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# DevOps: From Analyst Inquiry to Organizational Action

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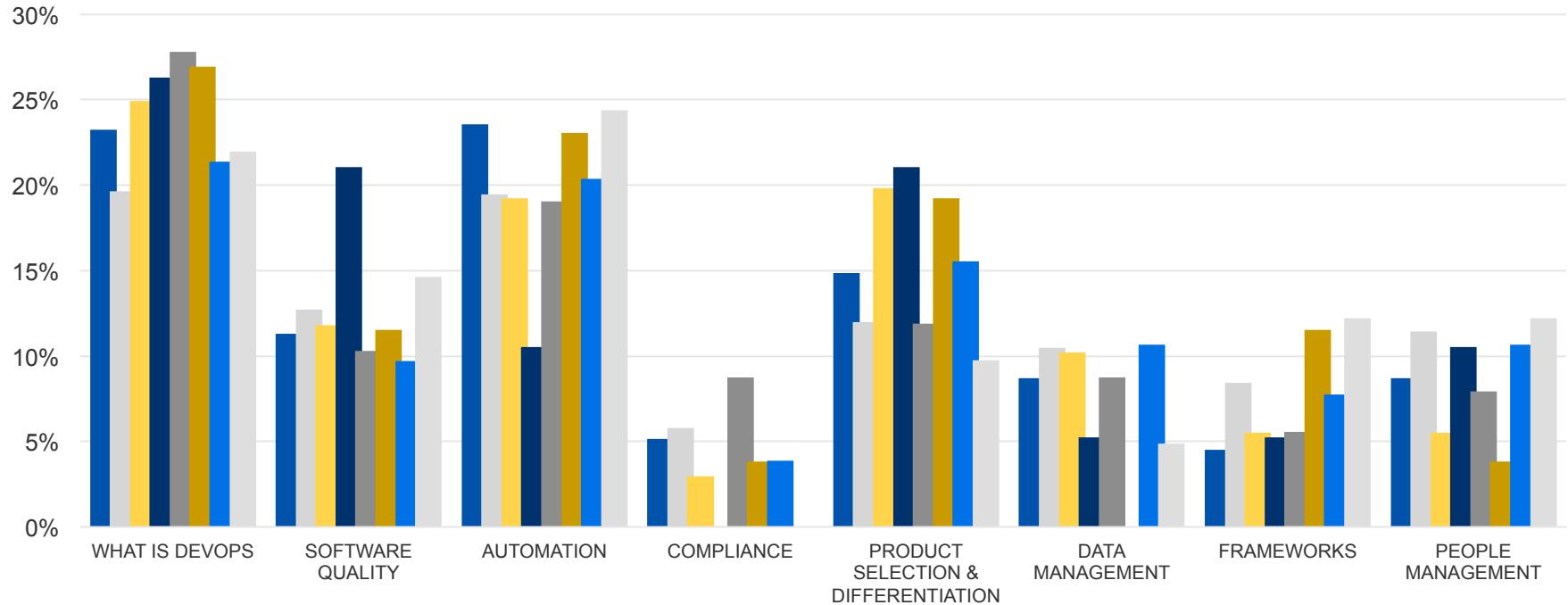
# **DevOps: From Analyst Inquiry to Organizational Action**

## **Robert E Stroud CGEIT CRISC – Principal Analyst Forrester Research**

The one constant in all our lives is change! Digital disruption is rampant – disruptive technologies are driving innovative business models across every vertical from Banking to public services. Innovation at speed mandates that IT organizations not only accelerate release velocity, but do so with greater quality, security and availability!

To meet these business demands, organizations of all sizes seek advice and counsel – from colleagues, conferences, and industry analysts like Forrester Research! In this session, Rob Stroud will share the top 5 questions that DevOps transformation leaders ask during customer inquiries. He'll then walk through the findings from global research to help you identify the traps and roadblocks teams often experience, and discuss common approaches and actions to help facilitate a smooth, and swift, transformation.

# Client Inquiries are growing!



■ Business services and construction ■ Financial services and insurance

■ Public sector and healthcare

■ Manufacturing

Source: Forrester research 2016 Inquiries

■ Retail and wholesale

■ Utilities and telecommunications

■ Media, entertainment, and leisure

■ Other

# ESCAPE VELOCITY



*DevOps is a  
technique  
to drive and deliver  
Business (Digital)  
Transformation*

# Operations Must Accelerate Release Velocity

“How often does your team (or teams) release applications?”



Releases are quarterly or faster

Infrastructure and operations teams  39%

Applications development and delivery teams  64%



Releases are twice a year or slower

Infrastructure and operations teams  61%

Applications development and delivery teams  36%

Base: 3,402 infrastructure decision-makers and 688 developer decision-makers

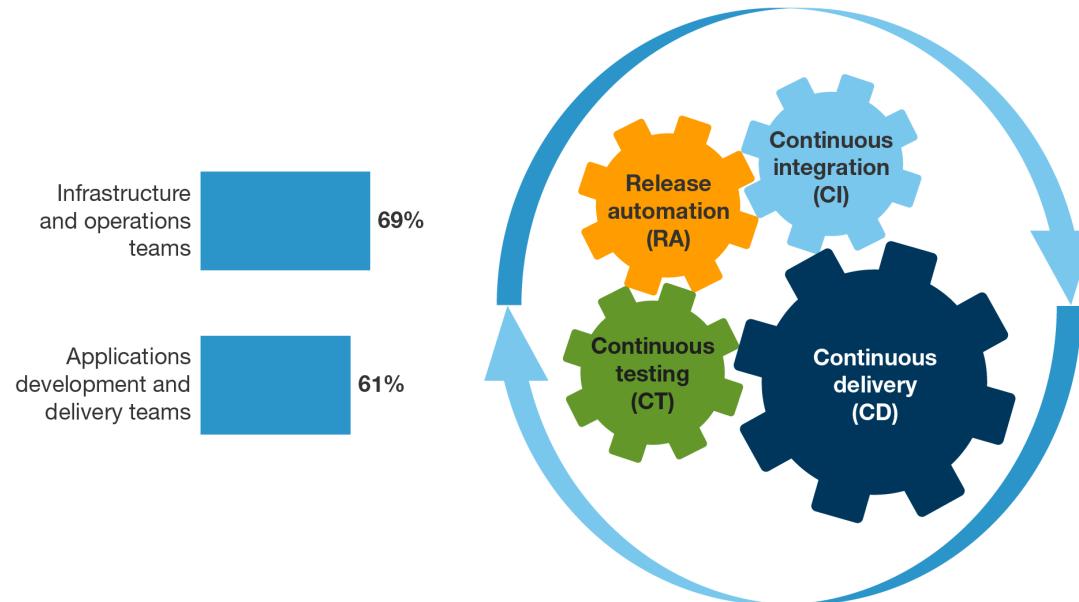
Note: “Other” responses have been omitted from this analysis.

Source: Forrester's Global Business Technographics® Infrastructure Survey, 2016, and Forrester's Global Business Technographics Developer Survey, 2016

Source: The Need For Speed: Drive Velocity And Quality With DevOps

# Operations Warming To DevOps

“We actively embrace, or have processes that resemble, DevOps.”



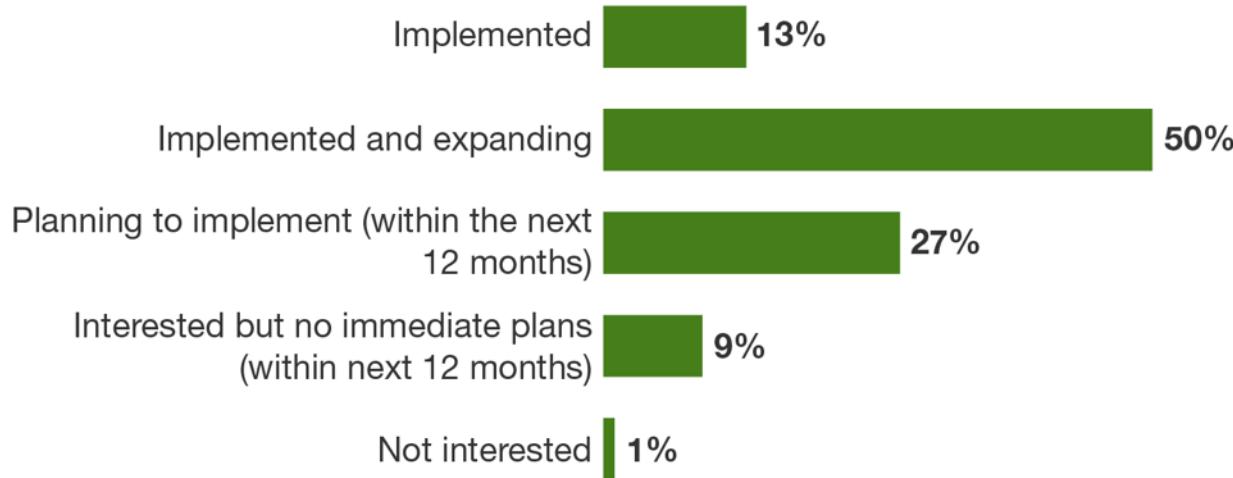
Base: 3,503 infrastructure decision-makers and 704 developer decision-makers

Source: Forrester's Global Business Technographics® Infrastructure Survey, 2016 and Forrester's Global Business Technographics Developer Survey, 2016

Source: The Need For Speed: Drive Velocity And Quality With DevOps

# 50% Organizations Implementing DevOps - NOW!

“Has your organization implemented DevOps? Where does it stand in relation to DevOps?”

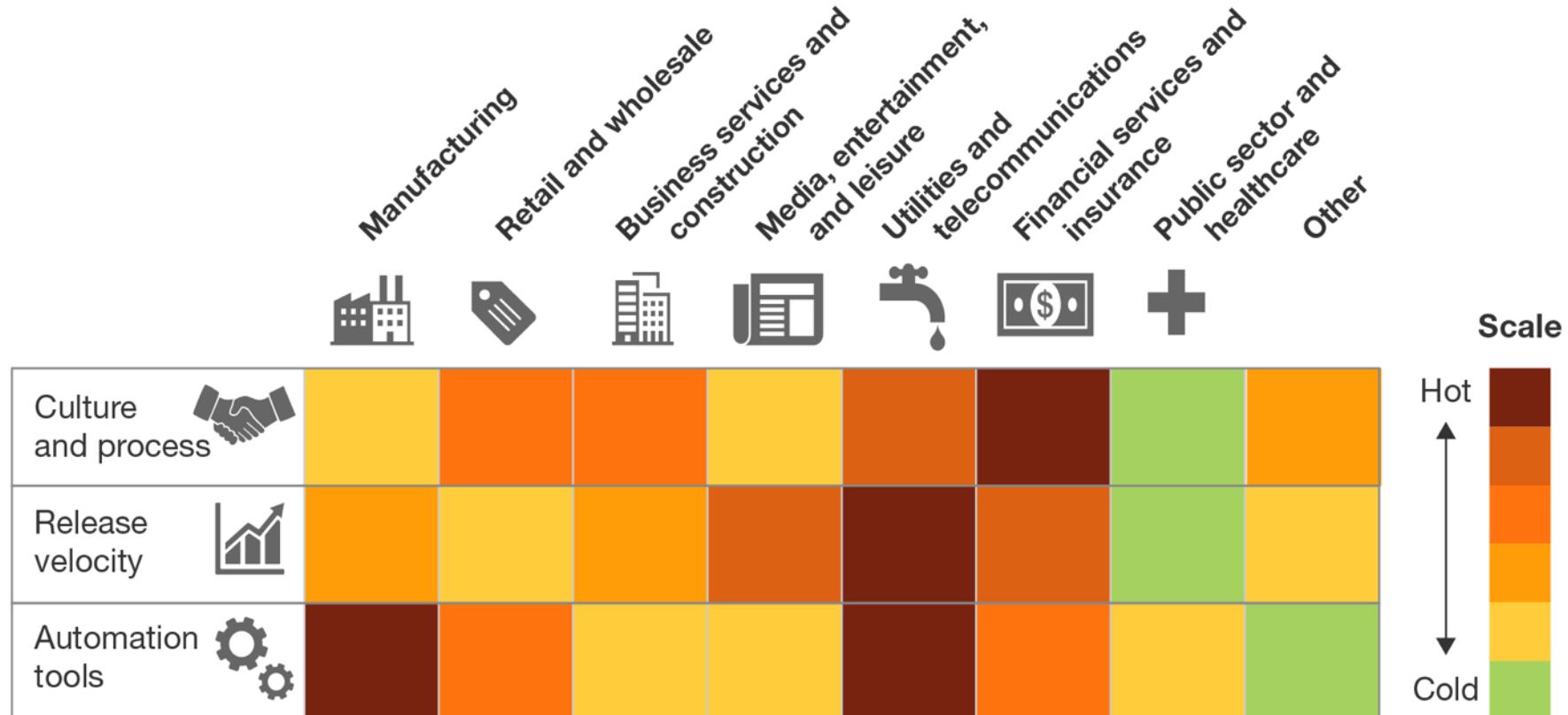


Base: 237 DevOps pros

Source: Forrester's Q1 2017 Global DevOps Benchmark Online Survey

Source: Six Trends That Will Shape DevOps Adoption In 2017 And Beyond

# Financial Services and Utilities leading the charge



Base: 21 to 244 developers who work for a software company, as game developers, for internal IT, or in technology services and 126 to 935 infrastructure decision makers (sample sizes vary by industry)  
Source: Forrester Data Global Business Technographics® Developer Survey, 2016 and Forrester Data Global Business Technographics Infrastructure Survey, 2016

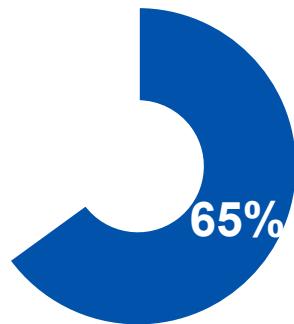
Source: Forrester Research - DevOps Heat Map 2017 – May 2017

# **“We have implemented DevOps for the following application types”**

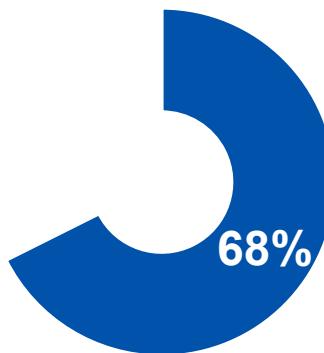
**Internal applications**  
(packaged application software like ERP, CRM, PLM, SCM, SRM, and finance or business intelligence)



**IoT-enabled smart products**  
(incorporating connectivity and intelligence into products)



**Mobile apps**  
(B2B or B2C)

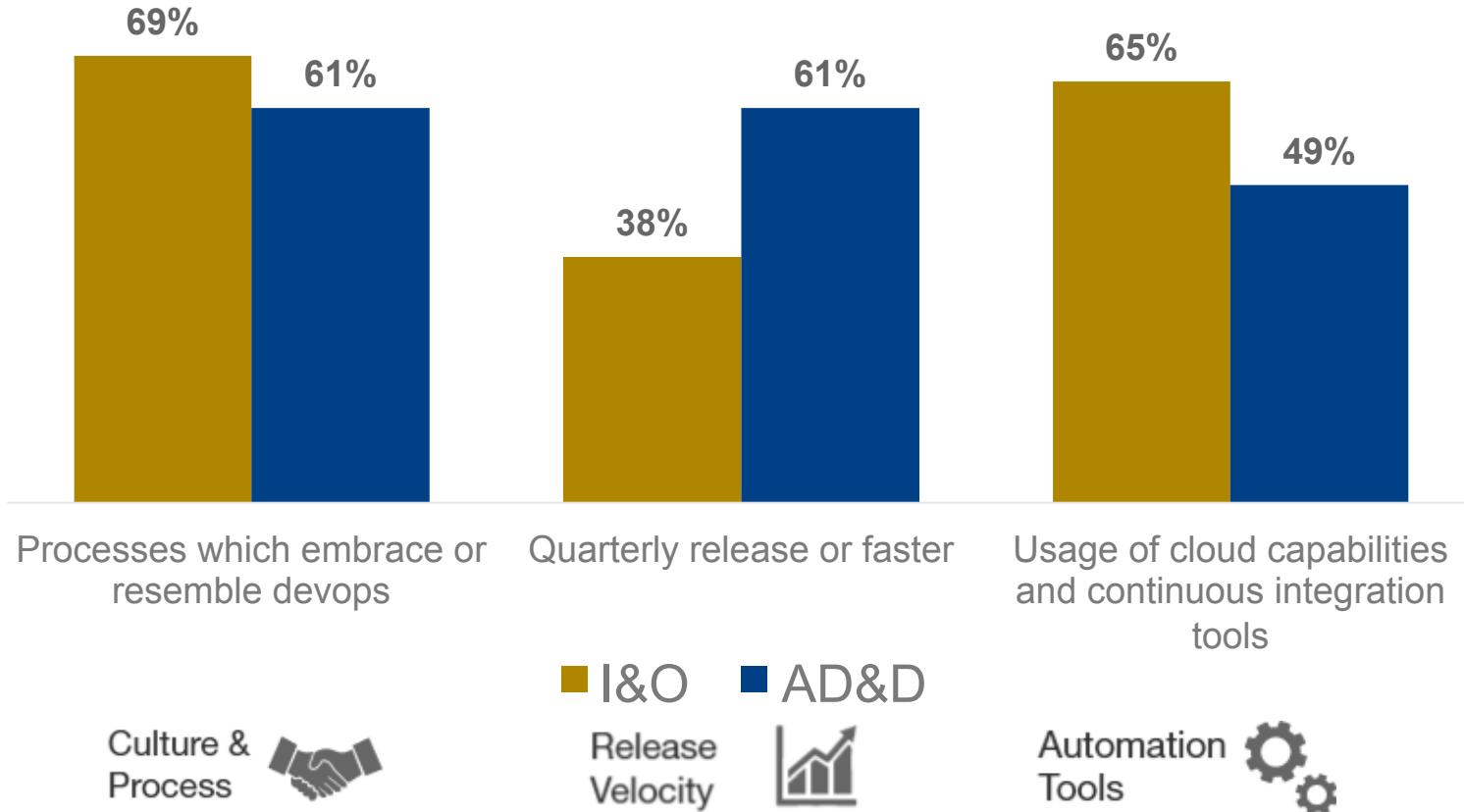


**eCommerce websites** (B2B or B2C)



Source: 2017 DevOps survey  
Base 236 DevOps Professionals

# Capabilities Adopted



Base: 704 -3503 Development and Infrastructure decision-makers

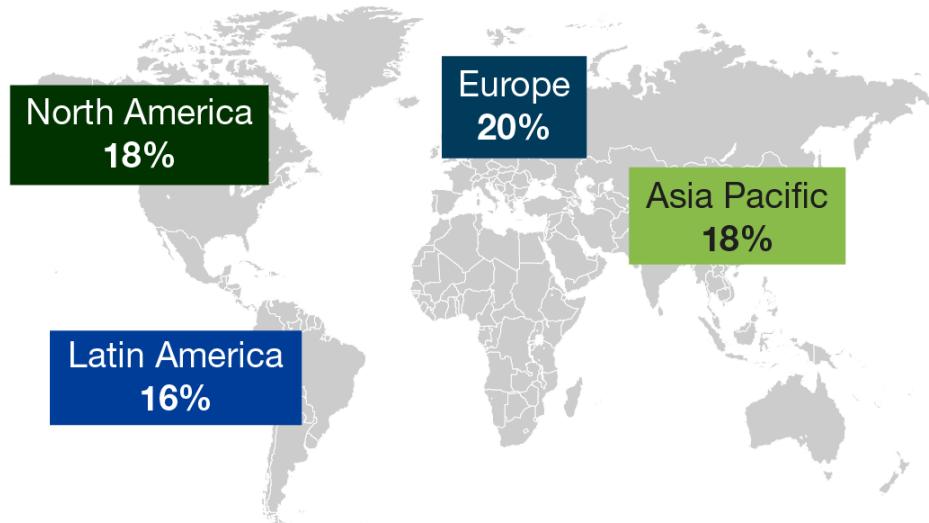
Source: Forrester's Global Business Technographics® Developer Survey, 2016 and Forrester's Business Technographics® Global Infrastructure Survey, 2016



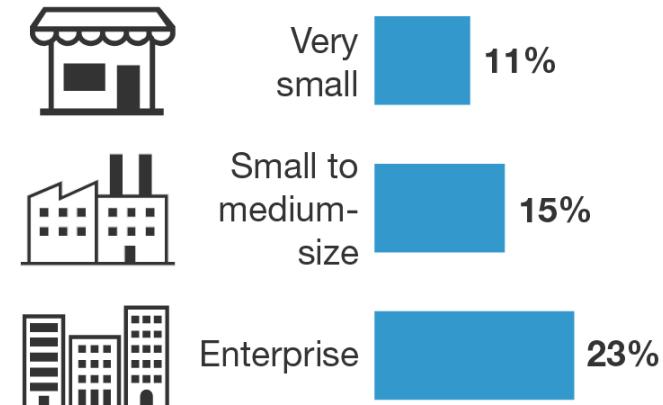
**64% of Businesses  
are dissatisfied with  
their release velocity**

# 23% of Enterprise deploying monthly or faster!

Release velocity of monthly or faster



Business size



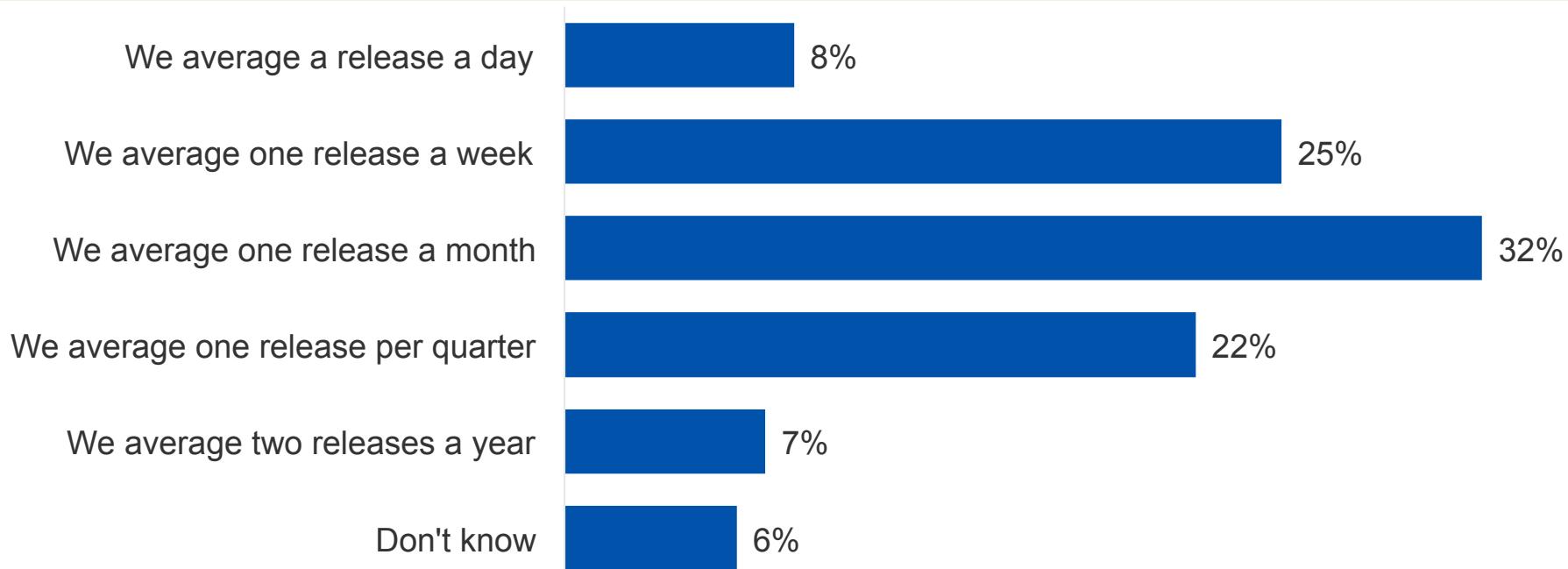
Base: 320 to 1,542 infrastructure decision makers

Source: Forrester Data Global Business Technographics® Infrastructure Survey, 2016

Source: The Forrester Wave: Continuous Delivery And Release Automation, Q3 2017

# RELEASE FREQUENCY

By taking this survey, you work in an IT role. How often does your team or teams release applications?



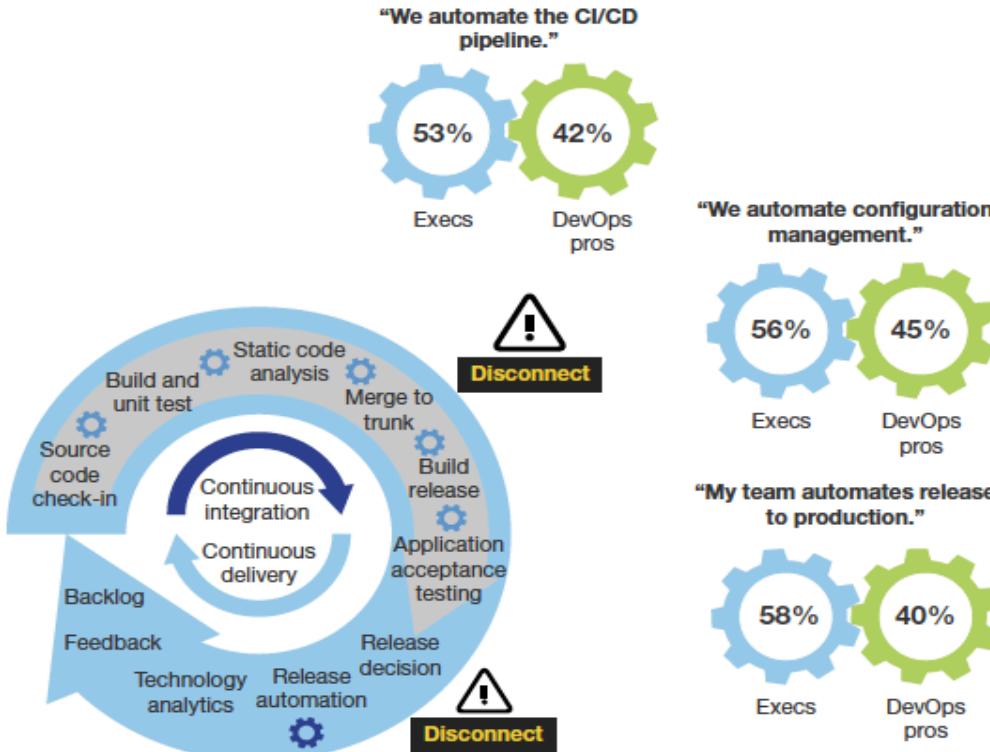
Source: 2017 DevOps Benchmark Survey  
Base: 237 DevOps pros

# ....Destruction of silos of automation



Source: <http://ayankeepastor.blogspot.com/2013/08/passing-baton.html>

# Destruction Of Silos of Automation



Automated deployment of application, infrastructure and middleware

Time to destroy traditional change management

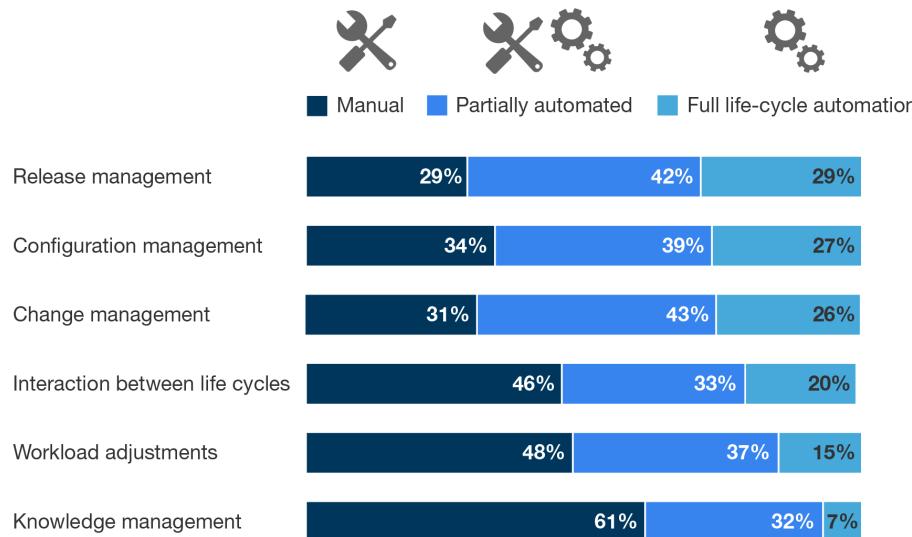
Base: 66 global executives and 170 global DevOps professionals

Source: Forrester's Q1 2017 Global DevOps Benchmark Online Survey

Source: A Dangerous Disconnect: Executives Overestimate DevOps Maturity

# Only 29% Of Releases Have Complete Life-Cycle Automation

“How automated are each of the following life-cycle stages in relation to customer-facing business services and applications?”



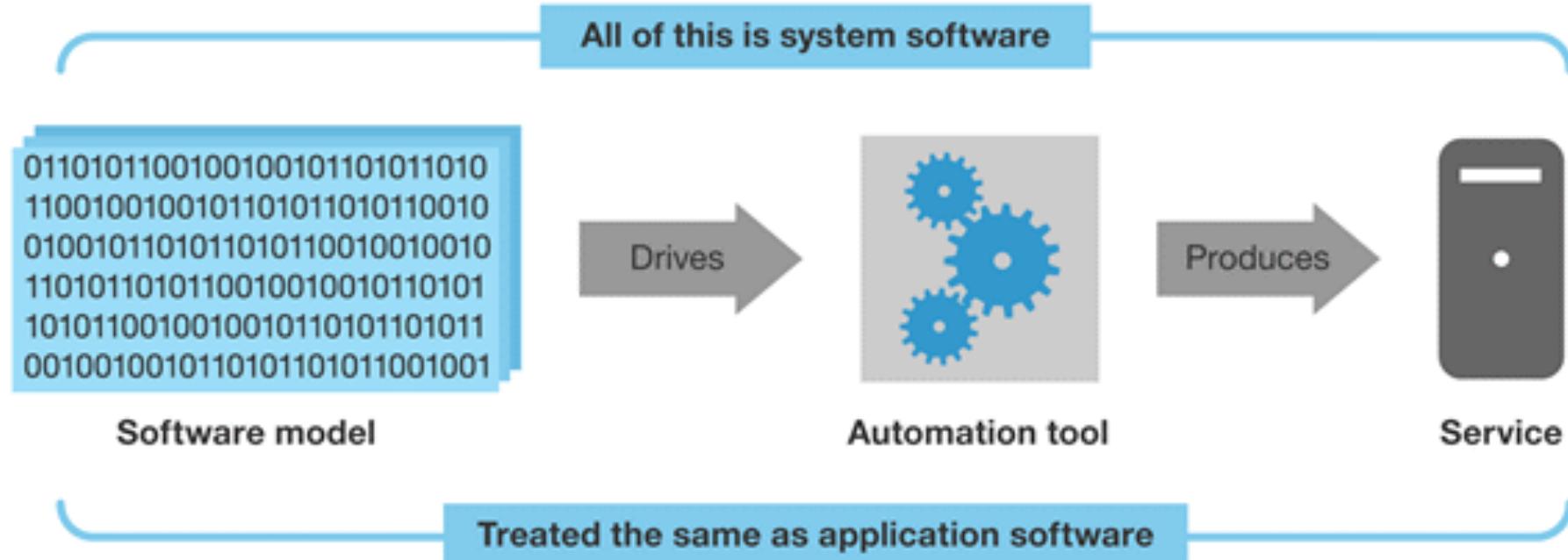
Base: 142 global DevOps professionals

(Percentages may not total 100% due to rounding)

Source: Forrester's Q1 2016 Global Modern Service Delivery Benchmark Online Survey

Source: The Need For Speed: Drive Velocity And Quality With DevOps

# Model-based automation (your future)

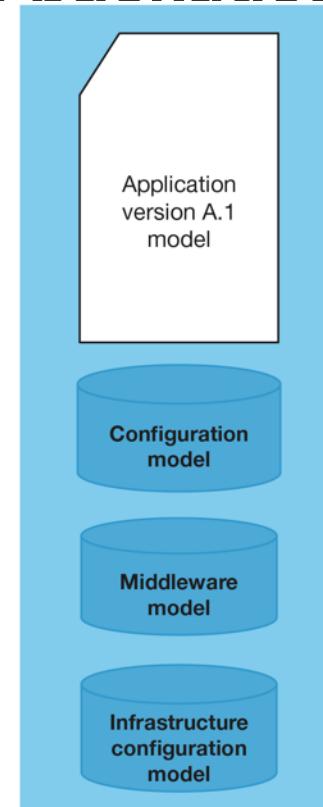


**Apply DevOps Thinking To Everything!**

Source: Infrastructure As Code, The Missing Element In The I&O Agenda (Forrester)

# Delivering with velocity and quality across the pipeline at scale – requires deploying packages

- › Build complete release packages
  - › Infrastructure
  - › Middleware
  - › Application
  - › Containers
  - › PaaS
  - › etc
- › Ease of use including CLI and GUI interface
- › Integration and automation of deployment

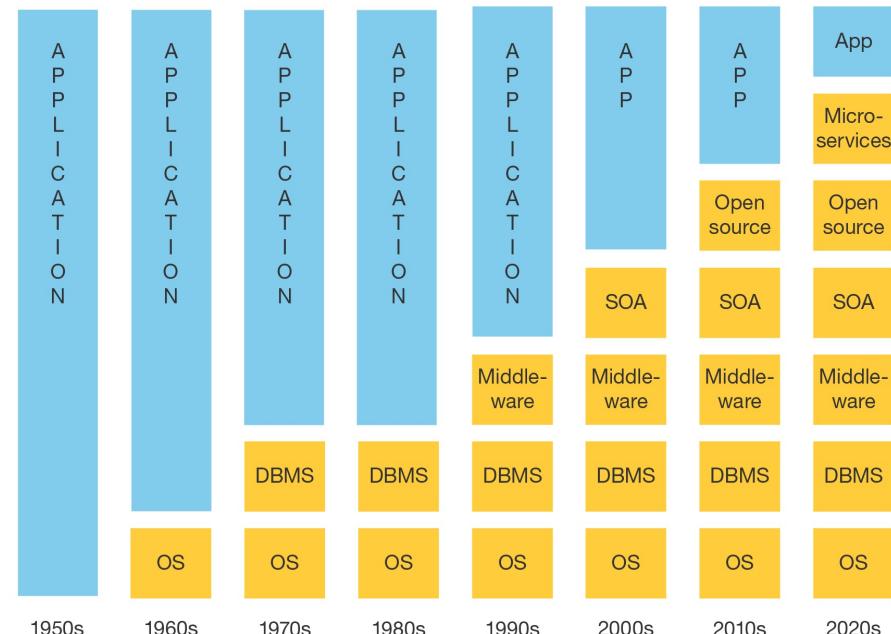


Source: The Forrester Wave™: Continuous Delivery And Release Automation, Q3 2017

# Microservices evolution: Creating agile delivery components

## Benefits

- › Incremental change
- › Implementation diversity
- › Runtime robustness
- › Deployment options



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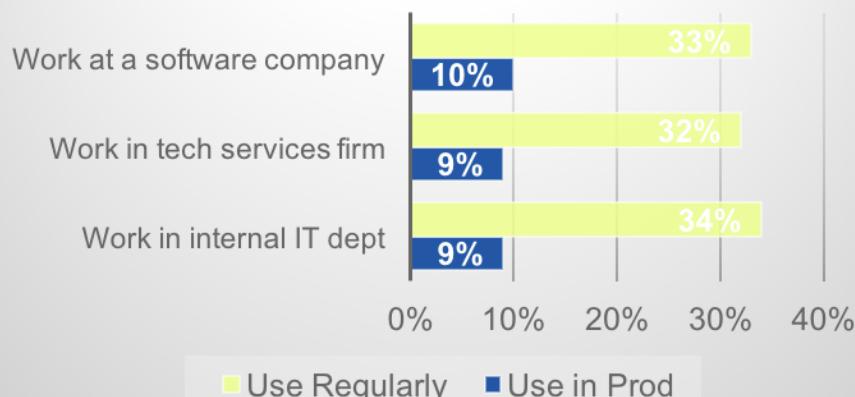
Source: Forrester Research, Inc. Unauthorized reproduction, citation, or distribution prohibited.

# Container use by role & industry

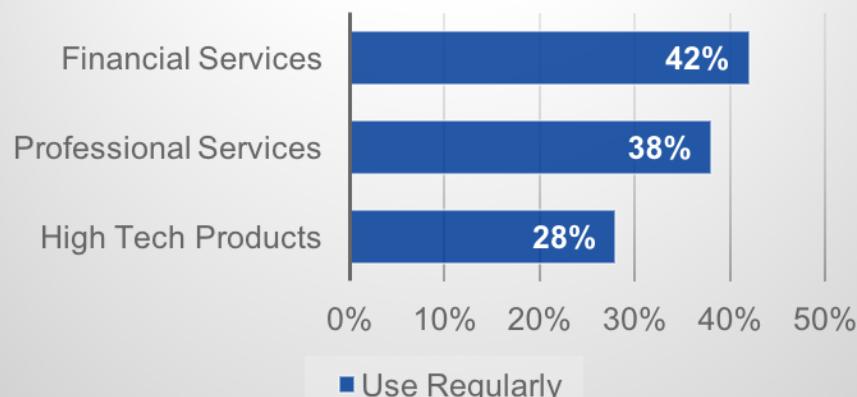
**8%**

Of all enterprise devs use containers for production release today

## By Role



## By Industry



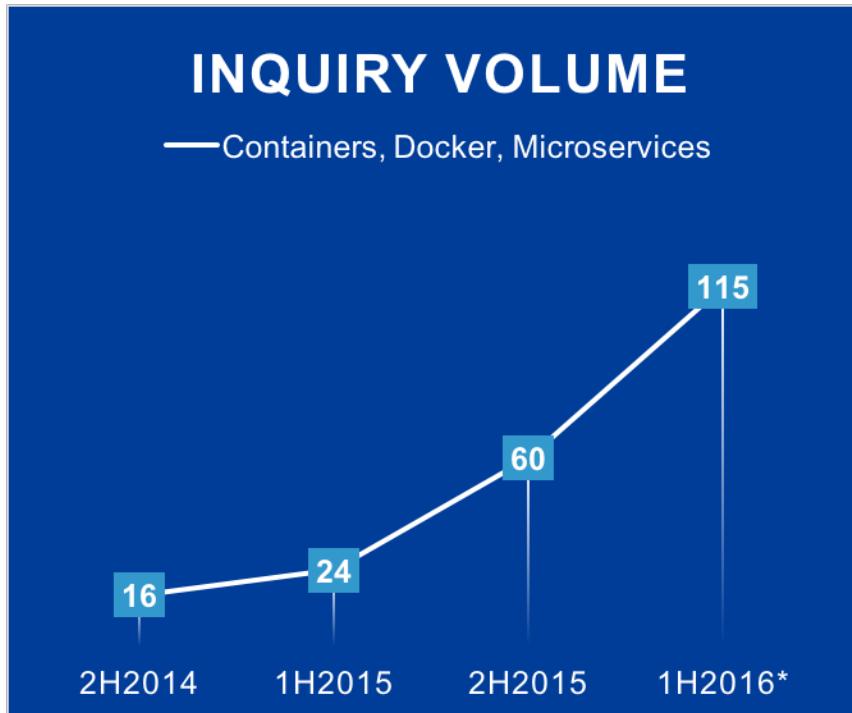
Base: 1,943 software development professionals in US, EU, APAC

Source: Forrester's Business Technographics Global Developer Survey, 2015

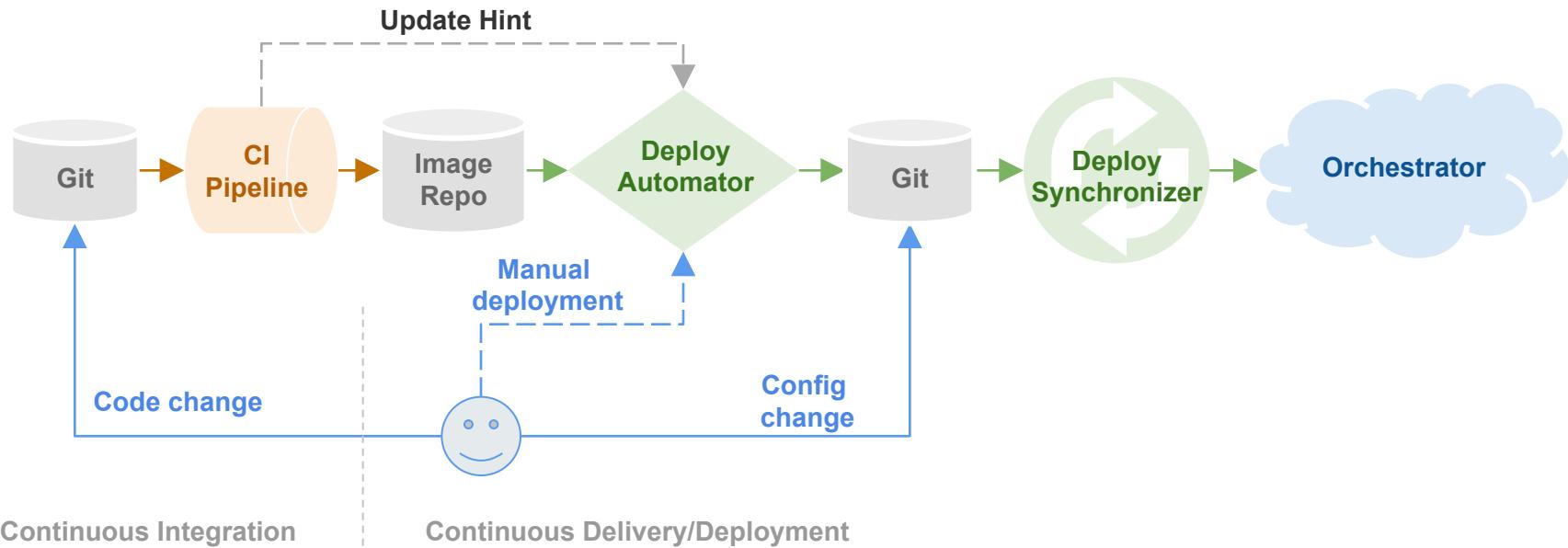
# Container inquiries are ramping quickly

## Top Inquiry Topics:

- › Are containers being adopted by **traditional IT** departments yet?
- › Help me **understand the ecosystem** – who's doing what?
- › How do we **monitor and manage** containers alongside VMs?
- › Should I **build or buy** a container-based development platform?
- › What's the vendor landscape for container **storage and security solutions**?

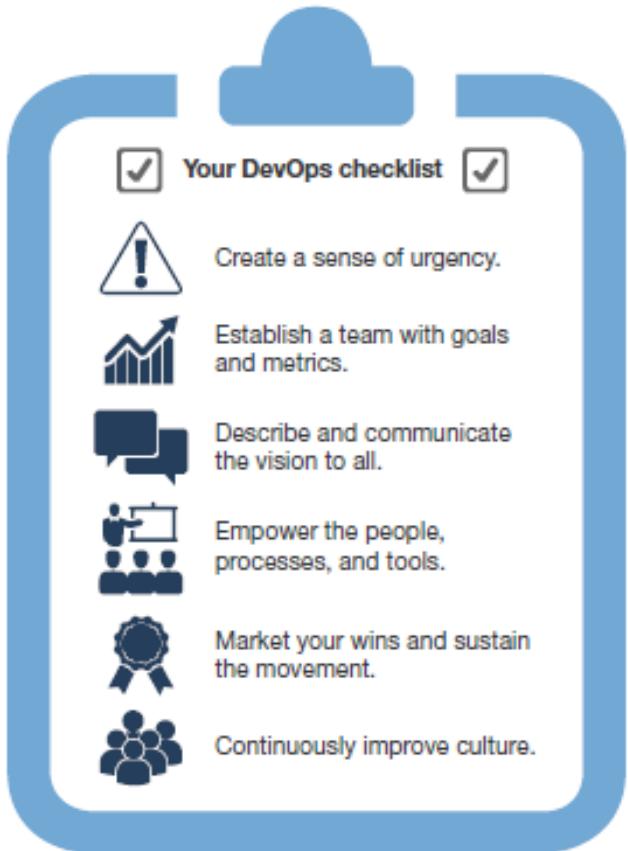


# New World Of Release Automation



Source: Weaveworks

# “DevOps” today – BizDevOps tomorrow



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Thank you

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