



# DEVOPS





# HOW DEVOPS IS ENABLING LEAN APPLICATION DEVELOPMENT



**CARMEN DEARDO**  
DEVOPS TECHNOLOGY LEADER,  
NATIONWIDE INSURANCE



# THRIVING IN A DYNAMIC, HIGHLY-REGULATED WORLD

**16+**  
**MILLION**  
POLICIES

**\$195.2**  
**BILLION**  
IN ASSETS

\$25.3 BILLION IN REVENUE FOR 2014



FOUNDED IN 1926  
BY MEMBERS OF  
THE OHIO  
FARM BUREAU

**\$345**  
**MILLION**  
CONTRIBUTED  
TO NONPROFITS  
AND COMMUNITIES  
SINCE 2000

**#1** PET & SMALL  
BUSINESS  
INSURER



**8<sup>th</sup>**  
LARGEST  
COMMERCIAL  
INSURER



FORTUNE  
**100**  
**BEST**  
COMPANIES  
TO WORK FOR  
**2015**

**#91**

ON THE  
FORTUNE  
500 LIST

**7<sup>th</sup>**      **8<sup>th</sup>**

LARGEST HOME INSURER      LARGEST AUTO INSURER  
IN THE U.S.





# INFORMATION TECHNOLOGY AT NATIONWIDE

20

INDIVIDUAL  
IT UNITS

8000+

IT PROFESSIONALS

200+

AGILE / LEAN  
STANDING TEAMS

800+

BUILD PROJECTS  
EXECUTED ANNUALLY

FIRST PHASE: AGILE DEVELOPMENT

NEXT PHASE: APPLICATION OF LEAN  
ACROSS THE DELIVERY LIFE CYCLE

35%

ANNUAL INCREASE  
IN NUMBER OF  
AGILE TEAMS

65%

OF ALL PROJECT  
WORK DONE BY  
AGILE TEAMS

ESTABLISHED



PRACTICES

BALANCE  
OF  
INNOVATION  
AND  
DISCIPLINE





# RESULTS / IMPACTS: SO FAR, SO GOOD



## QUALITY

**80%**

REDUCTION IN  
CRITICAL DEFECTS

**86%**

REDUCTION IN  
HIGH DEFECTS



## PRODUCTIVITY

**82%**

OF AGILE TEAMS MOVED INTO TOP  
TWO INDUSTRY QUARTILES (QSM)



## SYSTEM AVAILABILITY

INCREASE IN  
USER'S OVERALL  
SYSTEM  
AVAILABILITY

**70%**



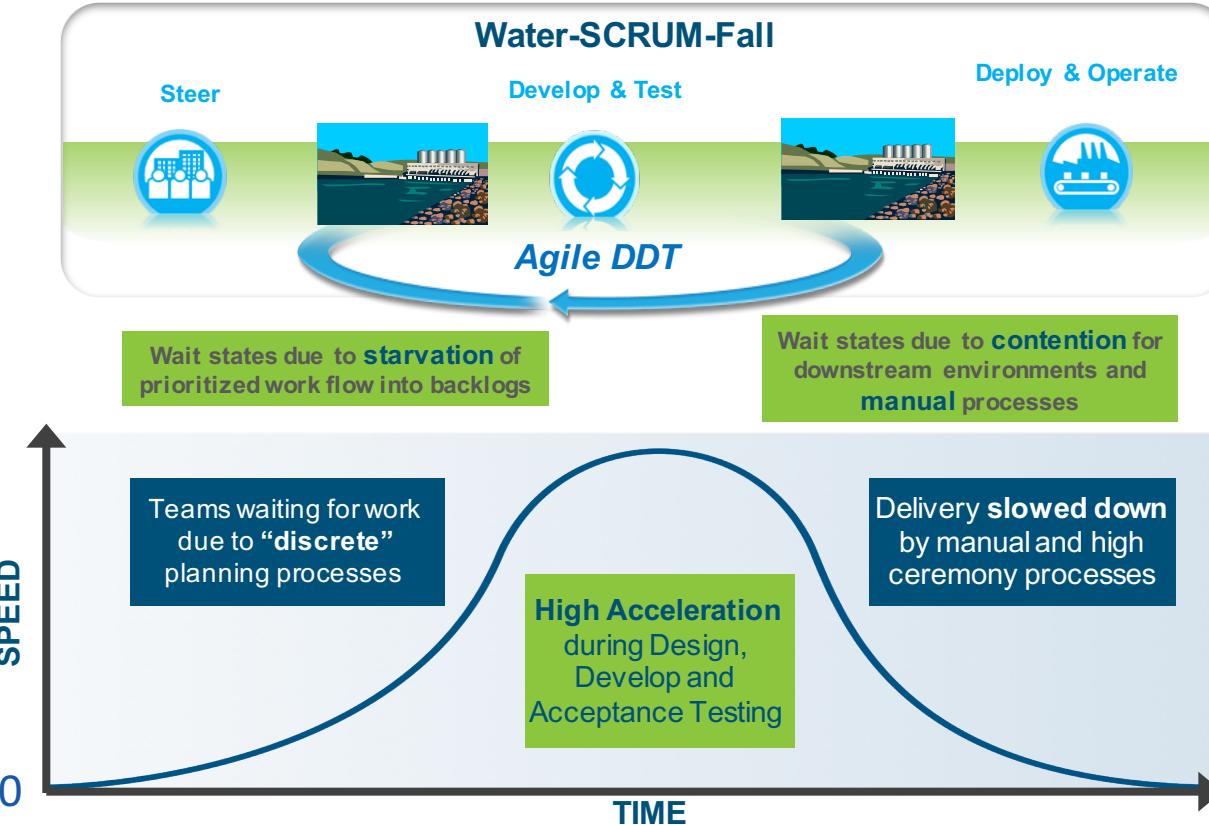
## DELIVERY

**90%** ON TIME  
DELIVERY

**VS**  
**60%** PREVIOUSLY

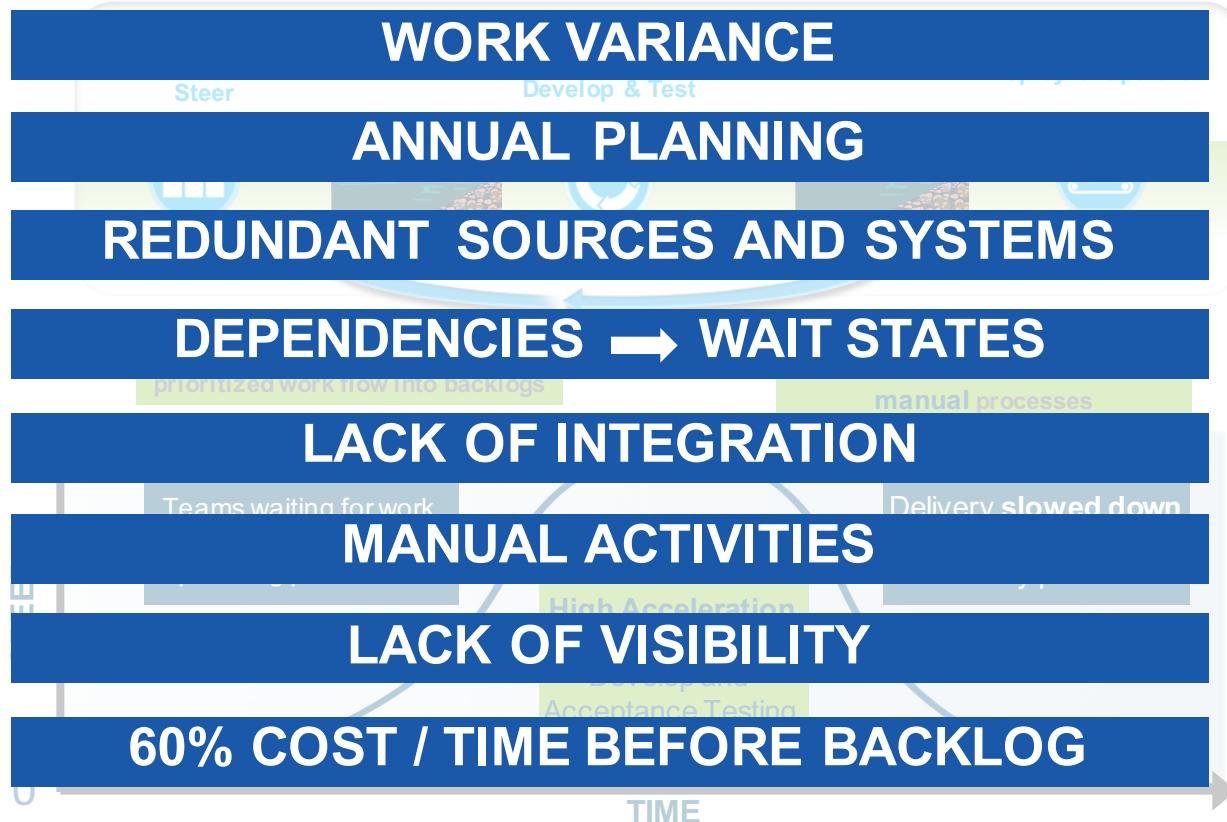


# AGILE OPTIMIZES THE MIDDLE OF THE DELIVERY VALUE STREAM



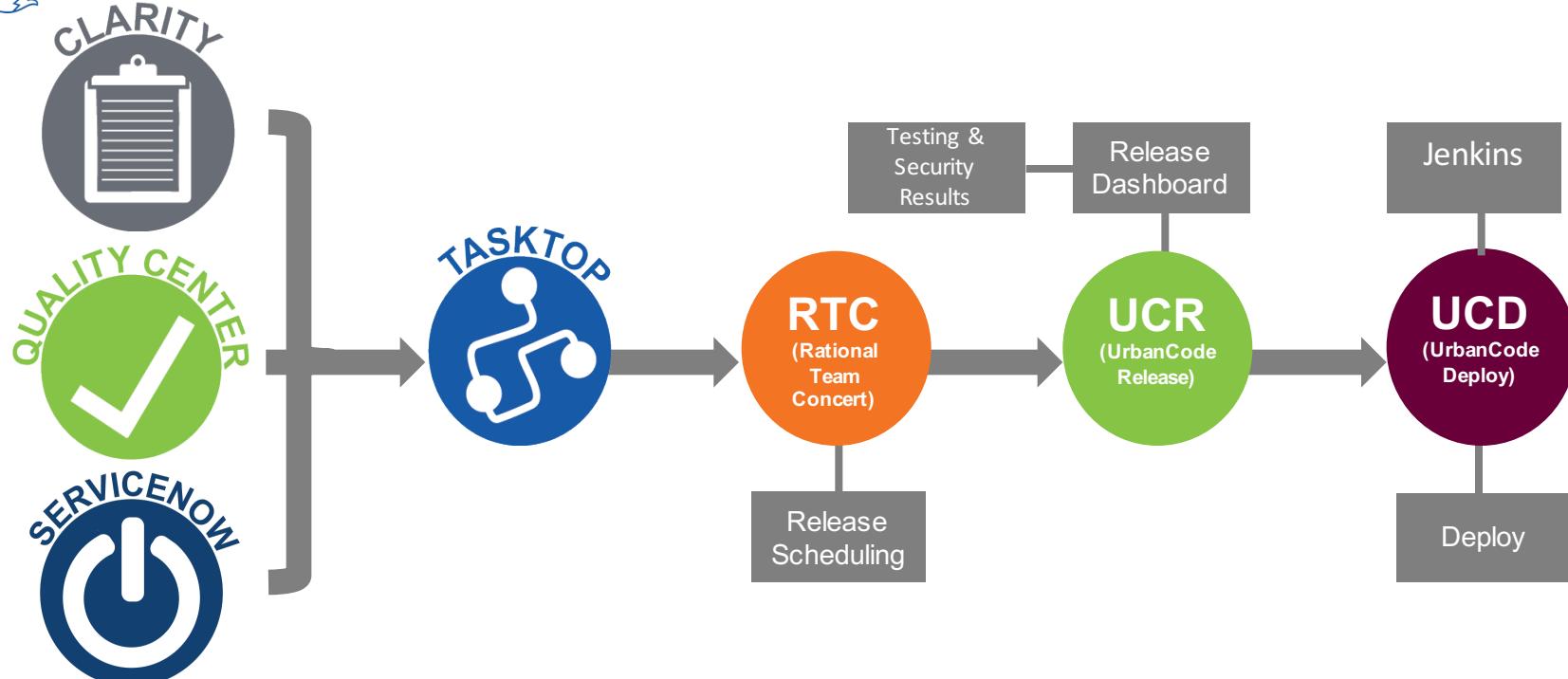


# INHIBITORS TO LEAN DELIVERY





# CD SOLUTION: CONTINUOUS DELIVERY PIPELINE



Standardize “Work” input  
(e.g. Business Value,  
Defects, Operations)

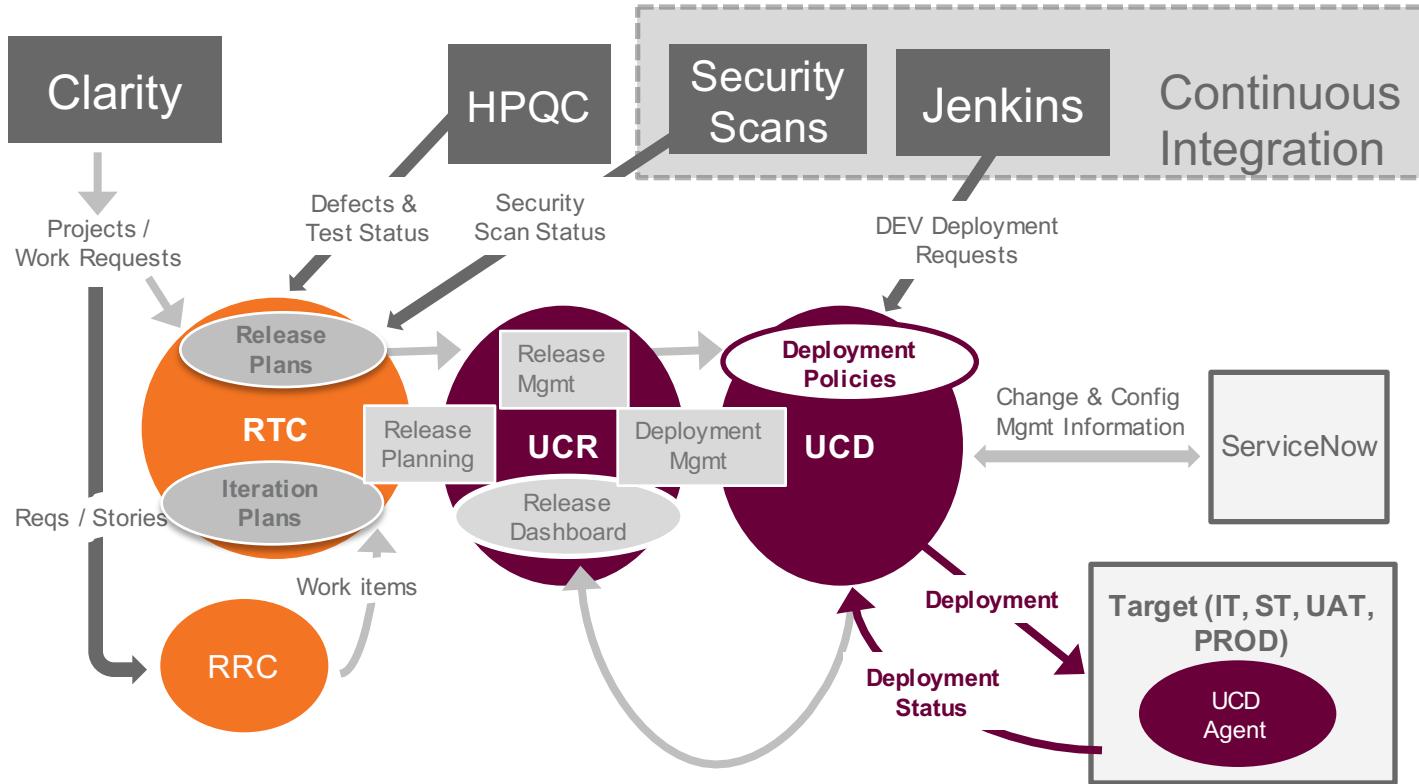
Provide impact analysis,  
Dashboard views and multi-  
application continuous delivery

Provide direct, automated  
control & traceability over  
deployment activity.





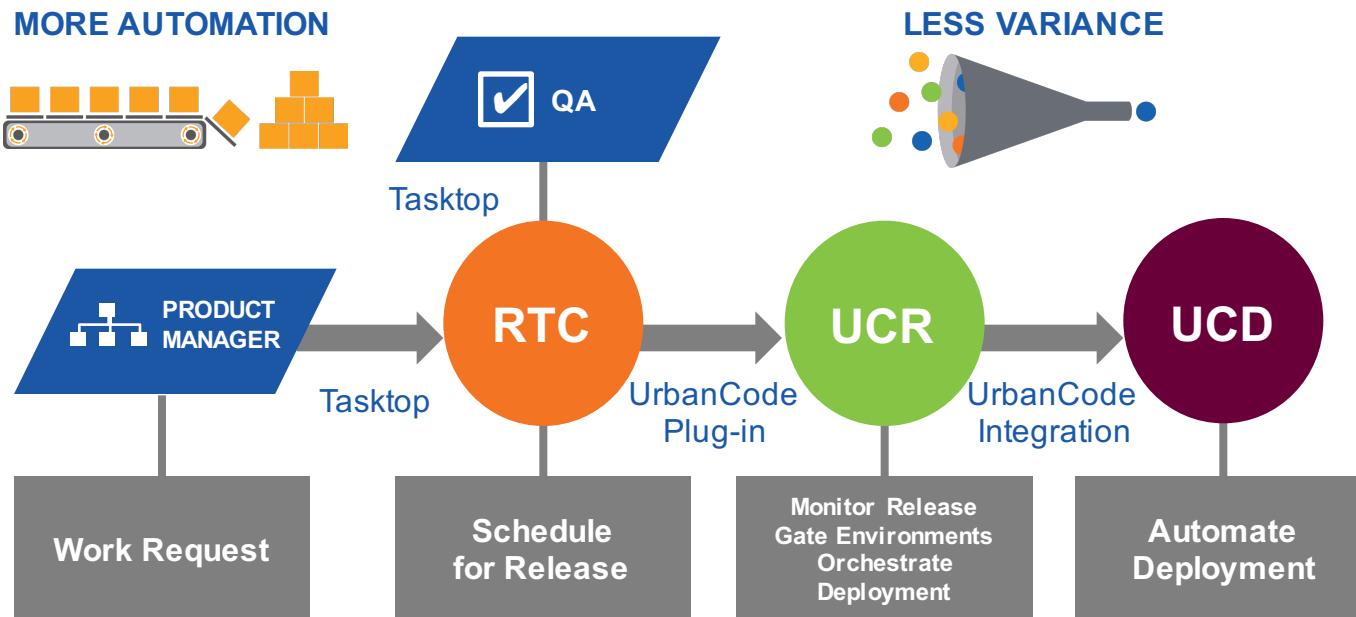
# CD SOLUTION: CONTINUOUS DELIVERY PIPELINE





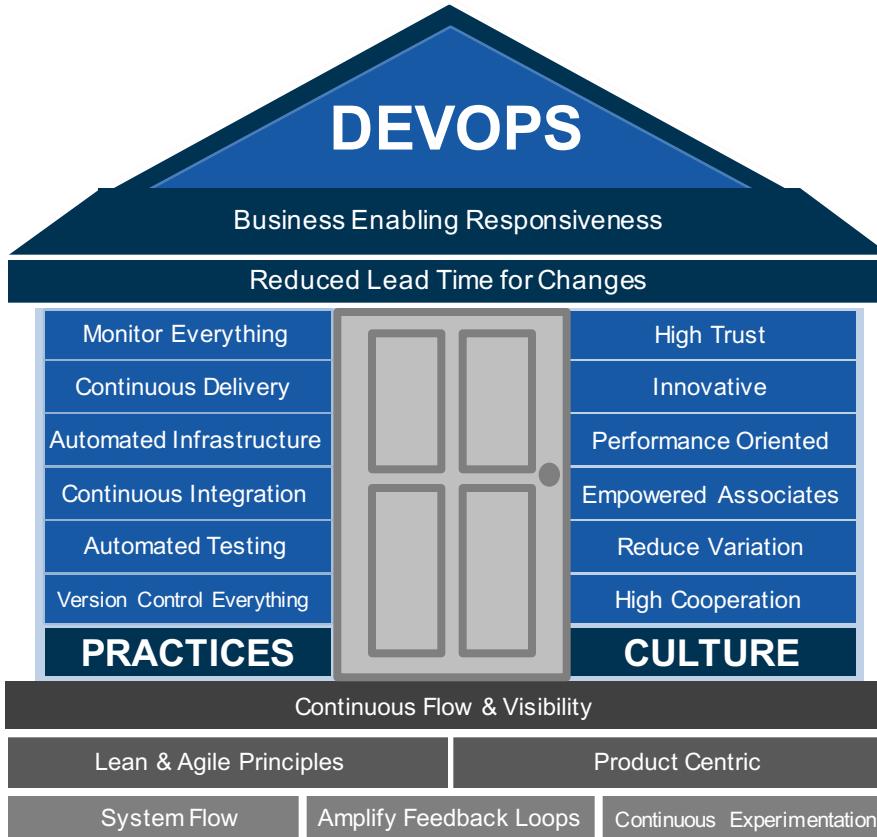
# VISIBILITY VIA REAL TIME INFORMATION

DELIVERY OPPORTUNITIES	QUALITY, SECURITY & TEST STATUS
ENTERPRISE AND SYSTEM VIEWS	AUTOMATION
DEPENDENCIES AND IMPACTS	DEPLOYMENT STATUS





# FOUNDATIONAL MODEL





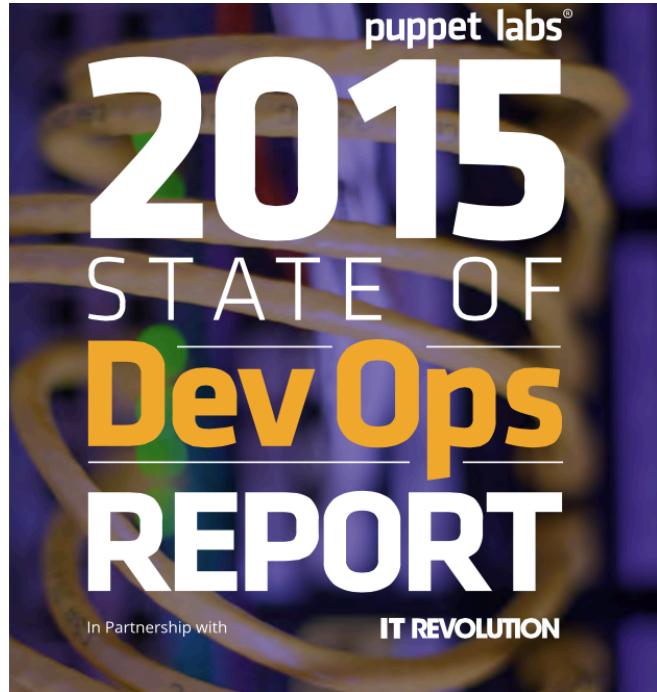
# State of DevOps Report 2015

## Key Findings:

- DevOps adoption was accelerating
- High performing IT organizations were more agile and reliable

High-performing IT organizations experience

- 60X fewer failures
- recover from failure 168X faster than their lower-performing peers
- deploy 30X more frequently with 200X shorter lead times



<https://puppetlabs.com/2015-devops-report>



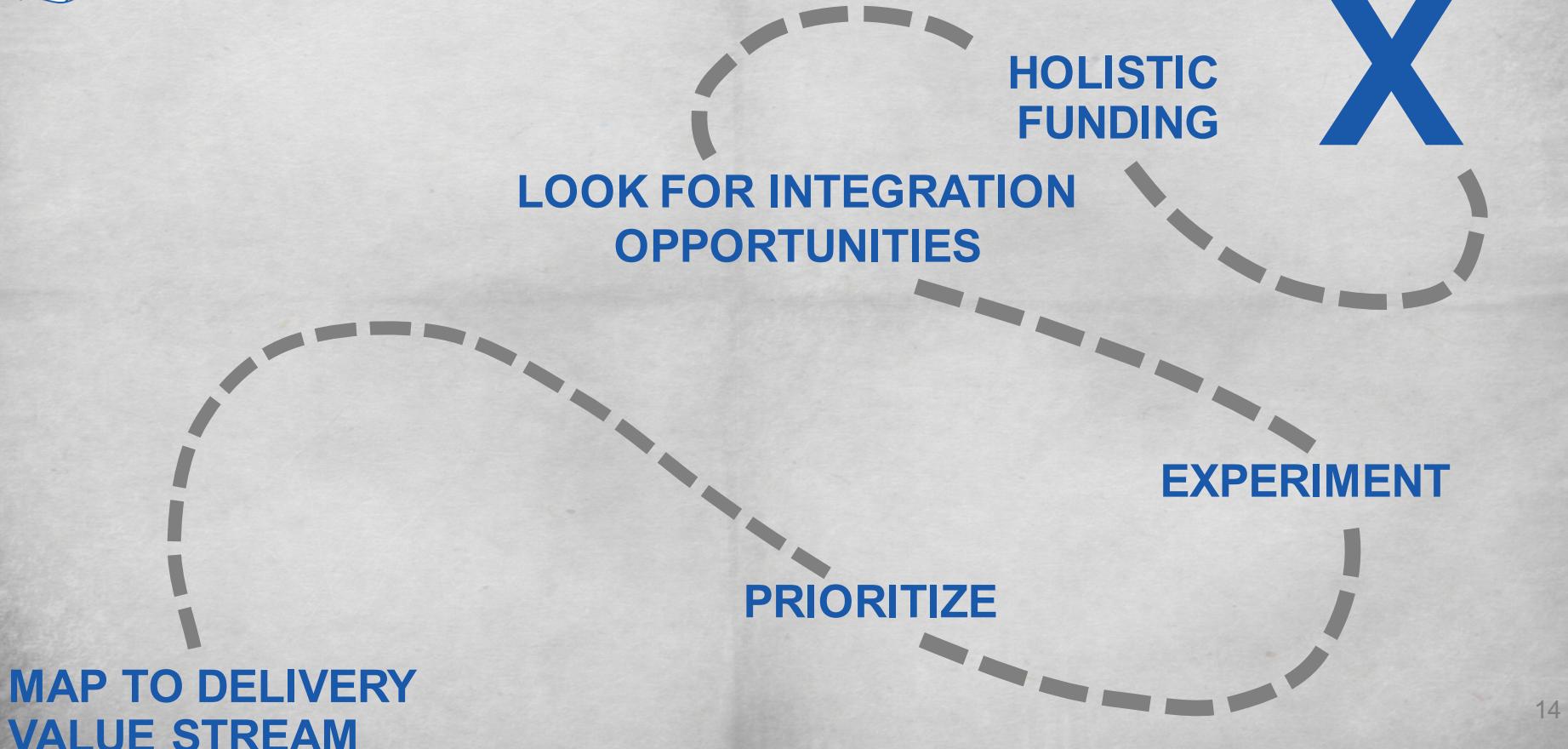
# GENERAL DEVOPS INDUSTRY THEMES

1. Much more investment from Industry Leaders in DevOps
2. Increased focus on applying Lean practices to the Delivery Value Stream
3. Technology is important but Culture is critical
4. Experimentation and Continuous Improvement are key success factors
5. Self-Service, Self-Service and more Self-Service
6. Focus on Reducing Lead Times
7. Agile and automated testing are table stakes practices
8. There is still very little focus on the beginning of the delivery value chain
9. Micro-services and Containers are coming but will take time for Large enterprises to determine how to adopt





# DEVELOP A DEVOPS ROADMAP



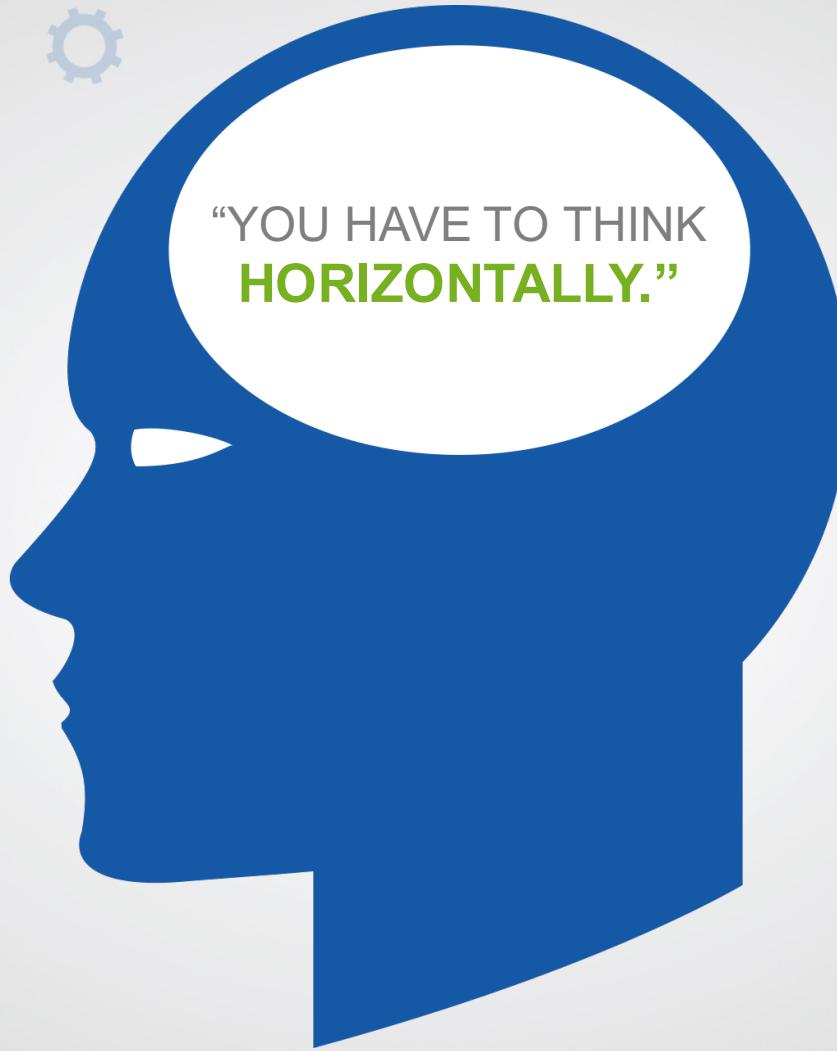


# FINAL 5 THOUGHTS...





“YOU HAVE TO THINK  
**HORIZONTALLY.**”



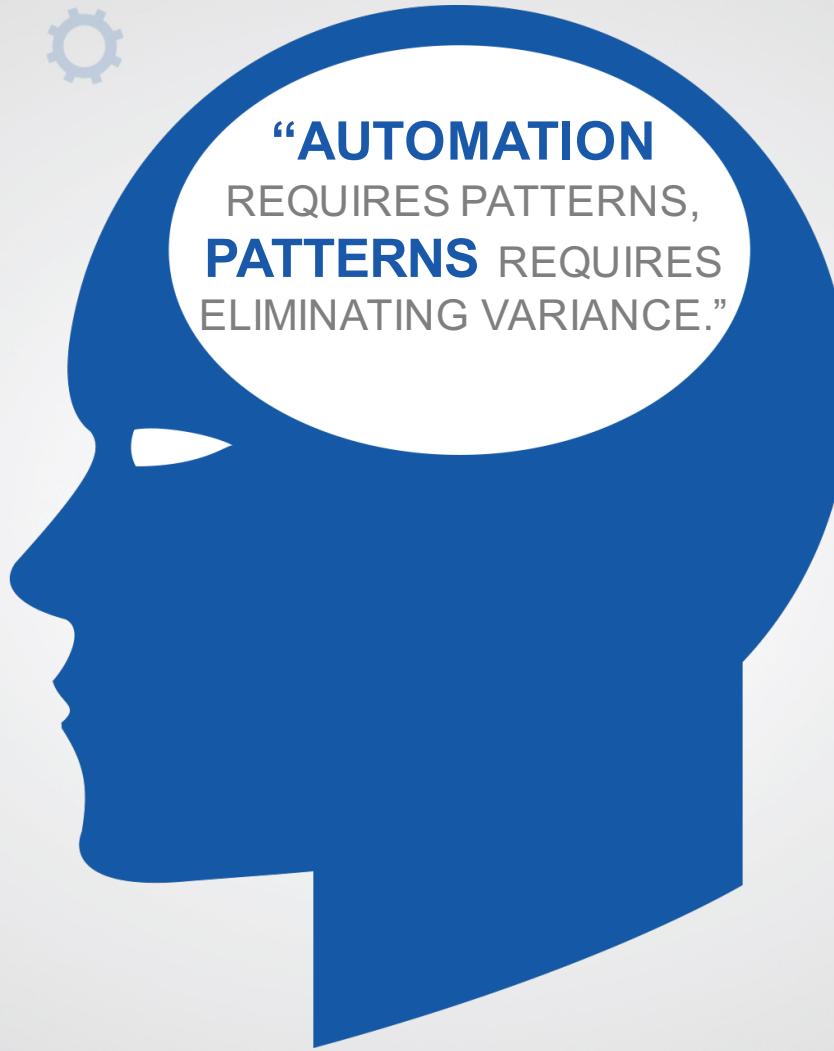


**“LOCAL OPTIMIZATION  
IS THE ENEMY OF  
LEAN DELIVERY.”**



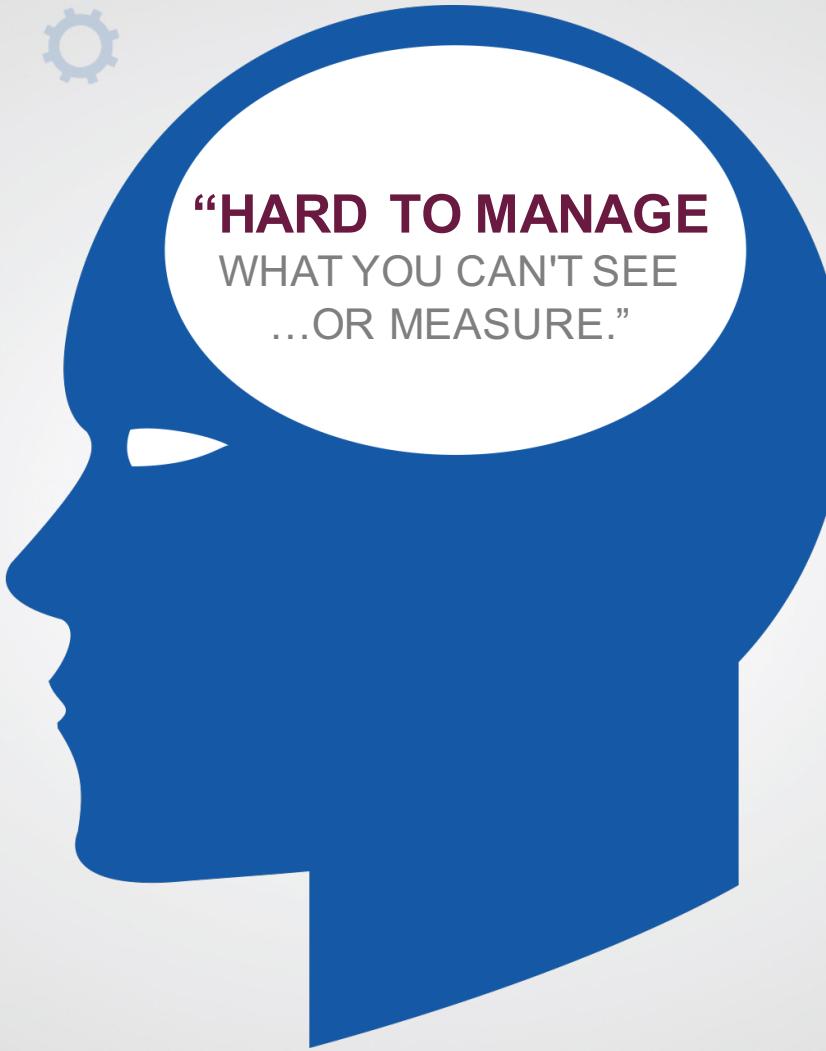


**“AUTOMATION  
REQUIRES PATTERNS,  
PATTERNS REQUIRES  
ELIMINATING VARIANCE.”**





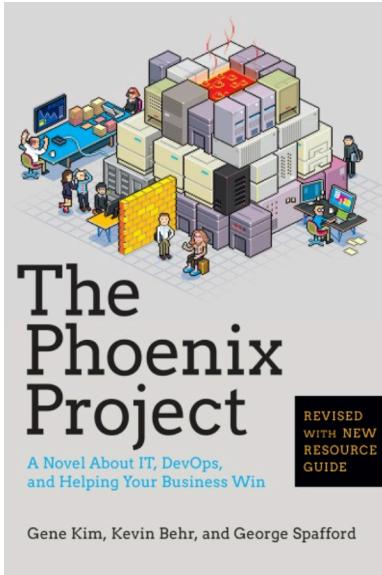
**“HARD TO MANAGE**  
WHAT YOU CAN'T SEE  
...OR MEASURE.”



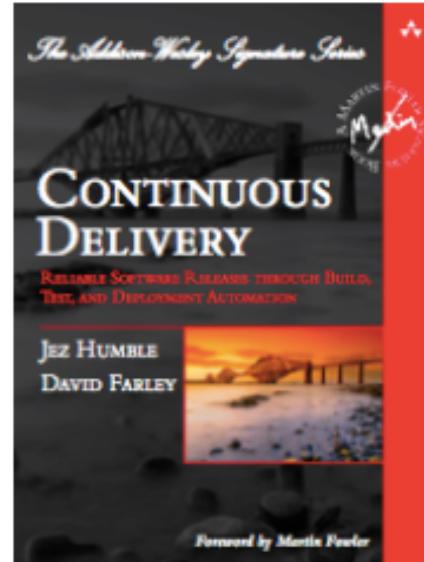




# DEVOPS RESOURCES



<http://itrevolution.com>



<http://continuousdelivery.com>





**THANK YOU!**

