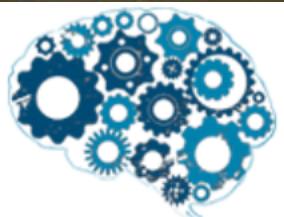




DevOps: From Grassroots to Mainstream

Wesley Pullen, Chief DevOps Strategist, Electric Cloud



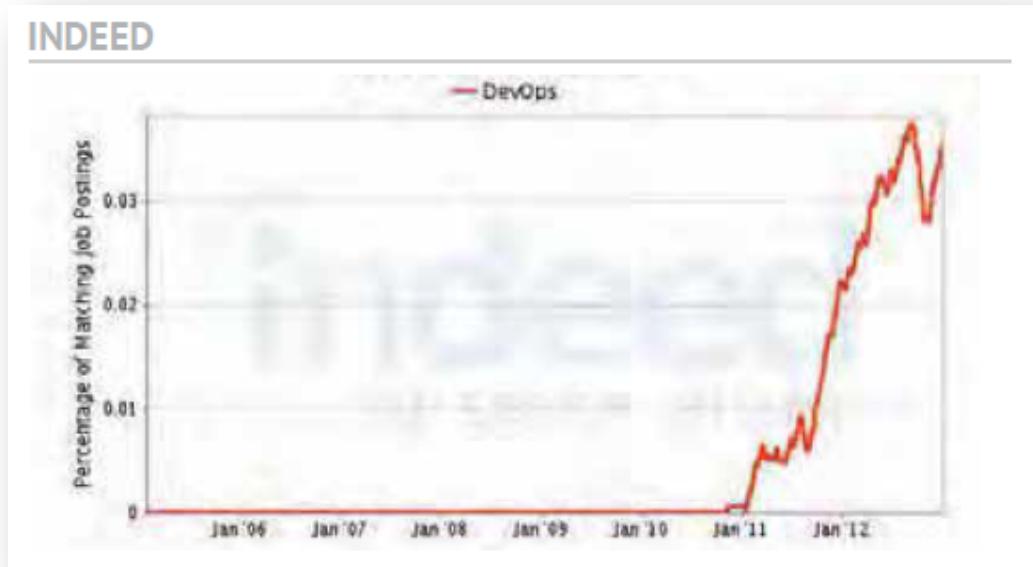
The conference that brings development
and operations together.



Where it ALL began!

Demand for DevOps Skills – Seeds of Growth

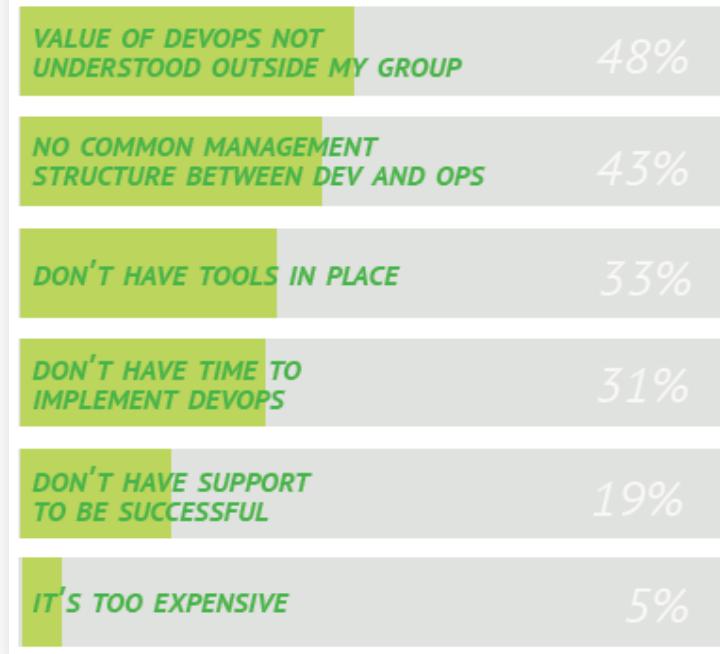
- 2013 State of the DevOps Report
- Job Listings for “DevOps” increased by 75% from Jan 2012 to Jan 2013 ([Indeed](#))
- Mentions of “DevOps” as a skill increased by 50% ([LinkedIn](#))



Barriers to DevOps Adoption - 2012

- The most common barriers to DevOps adoption (back in December 2012) are cultural: lack of manager or team buy-in, or the value of DevOps isn't understood outside of a specific group
- Solutions (education):
 - 1. Start a conversation with a teammate
 - 2. Invite someone from another team to lunch
 - 3. Ask about their laptop sticker ☺

BIGGEST DIFFICULTIES IN IMPLEMENTING DEVOPS





2017 State of DevOps Report

Presented by:

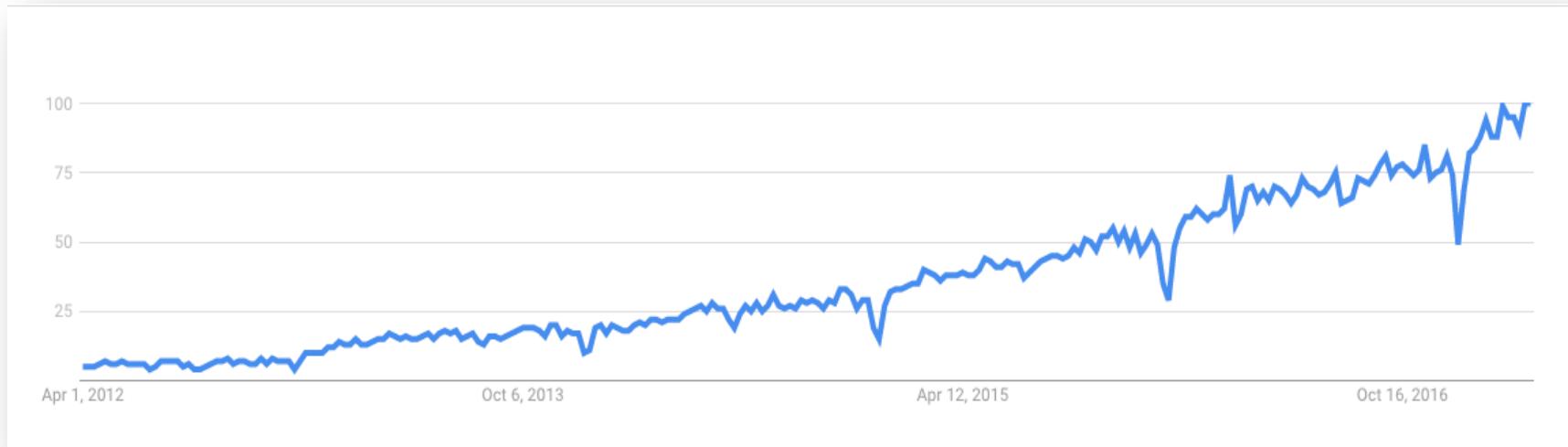


Sponsored by:



DevOps Term in Google Search – Scalyr Blog

- DevOps as a profession and discipline just keeps growing in demand...
- In 2017, there have been more than 100 global conferences dedicated to DevOps



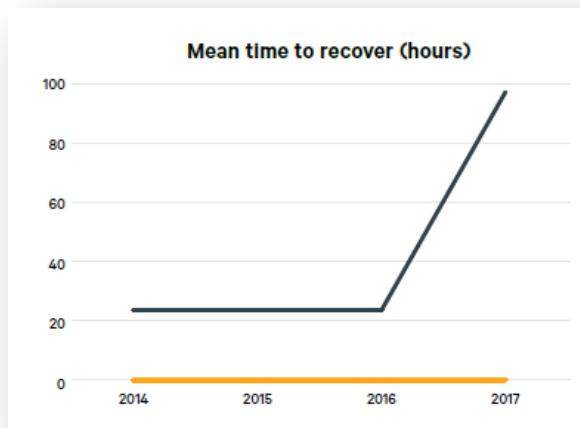
Key Findings in 2017 – State of the DevOps Report

- Characteristics of Transformational Leadership:
 - Vision, Inspirational Communication, Intellectual Stimulation, Supportive Leadership, Personal Recognition
- Automation is a HUGE boon to organizations
- DevOps applies to ALL organizations



Key Findings in 2017 – State of the DevOps Report

- LTFC → Less than one (1) hour
- MTTR → Less than one (1) hour



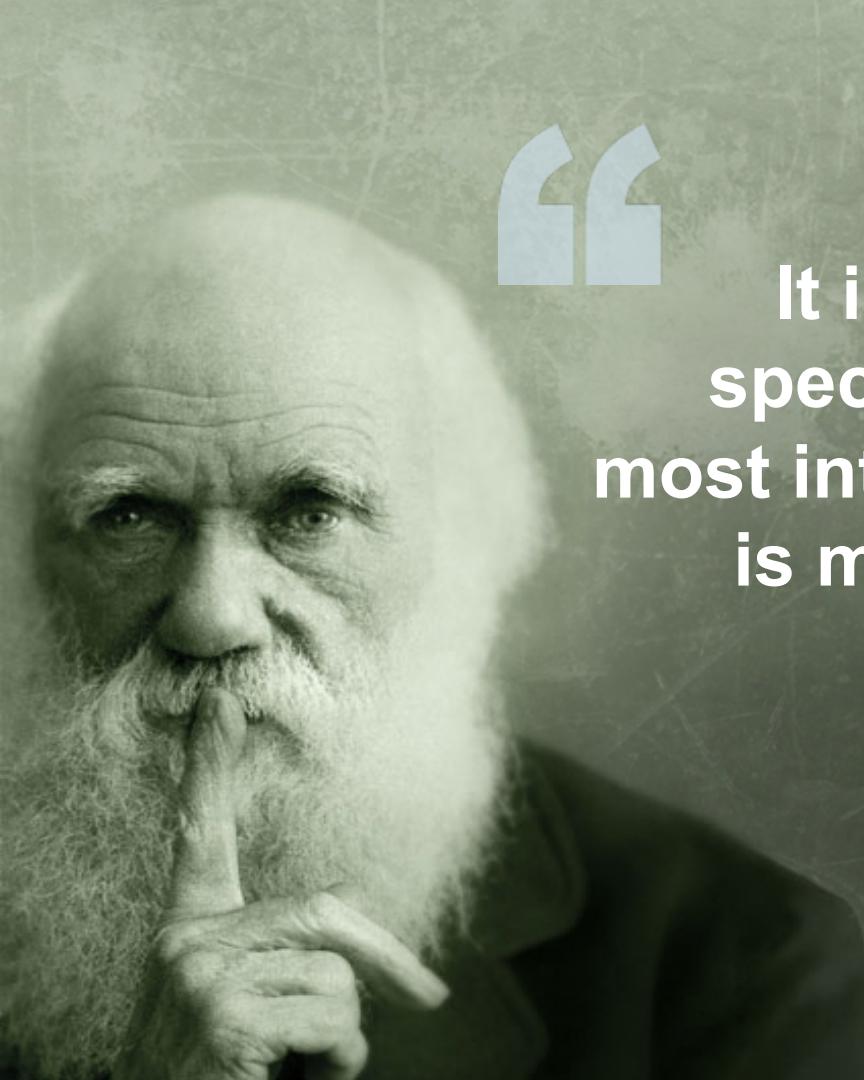
2017 State of DevOps Report | presented by Puppet + DORA

Table 2: 2017 IT performance by cluster

Survey questions	High IT performers	Medium IT performers	Low IT performers
Deployment frequency <i>For the primary application or service you work on, how often does your organization deploy code?</i>	On demand (multiple deploys per day)	Between once per week and once per month	Between once per week and once per month*
Lead time for changes <i>For the primary application or service you work on, what is your lead time for changes (i.e., how long does it take to go from code commit to code successfully running in production)?</i>	Less than one hour	Between one week and one month	Between one week and one month*
Mean time to recover (MTTR) <i>For the primary application or service you work on, how long does it generally take to restore service when a service incident occurs (e.g., unplanned outage, service impairment)?</i>	Less than one hour	Less than one day	Between one day and one week
Change failure rate <i>For the primary application or service you work on, what percentage of changes results either in degraded service or subsequently requires remediation (e.g., leads to service impairment, service outage, requires a hotfix, rollback, fix forward, patch)?</i>	0-15%	0-15%	31-45%

* Note: Low performers were lower on average (at a statistically significant level), but had the same median as the medium performers.

For information on how we determined high, medium and low IT performance, please see the [Methodology](#) section.

A black and white portrait of Charles Darwin, an elderly man with a full, bushy white beard and receding hairline. He is looking slightly to his left with a thoughtful expression, his right hand resting near his chin. The background is a textured, light-colored surface.

“

It is not the strongest of the species that survives, nor the most intelligent. It is the one that is most adaptable to change.

”

Charles Darwin

The Cost of Failed Software Updates/Deployments



\$100K Hr Infrastructure Failure Average Cost



\$1.25 - \$2.5B Yr F1K Downtime Cost



\$0.5 - \$1M Hr Critical App Failure

“DevOps & the Cost of Downtime:
Fortune 1000 Best Practice Metrics Quantified”

Software Delivery is critical but Hard

FINSERV

building software to deliver better service

RETAIL

building platforms for online sales and support

AUTOMOTIVE

building services for the connected car

FEDERAL

accelerating software delivery while managing complex deployments

HEALTHCARE

building applications to improve care

TELECOM

building embedded and online services

100%

of those surveyed

58%

want fast software delivery (one of top 3 goals)

12%

can do it

100

90

80

70

60

50

40

30

20

10

0

Reason for Failure: Software has changed...



Large App → Few Releases



**Small App(s)/Services →
Many Releases**

TIME TO ADAPT



Application Release Automation: The **Hottest** DevOps Category

Adaptive Release Automation → DevOps for 2018



Release on
Business
Demand



Deliver
Unprece-
dented
Insight



Pipeline-
as-a-
Service



Adapt at
the Speed
of
Innovation



Eliminate
Risk
Anxiety

Release on Business Demand

- Dramatically accelerate release cycles to match any cadence and scale that the business demands
- Orchestrate the entire SDLC shortening developer commit to production release cycles from months and weeks to days and hours.
- Coordinate releases across teams as they work in parallel without hindrances (e.g. have multiple phases of a release active for distinct teams)

TEAM work makes the RELEASE work!



Deliver Unprecedented Insight

- Gain visibility that allows you to predict, measure, understand and optimize the delivery of business value in current, planned and future releases
- Advanced and predictive analytics that deliver insight into release speed and value delivery that is needed to track, understand and improve results
- Visibility across the organization to find and fix release bottlenecks

You can't improve what you can't measure!



Pipeline-as-a-Service

- Centralize and treat pipelines and automation processes as high-level code (easy to version, test, reuse, refactor, scale, and visualize)
- Provides a shared catalog of standard and customized processes to all teams
- Accelerates team on-boarding, reduces errors, improves auditing
- Technical and business visibility improves communication and eliminates cadence mismatch

Your Pipeline is the Key!



Adapt at the Speed of Innovation

- Out-of-the-box Best Practices Templates to deliver fast time to value
- Eliminate the learning curve and the risk of adopting NEW technologies into PROD environments
- Rapidly adapt pipelines to accommodate new business, process or technology changes
- Meet your teams where they are by easily automating across existing tools, tool chains, and processes

1 Mile Wide BUT 2 Miles Deep!



Eliminate Risk Anxiety

- Facilitate collaboration between development and operations teams on releases and deployments
- Assure fidelity of environments across entire SDLC (Dev, Test, Stage, Pre-PROD, Production)
- Reduce release cycle times from hours and days to minutes through automation of manual tasks
- Provide a complete audit trail of all releases with full visibility

Time to End Finger Pointing!



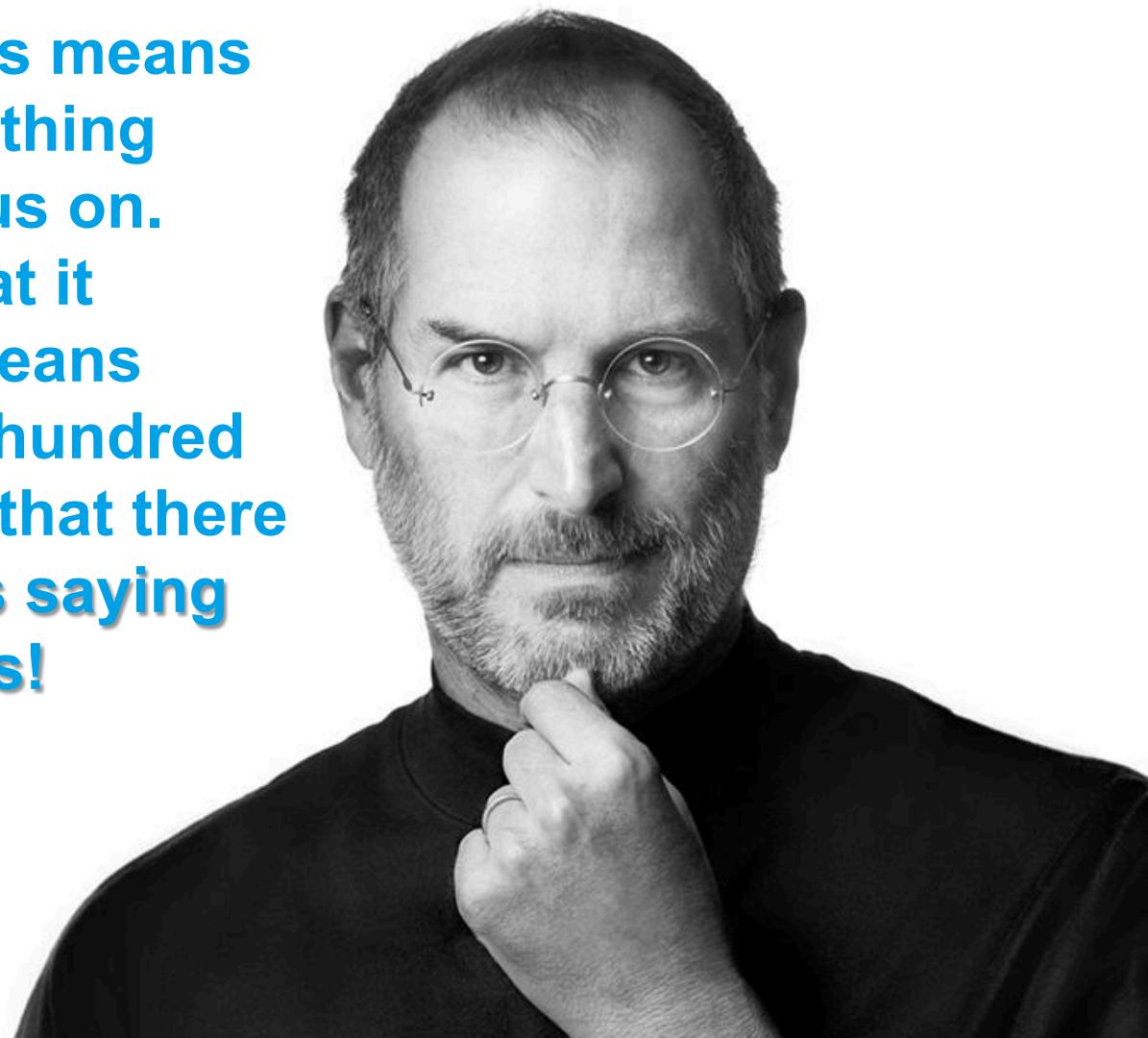


We help the world
deliver better
software faster.

*DevOps Release
Automation*



“People think focus means saying yes to the thing you’ve got to focus on. But that’s not what it means at all. It means saying NO to the hundred other good ideas that there are. **Innovation is saying NO to 1,000 things!**



Analysts View of Electric Cloud



#1 LEADER
DEVOPS ARA
MAGIC QUADRANT 2017

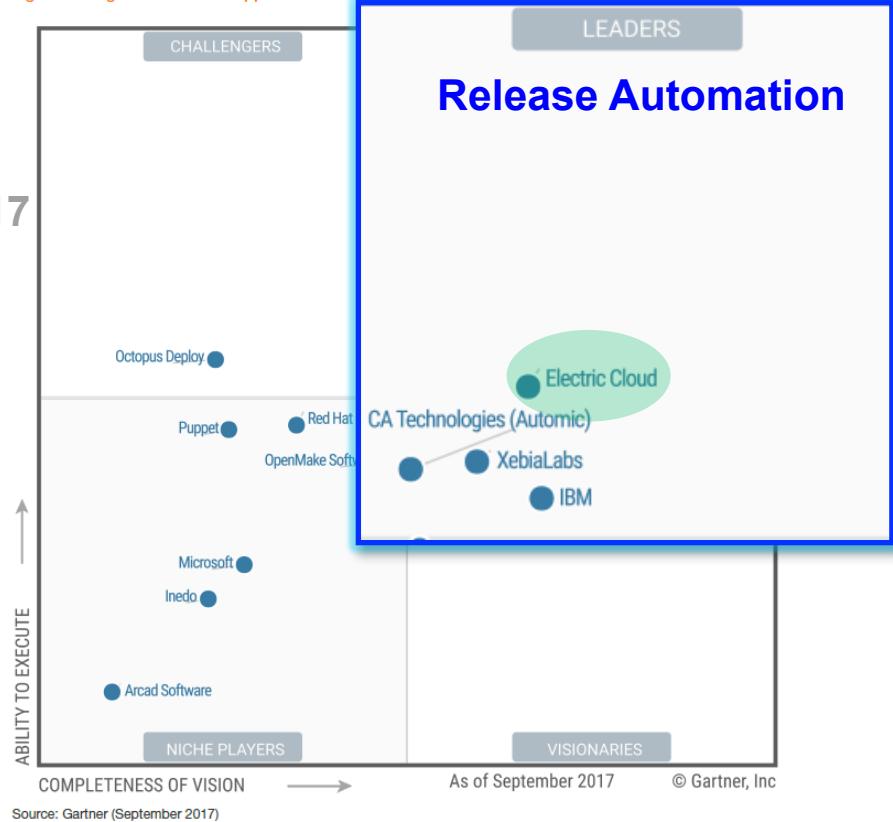


LEADER
DEVOPS RELEASE
MANAGEMENT 2016



LEADER
CDRA WAVE 2017

Figure 1. Magic Quadrant for Application Release Automation



Other Talks (Monday, Nov 13th)

More Detailed Sessions:

- [DevOps Transformation 2.0: From Ancestry.com to AdvancedMD - applying strategies for leading DevOps innovation](#)
John Esser, Sr. Director IT & Data Center Operations, AdvancedMD; Mon 2:00-2:30 PM, Franciscan A/B
- [Betting on DevOps: How NetEnt Transforms Online Gaming Delivery](#)
Aloisio Rocha, Agile Product Owner, NetEnt; Mon 2:35-3:05 PM, Franciscan A/B
- [DevOps In The Enterprise: The Analyst ‘Outside-In’ Perspective](#)
Sam Fell, VP Marketing, Electric Cloud; Mon 2:35-3:35 PM, Franciscan C/D
- [From Mainframe to Microservices: How Somos Keeps Telcos and Us All Connected](#)
Gary McKay, SCRUM Master, Somos; Mon 3:10-3:40 PM, Franciscan A/B
- [Architecting Your App and Your Pipeline for Continuous Delivery - 10 DO's for Successful DevOps](#)
Anders Wallgren, CTO, Electric Cloud; Mon 4:10-5:10 PM, Franciscan A/B

Key Takeaways

- DevOps no longer grassroots, but a competitive necessity
 - Application Release Automation (ARA) one of the HOTTEST DevOps Category
- DevOps applies to ALL organizations
 - Automation is a key enabler
- Organizations pay a penalty *IF* they are unable to adapt
- Adaptive Release Automation sets the stage for DevOps in 2018

Thank You



Electric Cloud