

MARKET MOVER ARRAY™ REPORT:

Lifecycle Virtualization

By Theresa Lanowitz, Lisa Dronzek | August 23, 2016



Vendor Excerpt

The complete publication is available to voke Research clients at www.vokeinc.com.



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◎ SUMMARY

As the line of business demands accelerated time-to-market and high-quality software, teams must use proven solutions to deliver better business outcomes through software. Lifecycle virtualization solutions bring the power of virtualization technology to the pre-production portion of the software lifecycle. Incorporating lifecycle virtualization solutions into your software lifecycle will help protect your brand and your business.

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CATEGORY OVERVIEW—LIFECYCLE VIRTUALIZATION

Lifecycle virtualization is the category of software solutions that encompass the benefits of virtualization technology applied to the application or product lifecycle for development and testing teams, including, but not limited to:

- **Virtual and cloud-based labs:** To provide environments on-demand
- **Service virtualization:** To statefully simulate and model dependencies that are unavailable or incomplete
- **Defect virtualization:** To record an application as it executes in order to replay to the point of failure
- **Test data virtualization:** To provision test data on demand while maintaining security and compliance
- **Network virtualization:** To emulate and simulate a network for assessing the impact of the network on the user experience (frequently used in conjunction with virtual users for performance testing)

These solutions enhance the application or product lifecycle by reducing defects, lowering costs, speeding time to market, and increasing customer satisfaction. Consider these solutions regardless of methodology. Lifecycle virtualization solutions are essential for movements that emphasize speed or collaboration such as Agile, DevOps, and anything positioned as “continuous”.

Lifecycle virtualization solutions remove the constraint of wait times for developers and testers in the pre-production portion of the software lifecycle. Through lifecycle virtualization solutions, developers and testers are given environments, services, data, defects, and networks “as close to production as possible” at any point in the software lifecycle, while reducing wait times.

This on-demand accessibility for labs, services, data, and networks means software teams are able to test in the most realistic environment possible at any point in the software lifecycle. Teams are able to meet time-to-market demands, manage costs, and deliver software with fewer defects.

While the technologies comprising the lifecycle virtualization category are proven, overall adoption and implementation is slower than it should be given the demand for compressed schedules. We attribute this slow adoption rate to lack of market awareness of the solutions especially at an influential level in an enterprise IT organization. We assume this is due to the popularity of such adjacent markets as cloud and platform as a service (PaaS) and the overemphasis by vendors of movements like Agile and DevOps in lieu of innovative technology with proven return on investment (ROI).

Lifecycle virtualization solutions, when used in conjunction with one another, work to deliver better business outcomes. Organizations that want tighter integration between cross-functional teams should adopt lifecycle virtualization solutions across the various roles of the software lifecycle.

MARKET MOVER ARRAY METHODOLOGY

The voke Market Mover Array is research designed to identify notable vendors in a particular market and is a core piece of voke's research taxonomy.

The voke Market Mover Array is plotted against two axes: "Innovation and Technology" and "Market Impact". Each of these axes contains seven components that the represented vendors were rated against.

The Innovation and Technology components are:

- Product
- Technology quality
- Ease of use
- Product works as advertised
- New technology solving a classic problem
- Easy solution to complex problems
- Integrations

The Market Impact components are:

- Executive leadership
- Product offerings
- Pricing
- Positioning
- Promotion
- Thought leadership
- Execution

The result of each vendor rating was charted and placed into one of four bands on voke's Market Mover Array: Lifecycle Virtualization (Figure 1).

The four bands of the Market Mover Array are:

- **Transformational:** These vendors are changing the tone and direction of the market. This band may include newer entrants to the market that have either innovative technology or the ability to take a long view of the market and articulate it. These

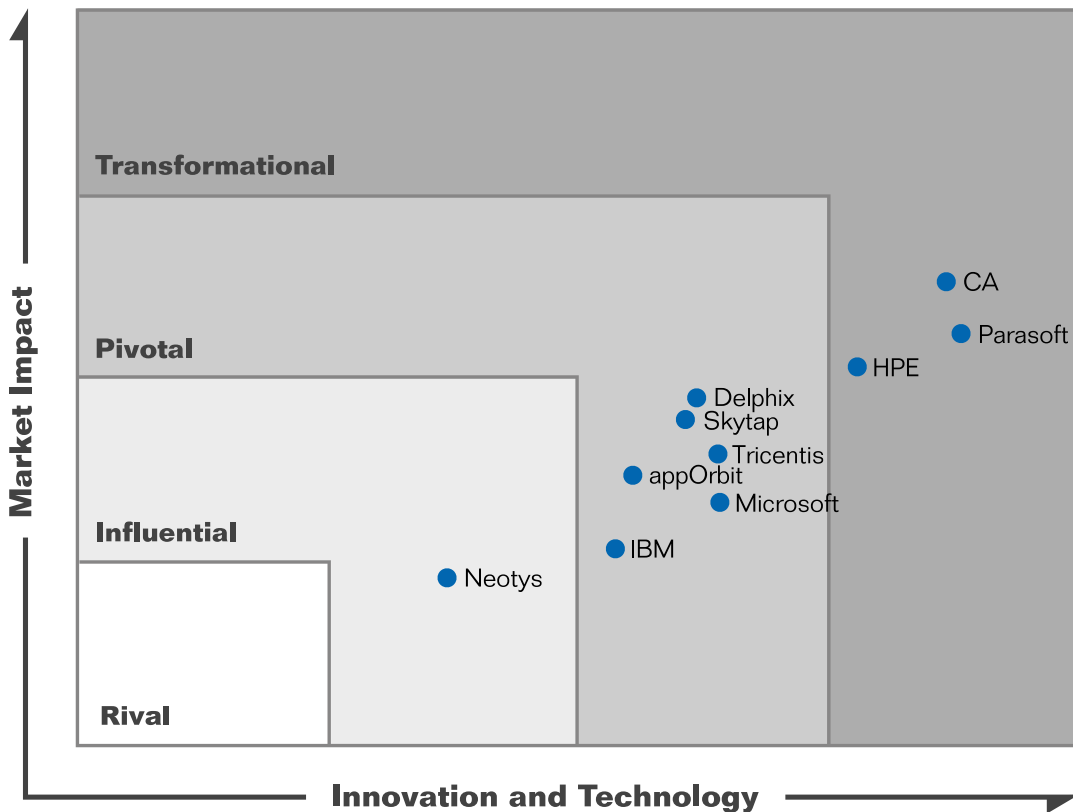
vendors are typically challenging the pivotal vendors to innovate either in terms of technology or marketing acumen.

- **Pivotal:** These vendors are crucial to the continuation and evolution of the market through their customer base, thought leadership, or technology innovation. Vendors with significant market share are under immense pressure to maintain status in the market through innovation. New and emerging vendors with compelling technology are vying for broader market awareness and solidifying their marketing voice.
- **Influential:** These vendors are making an impact in the market. Influential vendors are viewed as a compelling alternative or fill specific needs.
- **Rival:** These vendors show potential. Rival vendors may include emerging vendors delivering innovation or established vendors at a crossroads and in the process of reinventing their products or positioning.

MARKET MOVER ARRAY: LIFECYCLE VIRTUALIZATION

The Market Mover Array: Lifecycle Virtualization chart below identifies vendors with solutions in one or more categories of the lifecycle virtualization market.

Figure 1: voke 2016 Market Mover Array™ Chart: Lifecycle Virtualization



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MARKET MOVER ARRAY VENDORS

Vendors highlighted in this Market Mover Array (in alphabetical order):

- appOrbit
- CA
- Delphix
- HPE
- IBM
- Microsoft
- Neotys
- Parasoft
- Skytap
- Tricentis

This proven and evolving category includes multiple vendors with unique attributes. Its legacy began with virtual users and virtual labs. It then expanded to include defect virtualization, service virtualization, test data virtualization, network virtualization and is evolving to containerization. There is no one single solution to achieve the benefit of complete lifecycle virtualization. Enterprise IT organizations are likely to use solutions from multiple vendors. Consider all of the vendors mentioned in this report to virtualize the lifecycle.

Here is voke's analysis of each of the 2016 Market Mover vendors for lifecycle virtualization.

☉ PARASOFT

Market Mover Rating: Transformational

Lifecycle Virtualization Solutions

Service virtualization: Parasoft Virtualize

Test data virtualization: Parasoft Test Data Manager

Defect virtualization: Parasoft Virtualize

Virtual and cloud-based labs: Parasoft Environment Manager

Network virtualization: Integrated with third-party partner solution

Overview

Parasoft is a company borne of innovation with a relentless focus on software quality. Parasoft builds software that helps developers deliver the best possible code with as little risk as possible. The company is committed to giving developers and testers the most realistic and complete environment possible by leveraging lifecycle virtualization solutions. Through the combination of lifecycle virtualization solutions, Parasoft enables teams to be able to run all tests at any stage of the software lifecycle.

Parasoft is a company with powerful technology. The company must be able to articulate its strong value proposition in business-friendly language to gain momentum and traction in the enterprise.

Analysis

Vendor Strengths

- Technically strong lifecycle virtualization products with an emphasis on ease of use
- An extensive support for protocols and message types for simulating behaviors through service virtualization
- The ability to integrate benefits of development testing technologies (e.g., static analysis, automated unit testing, code coverage analysis) with early testing through service virtualization
- A strong partner ecosystem for lifecycle virtualization solutions through Parasoft Marketplace

Vendor Opportunities

- Speak to the business benefits of lifecycle virtualization solutions
- Demonstrate the benefits of lifecycle virtualization solutions as part of an overall way to identify business risk
- Invest to grow the business through acquisition

Consider this vendor if your organization is:

- Needing to test early and often throughout the software lifecycle
- Looking for an integrated offering with such development testing capabilities as static analysis, automated unit testing, and code coverage analysis
- Ready to expand lifecycle virtualization solutions across the enterprise whether on-premise or through public clouds such as Microsoft Azure or AWS

RELATED RESEARCH

☉ MARKET SPECIFIC

- voke Market Snapshot™ Report: Service Virtualization 2015 – January 21, 2015
- voke Strategic Brief™ Report: Reducing the Cost of Rework – October 21, 2014
- voke Market Snapshot™ Report: Virtual and Cloud-based Labs – August 24, 2014
- voke Market Snapshot™ Report: Service Virtualization 2012 – December 11, 2012
- voke Market Snapshot™ Report: Agile Realities – July 11, 2012
- voke Category Snapshot™ Report: Lifecycle Virtualization – November 7, 2011
- voke Market Snapshot™ Report: Virtual Lab Management – March 24, 2010
- voke Market Snapshot™ Report: Virtual Lab Automation – March 28, 2007

☉ VENDOR SPECIFIC

- voke Impact™ Note: A Focus on Neotys – January 13, 2016
- voke Solution Snapshot™ Report: Parasoft Development Testing Platform – July 7, 2015
- voke Solution Snapshot™ Report: Skytap – April 21, 2015
- voke Solution Snapshot™ Report: HP Service Virtualization – May 27, 2014
- voke Solution Snapshot™ Report: Tricentis Tosca Testsuite – February 26, 2014
- voke Solution Snapshot™ Report: Parasoft Virtualize – November 1, 2011
- voke Solution Snapshot™ Report: Microsoft Visual Studio Lab Management 2010 – April 21, 2010

Contact Information

Corporate Headquarters

voke, inc.
2248 Meridian Boulevard
Suite H
Minden, NV 89423
USA

Phone: +1-866-895-9045
Web: www.vokeinc.com
Blog: www.voke.blogspot.com



◎ ABOUT VOKE

voke, founded in 2006, is a modern independent technology analyst firm focused on the edge of innovation. voke's primary coverage area is the application lifecycle and its global transformation, including testing, virtualization, cloud computing, release management, embedded systems, cyber security, Internet of Things (IoT), mobile and device software.

voke provides data and analysis for the economy of innovation. Companies of all sizes, financial firms, and venture capital organizations turn to voke to harness strategic advice, independent and impartial market observations and analysis to move markets beyond the status quo. Please visit www.vokeinc.com to become a research client.