Automated Software Quality
IDC Vendor Profile

Worksoft Inc.

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VENDOR PROFILE


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IDC OPINION

Software drives business innovation and performance optimization and helps enable execution and competitive position. Proactive, consistent quality management for business-critical applications has increased in importance for most organizations. Given the visceral impact of downtime and performance degradations in a difficult economy and the agility enabled by software such as ERP solutions, the demand for effective testing has never been greater. The cost savings of finding software problems early in the life cycle and effective business process quality and infrastructure management for quality can be geometric in scale. In the wake of staff cuts of quality staff over the past 12–18 months, automation (along with improved organizational and process strategies) helps increase efficiency and can augment remaining resources. IDC sees these key trends driving growth for ERP testing:

☑ In a volatile economy as companies reinvest, financial constraints, global competition, and innovation are driving commitment to testing automation for core business applications.

☑ Small and medium-sized businesses (SMBs) and managed service providers are leveraging ERP testing automation for cost savings and efficiencies of scale.

☑ Large service and solution providers see ERP testing as an opportunity to evolve and bundle new, quality services together to target emerging markets for additional value-added and service offerings. This complements well ERP quality needs for mobile, security, and other areas (regulatory compliance, etc.).

☑ With the advent of agile approaches to both development and product evolution, including apps for mobile environments, software release cycles and churn are faster than ever. Business-critical branding and demand for mobile ERP applications necessitate speedy turnaround. Compressed release times from days to hours drive the need for automation. These combined factors and others that push both complexity and the need for speed (without loss of quality) are driving users to adopt automation solutions for ERP testing.
IN THIS VENDOR PROFILE

This IDC Vendor Profile is one in a series of IDC studies that examine automated software quality (ASQ) solutions and provides both vendor analysis and customer reference context for technology adoption. This Vendor Profile assesses the ASQ strategy and position of Worksoft, a vendor targeting the enterprise resource planning (ERP) quality and testing arenas. Here, we discuss Worksoft Certify's offering and testing solutions. We position Worksoft within this product category and relative to trends in user adoption for the dynamic ERP testing market and in the context of an overall economy that remains volatile and demands efficient access to software quality and deployment. We also include summaries of two Worksoft customer references: a chemical company and an agricultural firm, both made use of Worksoft's ERP testing solutions with Worksoft Certify.

SITUATION OVERVIEW

Company Overview

Products: Worksoft Certify, Certify Learn, Certify Data, Certify Impact, Certify Connect, Certify Business Process Procedure, Certify Execution Manager, Certify Performance Test, and Certify Performance Test Portal

Worksoft is based in Addison, Texas (near Dallas), and has 95 employees and is on target for revenue of between $20 million and $30 million for CY12 — with growth of greater than 30% over the prior year, driven by its SAP-specific, intuitive, scriptless quality solutions. Worksoft's key differentiators are testing products that do not require programming and its focus on the SAP environment in a targeted, innovative manner that refocused the company's business for the past three to four years and has been driving growth. (The vast majority of Worksoft's revenue comes from SAP-related quality assurance; historically, Worksoft offered generic testing capabilities.) Worksoft products are relatively easy to use by nontechnical users to help provide ROI typically in a matter of weeks for SAP users. Worksoft’s automation is responsive to changes in the underlying SAP application and business processes to extend value beyond initial projects. These products also provide context for both SAP and non-SAP applications that integrate and coordinate with SAP for more complex quality support across related application portfolios. Worksoft is considered a Major Player in the enterprise ASQ IDC MarketScape.

Worksoft augments its ASQ product capabilities and tight integration with SAP’s Solution Manager with integration to other testing solutions, such as test management products from both HP and IBM. (IBM is leveraging a close partnership with Worksoft as a primary SAP testing solution.)

While Worksoft's depth in SAP-specific environments provides differentiation, the company is obviously more limited with regard to broader ASQ capabilities. Partnerships with other vendors are a core focus for Worksoft as it seeks to broaden its reach. Beyond integration with the largest enterprise ASQ providers’ test management solutions, Worksoft recently announced a partnership with Keynote DeviceAnywhere in June 2012 to target mobile platforms. (Worksoft is in the process of evolving an ASQ SaaS/cloud testing solution.)
Company Strategy

To gain visibility into Worksoft's SAP-focused capabilities, it is helpful to have a deeper overview of the company's product portfolio. Worksoft Certify is a codeless automated functional testing solution for business process validation. Worksoft Certify has an interface library that supports a variety of platforms and operating systems including SAP GUI, SAP Portal, HTML, NET/WPF, Visual Basic, Java, Flex, Silverlight, Unix, C++, AS/400 (iSeries), Mainframe/3270, and Web services (SOA). Worksoft Certify is based on a scriptless framework that eliminates custom coding. Instead of generating scripts or code, Worksoft Certify uses a patented data-model design to validate business process workflows, making it relatively quick and easy to implement and adaptive to frequent application changes in dynamic, rapidly changing competitive business environments.

Certify Learn automates the process of loading SAP objects into Worksoft Certify to help create a set of SAP application maps to provide a common application inventory for improving impact analysis and business test validation. By automating the process of loading SAP objects into Worksoft Certify, SAP teams can define and execute more automated tests efficiently and more quickly than manual approaches.

A prebuilt, test content library for SAP is also included that contains a reusable repository of SAP business process tests based on commonly used SAP transaction codes and practices. Together, Certify Learn and the Worksoft Content Library for SAP help accelerate test automation projects and can assist companies in improving integrity for their SAP business processes.

For organizations that want to include SAP business analysts, business experts, and subject matter experts in the process, Worksoft includes Certify Capture. It is a free add-on to the Certify functional test automation solution that can be used by both testing professionals and business users. It does not require any specialized IT knowledge or programming skills, thus avoiding the problems normally associated with cataloging important business process knowledge that defeat test automation efforts. Once captured, business process knowledge can be easily used for testing, training, and compliance activities. Certify Capture preserves institutional knowledge and business processes in a centralized repository while simplifying the process of creating end-to-end business process tests with significantly less effort than required with legacy test solutions.

Certify Data is a test data management solution designed to automatically identify and extract representative SAP data so that it can be embedded into Worksoft Certify during test case construction. Over time, Certify Data also helps customers maintain their test data by performing automatic test data refreshes directly from within Worksoft Certify.

Certify Impact is a risk-based testing solution that identifies, recommends, and executes business process tests based on a set of proposed SAP application changes either directly from the transport or through SAP Business Process Change Analyzer (BPCA).
Certify Connect provides bidirectional integration to a variety of market-leading enterprise test management solutions such as SAP Solution Manager, IBM Rational Quality Manager, and HP Quality Center. Additionally, Worksoft Certify includes the ability to create SAP Business Process Blue Prints and to populate the Business Process Hierarchy in Solution Manager.

Incorporated into Certify is also access to key performance indicators and quality metrics to give managers the information and visibility needed to help improve decision making and risk management. Identifying and quantifying the overall effectiveness of business process validation tasks help provide visibility into current project status and test results through pre-packaged and customizable Web-based charts and graphs.

Certify Business Process Procedure (BPP) is a Web-based reporting module that generates detailed reports for testing, IT audit, and compliance. These automatically generated BPPs help keep documentation current and accurate and can be produced in multiple formats, so they are flexible and reusable for applications including training and Solution Manager Blue Print documentation. BPP reports catalog a sequential set of test steps, grouped by test process and application screen. Certify BPP provides dynamic reporting against Worksoft Certify test executions and test results to provide an audit trail of the business process validation activity. Certify BPP also enables Web-based workflow and approval for Worksoft Certify assets including test requirements, test processes, and test results. Certify BPP can also help record and preserve test assets and generate documentation to aid in governance and compliance including regulations such as FDA's 21 CFR Part 11 (helping to provide a system of record for reporting, auditing, and compliance).

Certify Execution Manager is a batch execution system that enables companies to quickly and easily schedule a variety of Worksoft Certify functional tests to run in an unattended mode (primarily for high-volume tests).

Worksoft Certify Performance Test and Certify Performance Test Portal provide a nonprogramming approach to build and execute large-scale performance tests based on both an SAP GUI and a HTML interface.

Since Worksoft ships with preexisting SAP tests and scenarios out of the box, a keyword-driven approach enables users to not have to re-implement if they haven't changed their SAP source. Worksoft's Live Learn connects to Solution Manager and extracts information about the applications. As users describe an instance, they don't need to have SAP running — Worksoft renders what the screen would be and supplies flexibility from a testing standpoint. Another feature is Certify Data, which at test execution time allows for inspection of real data in SAP. For example, if you want to know a part number, you can use Certify Data and find the potential part, and enable debugging. Worksoft's Impact enables risk-based impact analysis on tests when SAP changes. This provides several benefits: when the application changes, Worksoft can automatically update the tests and can point to specific areas where the tests are being impacted and show where they need to be updated, as well as if any new tests are needed. This also helps to automatically identify subsets of tests that need to be checked based on impact of the changes to SAP.
FUTURE OUTLOOK

Well-performing and well-functioning ERP applications are core to business success; Worksoft has leveraged its differentiated approach to ERP testing extremely well so far and is augmenting its approach as the company moves into 2013. From risk-based impact analysis to partnering for mobile testing to providing a SaaS solution for its intuitive Certify product, Worksoft is well positioned. We see additional opportunities for the company as it moves into the 2013–2014 time frame targeting both the mobile and the SaaS arenas, as well as deeper and broader partnerships with systems integrators and service providers with strong testing and ERP practices. We expect strong growth for Worksoft as 4Q12 concludes.

User Reference Summary

The customers IDC spoke with valued Worksoft for its ease of use and a different, pragmatic, efficient approach to testing that focused on business processes. A chemical company and an agricultural firm had similar experiences for efficiencies of scale for the business and ROI created by adoption of Worksoft for their SAP environments. Both companies found the transition to automation required the need for cultural and organizational change up front, which was rewarded by massive time and resource savings post-automation. Also, the shift to automated ASQ usage in this context was smoother since Worksoft is scriptless and intuitive.

The chemical company had been live on SAP since 1996, and the CIO kept asking why testing wasn’t automated. The challenge for this company with other automated SAP testing solutions was the effort required to create scripts, which would subsequently be shelved and then would require additional modifications when future changes were made to the applications (or scripts would not work). As a result, extensive manual testing was the name of the game. Worksoft changed the SAP testing options in multiple ways for this organization: scriptless testing meant that users didn’t need to be programmers to use the tool and, because it is object based, when a change happened to the SAP system or the processes, users could change one object and have it be fixed “all at once.” With other tools, if a company had 50 processes that touched a specific SAP screen, changes would be required to all 50 processes. For tool evaluation purposes, this organization had business people who were configuring SAP assets with multiple options for SAP testing, and they overwhelmingly chose Worksoft. (The other challenge with which this company was faced was the retirement of key staff who had been involved with manual testing of SAP applications, so the pressure to automate was significant and immediate.)

To assist in the transition, this company brought in an SI provider (Cognizant) along with its own team and support from Worksoft. The company was able to go live within four months.

The agricultural company has about 26,000 employees and close to $10 billion in revenue per year, and this organization is using Worksoft for cross-functional areas, bringing together business analysts and development staff (with about 100 BAs and 200 developers involved in the SAP area). One of the biggest drawbacks and challenges for this organization is maintenance and SAP updates — application change dragged the company down, and test automation was a necessity to enable it
to be responsive to dynamically changing business pressures. This organization also wanted to see which tool would be easier to use as it went through application changes (some of the mappings were broken when using live mappings). It also developed an ROI model and created a break-even analysis (e.g., over the course of the year, if it took X manual hours to test versus the amount of time needed post-automation). Assuming three releases per year, running regression tests at least twice per release was the baseline scenario in place for this organization.

In addition to the benefits offered by Worksoft, this company also valued the partnership that Worksoft extended toward it and the ways in which Worksoft was open to improving the product. This company also found that Worksoft's product works well and efficiently compared with alternatives that required many more steps, were significantly more cumbersome, and required additional resources to build and maintain testing scripts and manage them as a result.

The biggest challenge for this organization was the full conversion of the company's application and also its requirements, which were spread across multiple systems (from requirements management tools to Excel to MS Word documents). The company opted to do this across five individual business units and was able to complete one per month. With over 200,000 test scenarios, this company also needed to get a dedicated machine rather than a VM on which to run Worksoft to improve performance. During the launch, the company did launch studies to ensure that the tool was not merely being rolled out, but adopted. The company actively pursued individuals who had not logged in to help enforce a smooth transition. This company has achieved significant savings as a result of automating its SAP regression tests (millions of dollars per year). It is now looking to move to performance testing as well — turning regression tests into performance tests that include its massive workflows. It is also considering a move to cloud testing but has concerns about security.

Both organizations found significant efficiencies of scale in moving their SAP applications to automation with Worksoft's solutions. Establishing exit criteria ahead of time, prioritizing those across functional groups (including BAs and developers), and setting up an effective transition plan to enable adoption along with Worksoft's intuitive, efficient technology were key to success for these companies.

**ESSENTIAL GUIDANCE**

Users should engage in gap analysis assessments to determine core needs for ASQ across core emerging areas such as ERP testing, ASQ SaaS, and cloud testing and evaluate and adopt appropriate automated technology and testing services. Technology alone is insufficient, however; as was indicated by Worksoft's customer references, effective adoption of automated solutions must be accompanied by appropriate organizational and process change to help ensure consistent usage. This is even more the case in core emerging business-critical areas such as ERP testing. As customer examples indicated, these are "must-have" business software environments to sustain core corporate operations as well as customer and partner relationships. We expect ERP testing to be accompanied with business process as well as effective performance optimization and application testing.
Related Research


- IDC's Software Taxonomy, 2012 (IDC #235401, June 2012)

- Worldwide Automated Software Quality 2011 Vendor Shares: Innovation Demands Range of Quality Responses Driving Growth (IDC #235455, June 2012)


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