





## HOW TO WATCH THIS WEBINAR



- Audio for this webinar is delivered through your computer. Make sure your speakers are turned up or use a set of headphones.
- If your audio quality is choppy, it could be your internet connection.
- You can customize your webinar viewing experience by increasing, decreasing or minimizing the size of the widgets on your screen.
- If you have questions, enter them in the widget on the left.





### MAXIMIZING THE PRESENTATION





Click the icon in the top right of the presentation to make the slides full screen.





### HOUSEKEEPING



- This webinar will be recorded and available on-demand tomorrow. You will get an email when it is available.
- Join the conversation on Twitter using the hashtag
   #DevOpsTesting
- Use the Q&A widgets to ask questions during the webinar.
- At the end of the webinar, you will be asked to take a short survey.





## NEED TO LEAVE EARLY?



Survey	*	_ [	]
Webinar Survey			
Answer these questions to provide your feedback on the webinar.			





### **NEXT WEBINAR**



#### WHAT?

Learn about our new continuous testing solution for teams practicing DevOps.

#### WHY?

CONTINUOUS DELIVERY, DEMANDS CONTINUOUS QUALITY

#### WHEN?

March 1st, 2 – 3:00 PM EST

## **UPCOMING: PAUL MERRILL**



#### WHAT?

Best practices and steps to get started with test automation.

#### WHY?

Test automation is integral for reduced test maintenance and a faster time to market.

#### WHEN?

March 8th, 2 – 3:00 PM EST

## MARK YOUR CALENDARS!

#### WIN A FREE TICKET!



April 18-19, 2017 | QualityJam.com

Email <u>marketing@qasymphony.com</u> to be entered to win a free ticket.





### **OUR PRESENTERS**



Sunil Sehgal
Managing Partner
TechArcis
@TechArcis

Sunil brings over 20 years of experience in business leadership, technology management and strategic initiatives and is an expert in Quality Assurance and Testing Solutions



Ryan Yackel
Product Marketing
QASymphony
@RyanYackAttack

With a deep interest in the emerging trends of testing needs, Ryan is dedicated to being the customer voice for all QASymphony products.





## **AGENDA**

DevOps Movement

Is QA Dead?

How to enable Testing in DevOps

Practical Tips to Get Started

Q & A





"Software is eating the world." Marc Andreessen

"Every business will be in software business" Nadella, CEO

"It's an application economy."

"Speed is the new currency of IT and businesses."

Marc Benioff, CEO Salesforce



## DEVELOPMENT HAS ACCELERATED...

Waterfall 1970

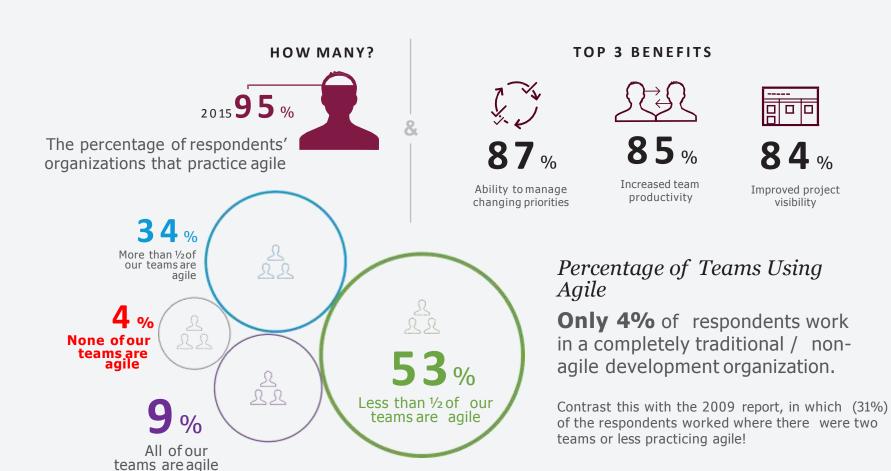
Agile 2000

"If you don' t like change, you will like irrelevance even less. " DevOps 2010

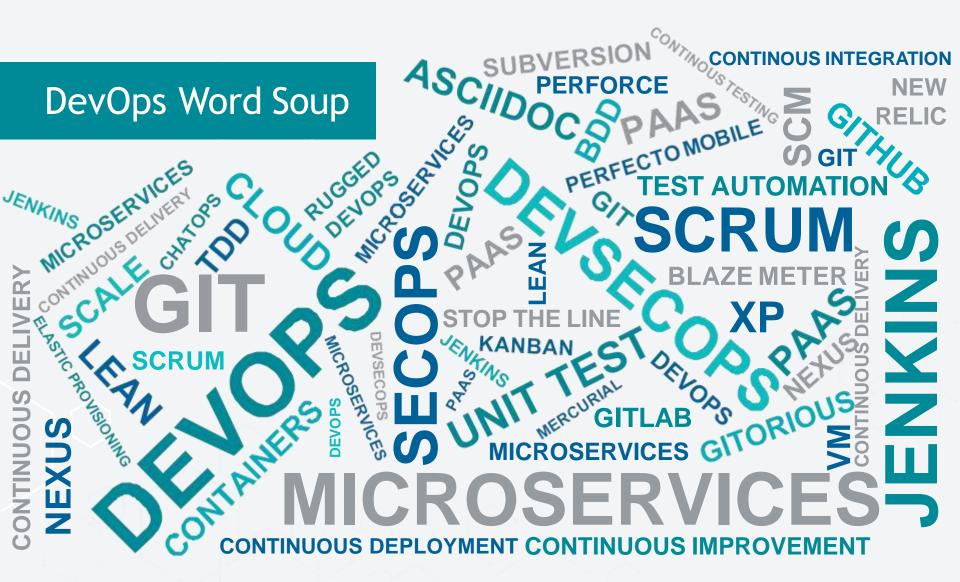
- General Eric Shineki, Chief of Staff, U.S. Army



## AGILE IS MAINSTREAM









## Incremental, Fast Deployments

#### Waterfall





## Agile





2 to 6 Weeks

## **DevOps**





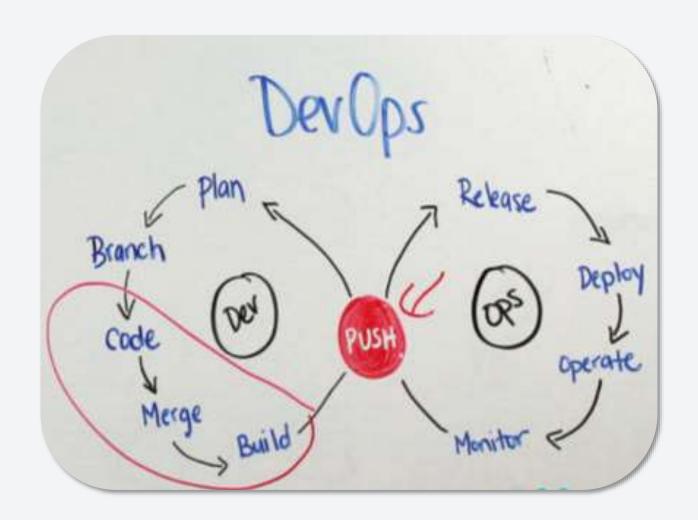
Hours to Days



DevOps is a set of practices intended to reduce the time between <u>committing</u> a change to a system and the change being placed into production, while ensuring high quality.



## WHERE IS THE TESTING?









## WHERE IS THE TESTING?



#### How DevOps is Killing QA



If you work in software quality assurance (QA), it's time to find a new job.

### The Day the QA Department Died

| Posted by Eli Lopian on Sep 24, 2012. Estimated reading time: 8 minutes | < 11 | Discuss

Share











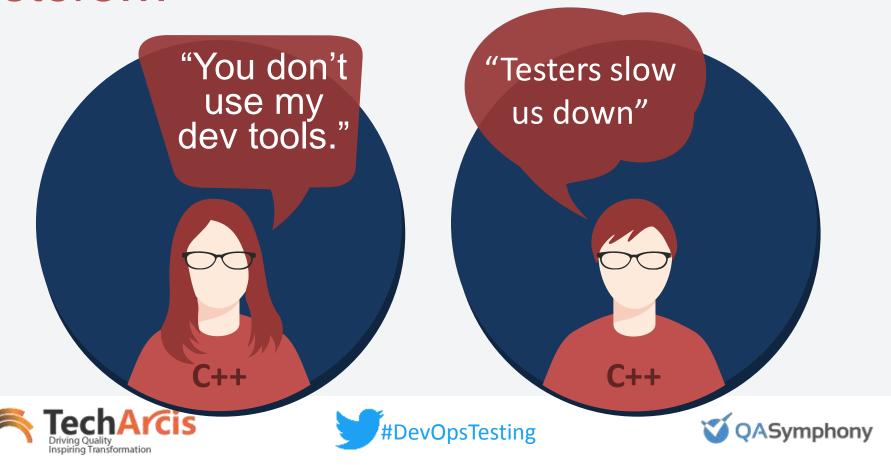




## WHY THE PUSH BACK?

"Testers can't work in a true CI/CD "Developers can just be environment."

testers..." "If it's not automated, it's not real DevOps...



### TESTING IN ALIVE IN AGILE / DEVOPS

- 82% Manual testing
- 78% Unit testing
- 67% <u>User acceptance testing</u> in sprints
- 66% <u>Functional regression test automation</u>
- 54% <u>Functional test automation</u>
- 43% Exploratory testing
- 42% Test data management Production data sub-settings, etc.
- 32% Test data management Masking, Obfuscation
- 25% Test data management Synthetic Generation
- 24% <u>Test-Driven Development</u> (TDD)
- 19% <u>Service virtualization</u>
- 14% <u>Behavior-Driven Development</u> (BDD)

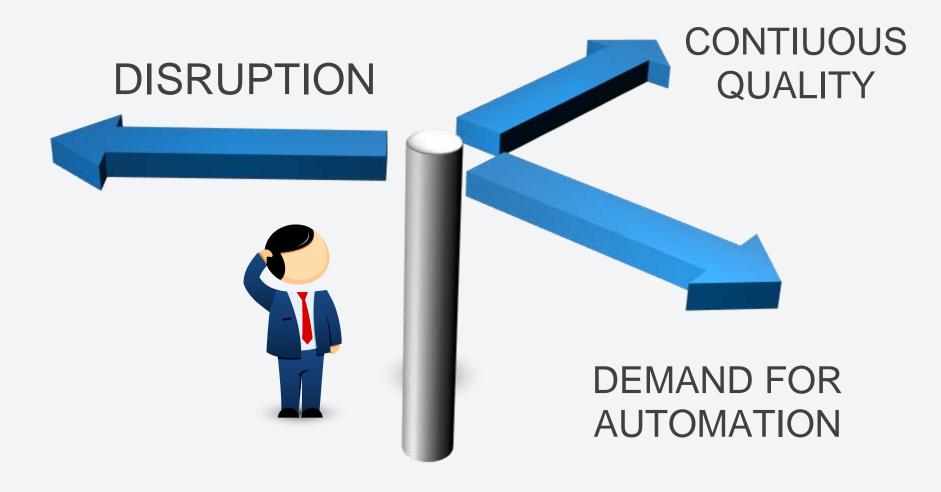
\*Forrester, The 2015 State Of Agile Development







## THREE FACTORS AT PLAY







### THRIVING IN DISRUPTION

## Quality and Convenience Drives "Customer Success"



Product Innovation and Development is Changing

Software Development is also changing and embracing Automation





Agile and DevOps is the new norm

But, how to drive "Continuous" Quality at Speed in this Disruption?

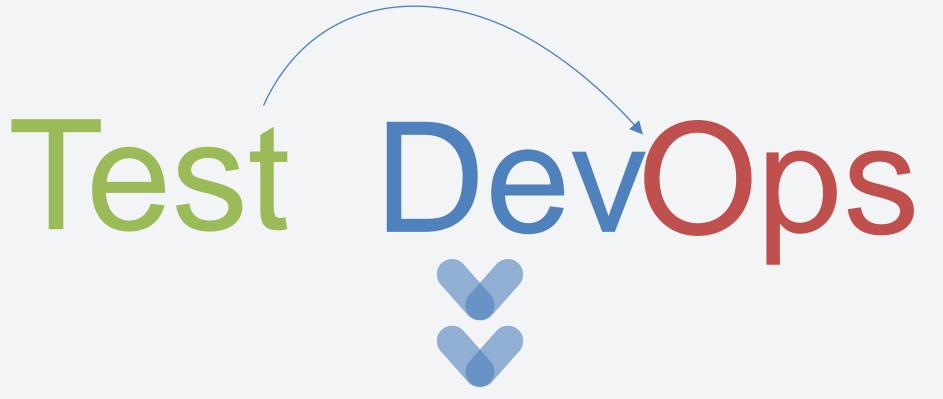








## PUTTING "TEST" IN "DEVOPS" = "DEVTESTOPS"



**Enabling "Continuous Quality"** 







## UNDERSTANDING "CONTINUOUS" TERMINOLOGY

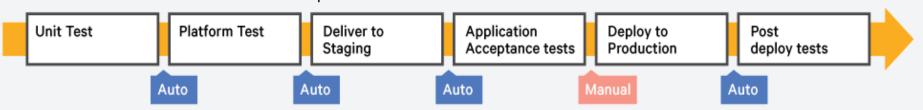
Process of delivering software updates to users on a nearly constant basis.

**Continuous Integration** 

Continuous Integration means the constant integration of changes to an application at all stages of the delivery chain.

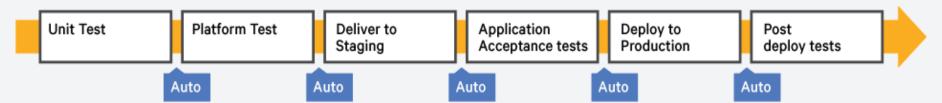
#### Continuous Delivery

Code can be rapidly and safely deployed to production by delivering every change to a production-like environment



#### **Continuous Deployment**

Continuous deployment is the next step of continuous delivery



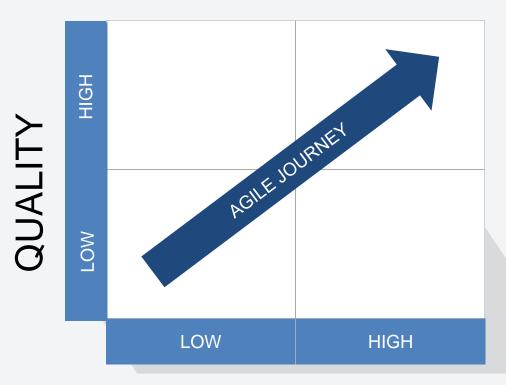






## HOW ARE WE ENABLING DEVTESTOPS?

## Achieve Continuous Quality with Speed



Clear Focus on DevTestOps

2

Automation at Speed of Dev

3



Right Test Infrastructure for Dev and Test Teams

**SPEED** 

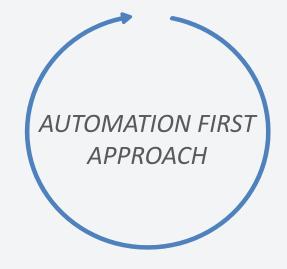


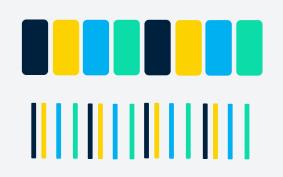




## FOCUS TIPS FOR TESTERS







THINK SMALL, REAL SMALL



AMAZON TWO
PIZZA RULE



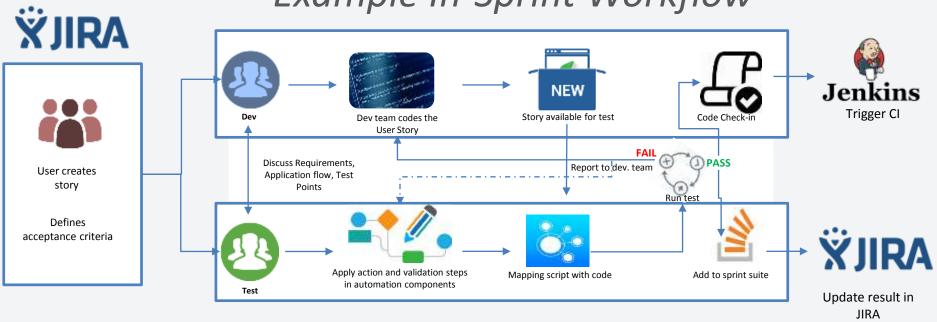






## TEST AUTOMATION AT SPEED OF DEV

Example In-Sprint Workflow



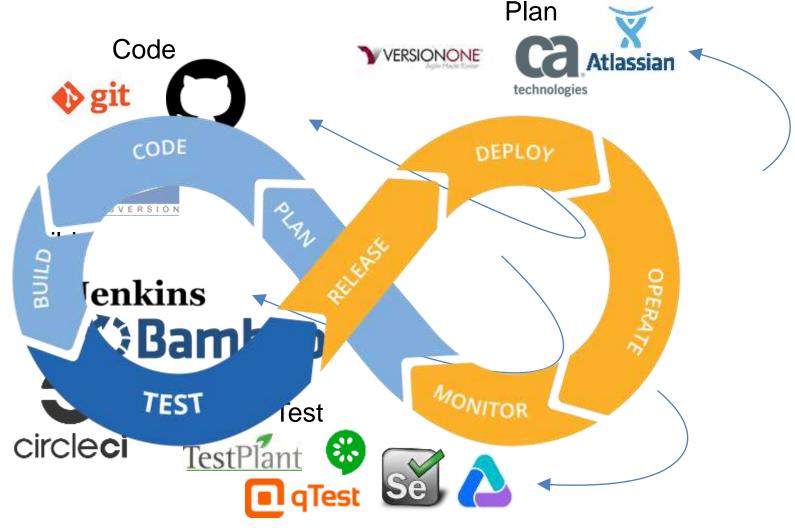
- Day-Zero Test automation for in-Sprint User stories is the only way Agile Testing can be scaled
- Test automation consistency and maintenance is hard to achieve in real world
- Always tie test automation to source code branch that is being developed.







## INFRASTRUCTURE FOR DEVTESTOPS















## PROACTIVITY VOLUNTEER

"We are going to start a pilot DevOps project with..."











## ATTEND CONFERENCES

② 11:00 a.m. - 11:45 a.m.

Adam Satterfield | Role of the Tester in the World of DevOps



**②** 04:45 p.m. - 05:30 p.m.

Angie Jones | How to Get Automation Included in Your Definition of Done

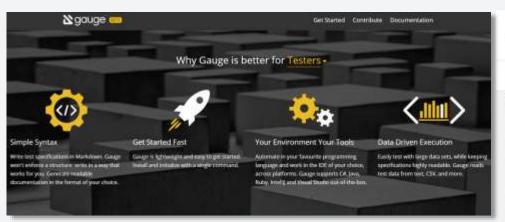








## LISTEN AND LEARN TEST AUTOMATION













# TAKEAWAYS FOR THE TESTERS

- Testing and QA is not Dead.
- Testing certainly is changing and Testing professionals have to step up and embrace the change (DevTestOps).
- Learn to do basic coding and embrace automation.
- Staying with manual testing is not going to be fun.
  - Learn TDD/BDD Frameworks like Gauge and Cucumber
- Distributed teams with QA embedded in the sprint teams is the new normal.
- So called independent QA teams are fading away. QA Managers have to become hands on and enable DevTestOps



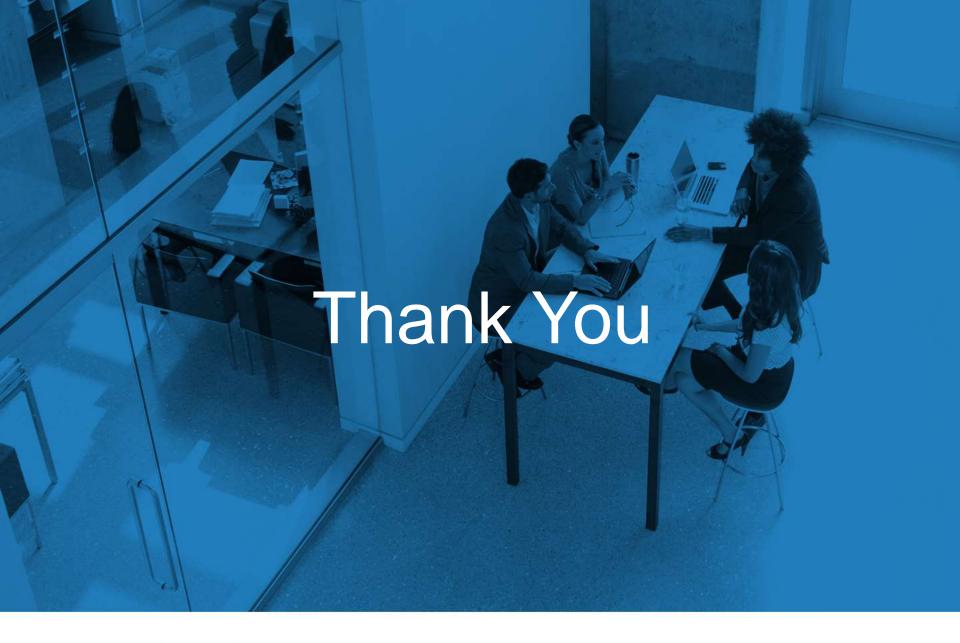
















## DEVTESTOPS

EXPERIENCE

