
A love letter to DORA

— A culture of continuous learning —

Varuna Venkatesh



@varunavenkatesh



Varuna Venkatesh

Apostolis Apostolidis



@apostolis09



Apostolis Apostolidis

Only **two** handovers 😊



“What Does Your Business Think of IT?”

	Cost Center	Asset	Partner	Enabler
Focus On	Cost	Return on Investment	Business Value	Speed & Innovation
CIO Reporting	CFO	COO	CEO	CEO
Common Strategy	Outsource IT	Harmonize/Rationalize	Insourcing	IT = Business
Levers	Cost Cutting	Economies of Scale	Business Case Driven	Economies of Speed

Traditional Structure **Digital Disruption**

Source: Gregor Hohpe "Enterprise Architecture = Architecting the Enterprise" YOW! 2017



Gregor Hohpe



David Farley



Lead Developer

Gazprom Energy

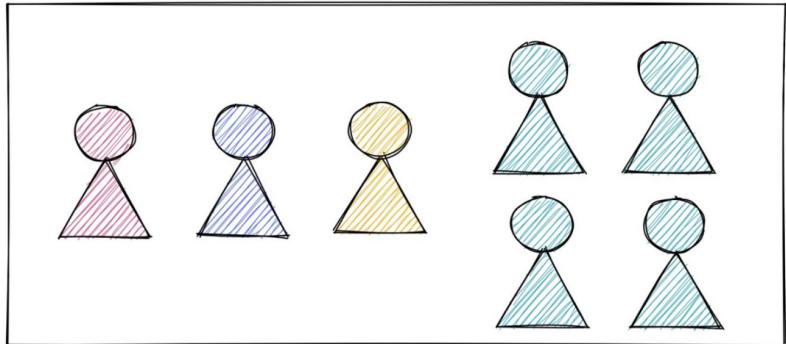
Apr 2018 - Oct 2019 · 1 yr 7 mos

Manchester, Greater Manchester, United Kingdom

Led the development of the Gazprom Energy UK Portals, managing a cross functional team of Product Owner, Software Engineers and Automation Testers

April 2018						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
26	27	28	29	30	31	1 Apr
2	3	4	5	6	7	8
9	10				14	15
16	17				21	22
23	24	25	26	27	28	29
30	1 May	2	3	4	5	6

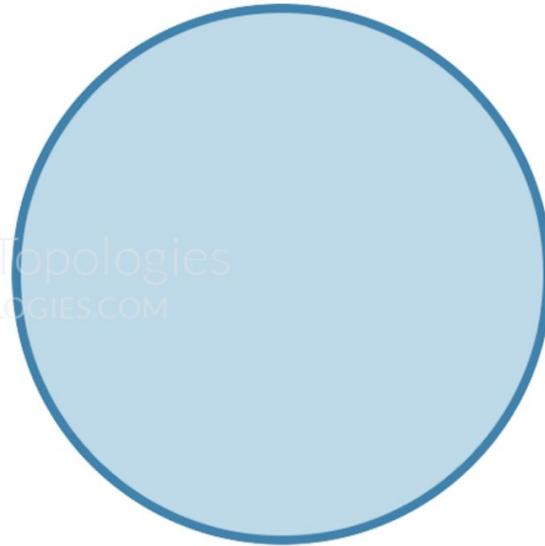
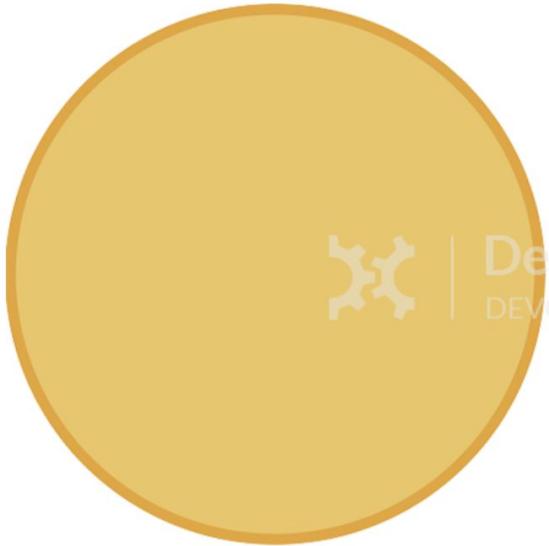
2018







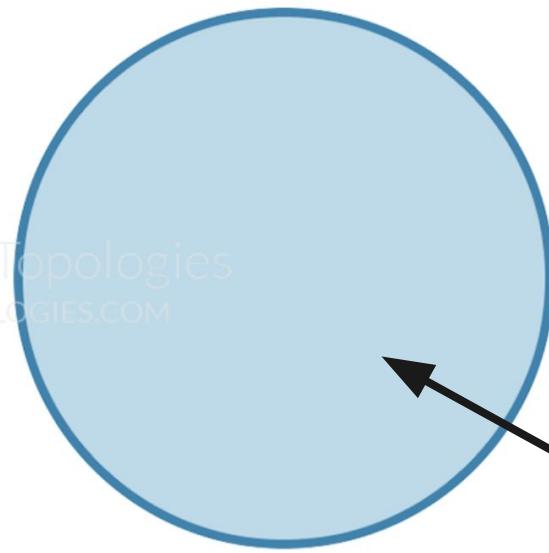
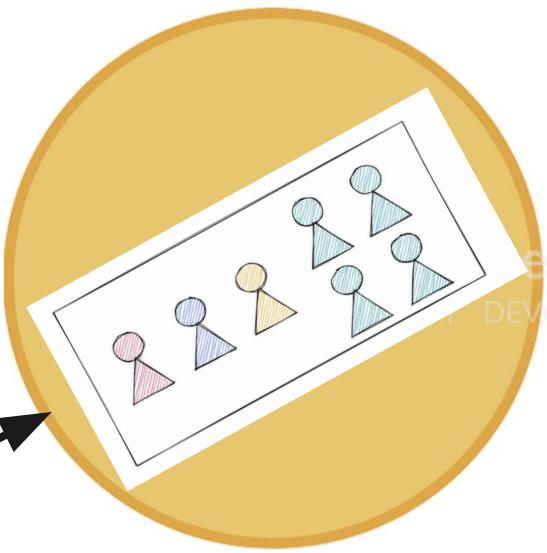




● Dev

● Ops

<https://web.devopstopologies.com/>

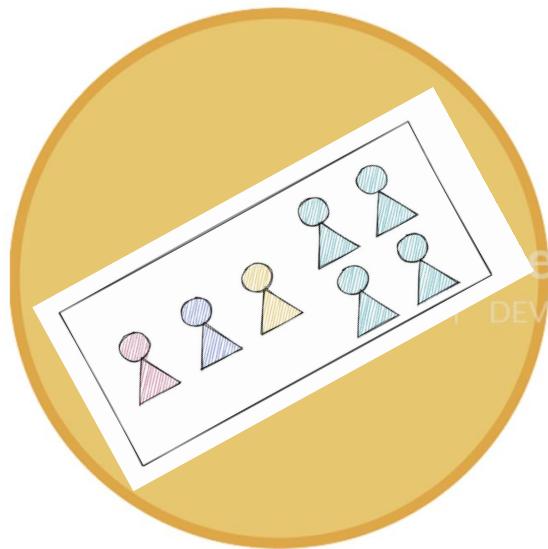


DevOps Topologies
DEVOPSTOPOLOGIES.COM

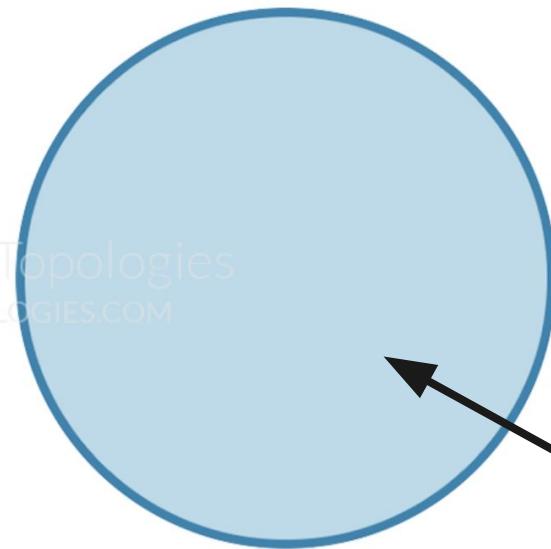
One day, we asked for a deployment to happen...

One day, we asked for a deployment to happen...





● Dev



● Ops

<https://web.devopstopologies.com/>

DevOps Topologies
DEVOPSTOPLOGIES.COM

Phil.

Phil checked the logs.

Phil checked the logs.

Phil reversed the change.

Phil checked the logs.

Phil reversed the change.

CAB meeting review was scheduled
the next day.



“What can we do to
avoid
this happening again?”

How I **left** the
CAB meeting



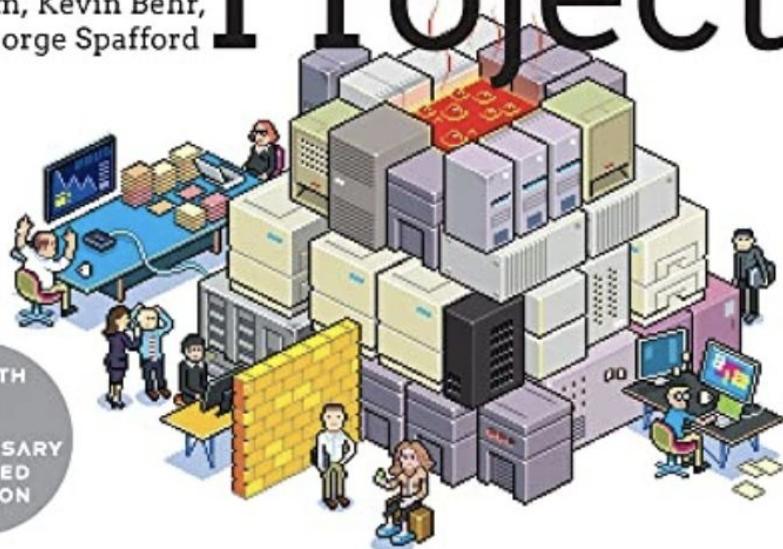
How I felt.



A Novel About IT,
DevOps, and Helping
Your Business Win

The Phoenix Project

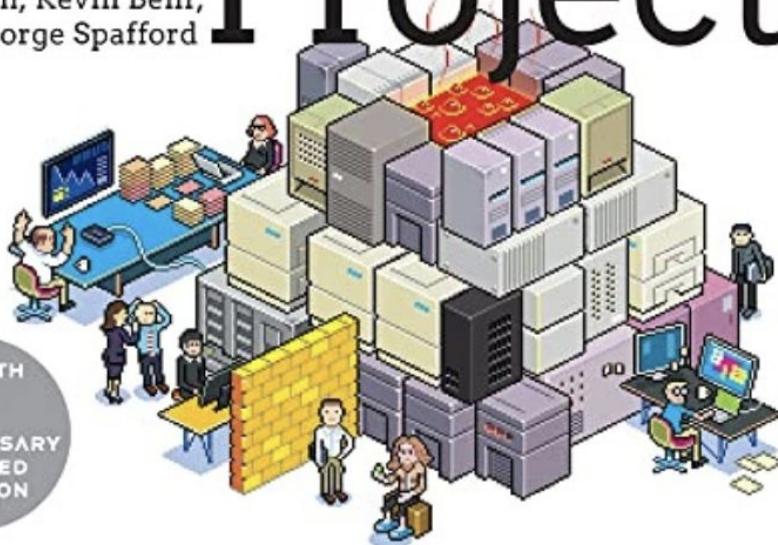
Gene Kim, Kevin Behr,
and George Spafford



A Novel About IT,
DevOps, and Helping
Your Business Win

Gene Kim, Kevin Behr,
and George Spafford

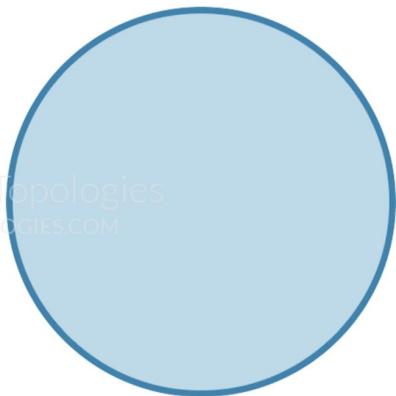
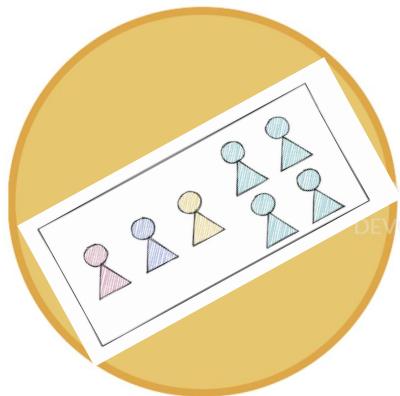
The Phoenix Project



5TH
ANNIVERSARY
LIMITED
EDITION

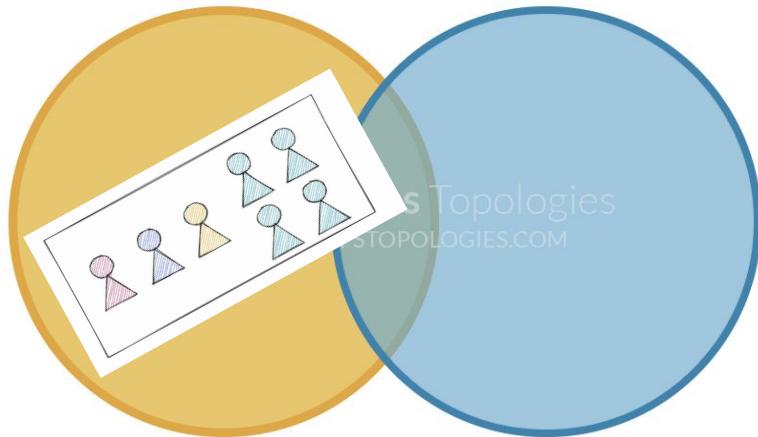


From hip to mainstream



● Dev

● Ops

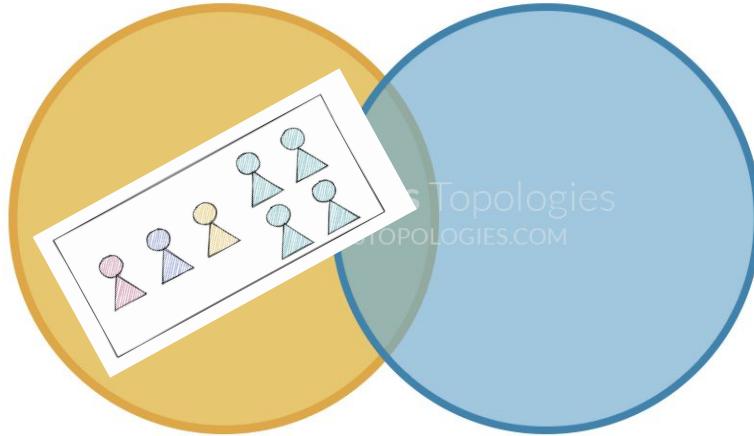


● Dev

● Ops

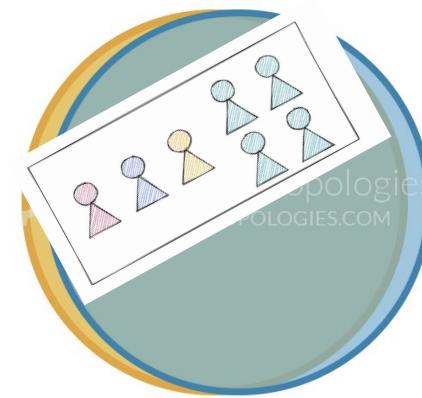
vOps Topologies
DEVELOPSTOPLOGIES.COM

vOps Topologies
DEVELOPSTOPLOGIES.COM



● Dev

● Ops



● Dev ● Ops





SEP 12, 2023

Boise



SEP 13 - 14, 2023

Washington, D.C.



SEP 14 - 15, 2023

Ukraine



SEP 14 - 15, 2023

Tampa Bay



SEP 21 - 22, 2023

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SEP 27 - 28, 2023

Buffalo



SEP 27, 2023

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OCT 5 - 6, 2023

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OCT 6, 2023

Madrid



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OCT 16 - 17, 2023

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Detroit



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EVENTS

DevOps Enterprise Summit

Amsterdam | 15-17 May 2023

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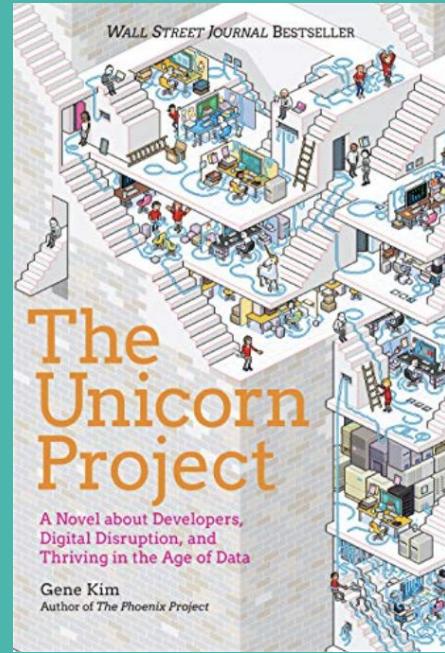
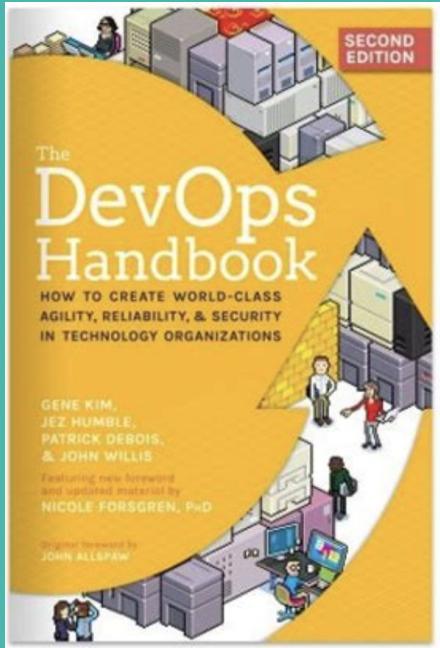
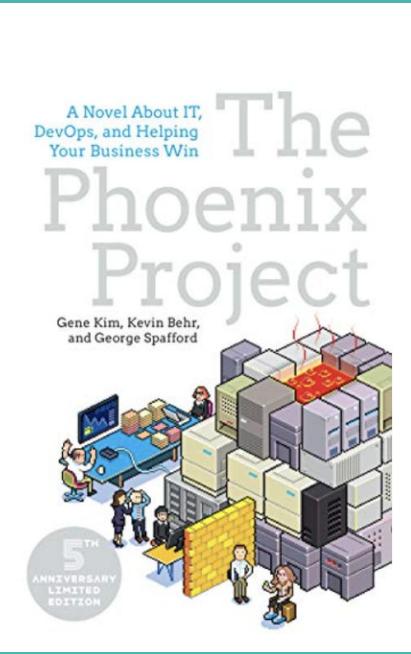
REGISTER ➔

DevOps Manchester

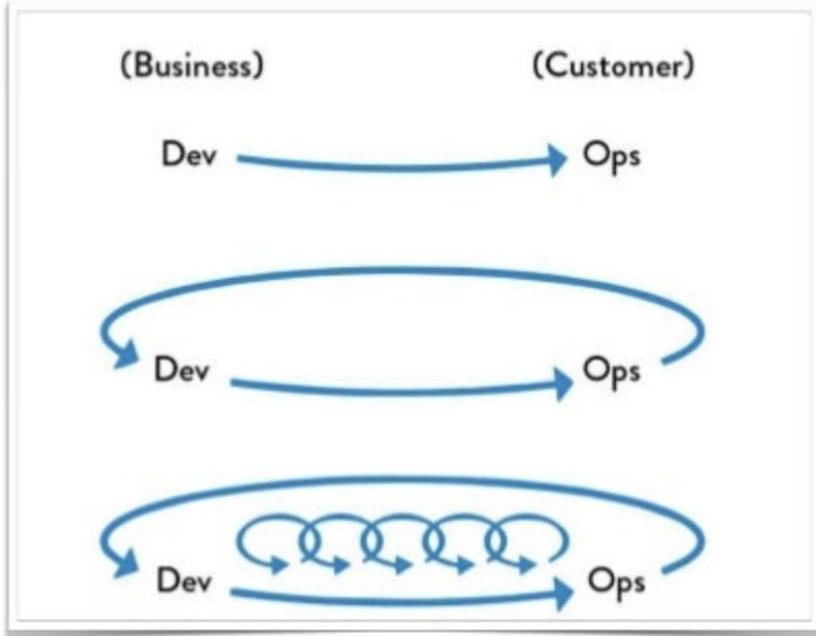
📍 Manchester, United Kingdom

👤 1,843 members · Public group ?

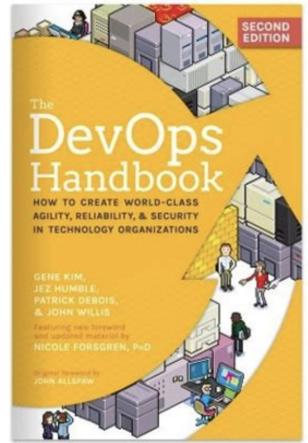
👤 Organized by James Heggs and 7 others



The Three Ways



- 1 Flow**
- 2 Feedback**
- 3 Learning**





Accelerate
State of
DevOps 2021

2021 Accelerate State of DevOps
Report

[Read PDF](#)



ACCELERATE
State of DevOps
2019

2019 Accelerate State of DevOps
Report

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2018
Accelerate:
State of DevOps
Strategies for a New Economy

2018 Accelerate State of DevOps
Report

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2017 State of DevOps Report
(in partnership with Puppet)

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2016 State of DevOps Report
(in partnership with Puppet)

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2015 State of DevOps Report
(in partnership with Puppet)

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2014
STATE OF
DEVOPS
REPORT

2014 State of DevOps Report
(in partnership with Puppet)

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Same survey,
every year.

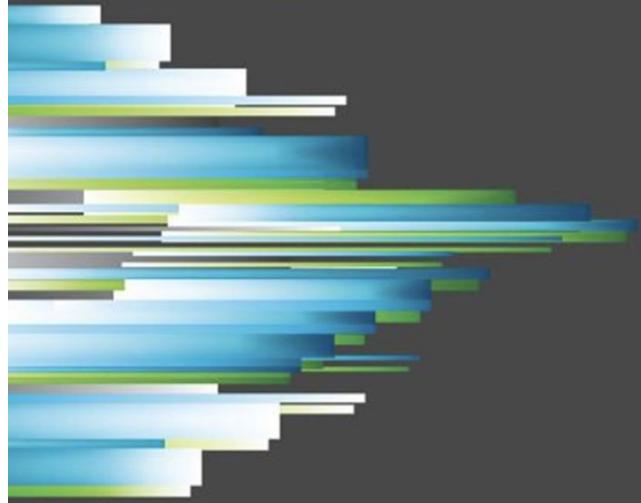
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THE SCIENCE OF LEAN SOFTWARE AND DEVOPS

ACCELERATE

Building and Scaling High Performing
Technology Organizations



Nicole Forsgren, PhD
Jez Humble, and Gene Kim

with forewords by Martin Fowler and Courtney Kissler
and a case study contributed by Steve Bell and Karen Whitley Bell

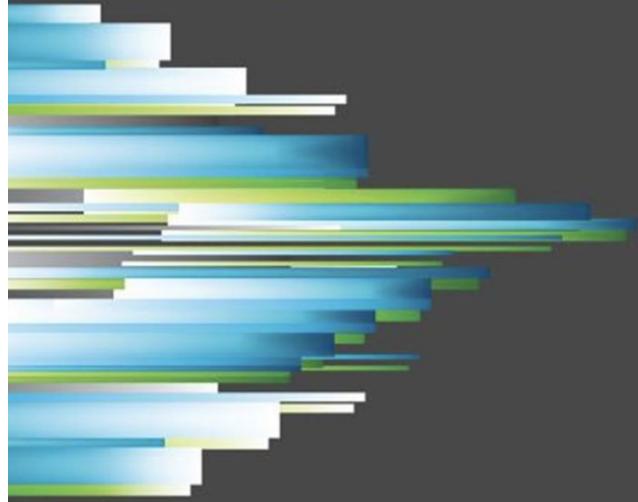
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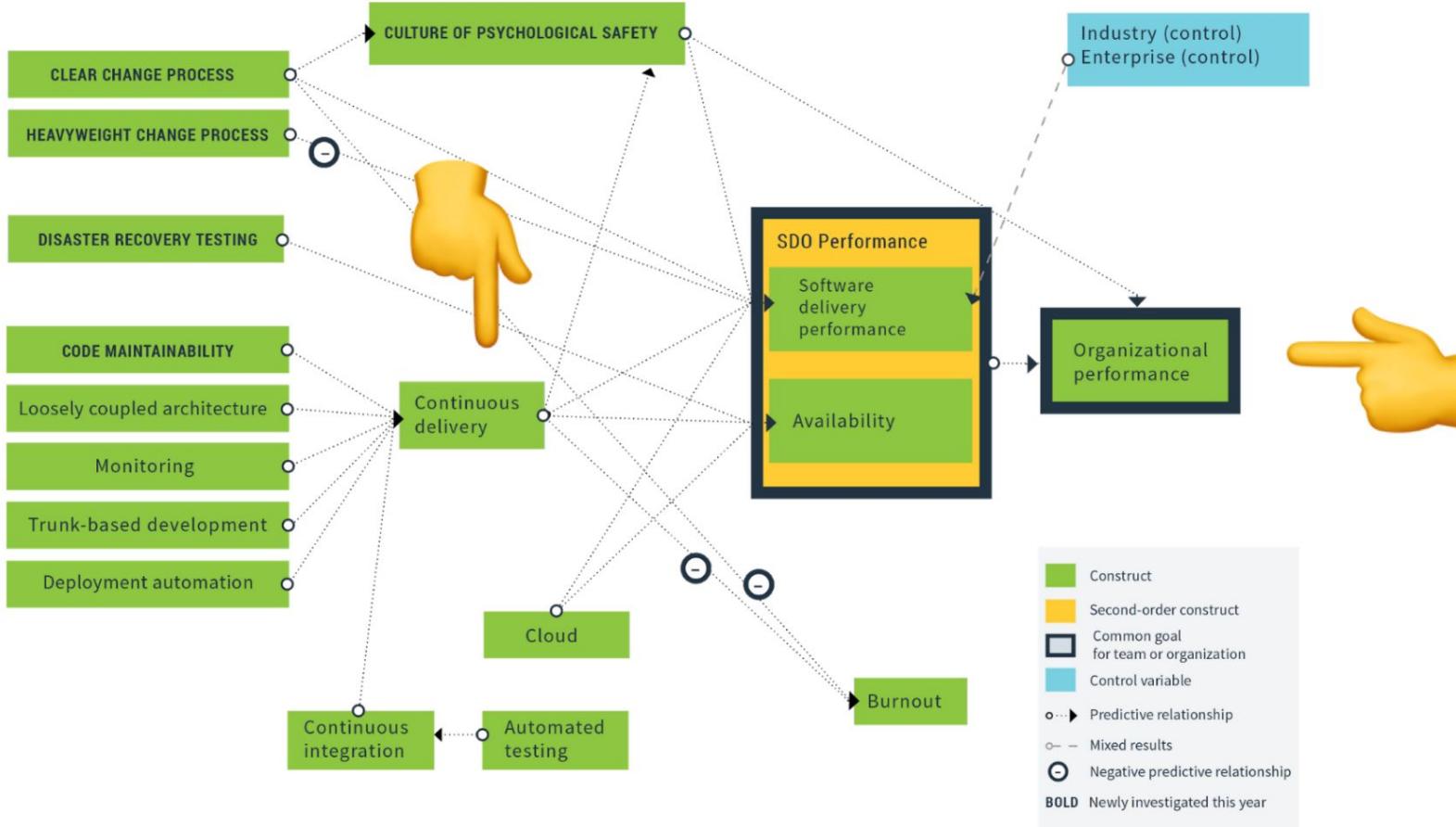
Building and Scaling High Performing
Technology Organizations

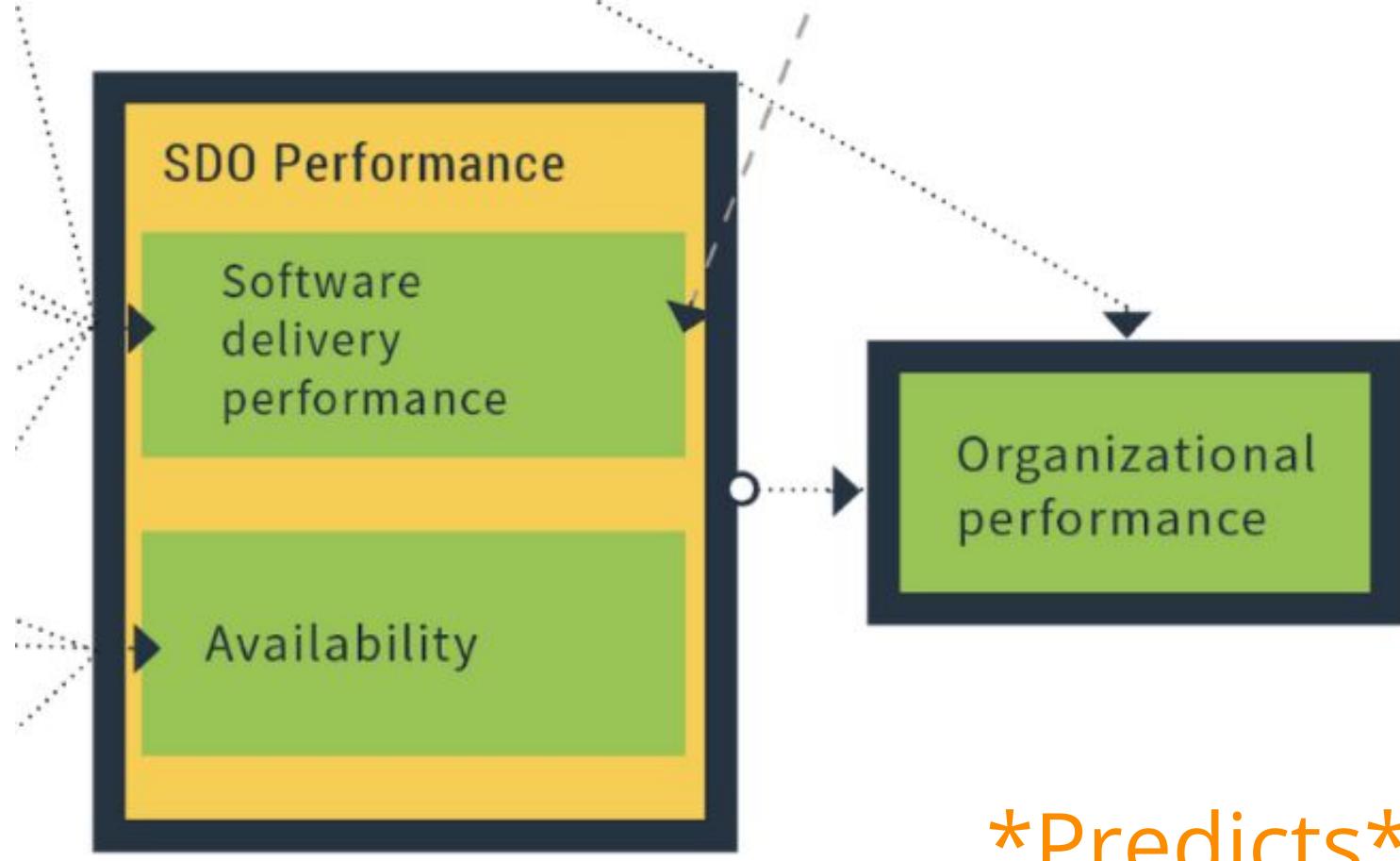
SOFTWARE DELIVERY PERFORMANCE



Nicole Forsgren, PhD
Jez Humble, and Gene Kim

with forewords by Martin Fowler and Courtney Kissler
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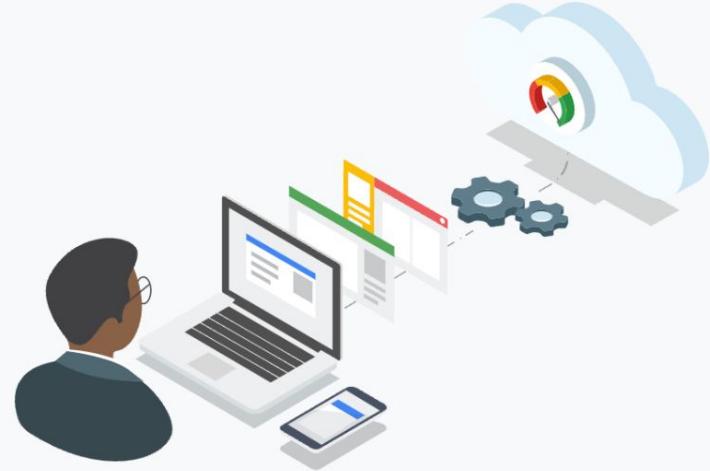


Predicts

Take the DORA DevOps Quick Check

Measure your team's software delivery performance in less than a minute!

Compare it to the rest of the industry by responding to **five multiple-choice questions**. Compare your team's performance to others, and discover which DevOps capabilities you should focus on improve. We don't store your answers or personal information.



<https://dora.dev/quickcheck/>

QUESTION 1 OF 5

Deploy frequency



For the primary application or service you work on, how often does your organization deploy code to production or release it to end users?

- Fewer than once per six months
- Between once per month and once every six months
- Between once per week and once per month
- Between once per day and once per week
- Between once per hour and once per day
- On demand (multiple deploys per day)

Literally
everyone in
the industry:

**Literally
everyone in
the industry:
Let's build a
dashboard!**



▼ Leader Board



Leader Board: Average Lead Time	
minutes	
6.84	in-life
15.37	search
25.13	product

Number of Deployments	
25.00	product
22.00	search
8.00	in-life

Deployments					
SQUAD	TRIBE	ENV	SERVICE	AVERAGE	TOTAL DEPLI.
in-life	incremental-	prod	vaps-compor	6m 50s	8
search	ecommerce	prod	vehicle-searc	15m 22s	22
product	ecommerce	prod	product-com	25m 8s	25



▼ Leader Board



Leader Board: Average Lead Time	
	minutes
6.84	in-life
15.37	search
25.13	product

Number of Deployments	
25.00	product
22.00	search
8.00	in-life

Deployments					
SQUAD	TRIBE	ENV	SERVICE	AVERAGE	TOTAL DEPL.
in-life	incremental-	prod	vaps-compor	6m 50s	8
search	ecommerce	prod	vehicle-searc	15m 22s	22
product	ecommerce	prod	product-com	25m 8s	25

SOFTWARE DELIVERY PERFORMANCE



1

Speed

For the primary application or service you work on, what is your **lead time for changes** (that is, how long does it take to go from code committed to code successfully running in production)?



2

Speed

For the primary application or service you work on, how often does your organization **deploy code to production** or release it to end users?



3

Stability

For the primary application or service you work on, **how long** does it generally take to **restore service** when a service incident occurs (that is, from the time of the unplanned outage, service impairment)?



DevOps Checkpoints instead!

Dev work
spec'd



Improvement

Run automated work

Failed Deployment



- Rollback
- Fix forward
- Comms

We applied DORA at a
DevOps-first company with

20+ teams

So what?

- ✓ Improve **observability** to improve reliability
- ✓ Improve **speed of pipeline**, saving hours
- ✓ Improve **deployments**, enable trunk-based

**Improve the thing, don't measure the
thing**

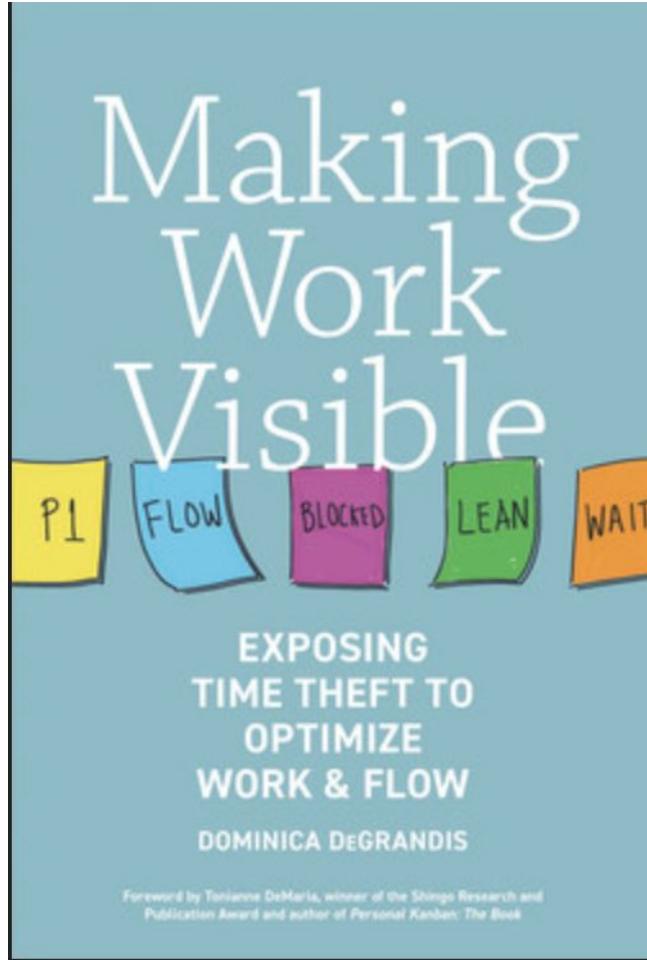


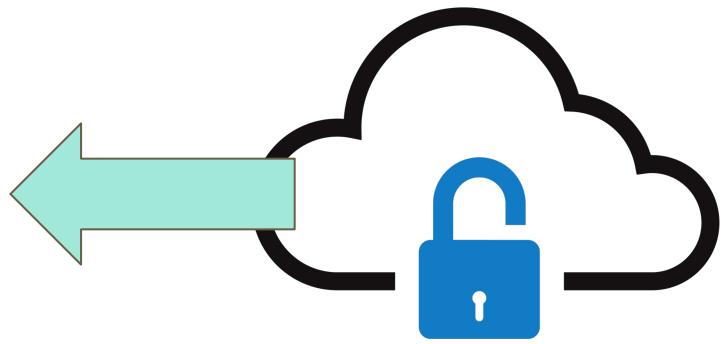


Step 1: Principles & Patterns

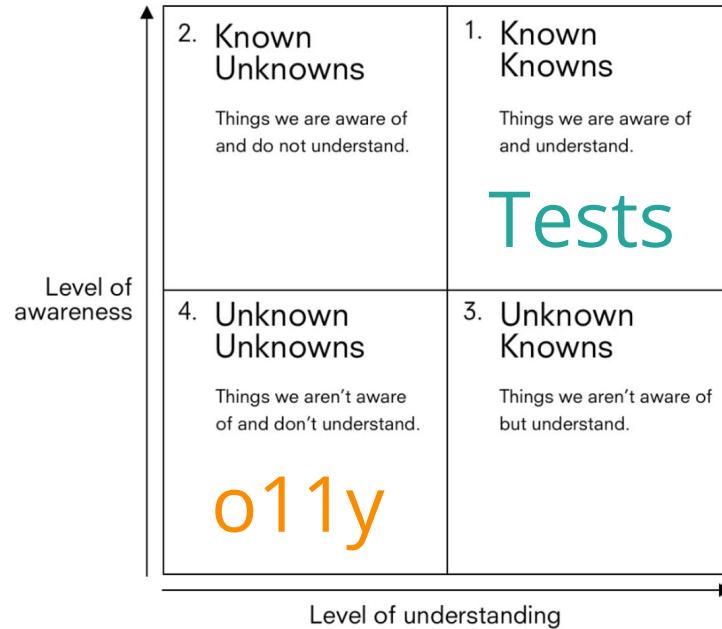


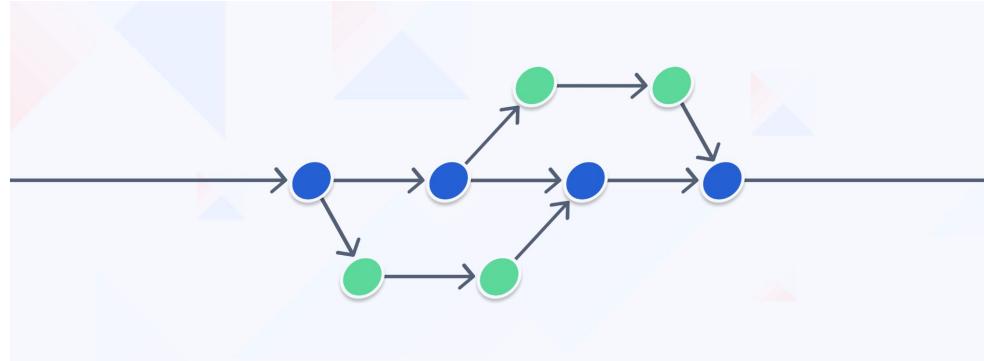
Code > Clicks





Tests 🤝 O11y





Pull requests 40

Step 2: DevOps Maturity

1

Speed

For the primary application or service you work on, what is your **lead time for changes** (that is, how long does it take to go from code committed to code successfully running in production)?

Lead Time:
More than
six months

Lead Time:
One to six
months

Lead Time:
One week
to one
month

Lead Time:
One day to
one week

Lead Time:
Less than
one day

Lead Time:
Less than
one hour



Speed

2

For the primary application or service you work on, how often does your organization **deploy code to production** or release it to end users?

Deployment
Frequency:
Fewer than
once per six
months

Deployment
Frequency:
Between once
per month and
once every six
months

Deployment
Frequency:
Between once
per week and
once per month

Deployment
Frequency:
Between once
per day and
once per week

Deployment
Frequency:
Between once
per hour and
once per day

Deployment
Frequency:
On demand
(multiple
deploys per day)



For the primary application or service you work on, **how long** does it generally take to **restore service** when a service incident or a defect that impacts users occurs (for example, unplanned outage, service impairment)?

Time to
Restore
Service:
More than
six months

Time to
Restore
Service:
One to six
months

Time to
Restore
Service:
One week to
one month

Time to
Restore
Service:
One day to
one week

Time to
Restore
Service:
Less than
one day

Time to
Restore
Service:
Less than
one hour



3

Stability

For the primary application or service you work on, what percentage of changes to production or releases to users **result in degraded service** (for example, lead to service impairment or service outage) and subsequently **require remediation** (for example, require a hotfix, rollback, fix forward, patch)?

Change
Failure
Rate:
0-15%

Change
Failure
Rate:
16-30%

Change
Failure
Rate:
31-45%

Change
Failure
Rate:
46-60%

Change
Failure
Rate:
61-75%

Change
Failure
Rate:
76-100%

Stability

4

<https://dora.dev/quickcheck/>

Take the DORA DevOps Quick Check

Measure your team's software delivery performance in less than a minute! Compare it to the rest of the industry by responding to five multiple-choice questions. Compare your team's performance to others, and discover which DevOps capabilities you should focus on improving. We don't store your answers or personal information.



Key DevOps capabilities recommended for you

Based on your performance profile, we think you should work on the three capabilities listed below. Based on your responses to the capabilities assessment, **we recommend you focus on monitoring and observability first.** ⓘ

Monitoring and observability

KEY FOCUS AREA

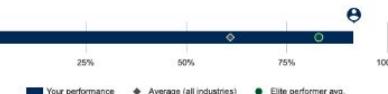
A comprehensive monitoring and observability system allows teams to understand the health of their systems. Effective solutions enable monitoring predefined metrics, including system state as experienced by users as well as allowing engineers to interactively debug systems and explore properties and patterns as they emerge.



[View solution](#)

Working in small batches

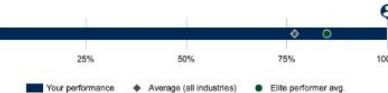
Teams should slice work into small pieces that can be completed in a week or less. The key is to have work decomposed into small features that allow for rapid development, instead of developing complex features on branches and releasing them infrequently. This idea can be applied at the feature and the product level. (An MVP is a prototype of a product with just enough features to enable validated learning about the product and its business model.) Working in small batches enables short lead times and faster feedback loops.



[View solution](#)

Westrum organizational culture

Westrum's measure of organizational culture is predictive of IT performance, organizational performance, and decreasing burnout. Hallmarks of this measure include good information flow, high cooperation and trust, bridging between teams, and conscious inquiry.

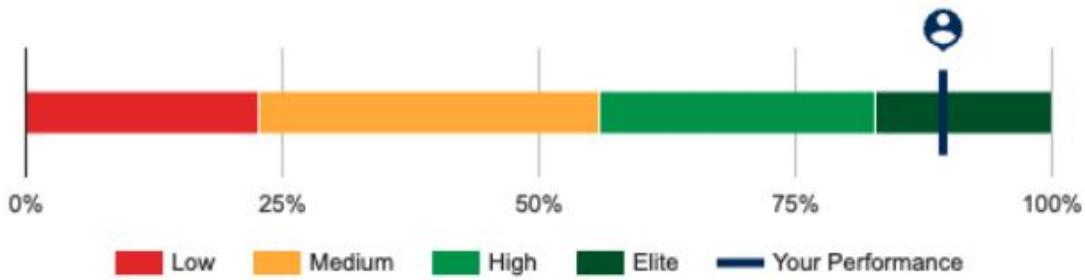


[View solution](#)

Your performance:

Elite

You're performing better than 89% of [State of DevOps Survey](#) respondents. 



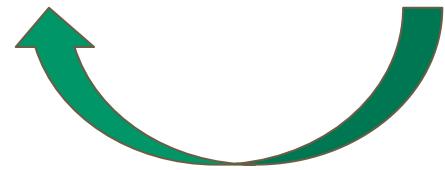
Step 3: The Value Stream

Example Development Value Stream

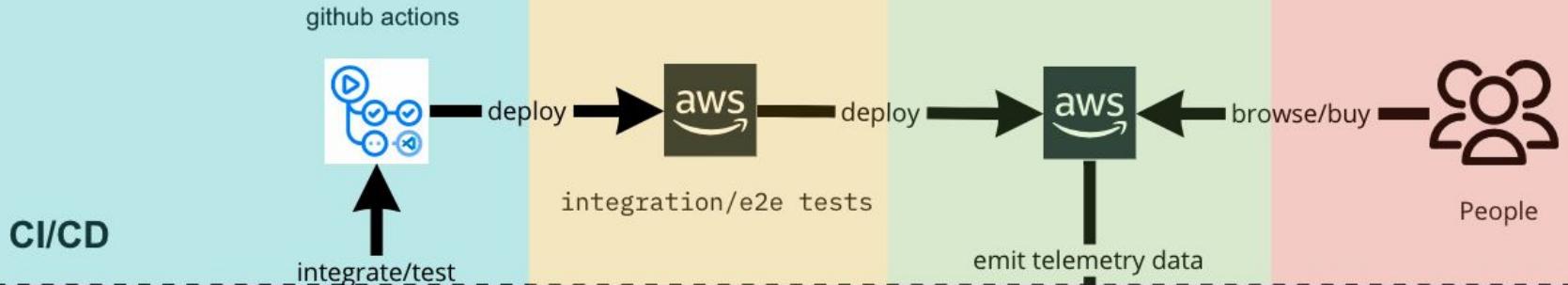
Scooter Search API Development Value Stream (High-level overview)



Commit → Live



Our standard process



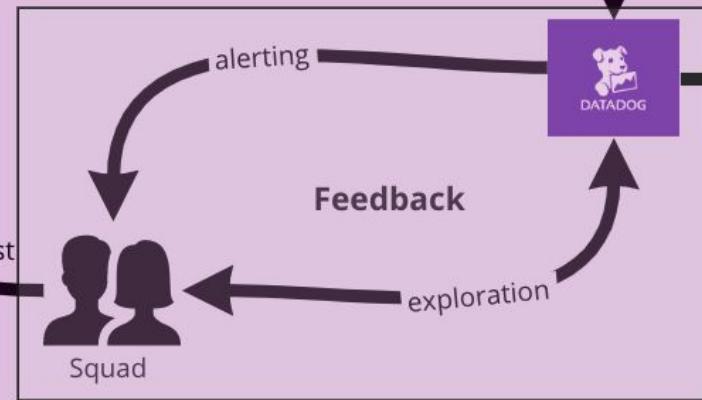
CI/CD

Write/Feedback Loop

source code

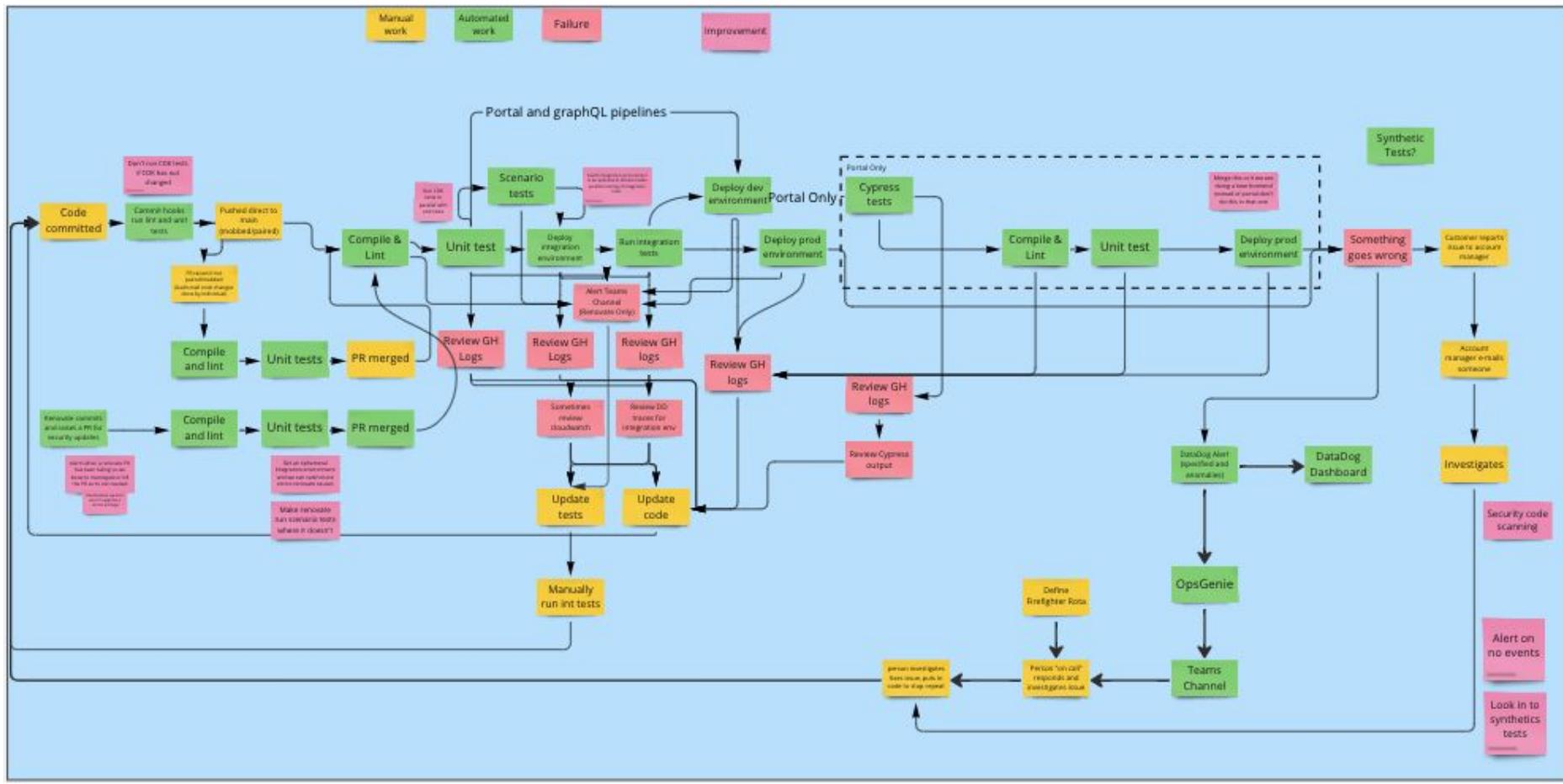


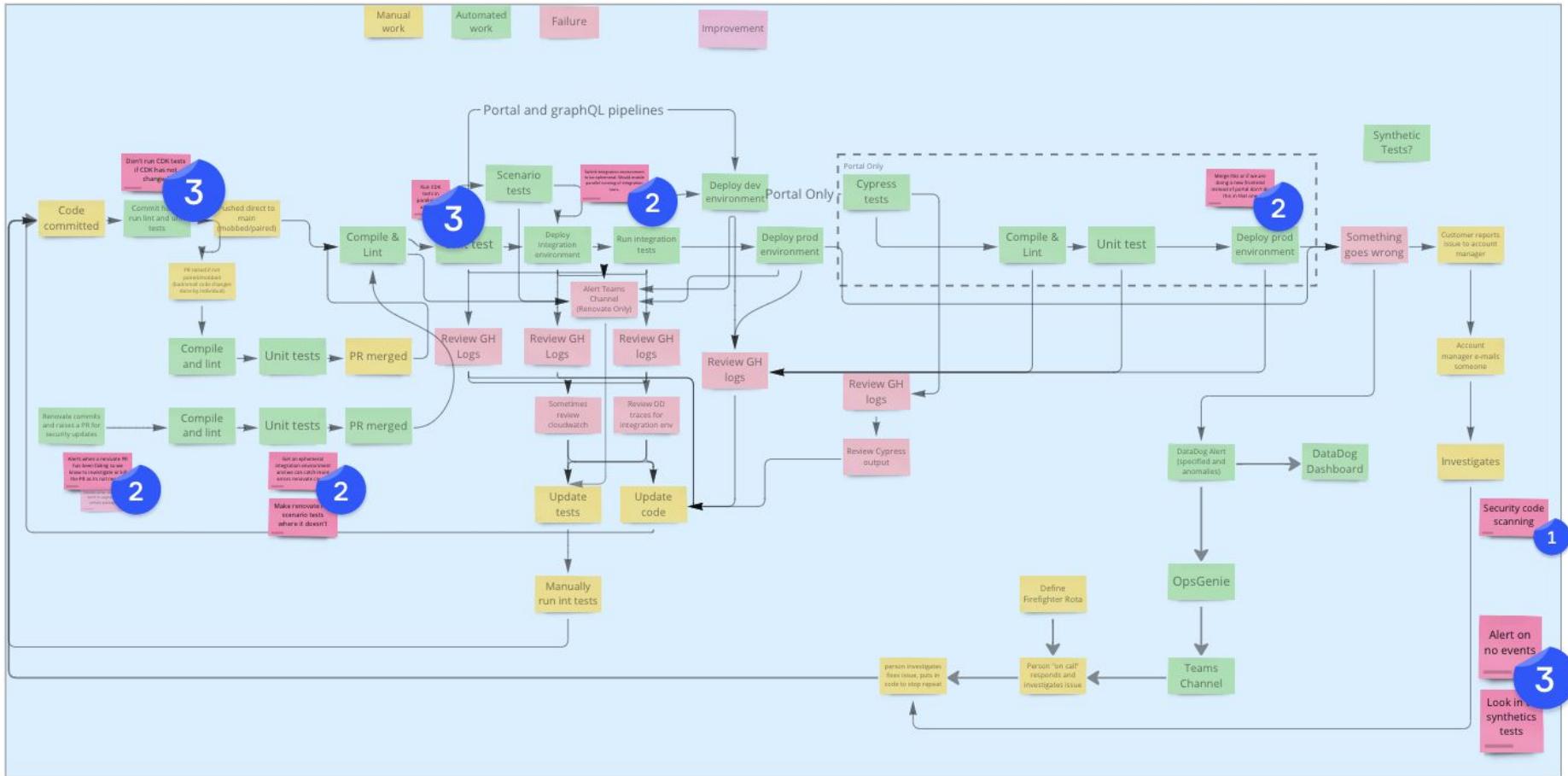
write code / unit test



People

opsgenie





DevOps Checkpoint Summary

Squad Name

Jan 2023

DevOps maturity is... **Elite!**

Your software delivery performance

Your performance:

Elite

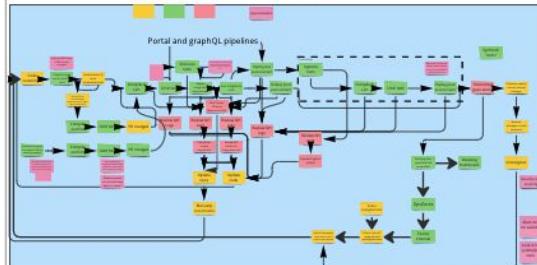
You're performing better than 95% of [State of DevOps Survey respondents](#).



Based on this maturity, the **capabilities** the squad should be focusing on are:



Software delivery **flow** & top **improvements** identified

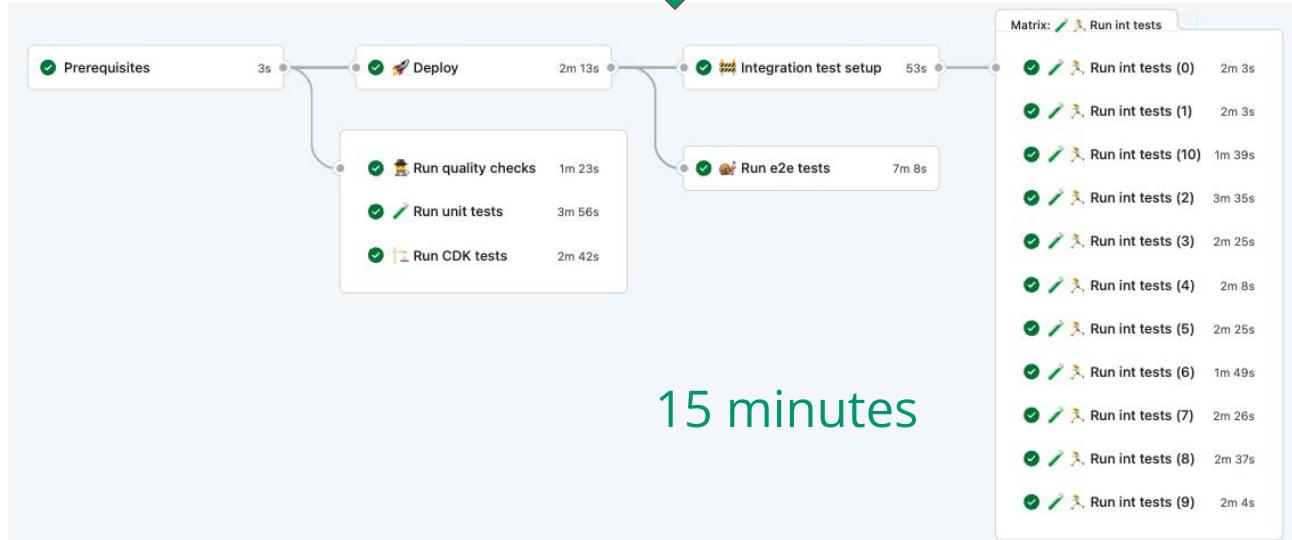


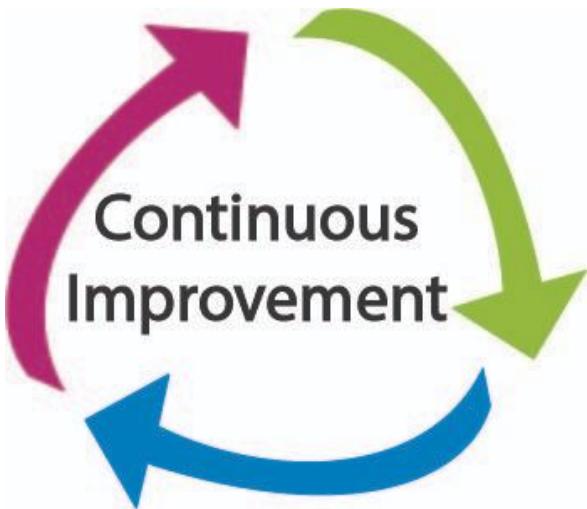
Top **improvements** identified

- Alert on no events
- Current Hook - Don't run CDK tests if CDK has not changed
- Run CDK tests in parallel with unit tests
- Alert when a new PR is opened telling us we have to merge it or not before the PR is merged
- Enable integration tests for each service instead of regressing the whole system when one service changes
- Promote Portal Merge Dev & Prod deployment pipeline

pull_request.yml

on: pull_request







✓ ✓ ? ?
✓





Wrapping up



**WRAP UP, PEOPLE,
THAT WAS FANTASTIC !**

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Building and Scaling High Performing
Technology Organizations

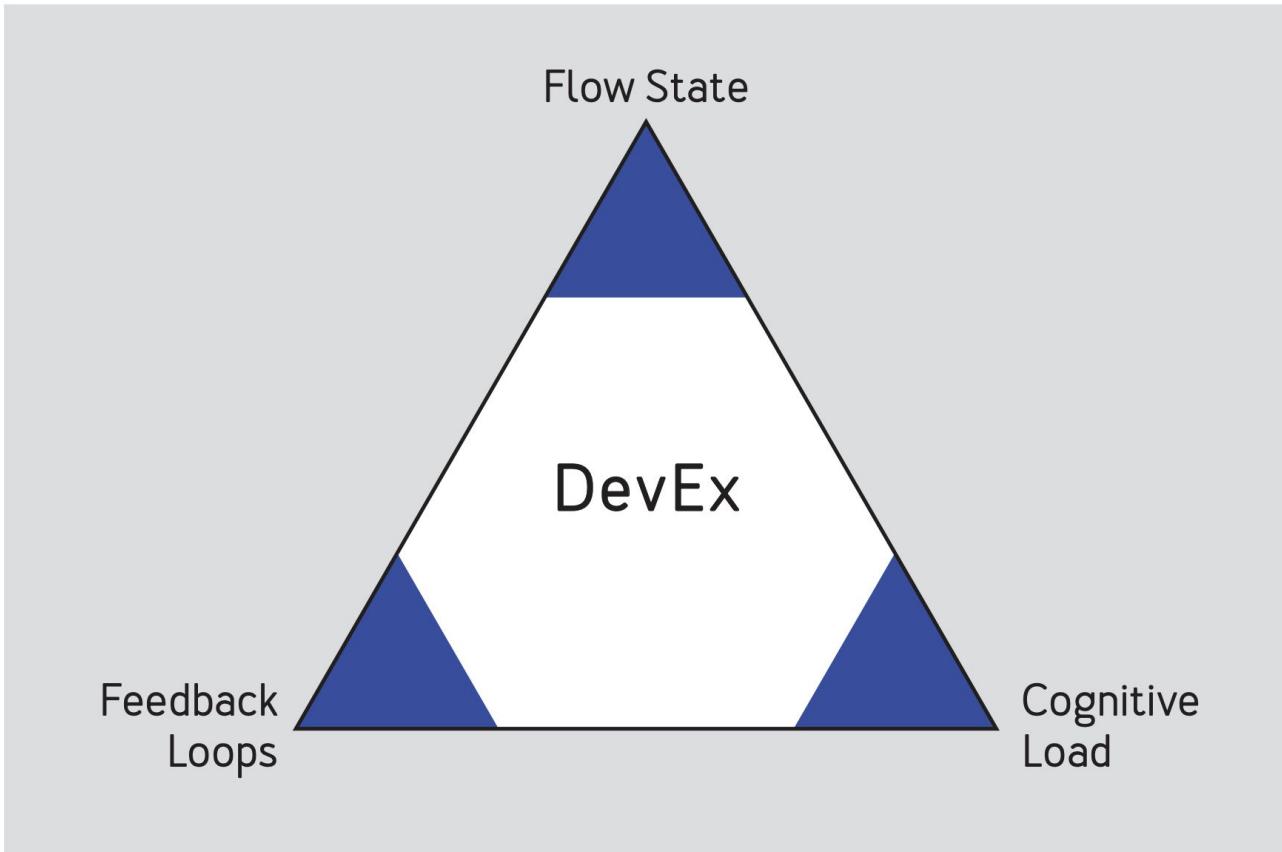
SOFTWARE DELIVERY PERFORMANCE



Nicole Forsgren, PhD
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with forewords by Martin Fowler and Courtney Kissler
and a case study contributed by Steve Bell and Karen Whitley Bell

FIGURE 1: THREE CORE DIMENSIONS OF DEVELOPER EXPERIENCE



You can apply DORA
without
“4 Accelerate metrics”
dashboards

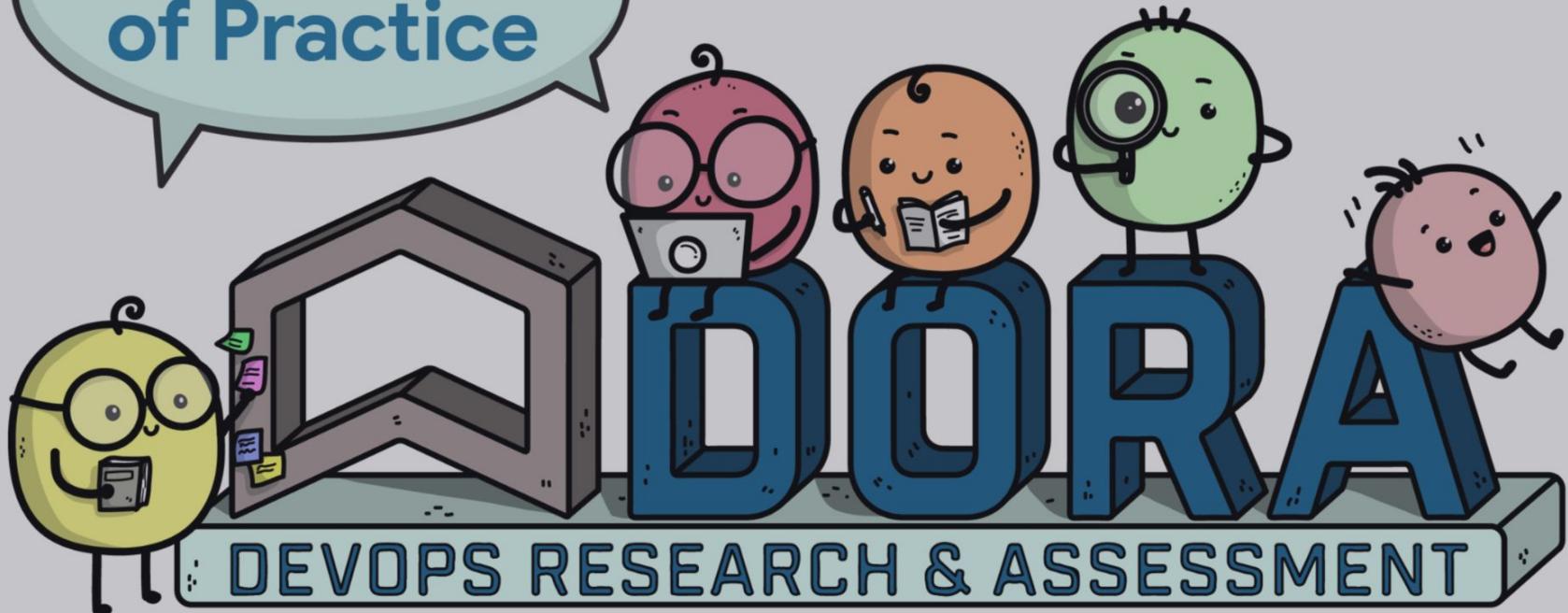
Run DevOps Checkpoints,
**help your teams help
themselves**

Your teams will have:

-  a sense of **accountability**
-  continuous **improvement** mindset
-  “elite” DevOps maturity

You will make your team a
generative, high-functioning
software engineering team

Community
of Practice



<https://dora.community/>

DevOps Checkpoint
template



Thank you

DevOps Checkpoint
template



Varuna Venkatesh



@varunavenkatesh



Varuna Venkatesh

Apostolis Apostolidis



@apostolis09



Apostolis Apostolidis