</li> <li>End-to-end QA delivery, business-platform focused, domain- and industry-specific models</li> </ul> |
| capabilities: The What?        | Integration of transformation and process consulting  | <ul> <li>Deep engineering capabilities<br/>driving speed and efficiency</li> <li>Offshore-focused with strong<br/>technical skills</li> </ul> | <ul><li>to-end transformation journey</li><li>Global capabilities with strong</li></ul>  |  |
| (25%)                          | Innovative solutions (QA for automation, AI, etc.)  |   | consulting and domain expertise across the complete QA portfolio   |  |
| Go-to-market                   | What transformation outcomes are you pitching to clients?   | Robust fundamentals of QA transformation Technology and capability focus  | Horizon 1+   | Horizon 2 +  |
| strategy: The How?             | Nature of investments in your QA business (M&A, training, R&D)  |   | <ul> <li>Proven and leading-edge proprietary assets including industry-led</li> </ul>  | <ul> <li>Driving co-creation with clients and ecosystem partners</li> </ul>  |
| (25%)                          | Co-innovation and collaboration approaches with customers and partners including creative commercial models | solutions Clear articulation of the transformation outcomes enabled   | Effectively envisioning outcomes and<br>providing business assurance for<br>transformation   |  |
|                                | Assuring outcomes   |   | by QA Capability to deliver end-to-end transformation with ongoing multi- year managed services  |  |
| Market impact:                 | Scale and growth of QA business—revenue, clients, and headcount   | Referenceable and satisfied<br>clients for ability to execute<br>technology transformation  | <ul> <li>Horizon 1+</li> <li>Referenceable and satisfied clients<br/>for ability to drive business</li> </ul>                              | <ul> <li>Horizon 2 +</li> <li>Referenceable and satisfied clients<br/>driving new business models based on</li> </ul>  |
| The So What?                   | Proven outcomes showcasing transformation enabled through QA  |   |  |  |
| (25%)                          | Voice of the customer   |   | transformation   | the partnership  |



## Market dynamics

## Market dynamics (1/3)

- **Lofty aspirations:** There is a huge gap between the aspirations (and lip service) for quality assurance (QA) and QA functions' maturity and enterprises' willingness to invest in them. While the mature end of the market is pivoting toward quality engineering (QE) with a focus on achieving continuous testing, data-driven decision making, and cross-functional collaboration, two-thirds of the market is stuck at a lower maturity level, often still working with a waterfall methodology. (See slide 18 for details.)
- Top QE priorities: Four priorities jump out for us: first, carving out a budget for QE architecture modernization and transformation; second, solving the conflict of production quality versus speed to market; third, overcoming a new complexity to provide integrated assurance for apps, infrastructure, and platforms or progressing toward the OneOffice™, as HFS would put it; and fourth, driving change management to foster transformation.
- Cloud-native mandates integration of quality: As organizations progress toward becoming cloud-native, QE must become an integral and continuous part of the software development life cycle (SDLC). This is challenging the underlying methodologies such as waterfall. Organizations must find effective ways of collaboration between software engineering and QA/QE. We see an increasing workforce transformation pivoting to full-stack test engineers spanning SDLC and QE.
- Observability critical for pivoting to QE: As observability tools provide real-time insights into system performance, they find enabling the real-time monitoring of metrics like response times, throughput, and resource utilization helps maintain system performance. Furthermore, they foster collaboration and communication, thus driving continuous improvement in DevOps. By enabling proactive and predictive approaches, observability can mitigate the complexity of software development.

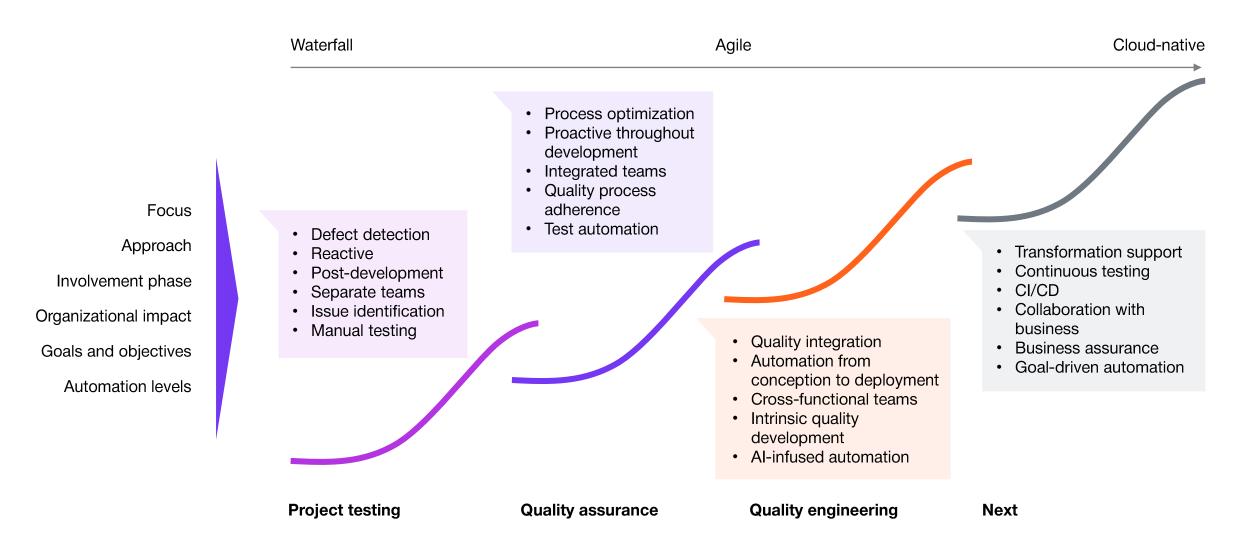
## Market dynamics (2/3)

- Shift right is starting to augment shift left: Most organizations have embraced "shift left" principles emphasizing the early and proactive involvement of quality assurance activities in software development. We are seeing mature QA functions augment this with "shift right" principles advocating quality activities at the later stages of the SDLC.
- Data testing is becoming critical for QE: Becoming cloud-native is all about integrating data, automation, and AI. Data testing is
  becoming as important as the traditional SDLC focus of QA by enabling data-driven decision making, complex data ecosystems,
  continuous delivery, and DevOps. Yet very few providers articulate this succinctly, which is a reminder that most organizations are only
  modestly mature and often look for low-hanging fruit.
- Clients are often immature in defining non-functional requirements: Not just confined to GenAl, customers struggle to define the requirements to manage innovation and transformation. Many lessons can be gleaned from the discussions on cloud-native transformation. Without help to better understand the future state and new operating models, clients' transformation journeys are likely to stall or even fail.
- There is much noise but little assurance on GenAl: While many providers hype use cases around domain knowledge and code creation, grown-up discussions about how to assure GenAl are sparse. As such, Cognizant's Artificial Intelligent Lifecycle Assurance (AILA) and Infosys' Al Assurance Platform are more exceptions than rules. This provides indicators for the enterprise adoption of GenAl. We are still at the very beginning of enterprise adoption. The core value proposition is having a higher accuracy with less data. Thus, providers can drive new levels of automation to generate test scenarios and test cases.

## Market dynamics (3/3)

- Governance on GenAl is still nascent: Where we had honest discussions on GenAl, providers reflected that large language models (LLMs) are largely unknown entities. Thus, the predominant way to engage is through experimentation. Progressing to robust business outcomes requires significant work training the system. It is critical to manage the instructions in prompts to provide quality outputs. Here, the levers for business assurance cut. Best practices point to chains of prompts to assure quality from LLMs. The art form is to split the tasks into "atomic" prompts. But we also heard the contrarian view that providers predominantly rely on hyperscalers to govern GenAl.
- North Star (autonomous) persona-based testing: Like cloud-native operations are shifting toward persona-based solutions, QE is shifting toward persona-based testing, requiring capabilities to better support specific stakeholders such as product teams, site reliability engineering (SRE), DevOps engineers, and beyond. But to be clear, this is the North Star, and only a few organizations have it on their roadmap. Specific to GenAl, the key is blending prompt engineering with specific persona scenarios. Using prompts to generate automation scripts such as Selenium can significantly enhance the scale of automation. Lastly, using the input from one prompt to generate another prompt can leverage GenAl to industrialize offerings.
- Talent requirements and development remain largely unaddressed: Cultural change management and talent reskilling are mandatory to address the fundamental changes in the industry. Yet, the provider space remains stuck in evangelizing tools and technology. Successful transformations are about aligning technology and business objectives. We encourage providers to pay more attention to it.

## Aligning with clients' quality assurance maturity



## Outcomes from quality engineering transformation



**Brand assurance:** Monitor and correlate process, structural, and product quality



Testing as a culture or practice: Process modernization through test-driven or behavior-driven development (TDD and BDD), true CI/CD



Persona-based testing: Just like cloud-native operations are shifting toward persona-based solutions, QE is shifting toward persona-based testing



Life cycle quality intelligence: Organize, analyze, and visualize the fundamental data from across the quality life cycle, with a strong linkage to observability



Agile adoption: Scaling the number of Agile initiatives supported by QE



Zero-touch automation: Scaling the number of applications with close to 100% zero-touch automation implemented

## GenAl use cases for quality assurance

### **Generative**

- Prompt templates
- Developer assistance and pair programming
- Fine-tuned LLM on QA data
- Requirement analysis and coverage
- Generate test scenarios
- · Generate test cases
- Test-data masking and anonymization
- · Generate synthetic data
- Generate automation scripts
- Architecture conceptualization and validation
- · Stability Al for visual designs
- · Test environment configuration and setup
- Infrastructure-as-code (IaC) script generation using GitHub, Copilot, Azure, and OpenAl APIs
- Chaos engineering scripts for validating production infrastructure
- · Smart object identification
- Auto self-healing



### **Synthesis**

- Coverage analysis
- · Execution report analysis
- · Performance dashboard analysis
- Gather user stories and requirements
- Insights from legacy code
- Workload modeling from logs
- · Mining Agile team communication
- Test-data masking and anonymization
- Automated defect triaging and dynamic test results aggregation for parallel tests across multi-devices.

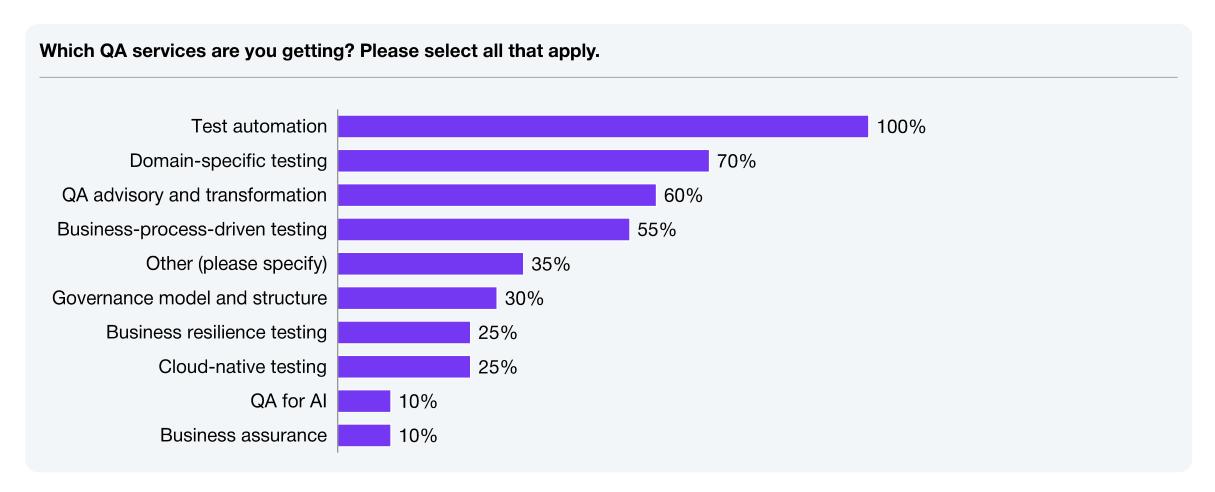


### **Predictive and diagnostic**

- Model outcome testing
- Dataset testing
- Code quality analysis
- Script failure analysis
- Defect root cause prediction
- Performance prediction

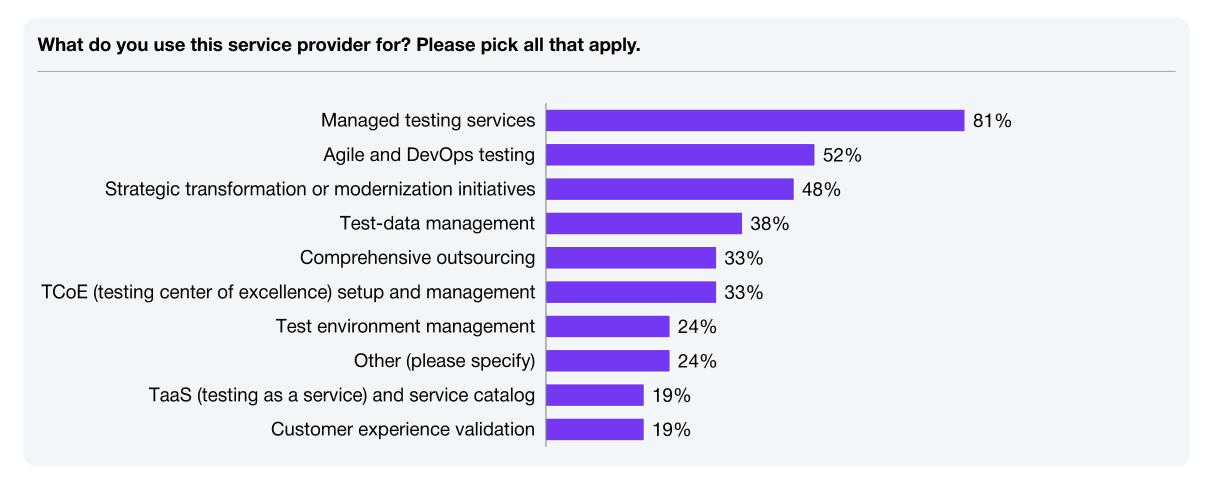


## Test automation drives quality assurance transformation



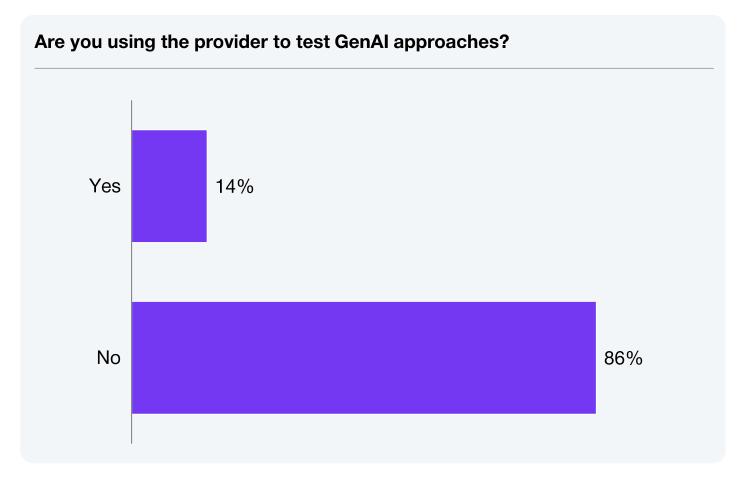
Sample: 26 QA client reference respondents

# Managed testing services are top of mind for most organizations



Sample: 26 QA client reference respondents

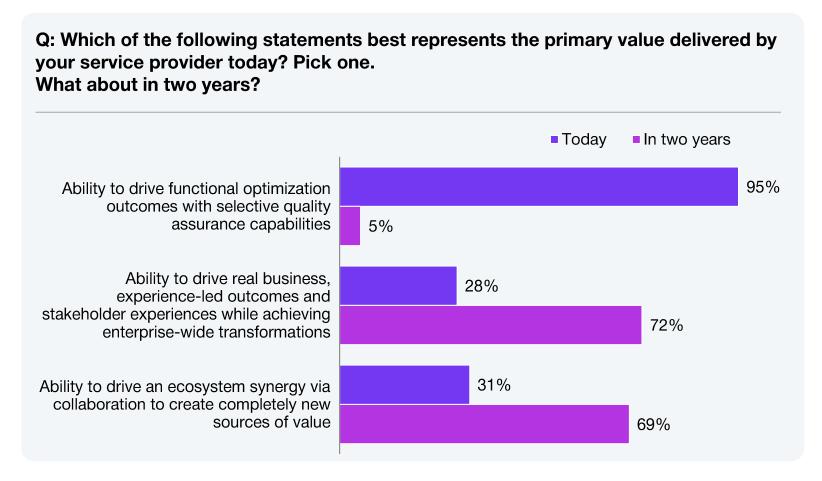
# GenAI captures the imagination, but assuring it is still largely elusive



GenAl assurance is still nascent. Firms are still formulating their approaches, exercising caution with concerns about intellectual property rights.

Sample: 26 QA client reference respondents

# The focus will broaden from functional optimization to business transformation and collaborative value creation in the next two years



This data underlines the moderate maturity in QA, as most organizations focus on functional outcomes.

Yet, the same organizations are stating their intent to transform, achieve business outcomes, and create new sources of value with an ecosystem mindset.

Sample: 26 QA client reference respondents



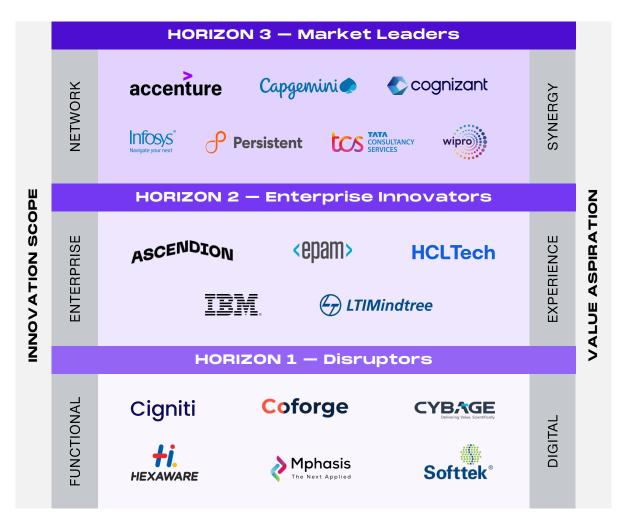
## Horizons results: Assuring the Generative Enterprise™, 2024

# HFS Horizons: Summary of providers assessed in this report

| Providers | HFS point of view   |
|-----------|---|
| Accenture | Transforming the entire software delivery process with QA at the core   |
| Ascendion | Healthcare and life sciences focused with an automation-first mindset   |
| Capgemini | Harnessing its differentiation around product engineering and operational technology while driving an Al-first strategy |
| Cigniti   | Embedding AI and automation to deliver QA services for change agents  |
| Coforge   | Pushing an automation-first mindset   |
| Cognizant | Combining co-innovation with deep domain expertise to transform through QA  |
| Cybage    | Blending customer-first vision with continuous software delivery  |
| EPAM      | Leveraging its DNA in digital engineering to transform software delivery life cycle                                     |
| HCL       | Pushing the innovation envelope to embed quality as part of business strategy   |

| Providers   | HFS point of view  |
|-------------|--|
| Hexaware    | A platform-led approach to quality assurance combined with deep automation expertise   |
| IBM         | Driving a holistic approach to disrupt the quality assurance market                    |
| Infosys     | Enabling business assurance with QA  |
| LTIMindtree | Delivering advisory-led QA services with ambitious growth plans                        |
| Mphasis     | Strong domain expertise in BFSI with zero QA as North Star                             |
| Persistent  | Pivoting to cloud-native transformation with strong GenAl chops                        |
| Softtek     | Delivering highly complex QA engagements with nearshore chops                          |
| TCS         | Infusing emerging technologies and embedding QA at the core of transformation          |
| Wipro       | Compelling narratives for QE transformation while progressing to persona-based quality |

### HFS Horizons for assuring the Generative Enterprise™



Note: All service providers within a Horizon are listed alphabetically. Source: HFS Research, 2024

#### Synergy is Horizon 3

#### Horizon 3 service providers demonstrate

- Horizon 2 +
- The ability to drive an ecosystem synergy via collaboration to create completely new sources of value
- · Compelling thought leadership that helps clients articulate their North Star
- Effectively envisioning outcomes and providing business assurance for transformation enabled by QA
- · End-to-end QA delivery, business platform focused, domain and industry-specific models
- Driving co-creation with clients as ecosystem partners
- Referenceable and satisfied clients driving new business models with the partnership

#### **Experience** is Horizon 2

#### Horizon 2 service providers demonstrate

- Horizon 1 +
- The ability to drive real business, experience-led outcomes and stakeholder experiences while achieving enterprise-wide transformations
- Clear articulation of the transformation outcomes enabled by QA
- Global capabilities with strong consulting and domain expertise across the complete QA portfolio
- · Capability to deliver end-to-end transformation with ongoing multi-year managed services
- Proven and leading-edge proprietary assets including industry-led solutions
- Referenceable and satisfied clients for ability to blend technology and business objectives

### **Optimization of outcomes is Horizon 1**

### Horizon 1 service providers demonstrate

- The ability to drive functional optimization outcomes with selective QA capabilities
- Deep engineering capabilities driving speed and efficiency
- Strong technology and managed services partners
- Offshore-focused with strong technical skills
- Robust fundamentals of innovation and transformation enabled by QA
- Referenceable and satisfied clients for ability to execute technology transformation



## Wipro profile: Assuring the Generative Enterprise™, 2024

# Wipro: Compelling narratives for QE transformation while progressing to persona-based quality

#### HORIZON 3 — Market Leader



HORIZON 2 — Enterprise Innovator

HORIZON 1 — Disruptor

### Strengths

- Value proposition: Wipro leads with nuanced narratives of QA pivoting to QE, evolving from solutions to platforms to ecosystems. The broader intent is to progress to autonomous, persona-based quality.
- Assuring change agents: Wipro has expertise and a handful of IP targeted at assuring change agents, such as Wipro Blockchain Validation. It invests around 7% of its annual QA revenue into innovation to ensure it continues to support clients with the latest and greatest technologies. It has solid GenAl chops with test case generation for regulatory compliance cases and is building a GenAl ecosystem platform for banking clients.
- Outcomes: An ERP migration for a US energy corporation led to a 40% reduction in operational cost estimation due to optimized functional support in regression testing activities.
- Understanding the business need: One of Wipro's partners told us that the provider looks beyond delivering functional testing to genuinely understand business needs, which allows Wipro to enable business assurance for its clients through QA.
- **Collaborative approach:** Wipro's clients told us the provider is flexible, dedicated, and collaborative throughout its engagements, with a tight focus on results-based outcomes. This, combined with strong business-assurance capabilities, resonates with clients.

### Development opportunities

- What we'd like to see more of: While Wipro conveys a strong vision for the evolution of QE, we encourage depicting the transformational outcomes more effectively. Clients need more guidance on best practices and outcomes.
- What we'd like to see less of: Move beyond capabilities and double-click on outcomes and cultural change. Mature clients are starting to bring digital engineering and QE together, yet success is more about cultural and organizational change.
- **Bringing expertise to engagements:** One of Wipro's clients told us the provider should bring its experience and best practices to engagements, even if they go beyond the QA scope.
- Expanding into existing accounts: One of Wipro's partners told us the provider should mine existing accounts with partners and explore new opportunities for joint QA growth.

#### Relevant M&A and partnerships

### M&A (2020-2023)

- Ampion: QE services in Australia (2021)
- Capco: Business consulting, next-gen tech integrated with QE (2021)
- CAS: Telecom consulting integrated with QE (2022)
- Rizing: SAP consulting and transformation (2022)

### **Partnerships**

- Wipro ventures:
- **Tricentis**: E2E continuous testing platform
- Functionize: Al-powered test design and self-healing
- HeadSpin: Al-powered digital experience platform
- Sealights: Al-powered quality intelligence platform

**Strategic partnerships:** EggPlant, Broadcom, Katalon, AppDynamics, Dynatrace

#### **Key clients**

### Number of clients: 600 Key clients

- A leading UK multinational bank
- Major APAC government transport agency
- Leading global energy corporation
- Leading North American logistics provider
- Leading North American airport authority
- Multinational off-price department store
- Leading European telecom operator
- Leading African bank
- Leading ASEAN telecom operator

### Global operations and resources

### Headcount: 30,000 Delivery and innovation locations

- Main hubs in India
- Delivery centers in the US, Brazil, and Europe
- Nearshore centers in Singapore, Mexico, and Manila
- Integrated services through 40+ cloud studios, digital pods, hyperscaler studios (AWS Launchpad, Google Innovation Arenas, etc.), and innovation centers

### Flagship internal IP

- Intelliassure: Intelligent quality platform for infusing AI into every quality activity across the SDLC. It has two variants: Virtual Automation Engineer (VAE), powered by traditional AI; and Rapid, powered by Gen AI; LLM agnostic
- Quality as a Service: A digital platform for consuming productized QA offerings through an outcome-based, pay-as-you-go model for exploratory, automation, performance, security, and AI model testing
- Cloud Studio: Integrated workbench of 1,000+ standard blueprints and 40+ industry solutions, with QE integrated into the overall strategy



## HFS Research authors

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Tom Reuner is an Executive Research Leader and Head of EMEA at HFS. Tom is responsible for managing the HFS IT Services practice with coverage areas including cloud-native, application modernization, and quality assurance. Furthermore, Tom covers the emerging ecosystems of ServiceNow, Salesforce, and Pega. Leveraging his long entrenchment in the automation community, Tom drives HFS' thought leadership on automation. A central theme of his research is the orchestration and increasing interdependency of approaches such as RPA, AlOps, Observability, and Al. He is also managing the Top 10/Horizons program to ascertain consistency and thought-leadership.

Prior to HFS, Tom worked as Head of Strategy at Arago. His deep understanding of the market dynamics comes from having held senior positions at analyst firms including Gartner, IDC, and Ovum where his responsibilities ranged from research and consulting to business development.



Sam Duncan
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Sam Duncan is a Practice Leader at HFS, based in Cambridge, UK. He graduated from Bournemouth University with a degree in economics. His interest in macroeconomics focuses on how the evolution of technology accelerated globalization. He also studied law, accounting, and investment management during his education.

Since joining HFS, Sam has developed his understanding of blockchain and continues exploring the latest applications of the technology across various industries. He applies his economics background to keep up with the latest banking and financial services industry trends and has a keen interest in insurance. He regularly contributes to the HFS Market Index, a quarterly report breaking down the performance and key events of the leading service providers throughout the previous quarter.



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Mayank is an Associate Practice Leader at HFS Research, with a horizontal focus on IoT, Industry 4.0, and Sustainability. He also works with practice leads focused on Industry verticals (mainly across Healthcare and Life science). He is a certified Sustainability and Climate Risk (SCR) professional from the Global Association of Risk Professionals (GARP).

He holds a certificate in Strategic Management from IIM Kashipur. Mayank holds a Master's in Business Administration from Birla Institute of Technology and Science College, Pilani (BITS, Pilani University) and a Bachelor's in Engineering in Electrical and Electronics from Jawaharlal Nehru National College of Engineering (Visvesvaraya Technological University), Karnataka.

## **HFS**

### **About HFS**

- INNOVATIVE
- INTREPID
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