Research Report

Compuware's Mainframe DevOps Strategy, Product Offerings and Competitive Differentiators

Background

DevOps involves the mixing and matching of application development tools with operations management tools to help customers build modern applications and/or integrate new applications with established application environments – as well as overlay those environments with management tools designed to improve operational management, to speed applications performance, to automatically troubleshoot issues and to otherwise increase the efficiency of a given development/operations environment.

Compuware, with its long background in mainframe software development, and with its deep portfolio of modern development and operations management solutions, is a leader in the field of mainframe DevOps.

About the Company

To understand Compuware’s mainframe DevOps strategy, it is useful to understand the company’s structure, goals and objectives.

In 2014 Chris O’Malley was hired as CEO of Compuware. Chris brought with him several “cockamamie” ideas about how to change the stodgy maker of mainframe tools into a mainframe software powerhouse. Under Chris’ leadership, along with a new executive leadership team including VP of Product Management Sam Knutson and VP of Product Development David Rizzo to revitalize development, Compuware has undergone an amazing metamorphosis and has now become a shining star in the marketplace for mainframe software. What O’Malley has done is he has changed the company’s culture; created a new sense of enthusiasm; set ambitious but achievable goals for the company’s sales and development personnel, and has reinvigorated a company that had a questionable future.

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About this Company Continued

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Figure 1 – Compuware’s Quarterly Product Progression

Source: Compuware: July, 2018

CA sales representatives can tell customers specifically which products are tactical and which are strategic – and they can also describe several of the future improvements underway in the strategic product offerings.

What Makes Compuware Different in DevOps

The company’s enthusiasm, its innovative approach to bringing new products to market, its willingness to think out-of-the-box and jointly develop new mainframe solutions and its commitment to deliver new functionality to its customers every 90 days are all major Compuware differentiators. And these differentiators clearly influence the company’s approach to the mainframe DevOps marketplace.

Compuware’s mainframe DevOps market differentiators can be summed up as:

• The company has a clear vision for a unified, mainframe-inclusive DevOps toolchain that enables customers to continuously improve on the essential digital measures of velocity, quality and efficiency of mainframe development;

• The company is customer-centric, focused on collaborative working relationships with customers that result in new and innovative products and functionality that address their customers’ top line challenges; and,

• The company focuses on the creation of familiar, easy-to-use, graphically-driven development solutions that integrate with popular, state-of-the-art technologies from companies like Jenkins, XebiaLabs, SonarSource, Splunk and many others.
Portfolio Assessment: the Development Tools

One way to assess a DevOps portfolio is to separate the company’s development activities from operations activities – and then look closely at the products that support each activity.

Think of Compuware’s development tools portfolio as an integrated development environment (IDE) and a set of modern tools that help developers of all experience levels perform discovery, assessment, development, integration and testing on the oldest and most complex applications with ease.

Compuware’s mainframe development and testing tools perform:
- Application visualization and analysis
- Agile source code management, build and deploy automation
- Enterprise file and data management and advanced data visualization
- Test data masking
- Debugging and code coverage analysis
- Automated unit testing and functional testing
- IMS virtualization

A closer look at Compuware’s portfolio reveals the company’s integrated development environment, rich with tools for application development and integration, testing and program analysis facilities. It all starts with Compuware’s Topaz. Topaz is Compuware’s modern Agile platform of mainframe development and testing tools that integrates into a DevOps toolchain.

Compuware’s Topaz suite includes:
- Topaz Workbench: a modern Eclipse-based IDE that developers can use to initiate Compuware’s mainframe development and testing tools
- Topaz for Program Analysis: graphical visibility into program behavior and application execution that helps developers of all skill levels understand and work with even the most complex and poorly documented mainframe applications
- Topaz for Enterprise Data: a single interface for managing mainframe and distributed data, that enables developers to understand data relationships as well as create and mask test data
- Topaz for Total Test: automated mainframe unit test creation and execution (Compuware recently acquired XaTester to enhance their unit testing offering)
- Topaz Connect: allows mainframe source code and processes to be seamlessly connected to other [non-mainframe] workflows and processes

ISPW is Compuware’s agile mainframe source code management, build and deploy automation solution. ISPW works seamlessly with Jenkins, XebiaLabs and REST APIs within a DevOps toolchain. Also worth highlighting is Compuware zAdviser, which uses machine learning to find correlations between developer behaviors and key performance indicators (KPIs) based on DevOps toolchain data and Compuware product-usage data. zAdviser is a free service for Compuware customers on current maintenance.

Our assessment is this: Compuware’s development tools portfolio is comprehensive and addresses all of the needs of developers who are looking to build, integrate (within the mainframe or with distributed systems), test, deploy and mainframe applications. The interface to these development tools and utilities is logical, easy-to-use (even for marginally experienced developers), simple and straightforward. Compuware has done a good job integrating its once separate point products into a highly-integrated, graphically-driven suite of product offerings that fit within an enterprise DevOps toolchain.

Also noteworthy is that Compuware offers this environment and associated tools as an on premise or
Portfolio Assessment: the Operations Management Environment

Think of Compuware’s Operations Management portfolio as a set of tools that can be used to tune mainframe performance as well as closely scrutinize application behavior and balance workloads.

In short, Compuware’s operations tools perform:

• Application performance monitoring and analysis
• Batch automation
• Cybersecurity and compliance

In operations management, the vendor offers tools for systems management, application performance management and batch workload automation, often with an overlay of some machine learning algorithms to expedite troubleshooting and perform predictive analysis—all to ease and simplify the job of mainframe management.

Compuware’s operations management portfolio consists of:

• Abend-AID: a tool for identifying, resolving and tracking mainframe application faults and abends
• Strobe: application performance and analysis
• ThruPut Manager: a tool for automating batch processing and mitigating the R4HA peak.
• Topaz for Java Performance: provides visibility into Java application performance within mainframe and distributed environments

Compuware’s operations management environment focuses on mainframe performance problem solving, including Abend-AID for abend/fault resolution and Strobe for application tuning, so operators and system programmers can spend their time addressing anomalies instead of getting bogged down in menial tasks. ThruPut Manager automates batch processing helping firms save on software license fees and monthly licensing costs (MLC). Compuware’s application performance management tools, in general, offer integrated machine learning analytics. For mainframe managers who want to automate batch workload and application performance tuning, Compuware’s operations management portfolio provides excellent solutions.
Summary Observations

Compuware’s resurgence in the mainframe DevOps marketplace provides an excellent example of how to reinvigorate a company, refocus a company’s efforts on meeting market needs, and restore confidence in a customer base.

Compuware’s Development Tools environment is highly competitive with those of its larger mainframe DevOps competitors. Compuware’s Topaz development tool framework/visualization environment is extremely well integrated with underlying tools and utilities – and greatly simplifies application development, management and tuning. Moreover, Compuware zAdviser is the only tool of its kind on the market that helps teams continuously measure and improve their mainframe DevOps processes and development outcomes.

The company’s Topaz interface is outstanding from a usability point-of-view; the company’s test tools are also outstanding; and the company’s development tools and utilities are very competitive with those provided by other vendors.

The company’s Operations Management environment offers point product solutions (abend, batch,...) as well as a competitive application performance management solution, all of which Compuware is continuously enhancing.

Our assessment of Compuware’s strategy is that it is well targeted toward customers looking for a simplified development environment and solid operations management tools. The company exudes enthusiasm; is proud of what it has done over the past three years to restore the confidence of its customers – and with solid revenue growth since it was acquired in 2014, Compuware is well-positioned for growth in the mainframe DevOps marketplace.