Buyers of application testing services can use this Magic Quadrant to identify service providers offering a broad range of application testing services — from advisory and implementation, through to managed services for numerous quality products and tools.

Market Definition/Description

This Magic Quadrant evaluates service providers for application testing. Buyers of application testing services can use this Magic Quadrant to identify service providers that fit their needs and that deliver a broad range of testing services.

"Application testing services" is a comprehensive term used to capture all types of verification and validation services for the purposes of supporting clients’ applications quality control and quality assurance (QA). Verification assesses the technical behavior, and validation assesses the functional behavior of tested elements. The following service categories were considered for the purpose of this Magic Quadrant:

- **Design:** advisory consulting services — A range of consultative services focusing on the overall testing strategy, business process testing and the technical site testing

- **Build:** deployment or IT consulting services — Services that define and execute tests to verify predefined test objectives for predetermined test objects (units) in controlled test environments, according to predefined test scenarios that reflect theoretical or operational situations for the predetermined test objects

- **Operate:** management services — Services, including managed testing, hosting and testing process management

*This Magic Quadrant does not review infrastructure testing services, mobile device testing, crowdsourcing testing or software product testing.*

The application testing service market, with a copious number of providers, is fast-growing. Full IT services providers and dedicated, pure-play application testing providers coexist in this market in which Gartner is aware of about 300 companies. This Magic Quadrant assesses 16 of the leading
application service providers based on specified inclusion criteria (see the Inclusion and Exclusion Criteria section).

We review each provider’s strengths and cautions; each provider may be more suitable for some types of engagements and some clients/industries than others. Many capable providers, not included in this study because of our inclusion criteria and methodology, may be a better fit for specific application testing service engagements, depending on the size of the project, geography, industry and other factors. Clients are advised to talk to a Gartner analyst to narrow down a shortlist of best-fit service providers.

In this Magic Quadrant, we evaluate application testing service providers that meet the following criteria:

- Service providers are expected to deliver application testing services from at least two stages of the life cycle of an application: determine strategy, determine process, identify needs, design solution, build solution, implement solution and operate solution.
- Service providers are required to offer services on-site, in addition to a global delivery model.
- Service providers must have demonstrated capability to consistently invest in methodology, frameworks, automation and internal processes, as well as invest in resource development.
- Service providers must have dedicated testing resources.
- Service providers (pure-play and full-service providers) must have regional-based testing delivery capabilities in at least two worldwide regions.
Magic Quadrant

Figure 1. Magic Quadrant for Application Testing Service Providers, Worldwide

Source: Gartner (November 2014)
Vendor Strengths and Cautions

Accenture

Accenture is positioned in the Leaders quadrant. The global full-service provider offers application testing services to more than 120 countries through its application testing practice. Accenture employs approximately 22,000 dedicated application testing resources, with an estimated 86% working from its global delivery centers. Gartner estimates the testing practice contributed approximately 6% to Accenture’s global total revenue in 2013, with year-over-year growth of 4% in 2013.

Accenture works with clients in many industries, but it has the strongest focus on communications, financial services, healthcare, high tech and public sector in its application testing service business.

Accenture works primarily with large clients with more than 10,000 employees, but it also has some clients in the 2,500- to 10,000-employee segment.

Accenture is a good fit for large clients that need testing services for complex industry-specific processes, as well as coverage across multiple regions.

Strengths

- **Scale and scope**: Accenture has scale and scope to support large global accounts with established local presence across most geographies. Accenture supplements local resources in deals with a strong, industrialized global delivery model that incorporates multiple centers across the world.

- **Vertical capability**: Accenture has a strong vertical approach that is also adopted in its testing practice. The business and domain expertise that Accenture possesses means a more holistic approach to engagements. This industry approach, combined with a platform approach with, for example, Oracle and SAP, provides a good foundation for the testing practice.

- **Quality of resources**: Accenture’s reference clients praised the resources provided by Accenture, highlighting their knowledge transfer and management capabilities, the desire to "go the extra mile" for the client, and the quality and professionalism of the consultants, as well as their understanding of the client’s industry.

Cautions

- **Automation**: Although Accenture offers automation and tools to industrialize the testing process, Accenture is not as prominent in this area as other competitors. The process is more manual with the input of tools and automation, and it is not fully automated in testing.

- **Stand-alone engagements**: Accenture provides independent application testing to its clients that typically also leverage Accenture for its breadth of other capabilities. Accenture performs best where it can fully utilize its other units and practices to achieve value for the client. Thus, clients looking for only testing services or smaller engagements would not be the best fit.
Software partnership and innovation: Accenture's reference clients would like to see the provider improve its software tool package expertise and partnership with testing tool vendors, as well as improve its ongoing innovation during the engagements.

Atos

Atos is positioned in the Niche Players quadrant. Atos offers application testing services through its application testing practice that was revamped through the Siemens IT Solutions and Services (SIS) merger, adding further competence to the unit and making it more of a strategic focus for Atos. The testing practice contributed 5.8% to Atos’ global total revenue in 2013, with year-over-year growth of 4.3%. The Atos testing practice has approximately 6,900 dedicated resources, of whom 34% are based in global delivery centers.

Atos' primary source of revenue within application testing services originates from the following verticals: telecommunications, manufacturing, consumer goods, oil and gas, chemicals, process and resource, utilities and energy, and banking, although the provider also has business in other verticals.

Atos works primarily with clients in the 2,500- to 10,000-employee range, but it also provides testing services for clients in the 1,000- to 2,500-employee range, as well as clients with more than 10,000 employees. Atos' deal size ranges from less than $1 million in total contract value (TCV) to more than $20 million in TCV (although outside of Europe, the maximum deal size is $15 million in TCV).

Atos is a good fit for Europe-based clients that need strong local support, as well as for clients that seek support around new technology testing or that work with high security demands.

Strengths

- **Security:** Atos has historically looked after defense and intelligence organizations that have a strong need for security — "testing in extremes." Its handling of security, data integrity and compliance requirements — under extreme security rigor — with defense and intelligence organizations has set it up well for any similar client issues.

- **Technical competence:** Atos' substantial technical competency foundation — supported by its scientific community and investment in testing labs — helps it to focus on specific areas of innovation, such as mobile. The Atos Shared Service Center has tools from all major providers that are leveraged by Atos professionals as well as Atos' clients to optimize testing. Canopy (a joint venture with Atos, EMC and VMware) is an example in which Atos has increased its digital focus through its investment in cloud.

- **European focus:** Atos is a strong brand across Europe, especially in the key markets of France, the U.K., Benelux and Germany. About 80% of its revenue is generated out of EMEA, and Atos has built strong relationships with many European clients. It thoroughly understands the various local nuances and differences in culture and business culture, as well as has local industry knowledge and local language capabilities.
Cautions

- **Integrated approach:** Atos is focusing strongly on making testing a strategic offering, and it is moving aggressively to redefine offerings and create an integrated, global approach. Atos does not yet consistently approach testing engagements from an end-to-end perspective, and it does not have the consistent execution across clients and regions that some other providers demonstrate.

- **Global footprint:** Atos is strong in Europe, but it has a weaker footprint in regions such as North America, Asia/Pacific, the Middle East and the Nordics. Atos continues to focus on growth from testing services in these other regions and is investing in these areas.

- **Client satisfaction:** Many of Atos’ client references gave Atos mixed scores relative to other providers with regard to value for money, overall customer satisfaction, ability to provide a vision for the testing engagement and innovation provided on the engagement.

Capgemini Group

Capgemini Group is positioned in the Leaders quadrant. The provider offers application testing services through its approximately 12,000 dedicated testing resources. Capgemini Group is present in 40 countries, but it is strongest in Europe, with 64% of testing revenue originating in EMEA, 25% in North America, and the rest in Asia/Pacific and Latin America. About 55% of its testing resources are located within global delivery centers. The practice contributed 6.9% to Capgemini Group’s global total revenue in 2013 and grew 7.6% from 2012 to 2013.

Capgemini Group has the most business in application testing services in the following industries: banking, insurance, communications, other financial services and public sector.

Capgemini Group works primarily with large clients in the 2,500- to more-than-10,000-employee range, but it also provides testing services for clients with 1,000 to 2,500 employees. Capgemini Group covers all deal sizes, from less than $1 million in TCV to more than $20 million.

Capgemini Group is a good fit for Europe-based clients looking for the combination of offshore delivery, local coverage and global reach, as well as for clients looking for managed testing services and quality transformation abilities.

Strengths

- **Local delivery:** Sogeti, a wholly owned subsidiary of Capgemini S.A., is a strong backbone to the testing practice. Sogeti has a dedicated testing service unit, which provides local professional testing services with onshore customer closeness. Clients find the combination of local presence provided by Sogeti and global testing centers to be effective.

- **Outcome-based models:** Capgemini Group has demonstrated the ability to assist clients with the transition and implementation of outcome-based managed services, as well as a willingness to use risk and reward models with clients.
Client references: Clients praised Capgemini Group’s partnership approach on projects and its professional and high-quality resources, as well as its knowledge transfer abilities. Clients also believed the service was a good value for money.

Cautions

Global delivery execution: Capgemini Group can offer delivery from its offshore and nearshore centers. However, increased standardization of its delivery model is still required. Some client references scored the company below average on quality of offshore delivery, and some clients did not believe the global delivery model was optimally utilized.

Testing strategy and consulting: Some of Capgemini Group’s client references believe the provider should place more emphasis on the business value of testing, and it should invest more time in the first phases of the testing strategy to clearly understand customer situations and how to best provide services. Some of its client references cited that Capgemini Group did not invest in the time upfront to establish what the client was looking for, as well as that it lacked innovation and proactive advice.

Geographic coverage and costs: Capgemini Group is focused heavily on the European market and secondarily on the North American market, with minimal coverage to other regions. Some of Capgemini Group’s reference clients scored it below average on geographical capabilities, as well as cited above-average cost for projects.

CGI

CGI is positioned in the Challengers quadrant. CGI is present in 40 countries, and the practice is estimated to represent 16% of CGI’s global total revenue. CGI has its primary testing assets in North America, where approximately 33% of its revenue is generated, as well as in EMEA (through the Logica acquisition), where slightly more than half of its revenue is generated. Approximately 5,000 dedicated application testing resources work in the practice, with more than 45% based in its global delivery centers.

CGI’s primary focus in application testing services lies within the sectors of financial services, communications, public sector, healthcare and energy.

CGI works primarily with large clients with more than 10,000 employees, but it provides testing services for clients of all sizes. CGI covers all deal sizes, although most of the deals are less than $5 million in TCV.

CGI is a good fit for Europe- or North America-based clients looking for a blended delivery model and domain expertise, as well as looking to build a long-term relationship with the provider.

Strengths

Testing automation: CGI has developed an industrialized approach to automation with its Automated Test Services Management (ATSM) model that is innovative. ATSM is part of a set of tools and accelerators that CGI has invested in to improve delivery to clients.
- **Global testing delivery center footprint:** CGI has 25 global delivery centers that provide a variety of on-site, onshore/nearshore and offshore options for a tailored client approach. CGI has a network of low-cost onshore delivery centers in Europe and North America, as well as centers with an industry or technical specialization in locations such as Germany, the U.K., the U.S., Canada and Sweden.

- **Testing team expertise:** Clients gave CGI strong scores for its technical, industry and functional expertise on the projects. Clients also cited CGI's very capable and professional consultants, as well as the consultants' ability to fit in well with the team, as strengths.

**Cautions**

- **Globally integrated delivery:** CGI’s focus is on local country markets instead of on regional markets or global structures, and this lack of a globally integrated delivery model means the provider is not fully able to leverage the testing practice on a global scale. There is insufficient evidence of deals spanning across regions within a standardized global approach. CGI added much-needed scale to its testing practice with the acquisition of Logica in 2012, which brought, for example, new testing methodologies. But CGI still has some work to do in terms of fully integrating businesses. Also, although CGI possesses good-quality intellectual property (IP), it is not consistently used across countries, and therefore, this inconsistency does not allow for a true global approach.

- **Limited global presence:** CGI has more-limited presence outside its core markets of North America and Western Europe.

- **Project management and contracting:** Some of CGI’s client references tell Gartner that their projects went over the budget and that some projects were also late. Some clients also requested the provider to be more transparent and clear in the contracting practice before the start of the project.

**Cognizant**

Cognizant is positioned in the Leaders quadrant. Cognizant, with its India-centric delivery model, offers application testing services through its Quality Engineering and Assurance practice. Gartner estimates the practice contributed about 19% to Cognizant’s global revenue in 2013, with about 20% growth year over year in 2013. Approximately 28,000 dedicated resources work in the testing practice, with 78% based in global delivery centers.

Although Cognizant supports several industries, it is focused primarily on banking and insurance, high tech, healthcare and life sciences, communications, and retail in its application testing service business.

Cognizant is a good fit for large clients, particularly in the U.S. and U.K. markets and with a growing focus on Asia/Pacific and continental Europe, looking for a provider with the ability to offer global transformation and managed services for testing.
Strengths

- **IP-based solutions:** Cognizant has created an in-house innovation ecosystem — Thought Exchange — which acts as an incubator for new IP-based solutions. "QAHub" is Cognizant’s suite of software development life cycle (SDLC)-aligned QA products that include ADPART (test design automation solution), mint (integrated mobility testing) and fastest (on-demand test services).

- **Global centers of excellence (COEs):** Cognizant organizes its specialized areas into COEs that enable it to develop offerings in, for example, mobile testing, big data and analytics, and test data management.

- **Partnership and teaming:** Cognizant’s client references appreciated the partnership approach taken by the provider in engagements, with good scores for quality and professionalism of the consultants involved, as well as for the ease and ability of the consultants to get along with the clients' staff and fit into the team.

Cautions

- **Regional coverage:** Cognizant is strong in North America (which accounts for the larger proportion of its revenue, estimated at three-fourths), and parts of Europe (where an estimated one-fifth of its revenue is generated, and it has more-limited coverage outside the U.K.). Cognizant also has limited local resources and support outside of these regions. Some client references mention that Cognizant has strong offshore resources, but that it has less ability to provide the same support locally.

- **Outcome-based pricing:** Some of Cognizant’s clients believed that increased adoption of outcome- or output-based pricing models would improve the provider’s ability to make a bigger impact on the value proposition.

- **Vision and industrialization:** Some of Cognizant’s client references would have liked the provider to offer more vision on the project, as well as to increase its ability to support clients not only from the beginning of the project, but also from the test phase. Some clients also requested Cognizant provide consultants with more agile skills and capabilities to meet market demand.

**CSC**

CSC is positioned in the Visionaries quadrant. The acquisition of AppLabs in 2011 enhanced the provider’s application testing capabilities in its independent testing service unit, which now includes approximately 9,000 dedicated resources. Gartner estimates the application testing service practice contributed 8% to CSC’s global total revenue in 2013. CSC has local coverage in multiple locations across the world, with an estimated 60% of its resources working from global delivery centers.

CSC’s primary industries of focus in application testing services include healthcare, insurance, banking, high tech, public services, manufacturing, transportation and retail.
CSC provides testing services for clients of all sizes and covers all deal sizes.

CSC is a good fit for clients with global requirements and large projects, as well as for clients looking for a partner to transform their testing unit on a big scale. CSC can also work with local requirements and with small and midsize projects.

**Strengths**

- **Vertical focus:** CSC recently restructured its global organization, resulting in increased vertical focus. This focus is also evident in its application testing practice, in which it has invested in industry-specific tools, accelerators and reusable test scripts for individual industries it targets, and it uses its understanding and experience in these industries. For instance, CSC has developed reusable test scripts to capture certain industry standards in healthcare.

- **End-to-end approach:** CSC has a strong vision for how its testing offerings should support clients through the SDLC. The provider’s view on how the applications will fit into the service-enabled enterprise underpins its message to clients, making it part of CSC’s core message on how enterprises will transform and how testing is a key part of this transformation. CSC is also able to apply end-to-end business process automation to testing.

- **Collaboration and flexibility:** CSC’s client references praised CSC’s consultants for their ability to fit effortlessly into the clients’ team, the quality of their technical expertise, their flexibility and strong engagement. Clients also cited the strong breadth of application testing services provided by CSC.

**Cautions**

- **Proactiveness in engagements:** Although CSC has a strong vision for how its testing offerings should support that vision, it is not always executed on. Despite the strong investment in tools, resources, along with the approach to view quality as a value proposition, there is insufficient evidence of engagements in which CSC takes a leadership role in improving testing for clients.

- **On time and on budget:** Some of CSC’s clients gave the provider below-average scores for the value for money in the services it provided. There were also some problems with delivering on time, on budget and to scope, which became evident in the analysis of the references’ responses.

- **Innovation and improvement:** Some of CSC’s clients were not completely satisfied with CSC’s continuous improvement and innovation in engagements.

**Deloitte**

Deloitte is positioned in the Visionaries quadrant. This is a global professional services company that provides audit, tax, consulting and financial advisory services. Deloitte’s testing practice offers application testing services globally, with a focus on Europe and North America, in particular. Gartner estimates that the testing practice contributes less than 5% to Deloitte’s global total revenue, and the practice grew 20.8% year over year in 2013. Approximately 9,000 resources are dedicated to the practice, with 43% based in its global delivery centers.
Deloitte has expertise in multiple vertical sectors, although the strongest industries for Deloitte in application testing services are financial services, public sector, healthcare, manufacturing and communications.

Deloitte works primarily with clients with more than 2,500 employees, but it also provides testing services for clients from 1,000 employees. Deloitte covers all deal sizes.

Deloitte is a good fit for clients looking for a business partner with a consultative approach and for clients with a demand for strategic advisory services.

**Strengths**

- **Industry approach:** Deloitte has industry experience and understanding, both of which enable it to approach projects in its industries of focus in a more comprehensive way. Deloitte practices a risk-based testing approach, in which experts in industry and testing practices are utilized on projects to discover the right overall strategy, focusing on testing the right things. This approach is emphasized by the industry-specific preconfigured solutions and accelerators it has developed.

- **Multidisciplinary approach:** Deloitte's multidisciplinary approach brings in experts from other units, such as risk, security and privacy practices, to ensure all the right controls are in place to protect data and systems. For instance, Deloitte can bring in regulatory competencies through its audit practice for assistance on anti-money-laundering regulations for banks.

- **Vision and quality of execution:** Deloitte had very good client references overall. Clients gave the provider particularly high scores for its application testing service vision and the overall thought leadership on projects. It also had one of the highest scores in terms of several clients stating they would rehire it for a similar application testing service engagement.

**Cautions**

- **Breadth of services:** Deloitte, compared with other vendors in this Magic Quadrant, has a narrower breadth of offerings in the testing support and managed service space. The primary focus has traditionally been on the advisory work. Although Deloitte has increased its investment in the "run" part of the work, the services are still maturing.

- **Global delivery:** Deloitte utilizes a global delivery model; however, the model is not as industrialized and scalable as needed to fully support some testing clients. Some clients perceive that Deloitte's costs are higher than that of its competitors.

- **Test automation and industrialization:** Some of Deloitte's clients reported they sometimes requested higher levels of automation on their projects and more focus on technical aspects of testing.
HP

HP is positioned in the Challengers quadrant. HP has an application testing practice — HP Testing and Quality Assurance Services. HP works almost entirely with its own tools, and it holds 48.2% of the testing tool market in application development in 2013. Gartner estimates that HP's testing practice contributed approximately 4.8% to the global total revenue of the HP Enterprise Services and grew an estimated 8% year over year in 2013. HP employs approximately 7,000 dedicated resources in its testing service practice, with 63% based in its global delivery centers.

HP focuses on the following industries where it can provide expertise to clients in application testing services: healthcare, public sector, communications, media and entertainment, and transportation.

HP covers deal sizes primarily below $1 million, as well as deals between $1 million and $3 million, although in EMEA, it covers deals at more than $20 million in TCV.

HP is a good fit for clients looking for deep technical knowledge, techniques and tools for the HP quality product suite.

Strengths

- **Product knowledge:** HP's application testing service division collaborates with HP Software, and the service division has access to market-leading testing tools. HP can also bring in benefits from the company as a whole with test environment capability from HP Information Technology Outsourcing and security testing capability from HP Enterprise Security Services.

- **Testing as a service (TaaS):** HP has developed a TaaS offering that packages HP's managed testing services into a pay-as-you-go model. There are TaaS packages for functional, performance, mobile and security testing. TaaS is priced in test units (individual units of source code), although there is some tailoring or solutioning of these services to each client.

- **Integration of technology, industry and functional skills:** HP's clients were generally pleased with the service they received from HP, highlighting in particular expertise in new technology areas, as well as functional and industry expertise. Clients also pointed out the benefit of HP's software package expertise and its testing methodologies and frameworks.

Cautions

- **HP technology-centric:** HP works primarily with its own brand of testing products, which means clients needing an independent view or support for other products must consider the implications of working with HP.

- **Vertical markets:** HP has more delivery experience in selected vertical markets, although it sells to all industries. However, it has not invested strongly in specific reusable vertical assets and tools but, rather, uses its knowledge of the vertical sector as a whole to approach the client engagement.

- **Cost and quality:** HP scored the lowest in the areas of total cost of contracted services and quality of offshore delivery. Clients scored it below average in both these areas.
IBM

IBM is positioned in the Leaders quadrant. IBM offers application testing services through its approximately 20,000 dedicated resources. Gartner estimates the testing practice contributed 10% to IBM’s global total revenue in 2013 and that it grew 7% year over year in 2013.

IBM has clients in most industries, although the ones it focuses primarily on in application testing services include financial services, high tech/electronics, healthcare, communications and the public sector.

IBM provides testing services for clients of all sizes. IBM covers all deal sizes, ranging from a significant portion that are less than $1 million to some deals that are more than $10 million.

IBM is a good fit for clients looking for a provider with a global network and for a provider that is able to handle a wide variety of testing needs.

Strengths

- **Global presence**: IBM can provide scale and scope to large global deals, as well as local support through its large global presence and a strong brand across the world. IBM’s clients also scored it highly on geographical capability.

- **Breadth and scale**: IBM has breadth and depth in application testing services. Its testing portfolio offers services from the design through to the run phase of projects, as well as offerings for cloud and TaaS. IBM also offers industry-vertical and analytics expertise. IBM has developed advanced testing tools and methods to accelerate testing programs through IBM Research.

- **Technology expertise and execution**: IBM clients scored the vendor highly on the software package expertise of its resources, reliable delivery and its desire to "go the extra mile" — beyond contractual obligations.

Cautions

- **Business focus**: IBM is focused and strong on the technologies involved in testing, but it still needs to improve on approaching engagements with a business aspect, basing it on the enhancement of business processes. Some clients request IBM offer more leadership and thought leadership to support them, as well as provide continuous innovation, which they expect of IBM, given its branding in the market.

- **Value for money**: IBM’s clients sometimes mention the comparatively higher engagement prices, and the provider scored below average on value for money when references were asked to take into account the fees of their provider.

- **Inexperienced team members**: Some IBM clients experienced issues with inconsistent quality of resources in their engagement and cited that the project required a lot of hand-holding, instruction and coordination from the client side to progress.
Infosys

Infosys is positioned in the Challengers quadrant. This provider offers application testing services through its "Independent Validation and Testing Services" practice. Infosys has approximately 15,000 dedicated resources in the practice, with 83% based in global delivery centers. The testing practice contributes approximately 11.7% to Infosys' global total revenue in 2013 and grew 8.9% year over year in 2013.

Infosys focuses primarily on the following industries in its application testing service practice: financial services, retail, communications and energy.

Infosys works primarily with clients with more than 10,000 employees.

Infosys is a good fit for clients primarily in the North American or the U.K. markets, as well as for clients that are looking for a long-term partner willing to create flexible contract models.

Strengths

- **Alternative pricing models:** Infosys offers alternative pricing models, in addition to standard time-and-materials-type contracts. It has invested in developing a test unit pricing model that is patented and that it has utilized in client engagements. It also offers pricing by test case and by outcome.

- **Value and consistent execution:** Infosys' clients are particularly pleased with the value for money, quality of offshore delivery, flexibility of the provider, and the professionalism of consultants on their engagement and their willingness to "go the extra mile" and/or go beyond contractual obligations.

- **IP solutions:** Infosys has developed end-to-end test automation solutions and a mature set of IP that is domain-specific (technology or industry). The framework allows for the plug-and-play use of client methodologies and tools, in combination with Infosys' IP solutions. The IP offering is strategically bundled with large contracts as part of the services, but it has also been sold as a stand-alone product. Examples of IP include Infosys' Model-based Test Case Generator and Performance Monitoring Tools.

Cautions

- **Geographical coverage:** Although Infosys offers services globally, the majority of its revenue originates in North America (with 63%), followed by EMEA (with 15.6%), and the rest divided between Asia/Pacific, Japan (APJ) and Latin America. Sixty-seven percent of its revenue in EMEA comes from the U.K. and Switzerland, with less coverage in other countries. However, Infosys is currently investing in the EMEA region.

- **Innovation and thought leadership:** Several clients, although pleased with the overall testing services delivered by Infosys, would have liked more thought leadership on the project, as well as delivery of continuous innovation during the engagement.

- **Partnering with other providers:** Infosys clients sometimes cited that the relationship the provider was able to build with other service providers on the client engagement was not
smooth enough. Some clients had requested Infosys to be more assertive in establishing a working relationship.

NTT Data

NTT Data is positioned in the Niche Players quadrant. NTT Data, part of NTT Group, has an application testing service practice — Quality Assurance and Testing (QAT) — of approximately 10,000 dedicated resources. The service provider’s testing practice contributed 7.7% toward NTT Data’s global total revenue in 2013. Gartner estimates a decline in revenue for the testing practice from 2012 to 2013, but this decline is due largely to the decrease in the yen. NTT Data’s QAT practice provides services in more than 40 countries and is supported by a global delivery model.

NTT Data focuses its application testing service investment in healthcare, financial services, insurance and telecommunications.

NTT Data works primarily with large clients with more than 10,000 employees, but it provides testing services for clients of all sizes; most of the deals are less than $1 million in TCV.

NTT Data is a good fit for clients — particularly in the healthcare, banking or insurance industries — looking for Testing Center of Excellence (TCOE) services.

Strengths

- **Vertical market coverage:** NTT Data has a vertical market approach, in which it has developed strong capabilities with domain-specific assets and accelerators for particular industries, such as healthcare, banking, insurance and telecommunications. Examples include Healthcare Payer Test Library and the QA Accelerator Pack for Insurance.

- **Industrialization:** NTT Data has invested in and developed multiple frameworks, methodologies and tools — from the requirements phase to the release phase of testing. Examples include a requirement quality diagnostics toolkit; its Open2Test (O2T) framework and test automation software; Test Automation aPpliance (TAP); and its global development methodology, called Terasoluna.

- **Quality and flexibility of execution:** Client references generally praised the quality and professionalism of NTT Data’s resources, as well as NTT Data’s flexibility.

Cautions

- **Global coverage and integration:** Although NTT Data supports clients in multiple regions and countries, the coverage is varied, and some solutions and industry coverage must be globalized. The usage of industrialization tools, for instance, has been noted by clients to be somewhat patchy outside of the Japanese region, where 77% of NTT Data’s revenue originates. The contribution of NTT Data’s total revenue from EMEA, North America and Latin America is 11%, 10% and 2.5%, respectively. Recent acquisitions in multiple countries are not fully integrated, leading to slightly fragmented testing capabilities that can be disconnected in places.
**Global delivery:** NTT Data offers clients delivery from nearshore and offshore locations, but to compete effectively in the application testing service space, NTT Data must balance out the global delivery more by expanding nearshore alternatives and exploring the development of more offshore testing delivery facilities.

**Innovation and tool partnerships:** Some of NTT Data’s references indicated improvements were needed in building a consistent experience around the use of new technologies, software and tools. In some engagements, they also cited lack of team management and insufficient innovation, as well as insufficient offshore delivery options.

QualiTest Group

QualiTest Group is positioned in the Visionaries quadrant. QualiTest is a pure-play testing service provider, with the majority of its revenue from testing work. QualiTest employs approximately 2,000 dedicated application testing service resources, of whom 58% are in global delivery centers. QualiTest grew its testing practice 33.8% between 2012 and 2013.

QualiTest covers multiple verticals, with more focus in application testing services in healthcare, financial services, communications and manufacturing.

QualiTest provides testing services for clients of all sizes, and it covers deal sizes up to $10 million in TCV.

QualiTest is a good fit for clients — particularly in North America, Israel and the U.K. and particularly in the healthcare, medical device market, telecom or banking markets — that are looking for a focused testing service provider.

**Strengths**

- **High-value approach:** QualiTest approaches each account from a value perspective, and although it has offshore capabilities, it ensures it also has sufficient on-site or onshore capacity. QualiTest has a focused approach to recruiting, and it invests a lot in training and in mentoring. The strategy of QualiTest is then to involve senior resources at all levels — from sales to execution. QualiTest’s clients note that the acquired services represented high value for the money.

- **Healthcare and medical devices industry testing:** QualiTest offers the healthcare and medical device market tailored solutions that fit the needs of those industries. The provider, for instance, established a testing practice around an untapped market in the healthcare industry that consisted of upgrading nationwide electronic health records and revenue cycle systems via the use of test accelerators. With the expertise and assets it has acquired, it can effectively compete with larger, more-established providers through depth and skill.

- **Consistent quality in execution:** References also gave the provider high scores for the quality of technical expertise of its consultants, as well as high scores for industry and functional expertise provided.
Cautions

- **Scalability:** QualiTest does not have the ability to offer its clients the same scalability of global delivery that its competitors do. At present, QualiTest’s largest engagements consist of no more than 250 testing resources.

- **Global presence:** QualiTest has coverage in multiple regions, although it does not have the same global capability that it needs to compete effectively in the application testing service space. QualiTest has local offices in North America, the U.K., the Netherlands, Israel, India and Australia. The provider is currently considering an active organic growth and acquisition strategy to grow its presence.

- **Resource management:** Some of QualiTest’s clients sometimes noted that more formalized project management in the engagement would be helpful. They also cited that there was occasionally difficulty in finding the correct skilled consultants on time.

SQS

SQS is positioned in the Challengers quadrant. SQS is the largest pure-play testing service provider, serving 27 countries globally. SQS employs approximately 4,000 dedicated resources, of whom 61% are in global delivery centers. SQS is focused on expanding its geographical footprint and global delivery capabilities, and as part of that strategy, it acquired the majority of shares in Thinksoft Global Services, an India-based testing service firm, in 2013. SQS grew 7.5% organically (9.5%, if including Thinksoft) from 2012 to 2013.

SQS serves clients in all vertical industries in application testing services, but it focuses on banking, other financial services (including insurance), automotive, high tech, services and other manufacturing.

SQS works primarily with large clients with more than 10,000 employees, but it also provides testing services for clients from 1,000 employees. SQS covers all deal sizes up to $20 million or more in TCV.

SQS is a good fit for large clients in Europe that require local capabilities, in combination with global delivery, as well as for clients looking for a provider with strong testing specialization. SQS is also growing in North America, with a focus on the automotive and financial services industries.

Strengths

- **Testing specialization and investment:** SQS has a broad spectrum of testing services, including multiple reusable assets and artifacts. It performs significant product testing, which gives it an additional perspective on the whole life cycle of software products that can be useful in developing business with clients of software providers. This expertise is especially true in the areas of automation and financial services, as well as gaming, all of which the provider has developed good opportunities.
Local capability: SQS has capabilities to support local clients with strong language skills, particularly English, German and French, supplemented by global delivery.

Testing delivery and execution: SQS clients were happy with SQS’s approach as a true partner in the testing engagements, including the quality, professionalism and flexibility of its resources allocated to client accounts.

Cautions

Limited geographic coverage: SQS is focused on expanding out of its core European market, but it is still more active in its home market, with 93% of revenue originating in EMEA, 4% coming from North America, and 3% coming from APJ. The provider’s various practices (for example, security or SAP testing services) are still not consistently leveraged globally.

Industry and domain-specific services: SQS has industrialized tools, frameworks and methodologies, but although it does have SAP-specific domain skills, it does not have sufficient ability to provide business-led application testing services, according to some of its clients. Some clients request that SQS adopt a more domain-centric approach rather than being guided by the client in engagements.

Consistent approach globally: SQS is still in the process of expanding and growing. It must start leveraging all global practices equally because there are still patchy uses of practices such as Security Testing or SAP Testing as well as the need to offer global delivery in a similar way to all clients. The Thinksoft acquisition was a good investment to strongly grow SQS’s offshore capability but in some accounts the satisfactory usage of offshore delivery is not yet fully visible.

Tata Consultancy Services

Tata Consultancy Services (TCS) is positioned in the Leaders quadrant. TCS offers application testing services through its Assurance Services Unit (ASU), which operates as an independent testing arm to TCS. The testing practice contributed an estimated 10% of TCS’s global total revenue in 2013, with 25.1% year-over-year growth between 2012 and 2013. TCS employs approximately 27,000 dedicated application testing resources, of whom about 80% are based in the global delivery centers.

The strongest verticals in the TCS application testing service practice are banking, retail, communications, insurance and healthcare.

TCS provides testing services for clients of all sizes. TCS covers all deal sizes.

TCS is a good fit for clients — particularly in the financial services, retail and communications industries — looking for a provider with an industrialized testing delivery model capable of handling large global projects.
Strengths

- **Industrialized global delivery**: TCS has invested in its Global Network Delivery Model (GNDM) with processes, automation and training to ensure consistent global execution optimization. Testing services are delivered in a distributed approach, with COEs and delivery centers present in multiple regions, such as EMEA, Latin America, North America and Asia/Pacific. TCS has also invested in its branded MasterCraft suite of products to provide test assets through the entire test life cycle.

- **Customer-centric**: TCS has a customer-centric model and approach, with a high degree of flexibility to suit each client. TCS’s clients scored the provider highly on satisfaction with the overall project. The provider builds strong relationships with its client accounts that are often large-scale deals with a transformational QA element.

- **Partnership and collaboration**: TCS’s client reference feedback was among the highest in this Magic Quadrant, with clients providing praise for many items, including the breadth of testing services provided, the ability of TCS to get along with the client’s team, and the quality and professionalism of the resources provided, as well as testing methodologies and frameworks.

Cautions

- **Domain- and industry-specific testing services**: TCS has invested in vertical and horizontal solutions, but these are still few in number and have a limited number of clients. We anticipate additional solutions and acceptance in the future. Client references noted strength in TCS bringing processes and discipline to testing, but when asked, they did not report that TCS brought industry-specific testing solutions.

- **Dependence on offshore delivery**: TCS has presence in many global locations, but to fully take advantage of the market opportunity, it needs more localization in some countries and regions, such as within the growing market in Western Europe, which still requires strong local support in many countries. TCS has acknowledged this challenge and is investing to scale up local presence.

- **Proactivity for business improvement**: Despite references being positive overall about TCS, some clients called out areas in need of improvement by TCS. Clients also requested increased knowledge of their business domains. Some clients also commented on the need for TCS’s resources to be more assertive and for leadership roles to sometimes demonstrate more authority on the project to move it forward.

Tech Mahindra

Tech Mahindra is positioned in the Challengers quadrant. This provider offers application testing services through its approximately 9,500 dedicated resources, of whom 48% work in global delivery centers.

The testing practice contributes approximately 13.5% to Tech Mahindra’s global total revenue and grew 29% from 2012 to 2013.
The primary industries of focus for Tech Mahindra in its application testing service practice are telecommunications, banking, insurance, retail, manufacturing and services.

Tech Mahindra’s client base is primarily large clients with more than 10,000 employees, but it provides testing services for clients from 500 employees. It covers all deal sizes.

Tech Mahindra is a good fit for clients looking for a partner able to cost-effectively transform and manage internal TCOEs.

**Strengths**

- **Vertical expertise:** Tech Mahindra has heritage and experience in the automotive, telecommunications and financial services industries, where it can deploy domain-centric solutions centered on creating redeployable test case and test scenario repositories that are readily deployable. Examples include models based on the Banking Industry Architecture Network (BIAN) principles for the financial services sector and enhanced Telecom Operations Map (eTOM)-based models for the communications vertical.

- **Pricing models and cost:** Tech Mahindra offers multiple flexible pricing models, such as TaaS, bundled services and revenue recovery model for automation (no upfront investment until the client receives automation benefits, volume discounts and catalog-based pricing). The provider can also offer assurance for a business process underpinned by industry expertise, such as providing assurance for a customer’s end goal of increasing online sales with a fixed percentage point. Reference clients gave high scores for cost of service.

- **Value and flexibility:** Tech Mahindra’s clients cited the good value for the money that the service represented. Clients also appreciated the flexibility of the provider and that it was not constantly referring back to the contract.

**Cautions**

- **Geographical coverage:** Tech Mahindra needs to improve its geographical coverage to fully support its clients globally. Currently, 45% of its revenue originates in North America, 30% comes from EMEA, and 5% comes from Latin America, although 64% of its revenue in EMEA comes from the U.K. Clients also scored it below average for geographical capability.

- **Strengthen brand:** Tech Mahindra is not a well-known brand in some parts of the world, such as many European countries, and it must strengthen its market perception to clients.

- **Proactive leadership:** Some of Tech Mahindra’s clients wanted more leadership of operational managers to strengthen the client’s test delivery team’s capability. Some clients requested Tech Mahindra focus more on anticipating needs and identifying solutions in the ongoing project.

**Wipro**

Wipro is positioned in the Leaders quadrant. This provider offers application testing services through an independent entity within Wipro. It has approximately 19,000 dedicated resources, of
whom 93% work in global delivery centers. From 2012 to 2013, the testing service practice grew 8.9% and contributed 16.6% to Wipro’s total global revenue in 2013.

The strongest verticals in the Wipro application testing service practice are retail, banking, insurance and healthcare.

Wipro works primarily with large clients with more than 10,000 employees, but it provides testing services for clients from 500 employees. Wipro covers all deal sizes with a good spread, although the majority of deals are more than $20 million in TCV.

Wipro is a good fit for clients looking for a partner that is able to approach testing requirements with breadth and depth of practice and that is able to transform and manage large testing engagements.

**Strengths**

- **Testing practice focus and investment:** The testing practice at Wipro is a big part of the provider’s business, and its leadership is clearly articulating where it needs to focus to be able to provide the most value to clients. It brings to market a focus on a solution-led approach. Clients gave Wipro strong scores on its testing vision and thought leadership in engagements.

- **IP and tooling:** Wipro brings more than 100 tools, IP assets and accelerators through the test life cycle to every engagement and has invested in a testing innovation group to focus on solutions aligning with market trends. The focus is on individual processes, such as claims processing, in which synergies and test suites are then developed for reuse. Industries with the most IP assets include energy and utility, communications, and discrete manufacturing.

- **Partnership:** Wipro’s clients talk of their strong partnerships with the provider. Wipro’s clients attest to the provider being very collaborative and customer-focused, as well as providing consistent good quality and strong technical expertise.

- **Flexibility, quality and execution:** The overall scores of Wipro’s reference clients were among the highest in this Magic Quadrant. Clients praised the provider for its ability to provide value for the money, its desire to go the extra mile, its testing methodologies and frameworks, its contracting practices, and its quality of offshore delivery. Wipro also received the highest score in terms of the likelihood of a client to rehire a provider for a similar engagement.

**Cautions**

- **Dependence on offshore delivery model:** Wipro encounters some challenges in resourcing engagements that can be partly attributed to its offshore-centric delivery model. Some clients complain over high attrition rates. However, clients note that Wipro quickly corrects any issues of this kind.

- **Geographic coverage:** Wipro offers services to clients in global locations. Although some countries are very strong with local resources and capabilities (for example, Wipro invests in Latin America and EMEA), there are still countries that lack sufficient presence.
Business and industry domain testing: Wipro has the skill sets and capabilities to carry out most testing; however, to provide even-higher value to clients in engagements, it must increase its business process skills for a more balanced approach. This demand is more relevant in the beginning phases of the project that includes strategy planning and requirements management phases of the testing cycle.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor’s appearance in a Magic Quadrant or MarketScope one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

This is a new Magic Quadrant.

Dropped

This is a new Magic Quadrant.

Inclusion and Exclusion Criteria

The inclusion criteria that needed to be met by service providers in this Magic Quadrant are based on a combination of quantitative and qualitative measures.

Quantitative Criteria

Both pure-play companies and full-service IT providers for application testing services are included in this Magic Quadrant, with some differences in criteria:

- Pure-play companies derive more than 90% of revenue exclusively from application testing services. The requirement for this research was to have a minimum of $40 million in annual revenue.
- Full-service providers of application-related services are required to have $350 million in annual application testing service revenue.
- Providers must have regional-based testing delivery capabilities in at least two worldwide regions: North America (U.S. and Canada), Latin America, EMEA and APJ.

Qualitative Criteria

The following qualitative criteria include:
Service providers must have demonstrated a capability to consistently invest in methodology, frameworks, automation and internal processes, as well as invest in resource development.

Service providers must have dedicated testing resources. Dedicated testing resources means the resource functions are branded as "application testing" or "software quality assurance," and at least 40% of the dedicated testing resources must be certified. Examples of certification include: the International Institute for Software Testing (IIST), Software Quality Engineering (SQE), American Society for Quality (ASQ), International Software Testing Qualifications Board (ISTQB), International Software Quality Institute (iSQI) and Certified Software Quality Analyst (CSQA).

Service providers are expected to deliver application testing services from at least two stages of the life cycle of an application: determine strategy, determine process, identify needs, design solution, build solution, implement solution and operate solution.

Service providers are required to offer services on-site, in addition to in a global delivery model.

Evaluation Criteria

Ability to Execute

Gartner evaluates service providers on their Ability to Execute and their Completeness of Vision. When the two sets of criteria are evaluated together, the resulting analysis provides a view of how well the provider performs a spectrum of services compared with its peers and how well it is positioned for the future.

For more information on Gartner’s Magic Quadrant research methodology, refer to our Research Methodologies and "How Markets and Vendors Are Evaluated in Gartner Magic Quadrants."

Gartner analysts evaluate technology providers on the quality and efficacy of the processes, systems, methods or procedures that enable IT provider performance to be competitive, efficient and effective, and to positively impact revenue, retention and reputation. Ultimately, technology providers are judged on their ability and success in capitalizing on their vision.

**Product or Service:** This criterion assesses core services that are offered by the provider and that compete in/serve the defined market. This includes current service capabilities, quality, skills, and so on. Subcategories include:

- Breadth and depth of capabilities across application testing service capabilities
- Capabilities in business/process consulting and industry knowledge
- Capabilities in other key delivery success factors: project management, change management, communication, and so on
- Demonstrated track record in successfully executing large complex global engagements
Overall Viability: Viability includes an assessment of the overall organization’s financial health and the financial and practical success of the business unit, and the likelihood of the individual business unit to continue to invest in the service and continue to offer the service, advancing the state of the art within the organization’s portfolio of services. Specific assessment includes the size and growth of the application testing services business.

Sales Execution/Pricing: This criterion assesses the service provider’s capabilities in all presales activities and the structure that supports them. These include deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel. Subcategories include:

- Pricing strategy and alternative pricing models
- Customer feedback on value for money

Market Responsiveness/Record: This criterion assesses the vendor’s ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve, and market dynamics change. This criterion also considers the provider’s history of responsiveness and ability to quickly address changing requirements. Subcategories include:

- Provider’s capabilities to deliver against business outcome-based objectives and metrics

Customer Experience: This criterion considers:

- The provider’s specific client feedback on the client’s experience working with the application testing service provider
- Demonstrated ability to deliver on key metrics that drive the overall client experience

Operations: This criterion assesses the ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, ability to manage utilization and attrition, tools, methodologies, knowledge management systems, training programs, global presence, global delivery centers, COEs, and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.
Table 1. Ability to Execute Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product or Service</td>
<td>High</td>
</tr>
<tr>
<td>Overall Viability</td>
<td>Medium</td>
</tr>
<tr>
<td>Sales Execution/Pricing</td>
<td>Medium</td>
</tr>
<tr>
<td>Market Responsiveness/Record</td>
<td>Medium</td>
</tr>
<tr>
<td>Marketing Execution</td>
<td>Not Rated</td>
</tr>
<tr>
<td>Customer Experience</td>
<td>High</td>
</tr>
<tr>
<td>Operations</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Source: Gartner (November 2014)

Completeness of Vision

Gartner analysts evaluate technology providers on their ability to convincingly articulate logical statements about current and future market direction, innovation, customer needs, and competitive forces and how well they map to the Gartner position. Ultimately, technology providers are rated on their understanding of how market forces can be exploited to create opportunity for the provider.

Market Understanding: This criterion assesses the ability of the provider to understand buyers’ needs and translate these needs into products and services. Vendors that show the highest degree of vision listen and understand buyers’ wants and needs, and they can shape or enhance those wants with their added vision. Subcategories include the service provider's knowledge and articulation of key market direction and trends, and the service provider's thought leadership.

Marketing Strategy: This criterion assesses a clear, differentiated set of messages that are consistently communicated throughout the organization and are externalized via communications, advertising, customer programs and positioning statements.

Sales Strategy: This criterion assesses the strategy for selling services, which uses the appropriate network of direct and indirect sales, marketing, service, and communications affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and customer base. Subcategories include:

- Service provider’s strategies for partnerships and alliances
- Account management and vision for creating new and/or additional service business

Offering (Product) Strategy: This criterion assesses a service provider’s approach to application testing service development and delivery that emphasizes depth and breadth of capabilities,
differentiation, and methodologies as they map to current and future requirements, such as enhancements/extensions to testing products.

**Vertical/Industry Strategy:** This criterion assesses the technology provider's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including verticals. This includes vertical, industry and process investments, as revealed by dedicated resources, training and related templates/preconfigured solutions/process maps and other IP development in selected verticals, industries and processes.

**Innovation:** This criterion assesses the direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

**Geographic Strategy:** This criterion assesses the provider's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, including global delivery locations, either directly or through partners, channels and subsidiaries, as appropriate for that geography and market.

**Table 2. Completeness of Vision Evaluation Criteria**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Understanding</td>
<td>High</td>
</tr>
<tr>
<td>Marketing Strategy</td>
<td>Medium</td>
</tr>
<tr>
<td>Sales Strategy</td>
<td>Medium</td>
</tr>
<tr>
<td>Offering (Product) Strategy</td>
<td>Medium</td>
</tr>
<tr>
<td>Business Model</td>
<td>Not Rated</td>
</tr>
<tr>
<td>Vertical/Industry Strategy</td>
<td>Medium</td>
</tr>
<tr>
<td>Innovation</td>
<td>Medium</td>
</tr>
<tr>
<td>Geographic Strategy</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Source: Gartner (November 2014)

**Quadrant Descriptions**

**Leaders**

Leaders are performing well today, gaining traction and mind share in the market; they have a clear vision of market direction and are actively building competencies to sustain their leadership position in the market. Leaders generally have a global client base; a track record of complex, global engagements that support business transformation; and well-balanced business, process, and
industry consulting, implementation and service management capabilities that are supported by rigorous tools and methodologies.

**Challengers**

Challengers execute well today for the portfolio of work selected, but they have a less-defined view of market direction. Consequently, these service providers are the "up and comers" of the future. Challengers generally have some gaps in consulting or other capabilities, sales, marketing, innovation, geographic presence or offering strategy.

**Visionaries**

Visionaries articulate important market trends and direction. They have a vision for changing market rules, but they are not in a position to fully deliver and consistently execute.

**Niche Players**

Niche Players focus on a few segments of the market, such as certain geographies, vertical industries, client segments or functional areas. Their Ability to Execute is limited to these focus areas and, therefore, we evaluate them based on the niche areas they play in. The offering strategy of these providers was considered good, and they can be considered to be leading players within their niche market focus. Niche Players need to increase their geographic sales and delivery, as well as increase overall breadth and depth of capabilities and bench strength.

**Context**

This Magic Quadrant analyzes the providers offering testing services ranging from consulting services, implementation, integration and managed services. The application testing service market landscape is vast and diverse, and it includes providers with different specialization. Gartner is aware of about 300 providers offering application testing services globally, but these providers are not the complete marketplace. The 16 providers evaluated in this Magic Quadrant represent only a small number of leading providers. It should be taken into consideration that many smaller providers not covered in this Magic Quadrant may be appropriate for any particular client needs. Gartner has used inclusion criteria to identify global providers that can handle complex, transformational projects, but smaller local providers, for example, might be a better fit for a client seeking local support. Gartner uses its selected criteria for evaluating the Ability to Execute and Completeness of Vision and, thereby, positions the providers in this Magic Quadrant. Clients must also consider their own criteria in addition to Gartner’s selected criteria to correctly identify which provider would have the correct skills to match their needs. Application testing engagements require skills related to testing specific products, in combination with service provider’s capabilities, which can look different for each client. Do not select only providers in the Leaders quadrant. Challengers, Visionaries or Niche Players may prove to be more appropriate for your requirements. The "Vendor Guide to the Right Application Testing Service Partner" can be helpful to identify additional suitable service providers.
Market Overview

Clients are under increasing pressure to make improvements to their internal testing divisions, whereby the main requirements are to improve quality of applications while lowering the overall cost of testing, as well as improving time to market. The difficulty in combining these sometimes conflicting goals have led to an increase in demand for utilizing the offerings of service providers to optimize, standardize, automate and rationalize quality requirements. This development of particularly mature internal IT organizations to transform testing from disparate units — with lower focus on overall quality in executing testing — to a more centralized TCOE model has brought with it an attached acknowledged strategic importance to the success of client organizations.

This trend has been further advanced by other factors, such as the convergence of the Nexus of Forces (social, mobile, cloud and information), along with the various opportunities and, in fact, threats that some of the forces represent. These forces affect the testing market, resulting in creating new models for conducting testing, as well as determining what needs to be tested. Mobility and consumerization affect the testing market: New challenges present themselves to clients, with numerous mobile applications that must be of high quality with often short time frames when going to market in a world where it is unaffordable to make mistakes and leave defects in any end-user or client-centric applications.

Regulatory compliance is necessary for any clients that have concerns around data privacy and data integrity, as well as other security concerns around the storage of sensitive information.

The providers evaluated in this Magic Quadrant generally all have extensive capabilities in application testing services across various traditional testing and specialization testing services. Differentiation is absolutely necessary to win new business and remain within client accounts. All providers look to pick their "sweet spots," in which they primarily invest, while the smaller providers are under more pressure to invest. The following are some investments that lead to differentiation:

- **Quality centricity:** Although still somewhat unexplored, the approach to making testing both a quality-centric discipline and a more integral model in the software is a different way to develop software. The ability to not only tie testing requirements to business process effectiveness, but also test to ensure the quality of applications underpinning processes, will have a strong impact on the business. Testing of end-to-end business processes is offered to some more mature clients in today’s marketplace, but this trend is expected to grow strongly.

- **Automation:** Although many aspects of testing are still necessary to do manually, there is an opportunity to significantly cut costs and ensure consistent quality with automation and tools. Service providers invest in automation tools to enable them to be up and running much faster in client engagements, as well as to execute tests more efficiently. They use their experience with previous engagements to create a variety of tools, built-in accelerators and IP tailored to a specific function or industry. Providers develop their own tools from scratch but, more often, build on existing tools available in the market. Examples include:
  - Capgemini Test Automation & Knowledge Tools (TAKT) Engine — This is a test automation solution for equipment, software or systems that simulates user experience.
TCS MasterCraft Test Automation Manager — This is an integrated platform to support the life cycle of test automation processes and artifacts, including designing automation scripts, planning, execution and maintenance.

CSC Enterprise Test Automation Platform (eTAP) — CSC’s Automation Framework enables full life cycle automation testing and reporting through one interface.

**Alternative delivery models:** These delivery models are industrialized and strong, and they bring value to how testing services are delivered. Providers offer multiple alternative delivery models, including on-site, embedded teams, remote dedicated testing teams, remote COEs (shared across clients), consultative (project-based), and as a service. Consumption-based models are introduced by providers and growing in popularity among clients that request an easier and faster way of consuming and using testing services without making significant investment.

**Agile and DevOps methodologies:** Continuous integration development models, such as Agile and DevOps, are becoming more and more popular, and they have the ability to improve quality across the software development life cycle. This development practice will require specialized testing rigor in which the testing service will be more of a quality service that occurs concurrently with development instead of at the end phase. This will have an impact on how providers organize their resources to meet different market demands.

These trends provide some context to the general market development in application testing services. In addition to those trends, we gathered a large amount of client feedback as part of this research process. From this process, we learned that clients generally were most pleased with the providers’ ability to deliver on time. The providers also generally provided very good service to their clients around the very important "soft" skills, such as being able to get along with the client’s staff and fitting into the team, and providing high-quality consultants with a high degree of professionalism. Providers also generally scored well as a group on their operational capabilities to deliver the services to the client.

The primary area in which clients requested more improvement from providers was to come with more expertise in new technology areas, such as mobile, cloud, analytics and social. The second area in which clients were generally not as satisfied with their provider was with regard to the innovation achieved or delivered during the engagement. Clients put great demands on service providers in their expectation of them to consistently keep them informed and in line with industry developments and new technologies, as well as make adjustments to the project along the way that would both challenge the client and continue to improve project effectiveness.

**Gartner Recommended Reading**

*Some documents may not be available as part of your current Gartner subscription.*

"How Markets and Vendors Are Evaluated in Gartner Magic Quadrants"

"Market Share: All Software Markets, Worldwide, 2013"
Evidence
Evaluation in this Magic Quadrant is informed by:

- Primary research
  - Telephone briefings with the 16 participating service providers in the Magic Quadrant
  - Gartner inquiries and discussions conducted in the past 12 months with service providers and user organization clients
  - Feedback from 191 client references, submitted by the participating service providers, using online surveys and follow-up interviews with a subset of these references
  - A detailed vendor survey covering revenue, staffing, geographic capabilities, industry and process assets, partnerships, investments, and other relevant information

- Secondary research
  - Press releases and publicly available information, including company websites and financial reports
  - Other Gartner analysts

This document was peer-reviewed by Gartner analysts; their views and comments were taken into account.

Evaluation Criteria Definitions

**Ability to Execute**

**Product/Service:** Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

**Overall Viability:** Viability includes an assessment of the overall organization’s financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization’s portfolio of products.

**Sales Execution/Pricing:** The vendor’s capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

**Market Responsiveness/Record:** Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor’s history of responsiveness.
**Marketing Execution:** The clarity, quality, creativity and efficacy of programs designed to deliver the organization’s message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

**Customer Experience:** Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

**Operations:** The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

**Completeness of Vision**

**Market Understanding:** Ability of the vendor to understand buyers’ wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers’ wants and needs, and can shape or enhance those with their added vision.

**Marketing Strategy:** A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

**Sales Strategy:** The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

**Offering (Product) Strategy:** The vendor’s approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

**Business Model:** The soundness and logic of the vendor's underlying business proposition.

**Vertical/Industry Strategy:** The vendor’s strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

**Innovation:** Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.
**Geographic Strategy**: The vendor’s strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.
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