

COMPETITIVE ANALYSIS

Worldwide Automated Software Quality 2009 Vendor Shares

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IDC OPINION

2009 was an extremely difficult, disruptive, and devastating year financially. The global economic crisis was unprecedented in recent history. Because of the economic conditions of 2009, the automated software quality (ASQ) market was adversely impacted. Specifically:

- ☒ Worldwide revenue for the automated software quality market was \$1,890.5 million in 2009, representing a decline of 5.6%.
- ☒ The top 4 vendors in 2009, based on worldwide revenue, were HP, IBM, and Microsoft, which accounted for 57.2% of the market total.
- ☒ By far the greatest revenue share contributor for ASQ was HP, at \$738.1 million with 39% market share. HP was in a position to both experience the greatest challenges and simultaneously impact the market overall. With HP's decline of 9.1% and no growth on the part of IBM (\$220.1 million with 11.6% market share), the combined impact of these two vendors on ASQ addressed 50.7% of the market.
- ☒ In addition, 2009 saw ASQ market consolidation with Micro Focus' acquisitions of Borland and of the distributed testing and requirements management products of Compuware (1H09). Borland was already struggling financially in 2008, and Compuware's ASQ business also experienced challenges going into 2009. Micro Focus' acquisition in mid-year 2009 increased the revenue impact on an already difficult market segment.
- ☒ Bright spots for the ASQ market included revenue growth for Microsoft (as users began to invest pre-2010 launch in an emerging market for Microsoft) and for innovative ASQ vendors in quality measurement, static and dynamic analysis, security, and the emerging software-as-a-service (SaaS) and testing-as-a-service (TaaS/cloud) arenas (Coverity, Fortify, SOAsta, Skytap).
- ☒ We remain bullish overall for ASQ solution providers as organizations emerge from the worst economic crisis in recent history. Limited resources and layoffs over the past 18–24 months that impacted quality organizations are leading to renewed investments already (4Q09 and 1H10), and as we encourage users to address technology and software complexity with effective ASQ solutions, we also expect increased momentum moving into 2011–2012 for quality technology and service providers.
- ☒ We also see increased adoption of ERP quality solutions and emerging demand for quality for product engineering and embedded software.

IN THIS STUDY

This IDC study examines the automated software quality market for the period from 2007 to 2009. Revenue and market share of the leading vendors are provided for 2009.

Methodology

See the Methodology in the Learn More section for a description of the data collection and analysis methodology employed in this study.

In addition, please note the following:

- The information contained in this study was derived from the IDC Software Market Forecaster database as of May 14, 2010.
- All numbers in this document may not be exact due to rounding.
- For more information on IDC's software definitions and methodology, see *IDC's Software Taxonomy, 2010* (IDC #222023, February 2010).

Automated Software Quality Market Definition

Automated software quality (ASQ) tools support software unit testing, system testing, or both; they also support software quality assurance. Functions such as test specification, generation, execution, results analysis, and "bug tracking," as well as test and QA management, are included in this category.

SITUATION OVERVIEW

The Automated Software Quality Market in 2009

Table 1 displays 2007–2009 worldwide revenue, 2009 market share, and 2008–2009 growth for automated software quality vendors.

TABLE 1

Worldwide Automated Software Quality Revenue by Vendor, 2007–2009 (\$M)

Vendor	2007	2008	2009	2009 Share (%)	2008–2009 Growth (%)
HP	757.0	812.0	738.1	39.0	-9.1
IBM	220.1	220.1	220.1	11.6	0.0
Microsoft	94.6	110.0	122.7	6.5	11.5
Micro Focus	61.4	57.8	69.2	3.7	19.7
Compuware	121.5	122.8	56.0	3.0	-54.4
VMware	27.6	35.2	37.0	2.0	5.1
Parasoft	32.4	35.7	36.4	1.9	2.0
Empirix	53.9	37.0	35.1	1.9	-5.1
CAST Software	32.6	38.2	34.4	1.8	-9.9
Coverity	21.0	26.0	32.0	1.7	23.1
Fortify Software	11.2	18.0	23.9	1.3	32.6
Surgient	11.1	18.9	19.4	1.0	2.6
ASG	6.1	19.2	17.0	0.9	-11.5
Oracle	–	11.0	11.7	0.6	6.4
CA	10.6	11.1	10.8	0.6	-2.8
Keynote Systems Inc.	5.0	6.0	6.1	0.3	1.7
RadView Software	4.6	5.0	5.3	0.3	4.9
Intel Corp.	3.5	3.7	4.3	0.2	15.1
Progress Software Corp.	2.5	2.6	2.5	0.1	-3.8
Instantiations Inc.	0.2	0.4	0.4	0.0	4.5
Sparx Systems	0.2	0.2	0.2	0.0	4.8
Subtotal	1,477.1	1,590.9	1,482.5	78.4	-6.8
Other	381.2	412.6	408.0	21.6	-1.1
Total	1,858.2	2,003.5	1,890.5	100.0	-5.6

Source: IDC, May 2010

The overall ASQ market struggled in 2009 as compared with significant growth in prior years. The two largest ASQ revenue providers, HP and IBM, impacted the market as HP declined 9.1% (at 39% share) and IBM remained flat (at 11.6% share). Additional disruption of the ASQ market with Micro Focus' acquisitions of Borland and of Compuware's distributed quality products (see *Micro Focus Augments Modernization Strategies with Borland and Compuware Testing Acquisitions*, IDC #218382, May 2009) resulted in revenue declines for two of the other top 5 revenue players as well. The numbers in Table 1 are somewhat misleading, since the acquisition of a portion of Compuware's product line that kicked in during 2H09 makes it appear that Micro Focus' overall ASQ revenue grew 19.7%. (IDC does not backstream revenue for prior years unless entire companies are acquired.) However, the totals for ASQ revenue for the combined ASQ products from Borland and Compuware declined significantly in 2009, which is visible in ASQ revenue declines of 54% for Compuware as it divested its distributed quality and requirements tools on the one hand and retained its mainframe ASQ products and acquired Gomez, which has a small amount of ASQ revenue, on the other hand (see *Compuware Centers on Application Performance and Portfolio Management with Sale of Testing Solutions*, IDC #218381, May 2009, and *Compuware Expands SaaS Portfolio with Gomez Acquisition*, IDC #IcUS22033409, October 2009).

Both Micro Focus and Compuware have significant opportunities to grow revenue in this context, as organizations begin to reinvest in ASQ solutions. Users emerging from M&A consolidation over the past 12–24 months can benefit from Micro Focus' existing product portfolio, which now includes the quality capabilities of the combined products including its application modernization, application portfolio management, and SCM portfolio of products. Micro Focus has executed well on its financial results for the company's fiscal year (ended CY 2Q10), with revenue growth of 57% (including 8% organic growth), which bodes well potentially for execution in the upcoming year. Micro Focus will ship its 2010 Silk release, integrating the Compuware testing products, and will be making further announcements in performance monitoring, augmenting its May 2010 release of Silk Performer Diagnostics.

Compuware's Gomez acquisition positions it well to target testing in the cloud and performance optimization in conjunction with its significant service management and IT PPM strategy, potentially.

Positive news in an otherwise dismal ASQ market for 2009 includes Microsoft's ongoing evolution of its testing offerings and uptake by users seeking an alternative to higher-priced alternatives (with Visual Studio Team System [VSTS] offerings, which are now part of Visual Studio 2010 as of 2Q10). We also saw engagement worldwide by users seeking to invest early in Visual Studio 2010 and related products. IDC's revenue analysis for Microsoft's ASQ products is based on testing usage models for the combined VSTS suite (since Microsoft sells both a separate SKU for testing, now called VS 2010 Test Professional, as well as testing capabilities within the former VSTS 2005 and VSTS 2008 product lines) and a portion of TFS revenue for collaboration.

In the midrange and other areas of the market, IDC saw growth, with innovative vendors playing a significant role to help keep the market from sliding further

downward. Solutions from vendors in areas of innovation and importance for users tended to experience increased adoption even in this difficult economy and helped insulate the ASQ market from an even deeper decline in 2009. These areas include emerging solutions for TaaS (SOAsta, Skytap), security (such as Fortify — with excellent growth taking into consideration Fortify's combined security and vulnerability revenue and ASQ revenue, split by usage pattern), and static and dynamic and overall software quality analysis and quality measurement vendors (Coverity, CAST, Klocwork, McCabe, etc.). We also saw and continue to see the increasing emergence of demand for specialized ERP testing, including Worksoft and emerging offerings from Oracle (with a recent new product release) as well as SAP's solutions and partnerships with HP, Worksoft, and other third parties. We expect demand for VoiP testing (Epirix) and user experience testing (Gomez/Compuware, Keynote) will increase over the coming 12–24 months.

IBM's investments in Jazz, Rational Team Concert, quality tools build management with Buildforge, Insight (Cognos), security (Ounce Labs, Watchfire), and coordination across life-cycle areas helped keep IBM Rational from revenue declines in 2009 and position it for an improved 2010.

The drive for complex sourcing in this difficult economy is also driving renewed adoption of automated software quality management solutions that provide visibility into software defects and performance challenges, and enable metrics for assessing sourcing and coordination for distributed development teams. We have also seen the evolution of the need for better coordination between security, ASQ, open source, and code management.

As the market revenue leader with 39% share, HP remains in a position to influence the overall ASQ market, and its decline in revenue of around 9% contributed to ASQ market revenue declines for 2009 as well. Although HP evolved its product portfolio with strong product releases during 2H08 and 1H09 and has been taking steps to move through challenges (through transitions in its sales and partner channels and by customer support, maintenance, and pricing concerns on the part of its user and prospect base), significant declines in enterprise corporate expenditures for major ASQ investments cut HP revenue significantly. In challenging economic times, many organizations opted to postpone investments in ASQ tools and upgrades or opted for lower priced solutions. By 4Q09 however, IDC saw an uptick in investment on the part of companies that were feeling the pinch of layoffs of quality personnel earlier in the year.

Moving into 2H10, HP has been establishing partnerships with key third-party partners and integrators and shifting its pricing model to support engagements. (Given the functional breadth and potential complexity of adoption for HP's ASQ products, HP and partners offer consultative sales that can be helpful for successful implementation.) HP is also continuing to focus on SaaS licensing models across its product portfolio and seeking to respond to customer issues with regard to maintenance costs. The applications portfolio within HP Software and Solutions has key opportunities, and IDC expects announcements in the coming months to leverage HP ASQ and application performance management capabilities. Other partnerships include relationships with Surgient for virtual test lab management and augmentation of its security investments. The applications portfolio within HP Software and

Solutions has a large ecosystem of additional partners that allows customers to target a broader integrated life-cycle solution including Fortify for Static Application Security Testing, Collabnet for development integrations for sharing information with developers, Electric Cloud for build management, and BluePrint for Requirements Definition.

IBM Rational has ASQ revenue second to HP, with no growth during 2009 for the second year running (down from 12.4% growth in 2007). IBM went up slightly from its 11.0% share to 11.6% as a result of HP's shift downward. Updates to IBM's testing tools and renewed focus on emerging areas during 2009 position IBM for some limited growth in the current difficult economy for 2010 and moving into 2011. IBM released its testing support for the Jazz platform in 2008, expanded that in 2009, and also more offered intuitive requirements tools with Method Composer. Most recently, IBM Rational announced its cloud-based testing initiative along with innovative token-based pricing models, which will become more broadly available later in 2010. The shipping of Rational Team Concert and Rational Asset Manager (RAM) and the emergence of IBM Rational's Jazz collaborative development environment are key examples of IBM Rational's push into dynamic, emerging markets. IBM Rational can benefit from its leverage across other life-cycle areas and its strengthening integration with other IBM business units such as Tivoli, which also resulted in product coordination during 2009 and 1H10. Alliance with the IBM WebSphere team remains sporadic, however, and is both an opportunity and a challenge for both groups moving into 2011–2012. The "Smarter Planet" and "Smarter Product" initiatives offer a coordination point for IBM software teams, which are beginning to be well leveraged. We expect to see quality management for embedded engineering as a core focus moving into 2011–2013 time frames.

FUTURE OUTLOOK

IDC expects significant declines of the ASQ market as our assessments for 2009 settle out with emerging stabilization in 2010, which will be in the low single digits. (We predicted and saw ongoing ASQ market consolidation with Micro Focus' recent acquisitions of two ASQ vendors in the number 3 and number 5 positions for ASQ revenue generation — Compuware and Borland — which build on Oracle's acquisition of Empirix and Progress' acquisition of Mindreef in 1H08.) Layoffs of quality and development staff had stark, significant impact on application quality during 2009, which started to include reinvestments in solutions (in 4Q09 and now moving into 1H10).

ESSENTIAL GUIDANCE

We recommend that users evaluate ASQ solutions in the context of highly constrained quality staff, increased complexity, and utilization of outside consulting firms to better evaluate software capabilities, performance, and success. The market remains far from saturated as manual testing remains the standard approach for a majority of companies. In a difficult economy with decimated human resources (in the wake of layoffs and consolidation), the efficiencies of automation remain both alluring and an essential element to IT efficiency and survival for businesses. The increasing

business criticality of software, combined with the emergence of complex, disruptive trends, will continue to drive the need for process improvement for ASQ specifically and ALM overall. Those constraints are also resulting in the usage of complex sourcing that demands oversight and management of quality. Compliance, security challenges, and the emergence of services and Web 2.0 heighten the need for ASQ tools and SaaS as well as emerging virtualization to support and facilitate ASQ adoption and implementation. Testing-as-a-service cloud solutions are also emerging increasingly, due to adaptability and potential cost savings (management and security remain user concerns; testing is a strong initial choice for cloud at many organizations).

The open source movement is also vitalizing grassroots automated testing implementations. The community meritocracy of open source contributors can lead to hybrid revenue generation models that begin as open source and evolve to SaaS models. Open source itself needs to be managed, demanding additional automation. End-user customers struggling with the complexity of this "perfect storm" of market trends look to more effective process, organizational, and ASQ tools as a way to manage and help ensure quality and security. We will continue to see the emergence of "build, buy, and partner" strategies on the part of larger vendors to create comprehensive life-cycle solutions to target enterprise customers. However, smaller vendors with innovative technologies and business models will find opportunity in specialized niches in smaller workgroup-focused development shops and in the enterprise through partnerships. Yet it will be harder for them to survive during the 2009–2011 time frame. Testing for ERP vendors will emerge increasingly. SaaS licensing models that are synergistic and can act as an on-ramp to "testing in the cloud" will increasingly emerge as customers seek to decapitalize investments in IT and lower support, implementation, and sunk costs in tools. In that context, leverage of automation for both virtual test lab management and provisioning will also pick up.

LEARN MORE

Related Research

- ☒ *Worldwide Automated Software Quality 2010–2014 Forecast: An Initial Look at a Challenging Testing Market* (IDC #223024, April 2010)
- ☒ *Coordinating Software Quality with Security and ALM* (IDC #IcUS22276610, April 2010)
- ☒ *IDC's Software Taxonomy, 2010* (IDC #222023, February 2010)
- ☒ *Driving Quality into the Cloud with SOASTA: Efficiencies of Scale in a Stormy Economy* (IDC #221732, February 2010)
- ☒ *Oracle Acquires AmberPoint — Targeting Services Transaction Tracking and Run-Time Governance?* (IDC #IcUS22227310, February 2010)

- ☒ *Worldwide Application Life-Cycle Management Software Vendor Analysis: Review of 2008 Customer and Partner Win Announcements* (IDC #220998, December 2009)
- ☒ *Worldwide Automated Software Quality 2009–2013 Forecast Update and 2008 Vendor Shares: Evolving Quality in a Challenging Market* (IDC #219695, September 2009)
- ☒ *IDC MarketScape: IT Project and Portfolio Management, 2009 Vendor Analysis* (IDC #219087, July 2009)
- ☒ *Jazzing Up Quality to Help Address Life Cycle Collaboration in a Challenged Economy?* (IDC #1cUS21713409, March 2009)
- ☒ *Virtualization and the Application Life Cycle: Strategies to Augment Existing Approaches* (IDC #215930, February 2009)
- ☒ *Application Lifecycle Management and Security — Establishing a Secure Software Framework?* (IDC #215936, January 2009)

Methodology

The IDC software market sizing and forecasts are presented in terms of packaged software revenue. IDC uses the term *packaged software* to distinguish commercially available software from custom software, not to imply that the software must be shrink-wrapped or otherwise provided via physical media. Packaged software is programs or codesets of any type commercially available through sale, lease, rental, or as a service. Packaged software revenue typically includes fees for initial and continued right-to-use packaged software licenses. These fees may include, as part of the license contract, access to product support and/or other services that are inseparable from the right-to-use license fee structure, or this support may be priced separately. Upgrades may be included in the continuing right of use or may be priced separately. All of these are counted by IDC as packaged software revenue.

Packaged software revenue *excludes* service revenue derived from training, consulting, and system integration that is separate (or unbundled) from the right-to-use license but does include the implicit value of software included in a service that offers software functionality by a different pricing scheme. It is the total packaged software revenue that is further allocated to markets, geographic areas, and operating environments.

The market forecast and analysis methodology incorporates information from five different but interrelated sources, as follows:

- ☒ **Reported and observed trends and financial activity.** This study incorporates reported and observed trends and financial activity in 2009 as of the end of March 2010, including reported revenue data for public companies trading on North American stock exchanges (CY 1Q09–4Q09 in nearly all cases).

- ☒ **IDC's Software Census interviews.** IDC interviews all significant market participants to determine product revenue, revenue demographics, pricing, and other relevant information.
- ☒ **Product briefings, press releases, and other publicly available information.** IDC's software analysts around the world meet with hundreds of software vendors each year. These briefings provide an opportunity to review current and future business and product strategies, revenue, shipments, customer bases, target markets, and other key product and competitive information.
- ☒ **Vendor financial statements and related filings.** Although many software vendors are privately held and choose to limit financial disclosures, information from publicly held companies provides a significant benchmark for assessing informal market estimates from private companies. IDC also builds detailed information related to private companies through in-depth analyst relationships and maintains an extensive library of financial and corporate information focused on the IT industry. We further maintain detailed revenue by product area models on more than 1,000 worldwide vendors.
- ☒ **IDC demand-side research.** This includes interviews with business users of software solutions annually and provides a powerful fifth perspective for assessing competitive performance and market dynamics. Direct conversations with technology buyers provide an invaluable complement to the broader survey-based results.

Ultimately, the data presented in this study represents IDC's best estimates based on the above data sources as well as reported and observed activity by vendors and further modeling of data that we believe to be true to fill in any information gaps.

Synopsis

This IDC study provides an analysis of vendor share for the automated software quality (ASQ) market during 2009. This IDC study discusses IDC's automated software quality vendor share assessment in a market that experienced losses of 5.6% during 2009. Major-share ASQ solution providers experienced a significant revenue decline or flat revenue for the most part. Innovative, smaller providers across a variety of areas — from security to software measurement to agile testing — experienced growth in the difficult market and helped keep the market from an even worse decline. Longer term and moving into 2010, however, despite a weak economy and declining revenue last year, the ASQ market is slated for an overall trajectory of stabilization for 2010 and growth. This will result from a variety of factors that are coming together additively. These include impact of quality staffing cuts last year, resource constraints and complex sourcing for application development projects, increased complexity of emerging development paradigms, and software-as-a-service (SaaS) and emerging cloud or "testing as a service" offerings.

"In the face of a chaotic global economy, constrained IT staffing, and complex sourcing, demand will remain for ASQ tools, though at lesser growth rates than earlier expected, and further market and product evolution will occur as larger vendors deliver more complete life-cycle management solutions as consolidation continues,"

says Melinda Ballou, program director for Application Life-Cycle Management at IDC. "Despite significant challenges to the ASQ market in 2009 and consolidation with the acquisition of key players, we see the gradual reemergence of investment. The surviving smaller vendors will continue to play a role for market innovation, as we see from emerging SaaS and early 'cloud' testing vendors. We expect ongoing acquisitions in this space, particularly in the 2011–2012 time frame."

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