

DEVOPS ENTERPRISE SUMMIT

AN  REVOLUTION EVENT

GET TOGETHER- GO FASTER

October 22-24, 2018
The Cosmopolitan of Las Vegas
Las Vegas, Nevada

 Electric Cloud

 IT REVOLUTION

#DOES18



More Engineering, More Culture, More Security

Erica Morrison Executive Director, Software Development, CSG

Joseph Wilson Executive Director, Global Information Security, CSG





MORE ENGINEERING, MORE CULTURE, MORE SECURITY

Erica Morrison, Executive Director, Software Engineering @ericarmorrison

Joe Wilson, Executive Director, Global Information Security

CSG: Who Are We?

Industry Leading, Innovative, Configurable Business Support Solutions

**REVENUE
MANAGEMENT**

**CONTENT
MONETIZATION**

**CUSTOMER
COMMUNICATION
MANAGEMENT**

**MANAGED
SERVICES**

**ASCENDON
NEXT GEN
PLATFORM**

3,300 EMPLOYEES
Around the Globe

35+ YEARS
Supporting the World's most respected CSPs



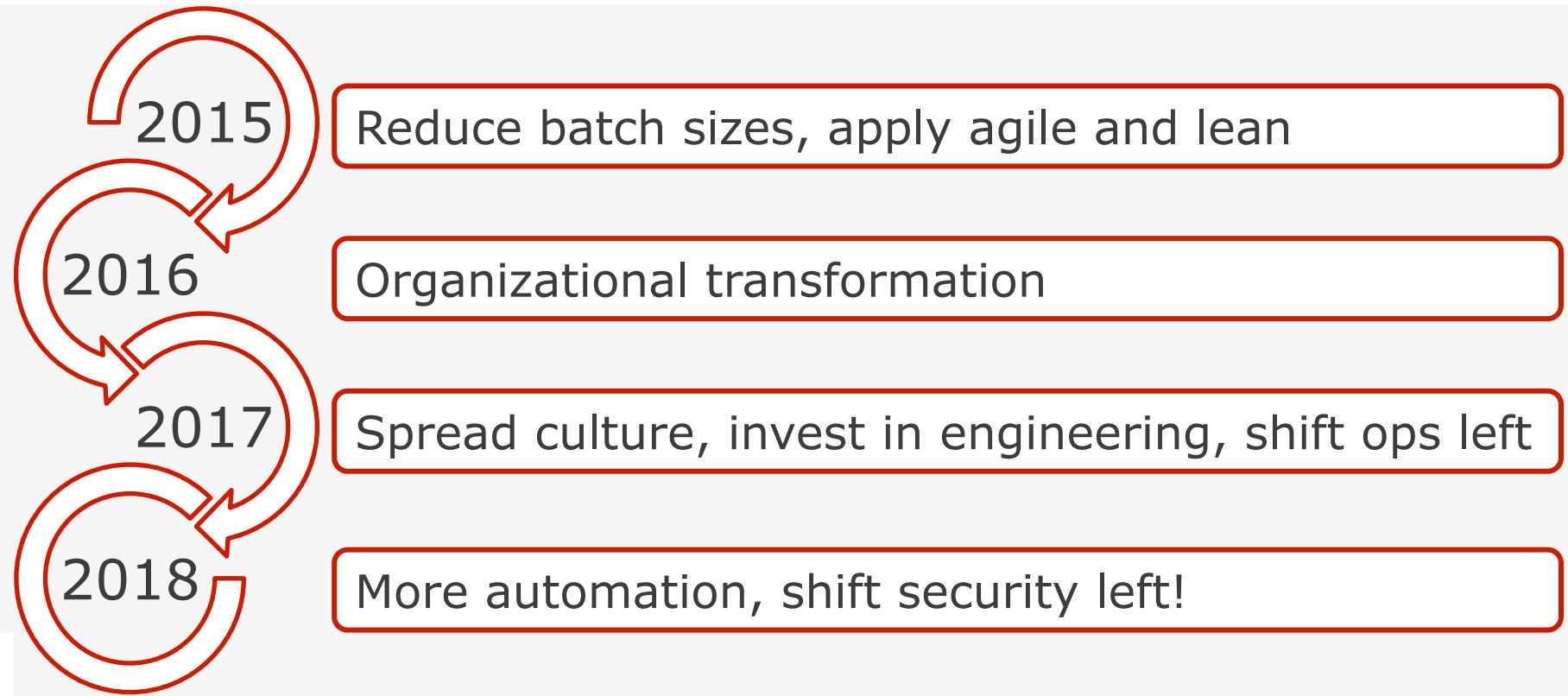
CSG in North America

SaaS Based Customer Care and Billing

- ~62M Subscribers
- 150k Call Center Seats
- ~6B External Transactions/month
- 40 Dev. Teams & 1000 Practitioners
- ACP: ~20 Technology Stacks: JS to HLASM
 - Integrated Suite of 50+ applications

Challenges: Time to Market, Quality: Software & Operations

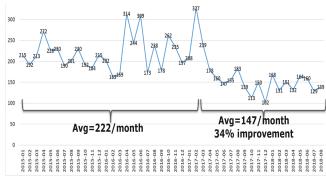
— OUR DEVOPS JOURNEY



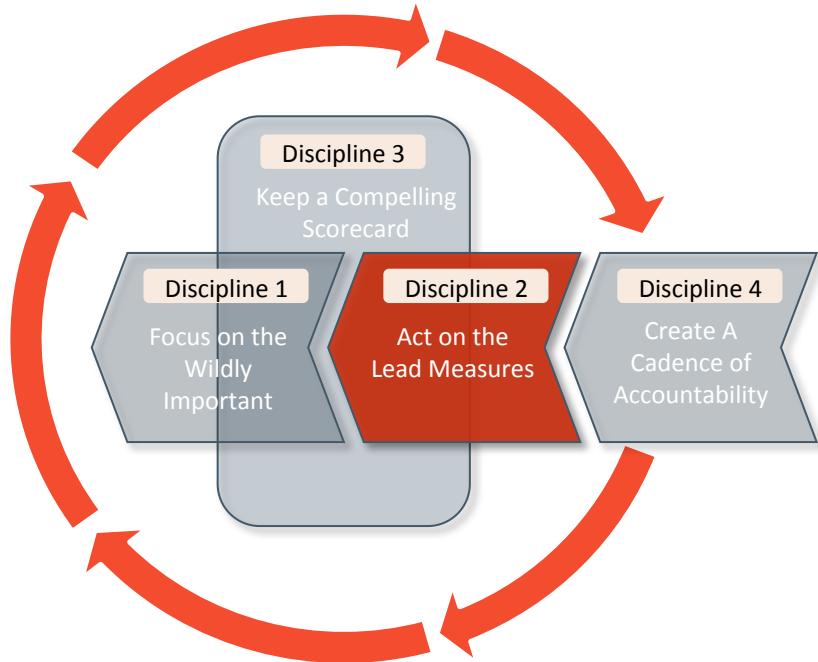
— 4DX



58%
Less Impact Minutes



74%
Fewer Incidents



IAC AND OPERATIONS MANAGEMENT

PLATFORMS

Chef for core IaC, Rundeck for operations management

FOUNDATIONAL ELEMENTS

Supporting public and private cloud

ROLLOUT

8 teams using Chef to manage prod environments, 5 additional in dev

IaC support via core team

Key knowledge
SMEs and training
curriculum

Infrastructure,
common
cookbooks

Standards and
best practices

Workstation
configuration

Test framework

— DEVOPS + SECURITY = EVERYBODY WINS

Defensible Network Architectures are:

- Monitored
- Inventoried
- Controlled
- Minimized
- Assessed
- Current

ACT elevates the delivery of these essential security principles at CSG

“With Chef Compliance, CSG was able to demonstrate compliance of our configuration standards for multiple OSes across our server population. This saved countless hours of manual compliance checks for our PCI QSAs and far better assurance than sample set checking.”

Doran Stienike, CISO

Asset Compliance Tool



Application Specifications

Platform Specifications



Global Asset Management

— DEVSECOPS – VULN MGMT.

PLATFORMS

Jenkins + Python + Ruby + MS SQL + Global Asset Management (GAM)

FOUNDATIONAL ELEMENTS

Supporting private cloud; Critical applications; Infrastructure teams

ROLLOUT

29 Products; 50 Technical Owners; 8 Service owners

Improvements

On demand
vulnerability
scanning

Vulnerability fast
feedback loop –
daily scans

Automatic trending
per business
owner / product

Senior leadership
visibility

Automatic
reporting

— DEVSECOPS – FILE INTEGRITY MONITORING

PLATFORMS

Trend Micro Deep Security + Jenkins + Python + MS SQL + Global Asset Management (GAM)

FOUNDATIONAL ELEMENTS

Supporting private & public cloud; Critical applications; Infrastructure teams

ROLLOUT

30 Products; 51 Technical Owners; 9 Service owners

Improvements

Faster onboarding processes

Fast concept to delivery cycle leveraging existing automation

Automatically eliminate unnecessary alerts

SecOps increased visibility of landscape

Automatic reporting

— SECDEV- 3RD PARTY SOFTWARE

PLATFORMS

Chef + ACT + APIs + Checkmarx + Flexera + USCERT

FOUNDATIONAL ELEMENTS

Supporting private & public cloud; All US based applications; Infrastructure teams

ROLLOUT

120+ Projects; 900+ Developers

Improvements

Complete application snapshot inventory

Vulnerability fast feedback loop – to developers

Criticality designation – fix timelines

Vulnerability pattern matching

Automatic Jira ticket creation

+ 2018 Key Cloud Initiatives

StatHu

b

- First major public cloud rollout
- 40 back end servers
- Blueprint for other teams to follow

Voice

- Consistent rollout
- Straightforward backout

eCar

e

- Manual server buildout of ~100 servers per release replaced with automation
- Dedicated VM cluster per client



THIS IS HOW
WE DO IT

— REFRAMING CLOUD SECURITY

- Embed security experts with developers to solve complex security challenges -- focus on integration points
- Embed developers with security to automate security functions – refocus cycles on solving complex problems
- Reduce complexity in security decision making; set precedents, but remain iterative and aspirational
- Use communities of practice to solve common challenges and to scale out scarce security resources
- Use the cloud to secure the cloud – take advantage of IaaS provider innovation and scale
- Revolutionize internal cloud: SDN / automatic segmentation
- Education, Awareness, Training: DevOps Leadership Series / PCI



WORK/LIFE BALANCE

15% TIME DEDICATED TO WLB

Let those closest to the problem solve it

CI
Patching on demand
Improved health monitoring

DATA WAREHOUSE
Test automation
Improved error handling

SLBOS
Enhanced synthetics framework

ORDER MANAGE
Streamline deployments

— HELP WE ARE LOOKING FOR



- | DevSecOps pipeline
- | SRE best practices
- | Reducing toil

THANK YOU

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