



Mainframe DevOps

The Compuware Story

David Rizzo
Vice President of Product Development
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Recognizing There Is a Problem



40 Years of Waterfall

A photograph of a waterfall, likely Niagara Falls, showing a massive volume of water cascading over a rocky ledge. The water is white and turbulent at the top, creating a large misty spray at the bottom. In the background, a wooden walkway with a railing is visible where a group of people are watching the falls.



Slow-moving Development

In the Modern Digital Economy —Fast Beats Slow



Innovation

Ideation Is Key to Success





Quality

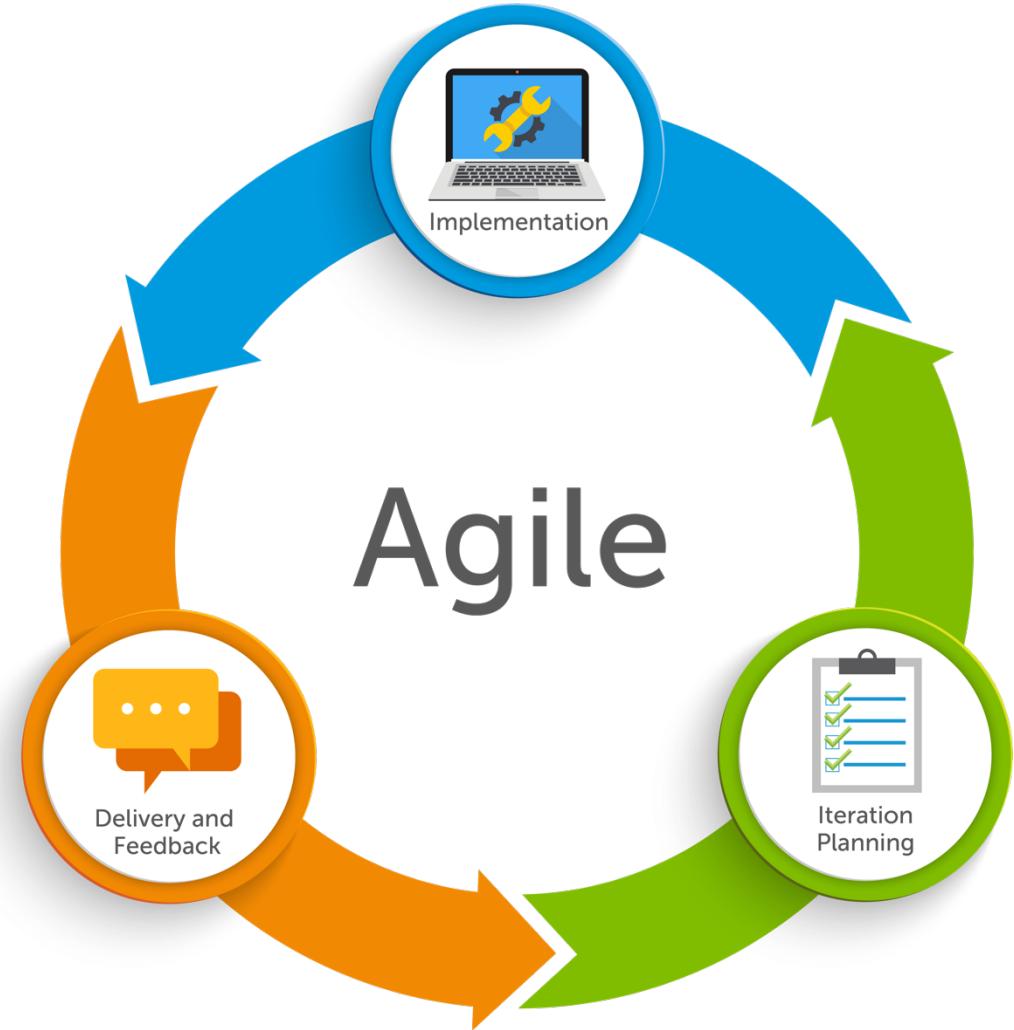
Measure, Maintain and Improve

Define the Desired State and How to Get There



Agility

Frequent,
Rightsized
Code Changes
to Fulfill
Business Needs





Confidence

Ensures Successful Mainframe
Code Changes Without
Unintended Consequences

Efficiency

Maximizes
Time and Skills
Across Dev,
Test and Ops



Ease of Use

Empowers
Mainframe-
inexperienced
Devs to Work
on Updates and
Enhancements





Integrations

Connect Mainframe and Non-mainframe
Systems to Achieve DevOps

The Right Tools Make It All Happen

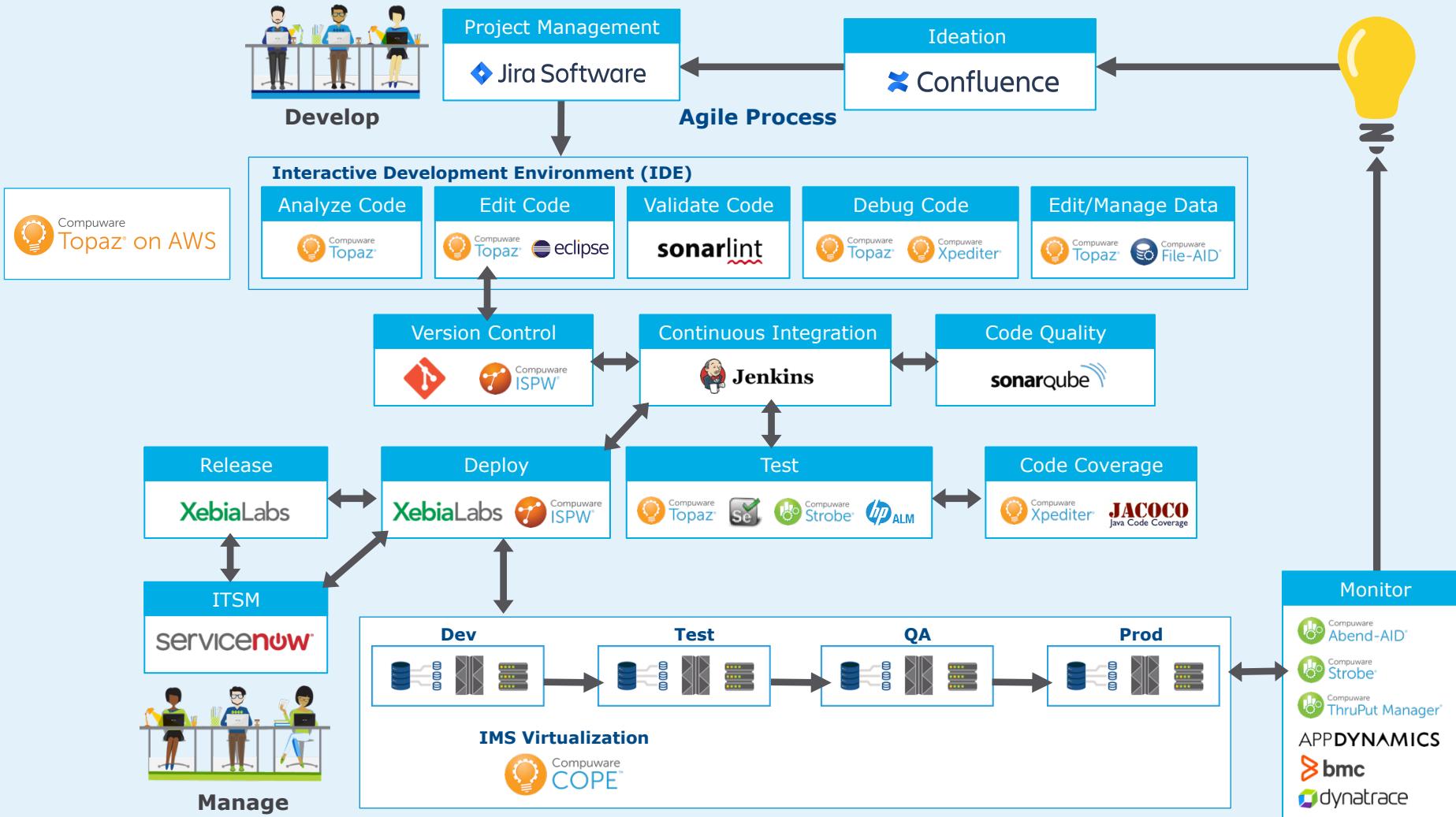
Verified Software Toolchain



```
0 001101 1 0 0  
10100101 0 0 1  
1 1 110101 0  
1 111 00 1 10  
0 1001110 0 1 1  
00 0100 101 1 1  
1 01 010010 0  
10 010100111 0 1
```



DevOps Toolchain

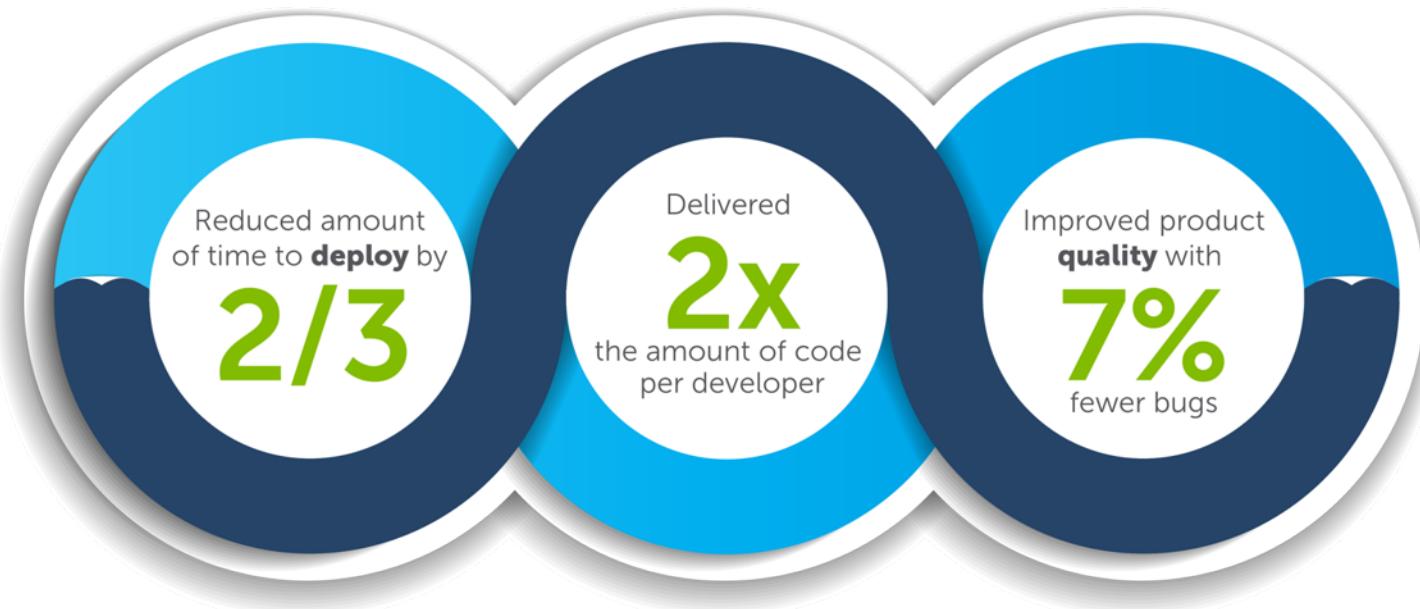


Metrics that Matter



Compuware Case Study*

Speed and Quality Through DevOps and Agile Development



All while onboarding developers with little-to-no mainframe experience

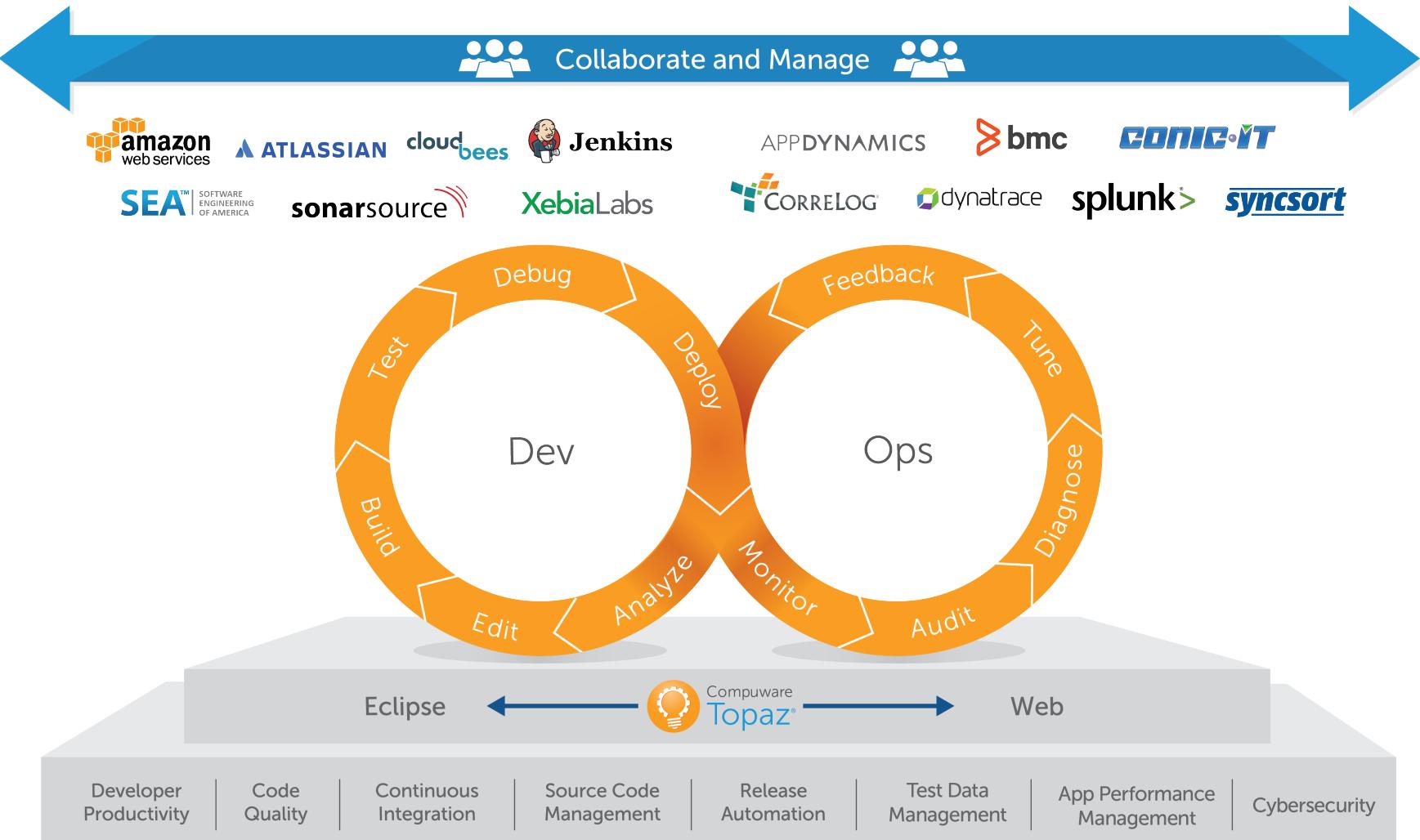
Summary

What We've Done



Mainstream the Mainframe

Enabling DevOps Across the Enterprise



10 Steps to Mainframe Agile Development



STEP 1

Define the Desired State



STEP 6

Initial Training in and Adoption of Agile Processes



STEP 2

Modernize the Mainframe Development Environment



STEP 3

Adopt Automated Unit Testing



STEP 8

Agile-enable Core Source Code Management Functions



STEP 4

Gain Graphical, Intuitive Visibility into Existing Code and Data Structure



STEP 9

Automated, Intelligent Deployment



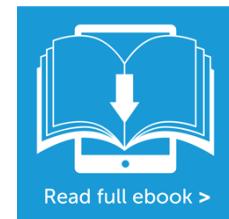
STEP 5

Enable Earlier Detection of Application Quality Issues and Establish Quality KPIs



STEP 10

Cross-platform Continuous Delivery



Questions

David.Rizzo@compuware.com

Twitter: [@dfrizzo1](https://twitter.com/dfrizzo1)





The Mainframe Software Partner
For The Next 50 Years