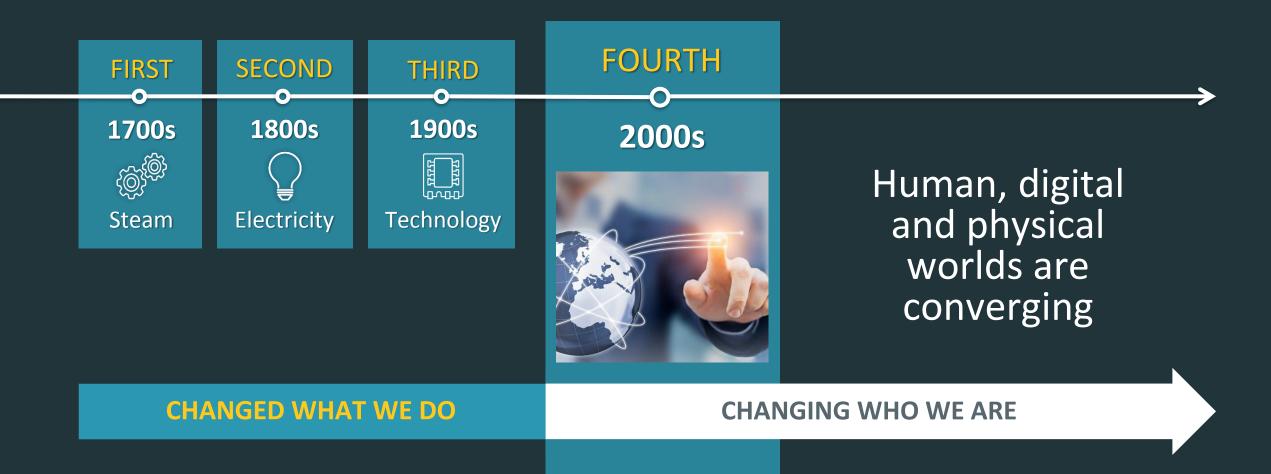
How to Remove Friction in the Software Innovation Factory

Zero Touch Integrated Continuous Delivery Ecosystem

Jeff Scheaffer
General Manager & SVP
Continuous Delivery, CA Technologies



Fourth Industrial Revolution





Fourth Industrial Revolution

Every Company Must Become a Software Company

Born Digital











Transforming











Apps Demand Speed, Quality & Amazing Experience



94%

of executives face increased pressure to release apps more quickly¹

2/3

of business leaders say the future of their business depends on the quality of their software²



of a single application development operations

application's development and operations costs is wasteful³

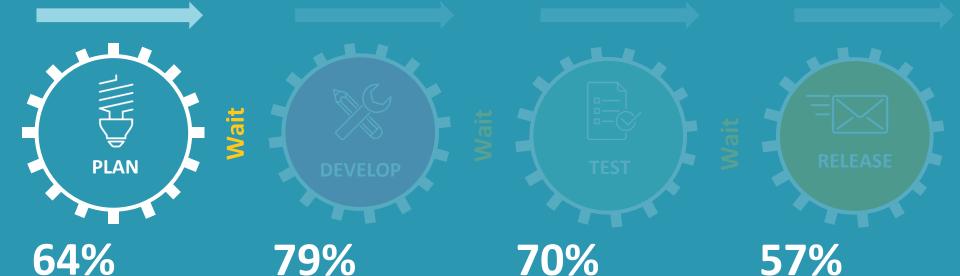
While Ensuring a Superior User Experience!

- 1. 2014 Vanson Bourne study commissioned by CA
- 2. "Surviving Disruption, Leading Change: Winning in the Application Economy," 2015
- "DevOps and the Cost of Downtime" IDC 2014



Existing Methodologies Are Not Keeping Pace

WATERFALL



64%
Of defect costs
originate in planning

of teams face prohibitive restrictions

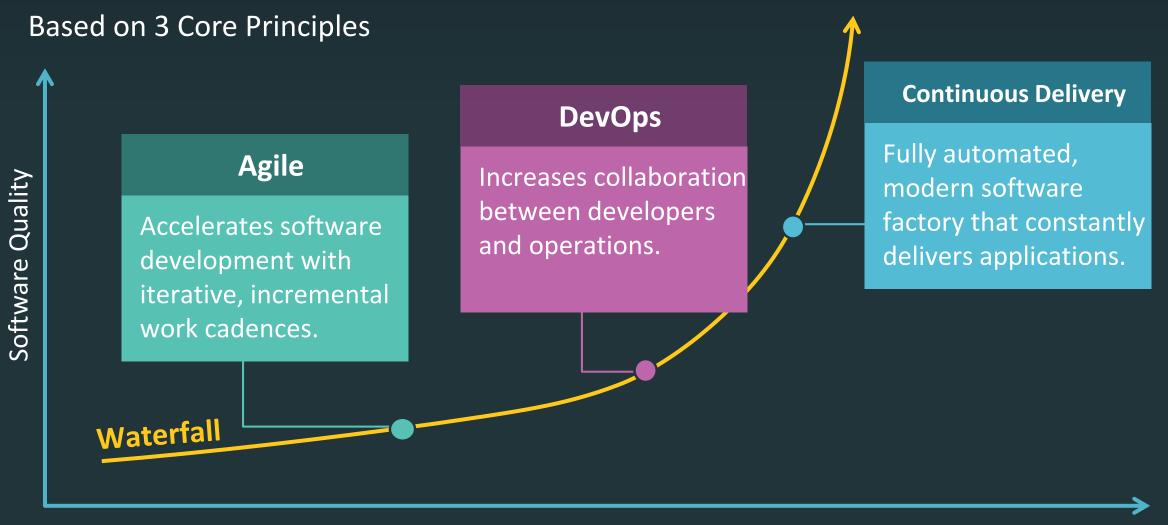
70% of all testing is still manual

57%Dissatisfaction with deploy times

One way, waterfall method causes work delays at each phase of SDLC



Companies Are Evolving to a Modern Software Factory



CA Has Invested Heavily in All Three Areas



Agile and DevOps: Accelerating Digital Transformation

Survey of ~600 EMEA Contacts Shows Real Results

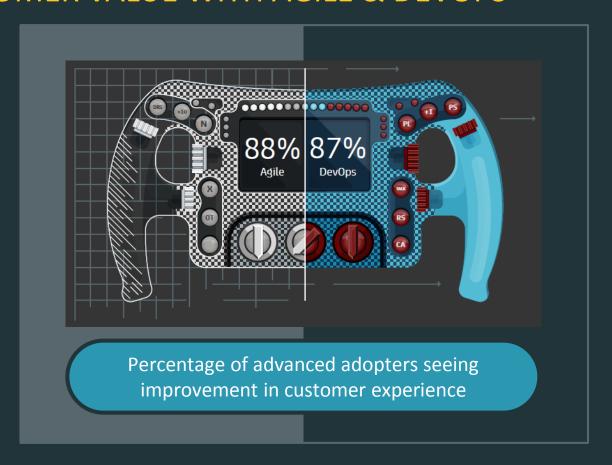
"ACCELERATING VELOCITY & CUSTOMER VALUE WITH AGILE & DEVOPS"*



Agile – 64% improvement in overall time-to-decision

DevOps – 38% increase in overall speed-to-market

Adding DevOps to Agile improves new overall results by 38%



^{*}https://www.ca.com/us/rewrite/articles/agile/accelerating-velocity-and-customer-value-with-agile-and-devops.register.html



Agile and DevOps: Even Better Together for EMEA

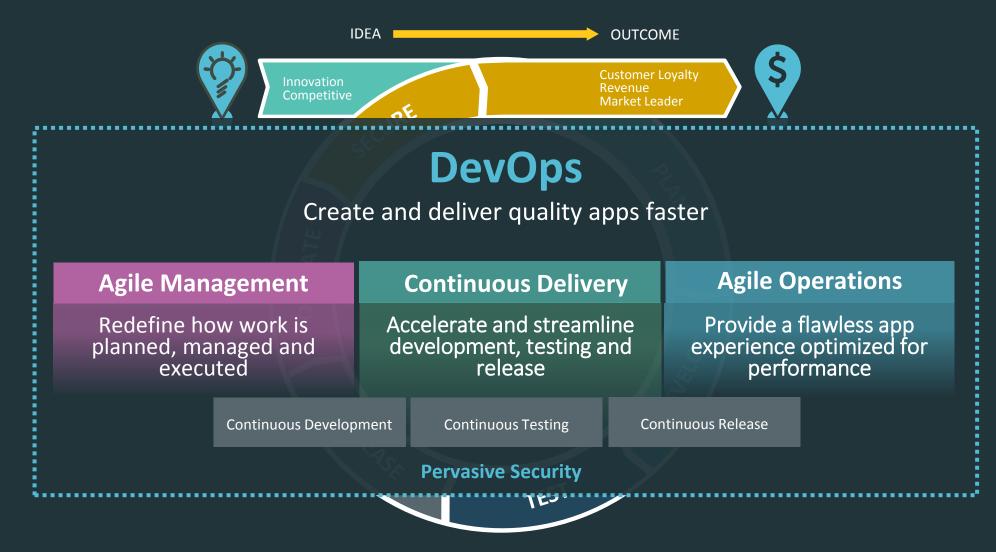
Adding DevOps to an agile environment increases certain KPIs even further



^{*}https://www.ca.com/us/rewrite/articles/agile/accelerating-velocity-and-customer-value-with-agile-and-devops.register.html



CA Accelerates the Path from Ideas to Outcomes

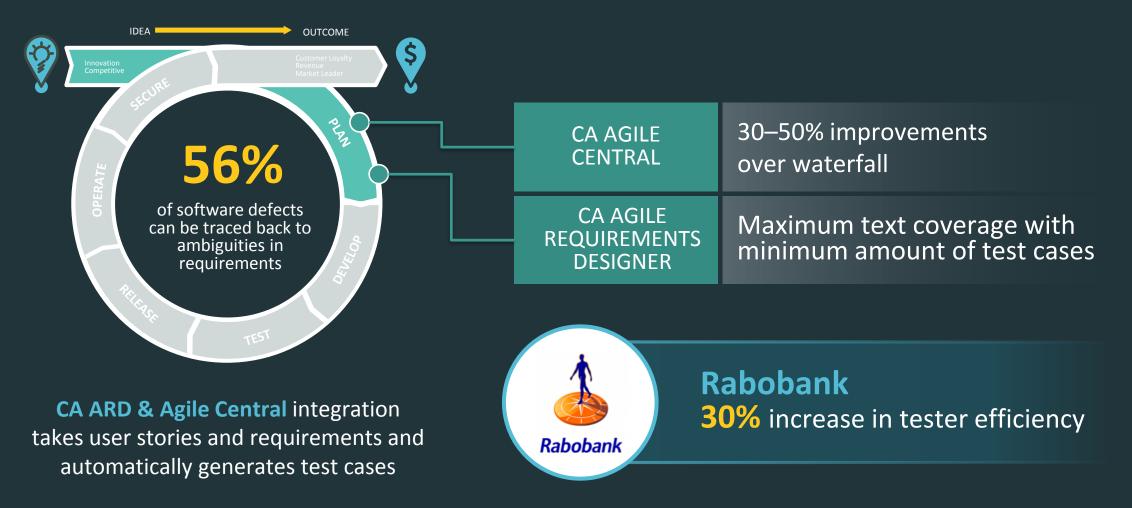


Speed, Quality and Lower Costs – From Mobile to Mainframe



Accurately Translate Ideas into Innovative Software

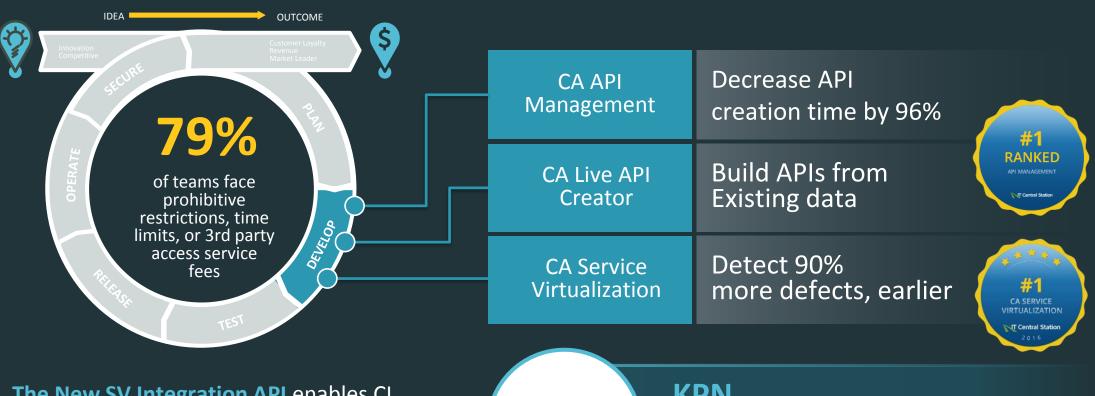
Challenge: Ensure Alignment from Planning Through Development to Release





Removing Hurdles to Enable Continuous Development

Challenge: How do you build, test and deploy high quality code and APIs?



The New SV Integration API enables CI teams to access virtual services to accelerate testing cycles w/o using SV



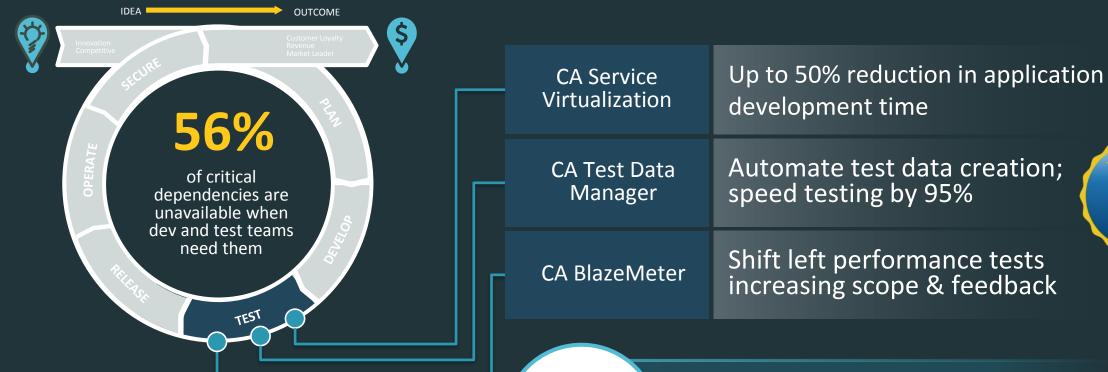
KPN

Improved availability of some testing platforms to almost 90%.



Shift Left to Enable Continuous Testing

Challenge: How do you create, execute and manage conclusive application testing?



Enhanced Data Generation Engine in TDM 4.0 dramatically speeds up the request and creation of new test data



Direct Line Group Saved \$267,000 in 1st year in testing costs



CA TEST DATA

Automate for Continuous Release

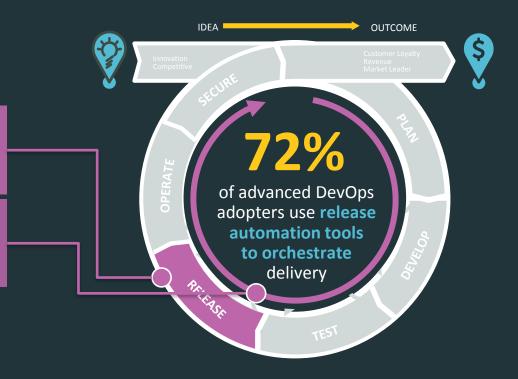
Challenge: How do you automate, speed and improve the software delivery pipeline?

Improves release quality
& reduces errors by 98%

End-to-end automation improves deployment time by 20x

CA Release Automation

CA Release Automation Continuous Delivery Edition





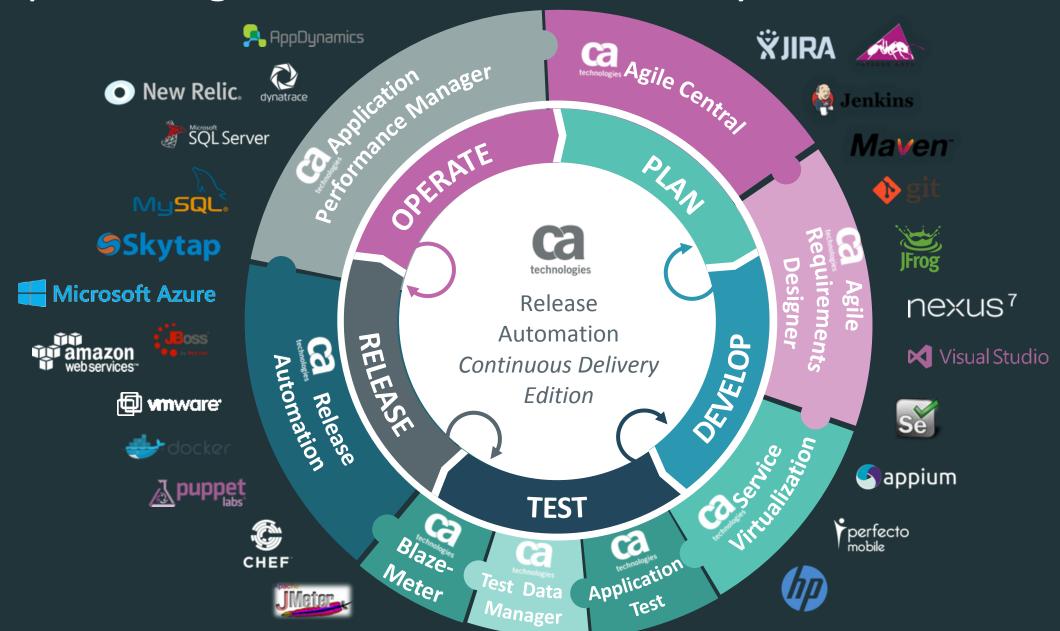
ING

Delivering new apps in 4 days vs. 100 days before.

New Release Tracks improves collaboration and coordination



Open, Integrated Continuous Delivery





Leading the DevOps Industry Consortium







































Why CA: Don't Take Our Word For it

Market Validation



CA is Positioned as a Leader in the Gartner MQ for ARA ... Forrester Wave SV Leader



Nominated in the
"Best Use of Technology in a Project" category for work
with the London Metal Exchange

Differentiation

20x

Faster time to deploy releases*

25%

Reduced testing costs & improved efficiency*

98%

*Forrest TEI Research

Reduction in production errors*

Customer Success

5 of the top 5

Telecom Companies

4 of the top 5 Retailers

4 of the top 5 Banks

*Based on Global 500

#1
User Ranking

Across Continuous Delivery Solutions in 2016

3 YEARS IN A ROW



After considering IBM, HP and Parasoft, the company chose CA Service Virtualization and improved test coverage by 40% to 59%, and time-to-market by 20% to 39%.

"CA Service Virtualization is one of the finest solutions available in the market —Large enterprise financial services company

2 YEARS IN A ROW



"CA Release Automation was a market leader, we made a quick decision in that direction. We haven't regretted it... we can do 3 to 4 times more on a release"

—Steve Schweiger, Director DevOps at a financial services firm

1st IN NEW CATEGORY



ABN/AMRO chose CA Test Data Manager <u>over IBM and</u>
<u>Informatica</u> ... saying "ease of use was highly superior when compared to the competition

—Patrick van Dijk , IT Project Manager

CA Drinking Our Own Champagne

Example: Using Agile Requirements Designer





Create Test Cases In

3 Days

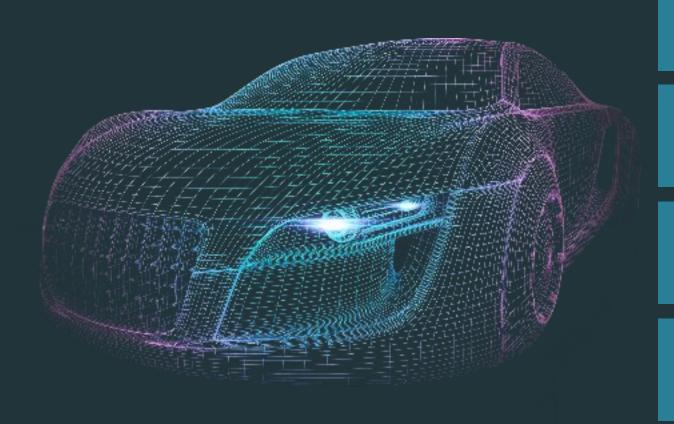
Versus 40 Days Before





Looking Forward

Continue to Innovate for our Customers



- 1 Shift Left (and Shift Right)
 Component, System & Functional Testing
- 2 Develop on Open Source
 Democratization of development
- 3 Deliver in the Cloud SaaS and on-prem solutions
- 5 E's: Make it Easier to Find, Try, Buy, Maintain, Use.



CA Technologies: Proven Expertise and Staying-Power

35+ YEARS MANAGING COMPLEX IT ENVIRONMENTS

\$4.26 BILLION ANNUAL REVENUE AND STRONG PROFIT

- Invests more than \$1 billion each year in designing and supporting software
- Holds more than 1,050 patents worldwide, with more than 950 patents pending
 - 2 Patents Closed for Release
 Automation in November 2016
 - 5 Patents for Service Virtualization







