

# Magic Quadrant for Integrated Software Quality Suites

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**Ensuring overall software quality requires a variety of tools to provide an overall picture and to appropriately control risks. The software quality market is dominated by HP, but other players have strong innovation and offer attractive options.**

## WHAT YOU NEED TO KNOW

Traditional focus in the application quality management market has been for specific testing activities (for example, load/stress and functional/regression). The market is shifting as organizations seek greater business value and agility. Agility doesn't just mean run as fast as possible, and it requires great discipline. A shift toward packages, service-oriented architecture (SOA) and business process management (BPM) also drives greater business analyst involvement in overall quality efforts, along with a shift in focus from finding defects in validation, to ensuring that business objectives are being met. Testing software can be an expensive process, but poor software quality leads to user dissatisfaction, as well as increased development and maintenance. Therefore, having a well-defined set of tools and practices to drive software quality will positively affect the overall business bottom line.

## MAGIC QUADRANT

### Market Overview

The total market for test management and functional and load/stress automation is currently valued at just under \$1.2 billion, and is growing at more than 8% per year. The traditional market is very stable, with a clearly defined pecking order established. However, especially with the current economic conditions, it is a market where acquisitions and new entries are having an effect on the shape of the market. During the writing of this Magic Quadrant, Micro Focus announced its intention to acquire Borland and Compuware's distributed Automated Software Quality (ASQ) products, which will give it a solid position as the No. 3 player in the market. In addition, Oracle acquired a set of tools from Empirix in 2008, and Microsoft is working on building a full set of tools. Although this is a mixed market, overall, it is mature. However, platform and technology shifts like SOA/cloud/software as a service (SaaS) are entering, and traditional automation tools have failed to deliver results, and the evolution of more-complete application life cycle management (ALM) solutions provide opportunities for new visionary players. This mix of the old/stable/consolidating and new innovators leads to a market with a couple of leaders (room for two more potentially), a set of visionaries and some that are more settled toward niches like embedded or small or midsize businesses (SMBs).

As the market continues forward, the visionaries will either settle, over time, into niche roles or be acquired, because it will be hard to compete against HP, IBM, Microsoft (which will enter the market in 2010), Oracle and, if it executes on its acquisitions, Micro Focus. These companies represent 90% of the total revenue currently spent on distributed application testing.

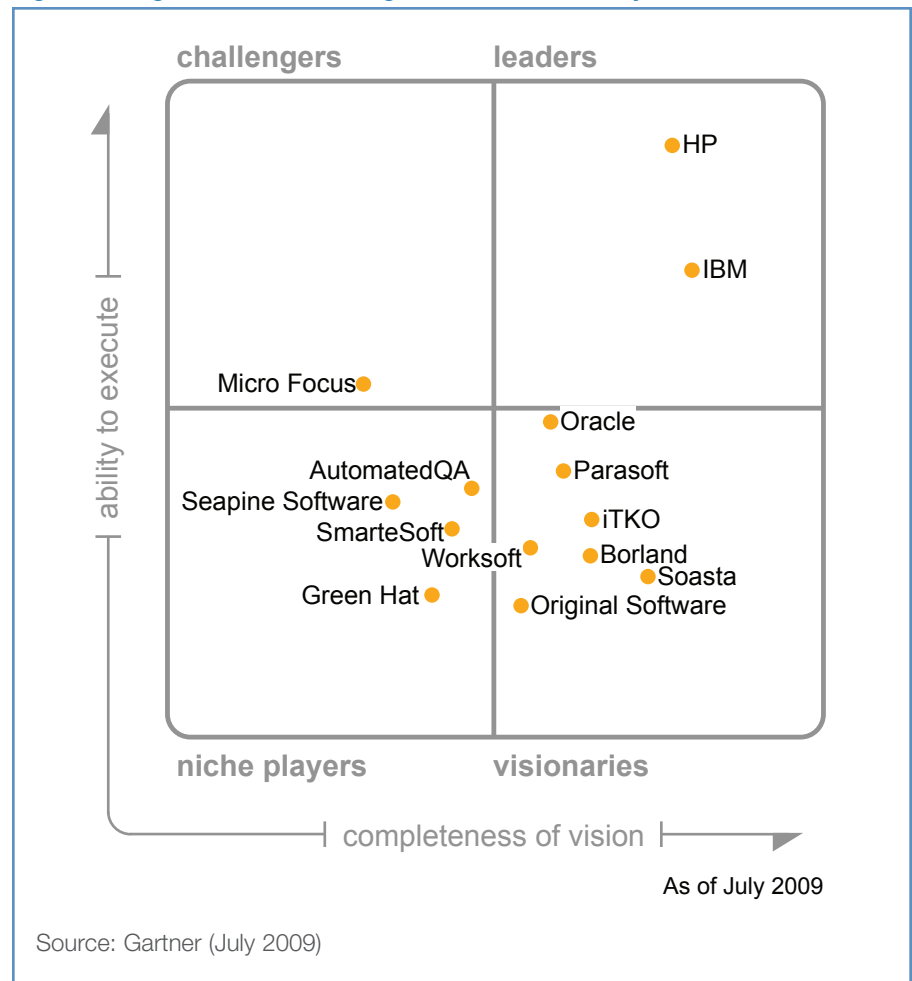
The key trends in the market are:

- Market consolidation:** During the past 18 months, Segue Software was acquired by Borland, and Mercury (the market leader) was acquired by HP. This year, Micro Focus acquired Compuware's distributed software quality testing tools, and is working to acquire Borland (a second bidder has recently emerged, and we will publish and update when this is settled). In addition, IBM and HP recently acquired tools in the security analysis space. This type of consolidation will continue as vendors work to build complete ALM suites, and move to integrate development with operations management. Microsoft also continues to expand into this market, adding test management and manual testing in its Rosario release, planned to ship during 2010.
- Emerging vendors:** Although the traditional software testing market has seen consolidation, a growing number of vendors continues to enter the market. This includes new script-free and model-driven testing environments, tools for testing in the cloud, tools for managing test labs and utilizing the cloud as a test lab, testing for complex SOA application testing tools, and the ability to virtualize services for use in testing. There are also an increasing number of players in the ALM space with tools for managing test plans, test cases and software defects. Because of the dominant share of HP, these companies generally must find a coexistence strategy, and a growing number of users utilize multiple test tool providers to cover the broad spectrum of testing and quality assurance needs.
- Distributed development:** Enterprise software development projects tend to be complex, and now are carried out in a

very distributed fashion, whether it is completely internally sourced or done in partnership with a system integrator or offshore outsourcing provider. The goal of this is increased productivity and more-flexible resources, but that means strong requirements practices and tools to enable collaboration and governance.

- Agile techniques:** Many organizations have begun to use agile development techniques. These practices put a premium value on collaboration, and alter the development cycle, because requirements are changing and being completed incrementally as the project is under way. Agile methods also focus on the

Figure 1. Magic Quadrant for Integrated Software Quality Suites



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drive to push quality upstream through techniques such as unit testing and code reviews. Agile practices are encouraging vendors in the tool market to build tools that recognize these process changes and address the shift from isolated specialist tools to coordinated suites that share information and manage and update each other in a complementary fashion. For example, leading tool support integration between software requirements and test plans, and as requirements grow or change, will force a vendor to update its test plan. This collaborative capability is especially important for globally dispersed organizations to keep information loss among groups to a minimum. Linked to this is the continued emergence of requirements elicitation tools that are designed to get the right requirements in the first place.

- **Regulatory environment:** Regulations surrounding data privacy and auditable change management procedures drive the need for better tools for test data management (IBM recently acquired Princeton Softech to fill this gap) and workflow-driven solutions that manage and track changes.
- **Package application upgrades:** Package applications place additional constraints and different needs on testing organizations than custom development, including lack of access to source and data models, and a high degree of complexity. These products are undergoing a major transformation as they increasingly shift to support SOA and SaaS models, and as vendors continue to consolidate. Packages tax organizations with frequent updates and a great deal of integration, forcing the need for effective test-automation solutions for regression testing. Many organizations, however, have been challenged to achieve acceptable productivity with automation.
- **SOA:** Testing for services introduces a great deal of complexity, and requires organizations to increase minimum standards just to operate as well as they do currently. Services are supposed to provide business-level agility, yet companies have traditionally struggled with reuse. If services are to provide a dynamically adjustable business operating environment, then they must have a high degree of quality and automation for quality assessment and change impact analysis. This will be a major catalyst for additional acquisitions, and could create a shift in market share positions, because standard testing tool frameworks don't readily support more than simple Web services, and they need to have a closed loop around change requests, quality, operation change management and impact assessment.
- **Flexible delivery:** Testing tools and quality management applications can be expensive, just as many pieces of the development tool market have been. We expect that certain segments of the quality and test market will face increased pricing pressure from open source, new smaller organizations and Microsoft's entry into the software testing market. The number of open-source testing tools and newer, lower-cost products for managing quality efforts (for example, Atlassian Jira, Axosoft's OnTime, PassMark TestLog and ApTest

Manager) has increased. Because of the dominant positions of Visual Studio and Eclipse, which each provide baselines for integration, it is possible to create a solution that fits together, as well as a single-vendor solution. Because no single vendor has a complete, comprehensive solution to all aspects of software quality and ALM, many enterprises may like this approach. However, at this point, for most enterprise use, it is better to go with one of the traditional quality management vendors covered in this Market Quadrant, and augment the tools with additional pieces, some of which may be open source. We expect that pricing pressure will also motivate vendors to look for alternative deployment vehicles, such as SaaS. During the next three to five years, SaaS offerings for load/stress testing likely will become standard for enterprise players.

- **Open source:** Open-source testing tools continue to make progress, although their impact on the overall market is still relatively small. The majority of tools are limited in their technology coverage, and lack an integrated approach to quality management. Thus the tools fit well for organizations that are working on smaller projects with a more limited technology scope, and where the number of test cases can be managed in a more basic tool like Excel. In addition, these tools have less documentation and little support, so they are best suited for a technically experienced testing team. The most widely used tools include Selenium, Watir, Bugzilla and JMeter. There are many other open-source tools used to drive quality early in the development process, including JUnit, Maven, CruiseControl, TestLink and FindBugs.
- **Agile development:** Another key driver in the market is based on the demands created by the shift to agile development, centralization and globally distributed project teams. Requirements for testing products have changed from testing the product in isolation to integrating the testing with the rest of the product's life cycle, and to support collaboration across the quality assurance team and among the entire project team. Therefore, IT organizations should focus first on testing workflow and quality management issues when selecting a set of tools. This requires evaluating solutions that are entrenched in the organization, and what political capital there is to drive changes. Changes cannot be made only in the name of efficiency, but must be tied to identified and consistent errors in established processes.

### Market Definition/Description

The automated software quality assurance market is a subsegment of the overall ALM market. It is comprised of three traditional areas:

1. Test management – Tools to manage and plan testing activities and their results.
2. Automated stress and load testing – Tools that simulate the load of multiple users against a server-based application to understand and tune performance.

3. Automated functional and regression testing – Tests that mimic a single user to find defects in the application.

Software quality encompasses a much broader number of activities, and thought leaders are driving broader toolsets and creating better integration across the life cycle. Other areas include test data selection and management, unit testing, security and compliance, and usability. The market is also evolving to better support package applications, deal with SOA and Web 2.0 technologies, and take advantage of virtualization and SaaS delivery mechanisms.

Recent years have seen an improvement in the integration of ASQ tools with the rest of the ALM platform (which also includes requirements management, and software change and configuration management) to help automate the overall execution of software projects. This includes integration between requirements and test cases, integration into the build process for automated execution of test suites, and integrated reporting to better understand the current status of a project from a quality and completeness perspective.

### Inclusion and Exclusion Criteria

Vendors in this Magic Quadrant must provide the ability to create, manage and execute functional test automation. Their tools must support the creation of software tests on the Windows platform to test Web applications (additional platform test execution support is desirable, and the most complete vendors cover a wide set of technologies). The vendors in this market must have a basic global presence, which means that they are actively selling their products in multiple geographies, and have at least \$5 million in annual revenue. (Note: This market includes a set of mainstream or traditional players that cover the testing of desktop and Web applications, plus a set of companies from emerging or niche areas, such as SOA/external service bus [ESB], cloud, and code-free solutions.) This Magic Quadrant looks at the entire market (traditional and new niches) as a complete market, although this is not to say that the vendors in the Leaders quadrant are the only solutions that should be explored, or that looking at the market through more-specific lenses would not change the shape of the market.

#### Added

SmarteSoft, Soasta, Green Hat, iTKO, Micro Focus

#### Dropped

Compuware – sold its distributed software testing assets to Micro Focus, with the deal closing 1 June 2009

### Evaluation Criteria

#### Ability to Execute

Because of the general maturity of the market, the ability to execute in a consistent fashion is critical and has been the defining attribute of the leaders. This will continue, with those that gain in the market providing a clean combination of technology with very clear market positioning. It is not enough to just have “better technology” than the incumbents. Because of the growing importance of integration across the life cycle, it is key to build and deliver on partnerships.

Market pressure to reduce costs will continue to create openings for new tools and open-source solutions, and will force vendors to deliver clear return on investment (ROI), but this will result mainly in market expansion, rather than replacement. At the enterprise level, company stability is also critical (see Table 1).

**Table 1. Ability to Execute Evaluation Criteria**

| Evaluation Criteria  | Weighting |
|--|-----------|
| Product/Service  | standard  |
| Overall Viability (Business Unit, Financial, Strategy, Organization) | high      |
| Sales Execution/Pricing  | high      |
| Market Responsiveness and Track Record                               | low       |
| Marketing Execution  | high      |
| Customer Experience  | standard  |
| Operations   | low       |
| Source: Gartner (July 2009)  |           |

### Completeness of Vision

Direct marketing capability is becoming less important than what happens in the community market, and the understanding of issues and the ability to position within the market. This is why the business model and innovation are also key – because it is either the way you are shifting or entering the market. Vendors that support leading technologies and architectures with a clear vision of the shift this introduces to applications and the complexity of testing these applications are key here. In addition, vendors with a complete vision either provide a very robust view of the product life cycle or have solid partnerships to help fill in areas of the life cycle they are not involved in. Overall, vendors have gaps in their product lines, with the majority of vendors still focused on the core of automation of functional/regression and load/stress testing, as well as elements of quality management. Common gaps are in unit testing, integration to other areas of the life cycle, test data management and lab management facilities. Many of these are filled through partnerships, but the leaders are increasingly filling these gaps as well.

We expect that leaders will continue to build more-complete platforms that not only encompass traditional testing tools, such as functional and performance automation, and test management, but that enable the shift from a test in quality mentality to quality throughout the process. Thus, while the visionaries and niche players will scramble to grab market share, the leaders and more-established players will consolidate through acquisitions as markets mature. These players are generally positioning to become leaders not only in software quality assurance (SQA), but in the overall ALM market, or are strongly partnered to do so (see Table 2).



Table 2. Completeness of Vision Evaluation Criteria

| Evaluation Criteria         | Weighting |
|-----------------------------|-----------|
| Market Understanding        | high      |
| Marketing Strategy          | low       |
| Sales Strategy              | standard  |
| Offering (Product) Strategy | standard  |
| Business Model              | high      |
| Vertical/Industry Strategy  | standard  |
| Innovation                  | high      |
| Geographic Strategy         | low       |
| Source: Gartner (July 2009) |           |

## Leaders

HP

IBM

## Challengers

Micro Focus

## Visionaries

Borland

iTKO

Oracle

Original Software

Soasta

Parasoft

Worksoft

## Niche Players

AutomatedQA

Green Hat

Seapine Software

SmarteSoft

## Vendor Strengths and Cautions

### AutomatedQA

We place AutomatedQA, a relatively new entrant to the testing market, as a niche player. The company's single-tool testing platform (TestComplete) has been favored by many independent software vendors (ISVs), and has complete technical coverage of Microsoft technologies, as well as leading Web 2.0 technologies (such as Ajax, Silverlight and Flex). It is well-integrated to Microsoft's Visual Studio and Team System products, features a simple licensing model and is low cost. The company has been executing well, with strong revenue growth, and it has been gaining market share.

For companies that are seeking lower-priced solutions or considering open-source options, TestComplete provides a well-documented and affordable alternative. AutomatedQA has been working to broaden its appeal to nontechnical developers by supporting keyword-driven testing. The company also owns the Smart Bear code review tools, which aid in the process of pushing quality earlier in the life cycle.

### Strengths

- Price
- Single product for unit, functional and load/stress testing
- Deep technical support for Microsoft, Java and Web technologies

### Cautions

- Oriented toward technical audience
- Not applicable for Unix/Linux/Macintosh-based applications

### Borland

We rate Borland as a visionary for having a strong product line, and for its strength in offering a well-integrated life cycle solution and supporting agile development. However, while vision has been strong, execution has lagged. Borland has seen consistent growth in revenue, but declining market share since entering the testing tool market with the acquisition of Segue. The company is now in the process of being acquired by Micro Focus (shareholders approved the deal on 22 July 2009).

SQA and agile have been Borland's two primary areas of focus over the last couple of years, with the development and delivery of its Borland Management System and other elements designed to help involve the quality team earlier in the cycle. This has been mixed with the struggle of going through the changes associated with the divestiture of the integrated development environment (IDE) business and questions about the companies' futures. However, Borland has also done a good job integrating its requirements, test and change management solutions to support an integrated ALM approach. We believe that the basic business/operational issues will be resolved over the next few months, and will follow up with

additional research once Micro Focus or another group completes its acquisition of the company.

Like many of the traditional testing vendors, Borland has had challenges with specific aspects of Ajax and testing across multiple browsers. There are a number of new features being introduced in the update to SilkTest, including improved Ajax support and the ability to record a script in one browser and then use it across multiple browsers.

### Strengths

- Responsive to customers
- Broad technology support, but simple licensing
- Open ALM, recognition that users have mixed technologies and tools, and provides consolidating reporting

### Cautions

- Support for Ajax is limited in the current release
- Browser-dependent scripts
- Transition to Micro Focus creates uncertainty

### Green Hat

We place Green Hat in the Niche Players quadrant because, although it has innovative SOA/ESB testing tools, it has struggled to build from its roots. Green Hat is a U.K.-based company that started life as a consulting company, and, over time, productized its testing solution. In 2008, the company acquired Solstice Software, which was a U.S.-based company also engaged in SOA application testing. Green Hat's product has strong support for testing complex SOA applications, virtualization of services for early testing and good ease of use. The company has strong support for Tibco, extending beyond its core functional/performance/simulation tools to also provide a "blackbox recorder" and monitoring solution. The product also supports a broad number of other ESB/BPM suite (BPMS) solutions. The company also supports several industry protocols, such as HL7 and SWIFT. Solstice customers were given a clear migration path and tools to assist in migration. The company still has a limited presence in the US., but customers note good overall support. In addition to integrations with other user interface (UI) testing tool providers, Green Hat has teamed up with Original Software to provide support for an end-to-end, UI-driven testing solution.

### Strengths

- Complete end-to-end SOA testing platform with strong support for key ESBs
- Ability to drive early testing

- Usability for nontesters to help establish and drive SOA policies
- Flexibility and support, owing to its consulting roots, which includes its approach to licensing
- Responds quickly to fix product issues

### Cautions

- Needs to grow its presence in the U.S. market, and its overall size
- Needs improved marketing presence

### HP

We rate HP as a leader because of its continued strong execution and dominant 60% market share position. This position requires all other players to position around HP's tools. This position is strong enough that several competitors also have integration to HP products. Virtually all system integrators, outsourcing providers and testing consultancies support the HP product line, making it easy for organizations to find experienced testers. SAP now resells HP testing tools as part of its overall quality solution. In 2007, HP introduced support for Requirements Management in Quality Center, and it has the best understanding of the interplay between the application development and operations organizations, although the tool integrations here are just emerging. Because of the position strength of HP, it flattens out the advantages others may have in technical innovation. The company is beginning to extend the breadth of its quality solutions, and is leveraging the broader HP Software portfolio. We believe this will create a leadership position in bridging to project portfolio management, as well as to IT service management (ITSM). The company has a broad set of tools for software quality, including:

- Functional Testing (including QTP) – for functional automation
- LoadRunner – for load/stress, and performance testing
- Quality Center (formerly TestDirector) – a consolidated quality management solution
- Business Process Testing (BPT) – a component-based testing framework for manual and functional testing
- Service Test – for testing applications using Web services; integrated to HP SOA Systinet
- QAInspect – static analysis tools to identify potential code security issues

### Strengths

- Market position – dominant market share provides network affect benefits

- Breadth of technology – both supported technologies and testing vehicles
- Global presence and support
- Ecosystem – market share creates network effect, resulting in broad, integrated life cycle support

#### Cautions

- Complex product line with many options
- Complex licensing model – premium pricing
- Gap between requirements and testing – how to drive continuous quality and consolidated reporting
- Support for Web 2.0 technologies, and integration to development environments

#### iTKO

We place iTKO as a visionary for its ability to build a market-leading SOA testing platform that supports codeless SOA, database and rich Internet application (RIA) testing. iTKO provides very rich support for ESBs, and is well-positioned for the growing BPM market. The company has expanded its message from test automation to a more complete solution, including its virtualization technology. This will enable the company to adapt well as the market shifts and matures, and has been successful in getting iTKO's vision out to the market. The company has a growing global presence and has seen strong growth in revenue. We expect continued strong growth, and HP has just signed a reseller agreement with iTKO for its LISA Virtualize. This will provide iTKO with much greater market access, and fills out HP's SOA solution portfolio.

#### Strengths

- Eclipse integration and general support across the life cycle
- Ability to drive testing across every tier of the application, and early in the project
- Virtualization technology simplifies the testing of complex environments

#### Cautions

- Complexity of tool and learning curve
- Product shows tilt toward innovation vs. fit and finish
- Limited support for .NET, and uneven support for Java on Unix

#### IBM

We rate IBM as a leader because of its overall market strength and broad support for quality through the life cycle. Like HP, IBM has a strong global presence and broad set of testing products. A key strength is the complete ALM story that IBM provides tools for, and the market strength it has across this life cycle because of the success it had with the Eclipse project (now maintained by the Eclipse Foundation). As IBM builds upon that open-source project with the Jazz collaborative platform, it is able to weave together a relatively complete development life cycle.

IBM has been moving at a fast pace with new products built on Jazz, including its new Rational Quality Manager and Rational Requirements Composer products. The company also recently announced a move to a representational state transfer (REST)-based integration framework for Jazz that should provide an easier path to collaborative integrations with third-party products. However, although IBM has been good at driving the integrated ALM story, in the testing market, it has played from behind the curve and lags the market in test automation functionality. The overall strength is IBM's ability to drive a quality-oriented approach across roles and throughout the project, from requirements through development practices, such as unit testing, code review and static analysis, and managed change and build processes.

IBM Global Services is also becoming an asset in the development of technology, drawing upon its experience working on many projects to gain insight into effective planning and practices, and turning this knowledge into tools. IBM's testing tools include:

- Rational Quality Manager
- Rational Functional Tester
- Rational Performance Tester
- Rational Service Tester
- Rational AppScan
- Rational Policy Tester
- Rational Software Analyzer

#### Strengths

- Quality throughout the application life cycle
- Ability to reuse assets and move beyond project-centric tooling
- Global presence and strength of Global Services organization
- Support for collaboration and workflow

## Cautions

- Lagging automation tools
- Products in transition to Jazz platform
- Tools have been complex to implement

## Micro Focus

The position of Micro Focus as a challenger in this Magic Quadrant is largely influenced by the position that it inherited from Compuware, and we will be following this up with research later in the year as Micro Focus pulls together its story. Compuware had not been executing well in this market during the past year, losing market share and putting little effort into product marketing and position since refocusing the company in new directions. If Micro Focus closes the acquisition of Borland, then the company will have significant overlaps in product line, and although Micro Focus has been executing well with its existing products, this will be a very different market for it. However, the company now has a sizeable portfolio, and builds from a significant customer base. Micro Focus has inherited a sizeable team from Compuware, and is certain to have a better focus on the products and market than Compuware did; however, Micro Focus needs to have a clear picture of how it will take the two testing product lines forward. Its assets now include:

- QADirector
- QARun
- TestPartner
- TrackRecord
- QALoad
- DevPartner
- Data Express

## Strengths

- Risk-based planning tools
- Technology coverage for traditional testing tasks
- Solid testing maturity model
- Broad quality life cycle, including test data extraction and management

## Cautions

- Starting from embattled position
- Lack of product or market differentiation from market leader

## Oracle

Oracle is rated as a visionary even though it is new to the testing market, entering in mid-2008 with the acquisition of the e-Test suite of tools from Empirix. For several months after the acquisition, Oracle was pretty quiet about its plans and how e-Test would fit into the portfolio. Oracle has now pulled together a solid story that plays on the company's strengths as a platform provider and its background in applications and databases. Oracle is one of the only vendors at this point to have a strong test data management solution with the ability to extract and mask data from test systems. It also has a strong set of capabilities for performing various performance and load-testing activities with the ability to pull information from production systems to help drive accurate loads. Oracle is naturally also providing a set of acceleration templates to support its application suite. We believe that Oracle's channel strength and strong connection to its system management and package software products will drive market growth, but the company needs to develop more-complete ALM integration to its development tools.

## Strengths

- Test data management
- Support for high-capacity load testing of database tier
- Support for testing Oracle packages
- Single script can be used for both functional and performance testing

## Cautions

- New to market
- Lack of integration to Oracle development tools or full ALM story
- Oracle-only technology support
- Only supports Web applications for load testing

## Original Software

We place Original Software as a visionary for the strength of its code-free testing capabilities, which are enabling users to achieve higher levels of automation earlier in the life cycle. However, while automation is the goal, equally important is the strength of the product for manual software testing. The majority of functional testing performed in the market is done manually, and Original's



manual testing facilities are the most advanced in the market. Manual tests can easily be transitioned to full automation that is scriptless and self-healing. Customers are reporting very solid gains in the percentage of test automation, and resulting savings in the overall testing process.

The company has no load/stress testing support, but has very complete tools for test management and reporting, with a solid workflow process and the ability to see and manage progress across multiple projects, as well as integration with Outlook. Another key element of the completeness of the platform is test data management with tools to subset and cleanse data and manage it through the cycle of testing. The company is also building out an emerging ALM story with its Qualify product. The company has been building out its U.S. presence (which already accounts for a majority of revenue), but will need to build out a stronger story than just being a better form of automation and fill in its partner chain.

### Strengths

- Customer support or resolve to fix issues
- Test data management – extract and mask data as well as roll-back
- Ease of use in code-free approach and process to migrate from manual to automated testing
- Self-healing scripts

### Cautions

- Overall global presence
- Support for Flex and Silverlight still in development
- Lack of full life cycle integration, including no integration to defect tracking – Qualify will fill this in

### Parasoft

We place Parasoft as a visionary for its work pushing a strong message around development productivity by driving quality through the entire development process. The company is working to grow from its core audience of technical developers. It delivers this via its Automated Defect Prevention practices, which features a strong focus on metric-driven process improvement.

Parasoft was founded in the late 1980s, and began by building development environments for technical computing. It has focused primarily on tools oriented at developers, such as source code analysis and unit testing, taking the approach of identifying how to prevent defects, rather than finding them later. The company expanded into SOA testing, and has now expanded into full test automation and ALM, including both workflow and policy management. During the past couple of years, Parasoft has been realigning some of its offers to create more-complete solutions.

Examples of this include combining the SOAtest and Web Test products to strengthen the overall feature/value message of SOAtest. The company has good global coverage and has steadily executed, but it now needs to extend beyond its traditional customer base to drive broader adoption.

### Strengths

- Developer-focused tools designed to drive quality efforts upstream
- Strong metrics and reporting to support Automated Defect Prevention method
- Wide coverage of testing types: unit, functional, performance, static analysis
- Broad set of integrations with other tools across the life cycle

### Cautions

- Technical solution not well-suited to many business-level testers
- Does not fit in common conception of software quality

### Seapine Software

Seapine is rated as a niche player that offers a good integrated solution that encompasses test planning, management and execution. The company has a complete ALM solution and is targeted primarily at servicing midmarket companies. A requirements management facility is being added to the product line that will enable end-to-end validation connecting requirements to test cases and results. This is enabling the company to support companies that require a solid, process-driven and managed change development cycle, such as bio-medical research. Seapine has a limited footprint outside the U.S., and lacks significant partnerships with third parties in technology and services.

### Strengths

- Cost-effective solution that is part of a complete ALM suite
- Strong support for Windows-based developers

### Cautions

- Lack of partnerships and market exposure
- No load/stress solution

### SmarteSoft

We place SmarteSoft as a niche player because, although it offers a good set of productive tools, it will be challenged to define a clear, sustainable market position. We believe that the company needs to build strong partnerships and either focus on a specific

market segment or find other market disruptions. However, SmarteSoft has been able to execute well initially, and has a good focus on building a complete platform for testing professionals. This means, however, that the company is lacking in other ALM functionality, such as requirements management and software change and configuration management (SCCM). The most notable missing element is defect management, but the company has been building integrations for this and other ALM products.

### Strengths

- Ease of use
- Ease of maintaining test automation
- Cost

### Cautions

- Product maturity and integrations
- Ability to drive sustainable differentiation
- Establishing a position in the market

### Soasta

We place Soasta as a visionary for its ability to test complex Web applications and utilize cloud-based scenarios to reduce the cost of tool licenses and lab costs. The company has a code-free test engine that supports both functional and performance test automation utilizing the same test components and sequences. Soasta has been providing a continuous stream of innovative technology, but beyond technical innovation, the company has innovated with its business model in targeting and delivering cloud-based test tools with CloudTest. This means no deployment access to the testing tools and the infrastructure to run them, and customers only pay for the tool when it is being used. This is good for companies that may not have continual testing needs, or those that have a very dynamic test team.

Soasta also sells an appliance-based version of its test platforms for those that want a local installation. The company is experiencing good growth and market recognition, but needs to develop additional partnerships to fill out the life cycle.

### Strengths

- Ability to exploit the cloud for test labs
- Test component reuse
- Support for testing parallel execution paths
- Support for leading Web UI technologies

- Price model – single price for all testing capabilities and SaaS model

### Cautions

- Lack of partnerships across the life cycle
- Lack of test life cycle management
- Not viable for traditional desktop or client/server applications
- SaaS delivery is leading edge, but not accepted by all

### Worksoft

We place Worksoft as a visionary for delivering leading-edge, script-free test automation tools and their leading support for testing SAP applications. Although the company has the ability to test general applications, its focus during the past two years has shifted to SAP testing, and users of the product are finding that they can drive very high test automation coverage and have maintainable scripts. The toolset has integration to both SAP Solution Manager and the IntelliCorp suite, enabling an integrated change impact analysis and validation loop. However, Worksoft lacks an integrated defect management solution, and could utilize partnering for test data and lab management.

### Strengths

- SAP focus and integration to both SAP Solution Manager and IntelliCorp
- Resilience of tests to application changes
- Script-free enables a higher degree of automation success

### Cautions

- Lack of a defect management solution
- Lack of flexibility in reporting
- Lack of integration for versioning test cases

### Vendors Added or 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 appearing 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. This may be a reflection of a change in the market and, therefore, changed evaluation criteria, or a change of focus by a vendor.

## Evaluation Criteria Definitions

### Ability to Execute

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

**Overall Viability (Business Unit, Financial, Strategy, Organization):** Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood of the individual business unit to continue investing in the product, to continue offering the product and to advance the state of the art within the organization's portfolio of products.

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

**Market Responsiveness and Track 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 in order 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, 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, etc.

**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 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 product 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 set 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 verticals.

**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.