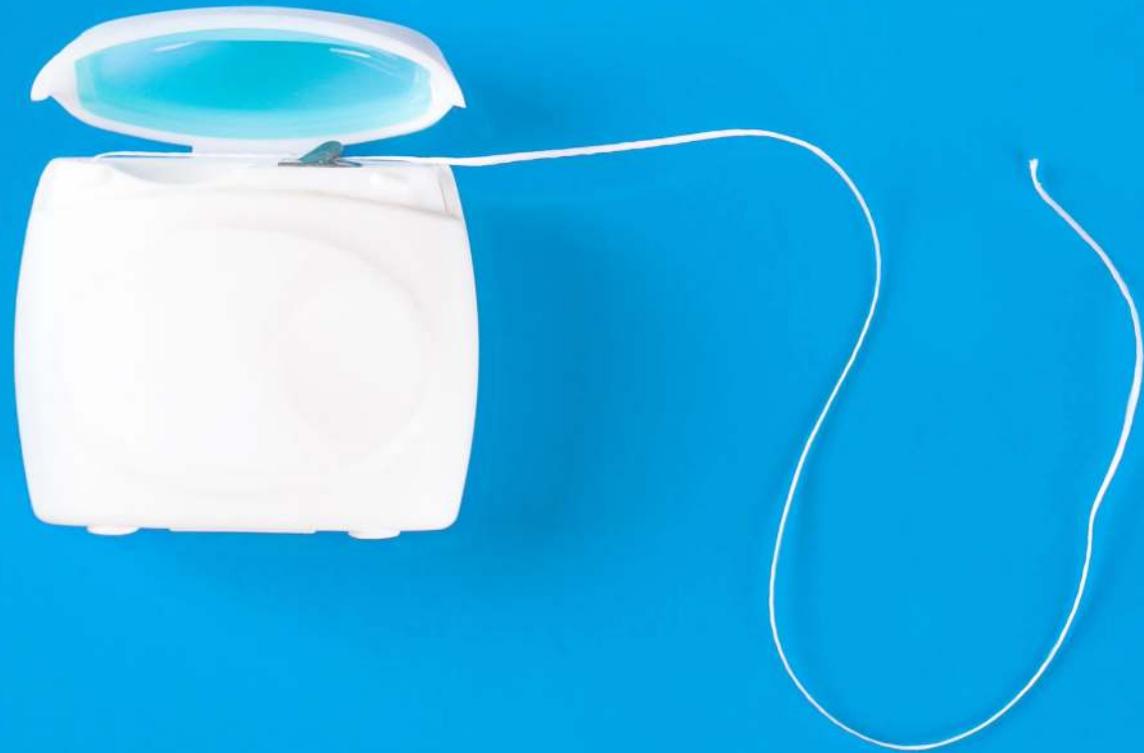


Hello.

Welcome to my ongoing therapy session

Things we know are true but do not do

1. The people who do the work should determine how the work is done.
2. Revisit governance frequently, remove when no longer needed.
3. The software factory requires maintenance just like a real factory. (Automation, tech debt.)
4. Switch to product management (also: developers are your customers).
5. Beware “change or die.”
6. Sellers want you to buy new things, whether you need them or not.
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10. Use small batch thinking to be a learning organization.
11. Change in large organizations requires tops down re-engineering.
12. To change, you must slowly build up trust and word-of-mouth.
13. Focus on outcomes over activities
14. Make sure your customer is a human, not a dashboard.



DevOps is
like
flossing...

Hello, I'm Coté

I work at **vmware**[®]



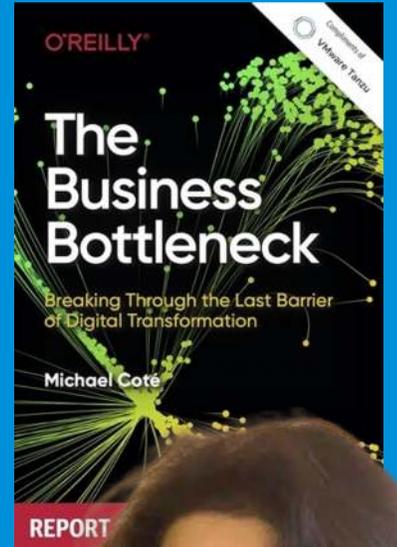
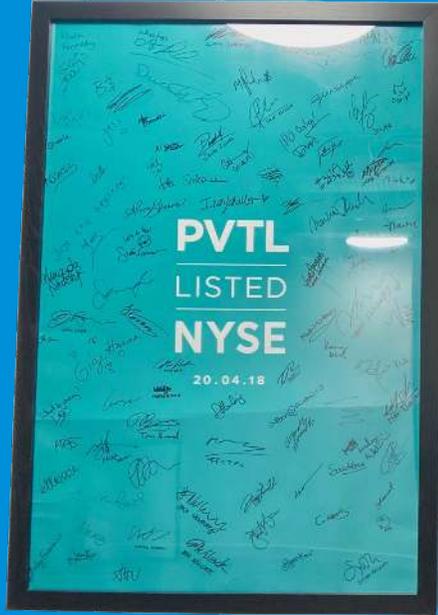
...and,
I'm a recovering
thought-leader

How its started.



 **RedMonk**

Photo: Simon Phipps, May, 2006



[INSERT PICTURES
GESTICULATING
AT PODIUMS]



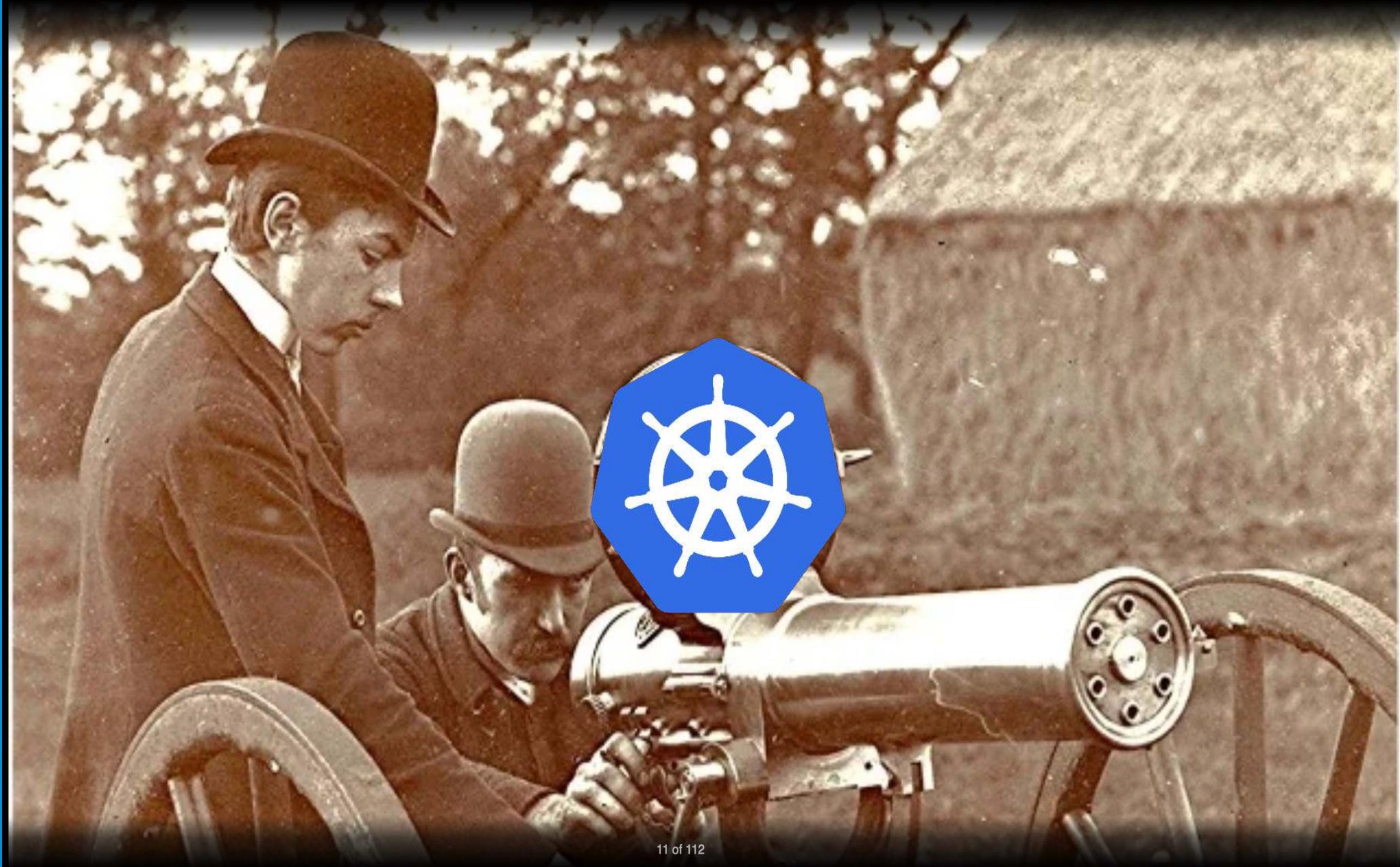
Photos: Andrew Shafer, Mark Hinkle(?), Tasha Isenberg, Bridget Kromhout.



How it's going.



Tanzu
Talk



11 of 112



DEVOPS / PLATFORM ENGINEERING / SOFTWARE DEVELOPMENT / TECH LIFE

DevOps Is Dead. Embrace Platform Engineering

Platforms provide golden paths, with recommended tools and best security practices built in, reducing cognitive load while preserving developer freedom.

Sep 22nd, 2022 7:10am by [Aeris Stewart](#)



Image via Unsplash.

VOXPOP

Try our new 5 second poll. It's fast. And it's fun!

Would your organization seek an alternative if the open source license for software it uses becomes significantly more restrictive?

Yes. We require an open source license so we can make modifications and submit

I HAVE AN OPINION

We'd love to hear what you think.

“I know my price Because I developed my identity outside of work, there’s a cost that if work cuts into it – if it ever costs me a larger part of my identity and my life I know it’s not worth it.”

From The Good Enough Job.

Linda Vloeistof High Elf Artificer 3

STR +0 DEX +2 CON +1 INT -4

WALKING SPEED 30 ft.

MAX HP 29

CLASS 15

WEAPONS: Crossbow, hand, Firearms (Optional rule at DM discretion), Longbow, Longsword, Shortsword, Simple Weapons

TOOLS: Alchemist's Supplies, Custom Tool 1, Playing Card Set, Poisoner's Kit, Smith's Tools, Thieves' Tools, Tinker's Tools

ARMOR: Light Armor, Medium Armor, Shields

WEAPONS: Crossbow, hand, Firearms (Optional rule at DM discretion), Longbow, Longsword, Shortsword, Simple Weapons

TOOLS: Alchemist's Supplies, Custom Tool 1, Playing Card Set, Poisoner's Kit, Smith's Tools, Thieves' Tools, Tinker's Tools

PROFICIENCIES & LANGUAGES

STR +1 INT -4

DEX +3 WIS -4

CON +4 CHA -4

against being charmed

1 on saves

SAVING THROWS

14 PASSIVE WIS (PERCEPTION)

14 PASSIVE INT (INVESTIGATION)

12 PASSIVE WIS (INSIGHT)

Darkvision 60 ft.

SENSES

ARMOR: Light Armor, Medium Armor, Shields

WEAPONS: Crossbow, hand, Firearms (Optional rule at DM discretion), Longbow, Longsword, Shortsword, Simple Weapons

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PROFICIENCIES & LANGUAGES

FROZEN MOUNTAINS

Sawyer's (Coss's) Gully

BRIDGE TOWER

THE GRANT BRIDGE

WESTERN WATCH

FARM LANDS

OLD FORD VILLAGE

THE OLD ROAD

RANCH LAKE

THE RIVER CLIFF

THE RIVER

FORGOTTEN MOUNTAINS

EASTERN PASS

FACE BAY CITY

LAST HORN VILLAGE

THE TABLE FORN'S

THE MAP

35 TOWN IN TWO

South SEA

YOU awake high above a forest of giant trees, seeming to float above them. It is morning, with golden sun warming up the trees and waking birds. You realize you are atop a giant butte, a tower of rock shooting up above the trees. Standing up, you see that the forest extends just before your vision stops, there are many more buttes spread through the forest. You have no idea of where you are, nor memory of what was happening before you awoke. You do know who you are, but your memories of what's happened recently are vague. Next to you, you discover as you walk to the butte's edge, you see a large, deep red leather satchel. Inside you find a torn map rolled up in a stiff leather tube - the map you hold now, here. You also find a small pouch filled with 30 pieces of silver coin and 10 gold pieces, also of the same deep red leather. The satchel contains four large seed cakes, each enough to feed a regular sized creature for half a day. Finally, there is an ornately carved box of wood. It is flat and about as big as a human's hand. You pull apart the thin edges and see an impression on each side that would contain a circular emblem. Running your fingers over it, memories start coming back...



**Error:
No Thoughts Found**

Things we know are true but do not do

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#1

**The people who do the work
determine how the work is
done.**

Leaders at the Genba



The boss made immediate changes once I put him on the line!



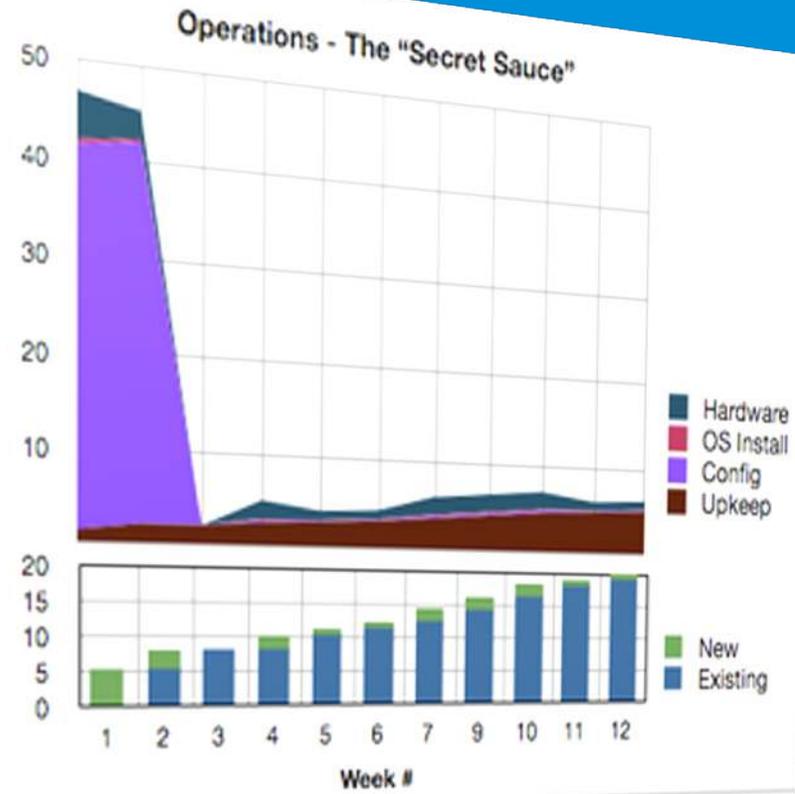
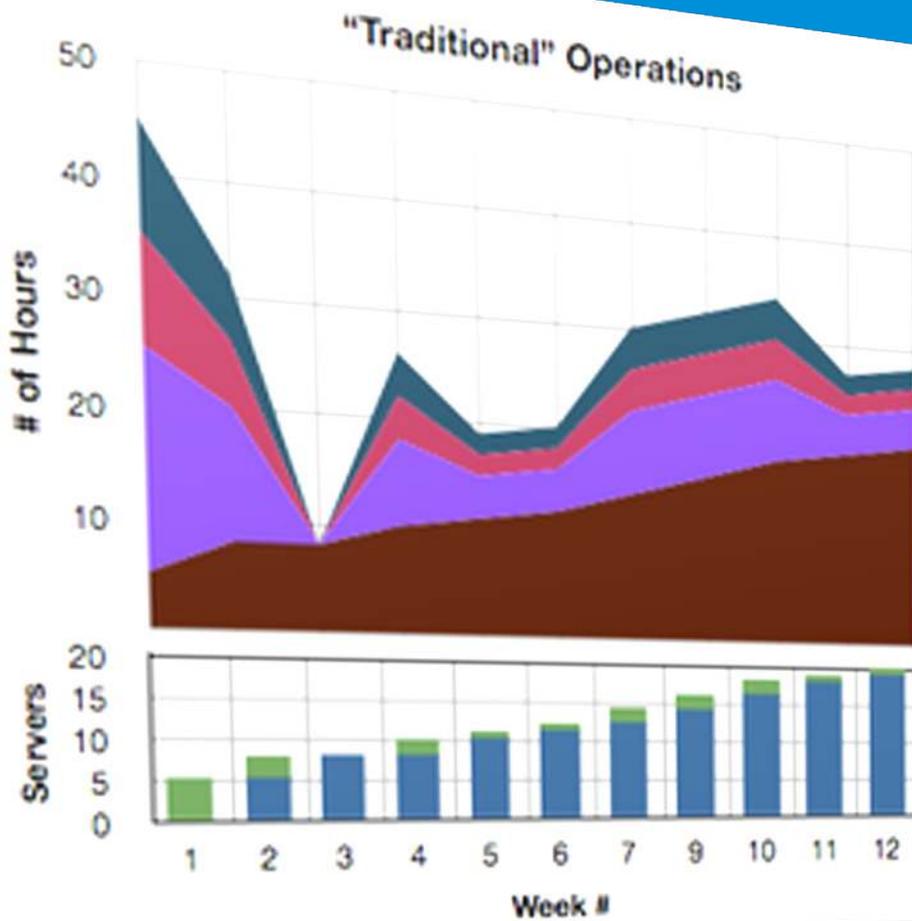
40

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#3

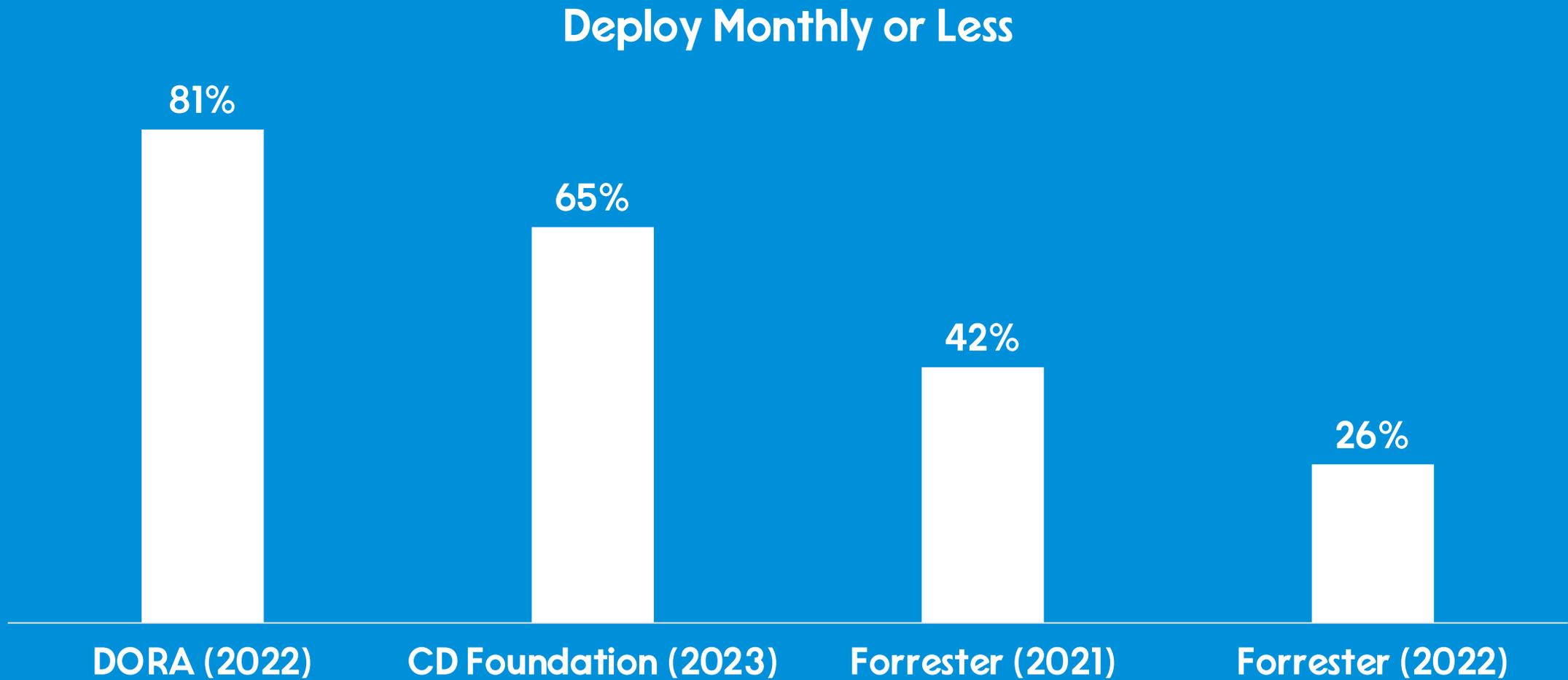
CI/CD, but for real this time



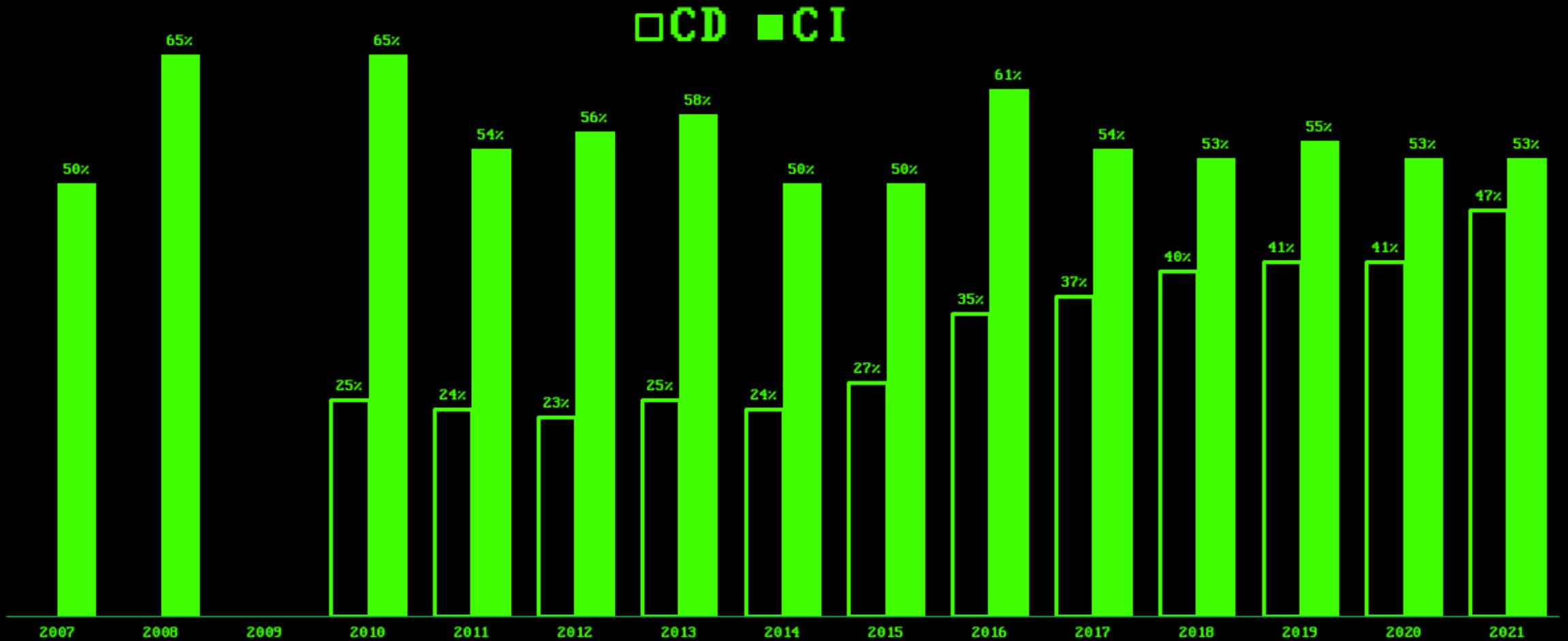
(<http://radar.oreilly.com/archives/2007/10/operations-advantage.html>)



Accounts of deployment rates vary wildly



CI and CD usage, 2007 to 2021



Source: State of Agile Surveys, VersionOne/CollabNet/digital.ai

@cote

#5

Beware “change or die”

Or, your business likely won't be “disrupted” if you just avoid being dumb shit & instead be smart We forget all the startups that failed.

**“Software is
eating the
world.”**

**“It is not necessary
to change. Survival
is not mandatory”***

S&P 500 Churn Over the Past Decade

Sample companies that have entered and exited the index since 2002

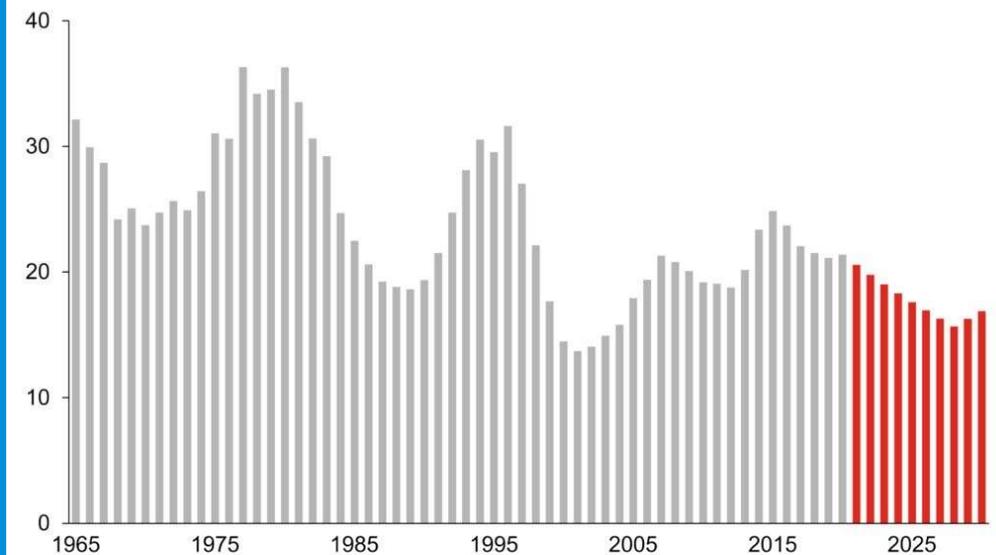
Entered the index:



Exited the index:



Chart 1: Average company lifespan on S&P 500 Index in years (rolling 7-year average)



Data: Standard & Poor's; Innosight analysis based on public S&P 500 data sources. See endnote on methodology.

Sources: [Innosight's Corporate Longevity Forecast, 2014 to 2021](#).



“Silicon Valley is coming....
We are going to work hard to make our services as seamless and competitive as theirs.”

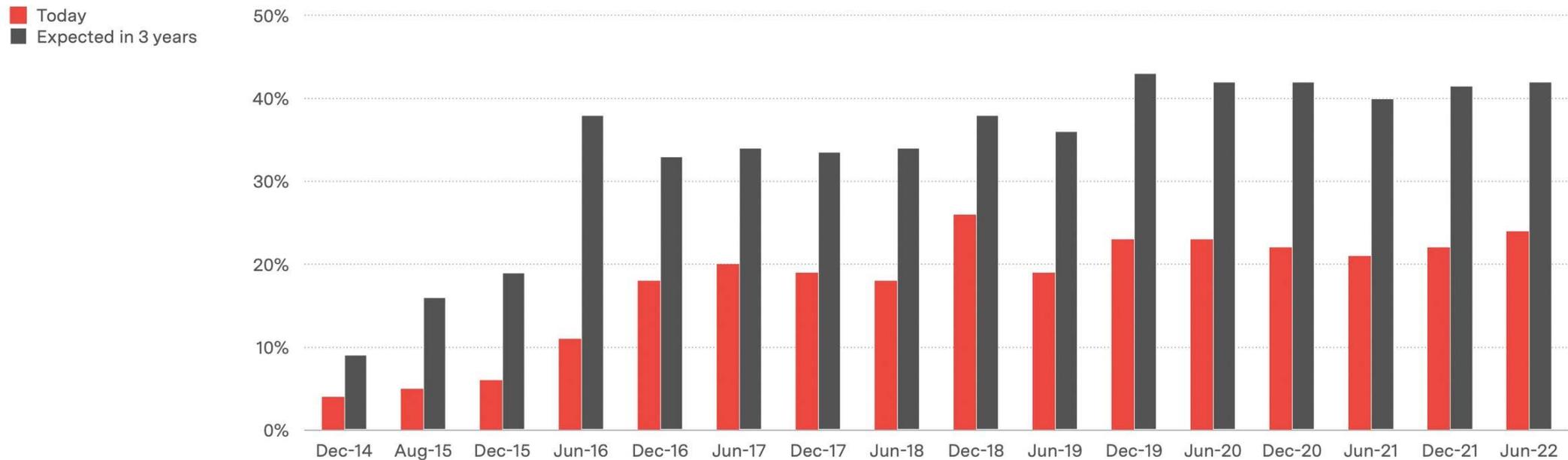
Pivotal

Source: DevOpsDays Austin 2015, Jamie Dimon, CEO@JPMC, 2015 letter to shareholders.

The future can take a long time

The cloud might seem like an old and boring idea, but it's still only a quarter of enterprise workloads

Enterprise workloads in public cloud



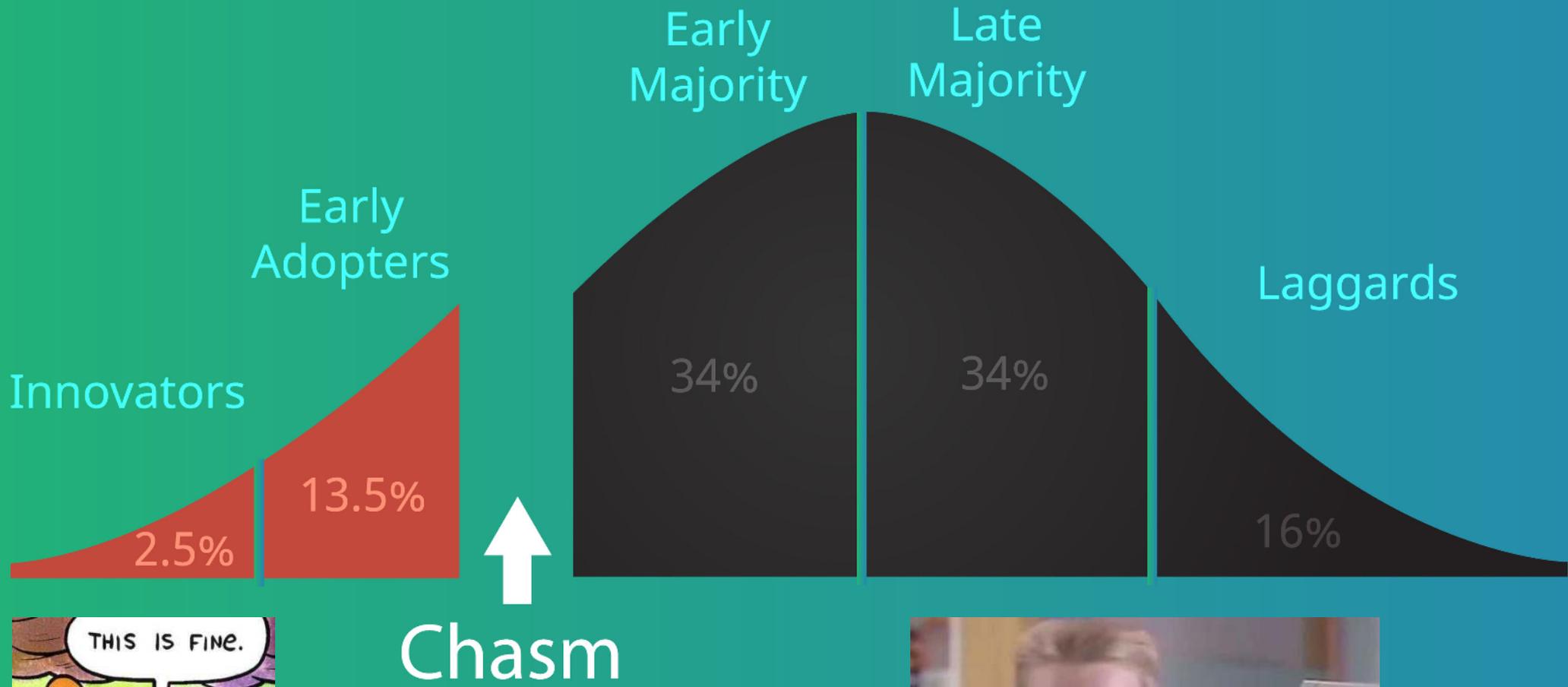
Source: Goldman Sachs CIO Survey

Benedict Evans -- February 2023 73

#9

Be a late adopter

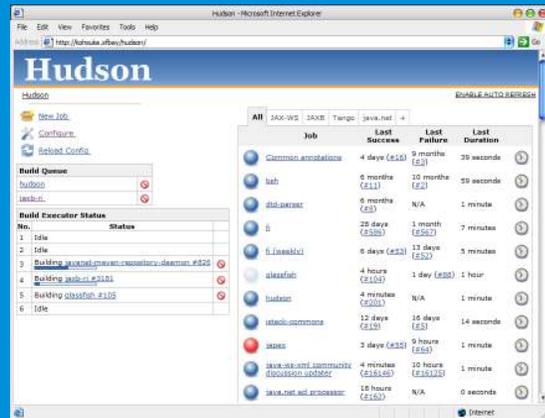
Or, be OK with taking a long time



...there's a difference between being late adopter and being stubborn



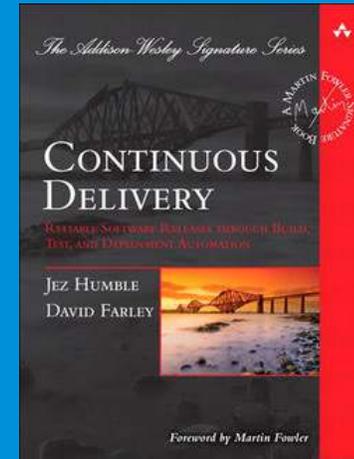
2001



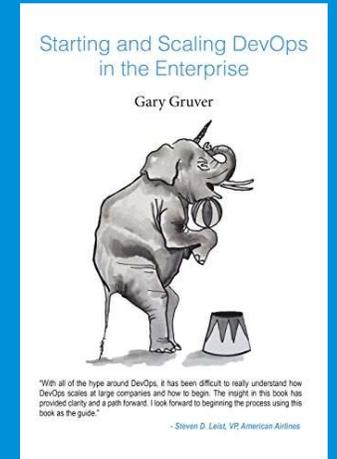
2005



2011

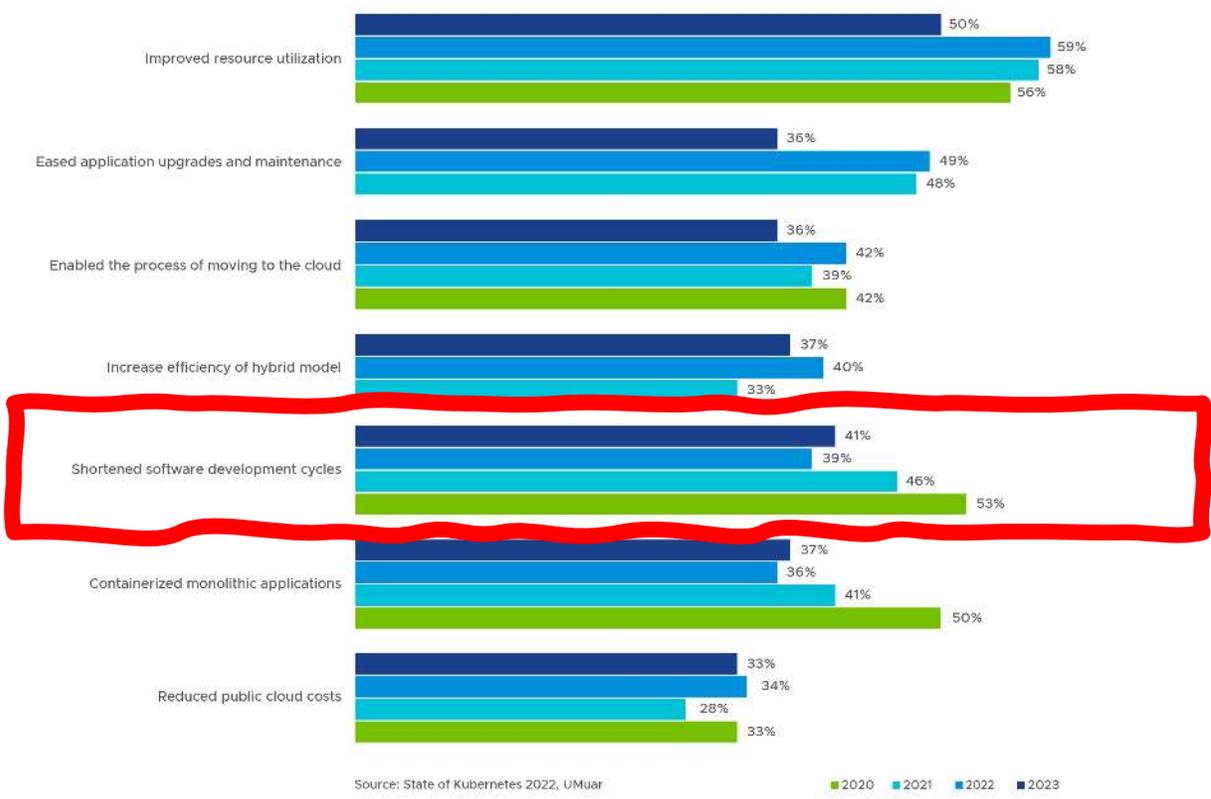


2010

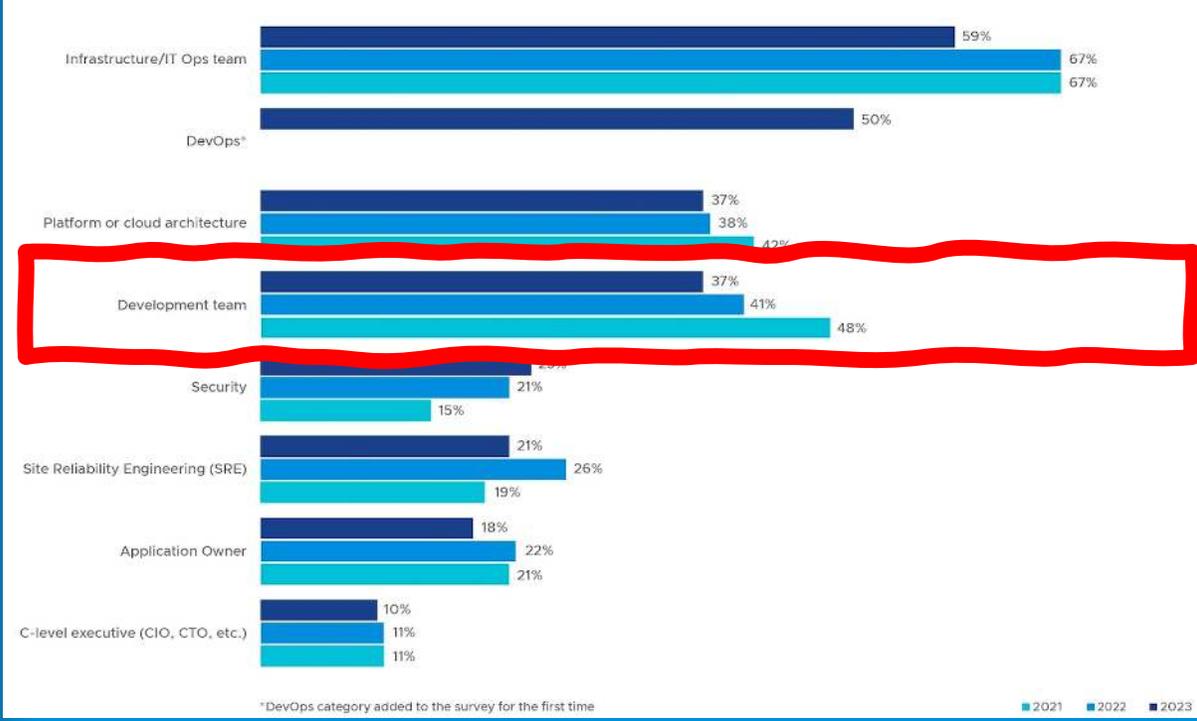


2016

What benefits has your organization realized from operating Kubernetes?
(Choose all that apply)



Which teams in your organization own the operation of your Kubernetes infrastructure?



THE APP STACK



The image displays the CNCF Cloud Native Landscape, a grid of logos for various technologies. The landscape is organized into several functional categories:

- Application Development & Management:** Includes Database, Streaming & Messaging, Application Definition & Image Build, and Continuous Integration & Delivery.
- Orchestration & Management:** Includes Scheduling & Orchestration, Coordination & Service Discovery, Remote Procedure Call, Service Proxy, API Gateway, and Service Mesh.
- Runtime:** Includes Cloud Native Storage, Container Runtime, and Cloud Native Network.
- Foundational:** Includes Automation & Configuration, Container Registry, Security & Compliance, and Key Management.
- Special:** Includes Kubernetes Certified Service Provider, Kubernetes Training Partner, and Certified CNFs.
- Platform:** Includes Certified Kubernetes - Distribution, Certified Kubernetes - Hosted, Certified Kubernetes - Installer, and PaaS/Container Service.
- Serverless:** A dedicated section for serverless technologies.
- Members:** A section listing various member organizations.
- Cloud Foundation Landscape:** A section for foundational cloud technologies.
- Observability and Analysis:** Includes Monitoring, Logging, Tracing, Chaos Engineering, and Continuous Optimization.

At the bottom right, there is a QR code and the text: "This landscape is intended as a map through the previously uncharted terrain of cloud native technologies. There are many routes to deploying a cloud native application, with CNCF Projects representing a particularly well-traveled path." Below this is the logo for l.cncf.io.

Source: CNCF Cloud Native Landscape, retrieved Sep 1st, 2023.

2014

“How do [we] change things up – how do we shake the snow globe in a way that may not be all about Google, but at least gives Google a fighting chance to be able to start grabbing some of these customers, and to start being that balance against the dominance that AWS had at the time.”

Joe Beda

2017

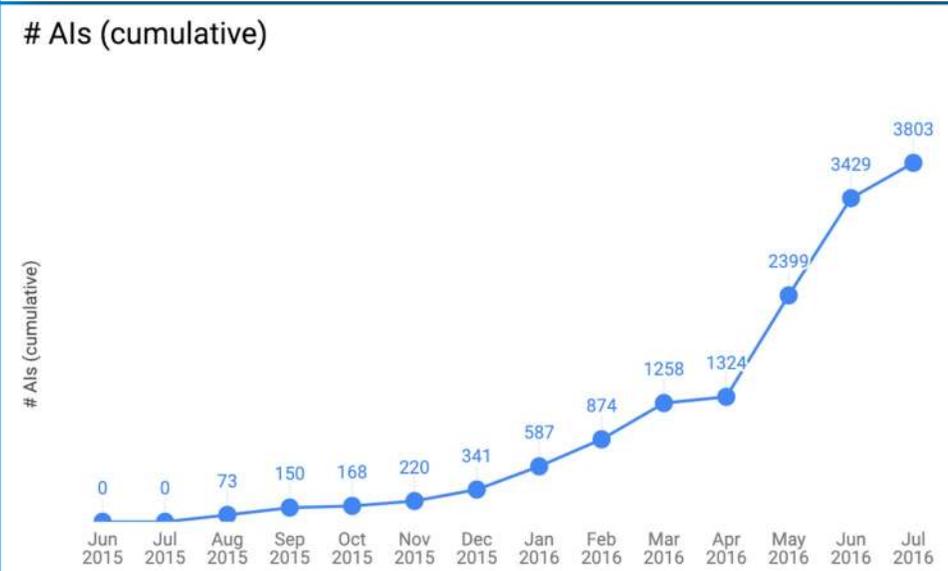
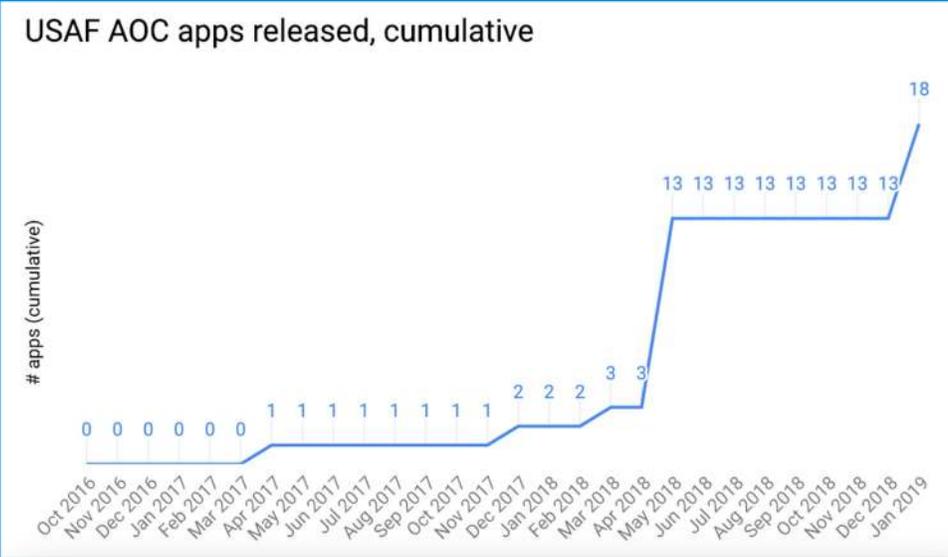
“Kubernetes is a platform for building platforms. It’s a better place to start; not the endgame.”

Kelsey Hightower

2021

“The initial experience, that ‘wall of yaml,’ as we like to say, when you configure your first application can be a little bit daunting. And, I’m sorry about that. We never really intended folks to interact directly with that subsystem. It’s more or less developed a life of its own over time.”

Craig McLuckie

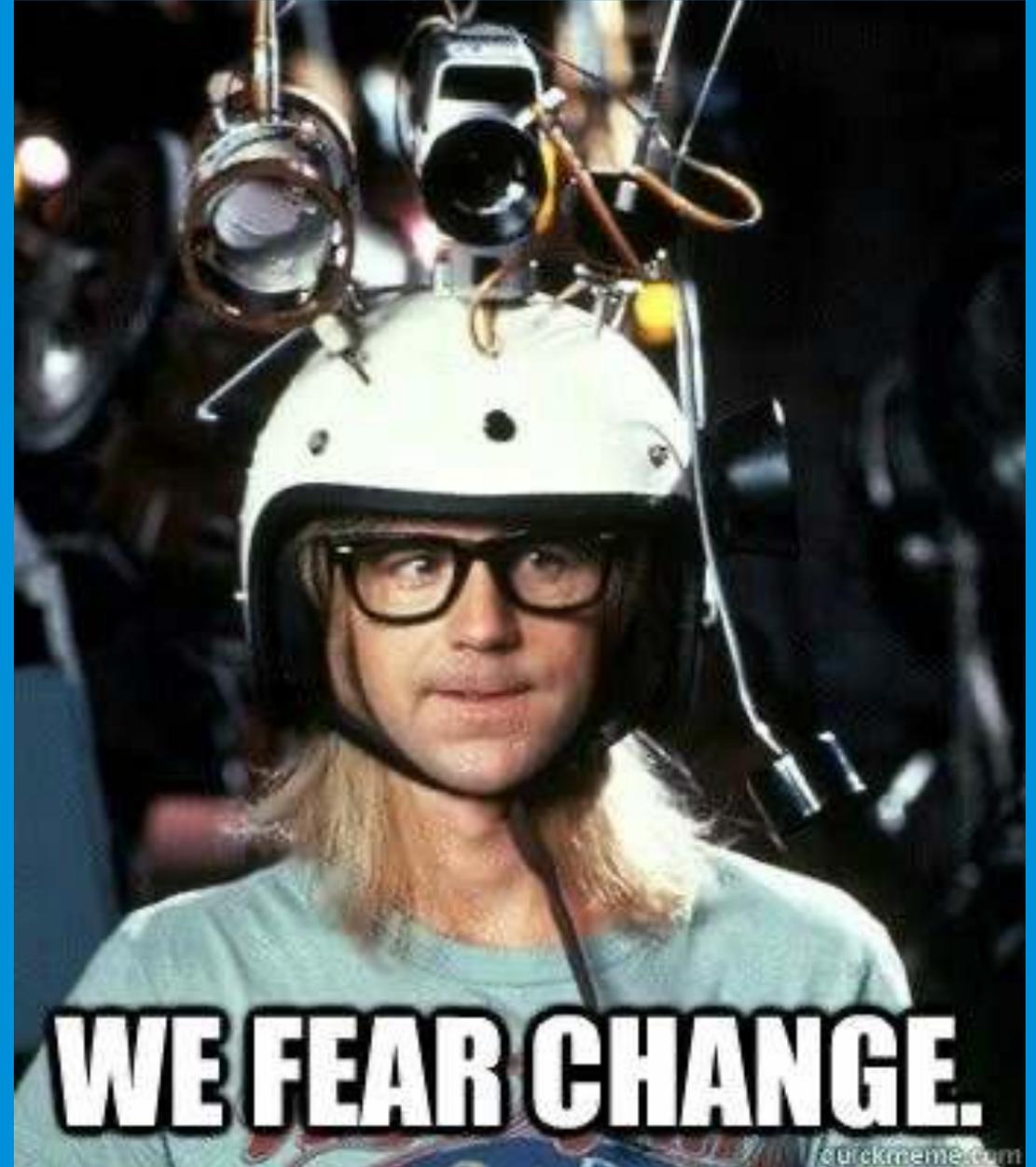


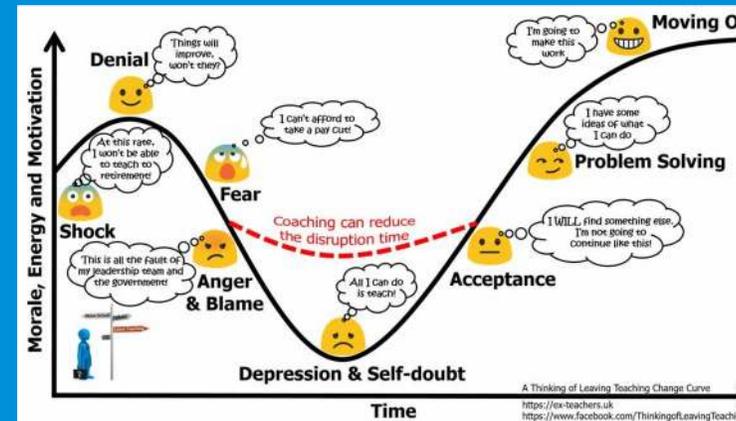
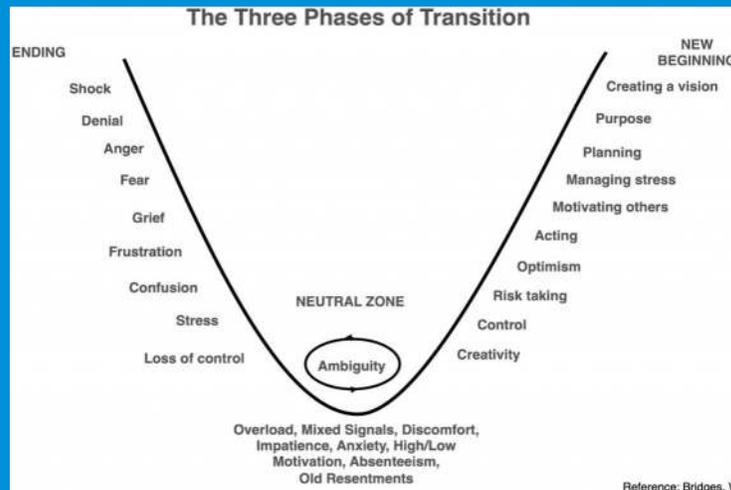
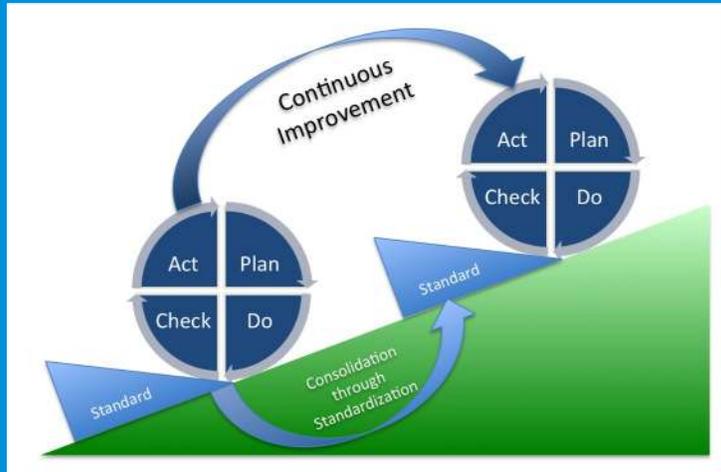
Sources [“From 0 to 1000 Apps: The First Year of Cloud Foundry at The Home Depot,”](#) Anthony McCulley, The Home Depot, Aug 2016; [“Cloud Native at The Home Depot, with Tony McCulley,”](#) Pivotal Conversations #45; USAF presentations and write-ups.

#12

To change, slowly
build up trust and
word-of-mouth.

(Among many other things)





Bridges Transition Model

Kübler-Ross Change Curve

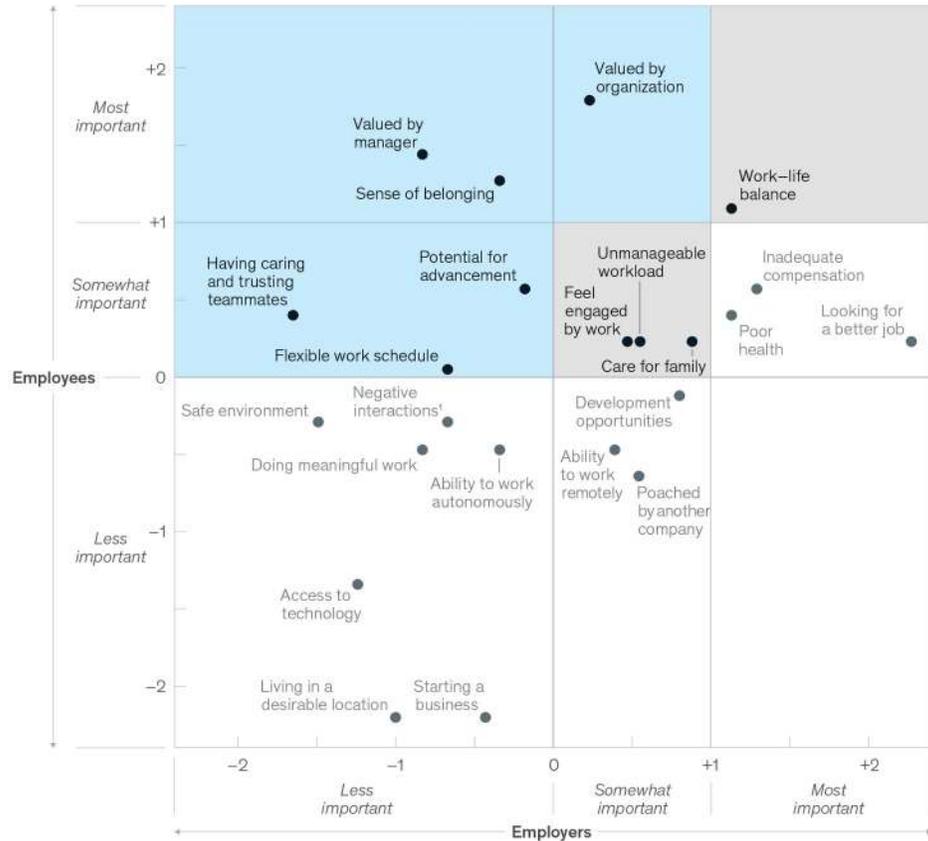
Pictures: PDCA from Wikipedia, KotterInc.com; Bridges from Global Leadership Foundation, Kubler-Ross from [ex-teachers.uk](https://www.facebook.com/ThinkingofLeavingTeaching/).

Factors that are important to employees versus what employers think is important

Employer views

► **Employers seem to overlook the relational elements** that are key drivers for why employees are leaving, such as lack of belonging or feeling valued at work.

More important to employees than employers appreciate
As important to employees as employers think



Note: Standardized scores are reported for both employee and employer perspectives. Employees were asked to respond to the following question: To what extent did the following factors impact your decision to leave your last job? (Not at all, slightly, moderately, very much, extremely); employers were asked to respond to the following question: Why do you think employees are choosing to leave your organization now? (select all that apply)

¹Includes clients, customers, patients, and students.

McKinsey & Company

productivity

14 of 29

FIGURE 1: EXAMPLE METRICS

LEVEL	SATISFACTION & WELL-BEING How fulfilled, happy, and healthy one is	PERFORMANCE An outcome of a process	ACTIVITY The count of actions or outputs	COMMUNICATION & COLLABORATION How people talk and work together	EFFICIENCY & FLOW Doing work with minimal delays or interruptions
INDIVIDUAL One person	*Developer satisfaction *Retention ¹ *Satisfaction with code reviews assigned *Perception of code reviews	*Code review velocity	*Number of code reviews completed *Coding time *# Commits *Lines of code ¹	*Code review score [quality or thoughtfulness] *PR merge times *Quality of meetings ¹ *Knowledge sharing, discoverability [quality of documentation]	*Code review timing *Productivity perception *Lack of interruptions
TEAM OR GROUP People that work together	*Developer satisfaction *Retention ¹	*Code review velocity *Story points shipped ¹	*# Story points completed ¹	*PR merge times *Quality of meetings ¹ *Knowledge sharing or discoverability [quality of documentation]	*Code review timing *Handoffs
SYSTEM End-to-end work through a system (like a development pipeline)	*Satisfaction with engineering system (e.g., CI/CD pipeline)	*Code review velocity *Code review [acceptance rate] *Customer satisfaction *Reliability (uptime)	*Frequency of deployments	*Knowledge sharing, discoverability [quality of documentation]	*Code review timing *Velocity/flow through the system

¹ Use these metrics with (even more) caution – they can proxy more things.

acmoue | January-February 2021 14

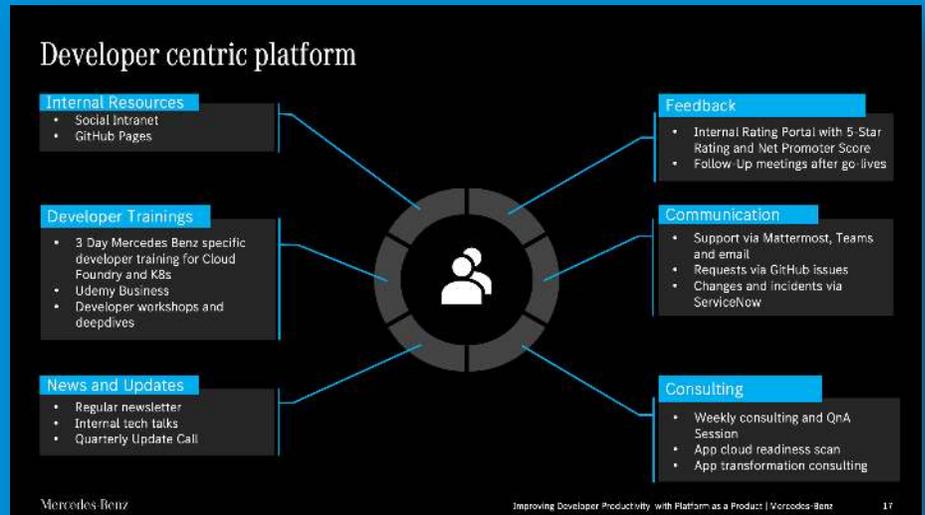
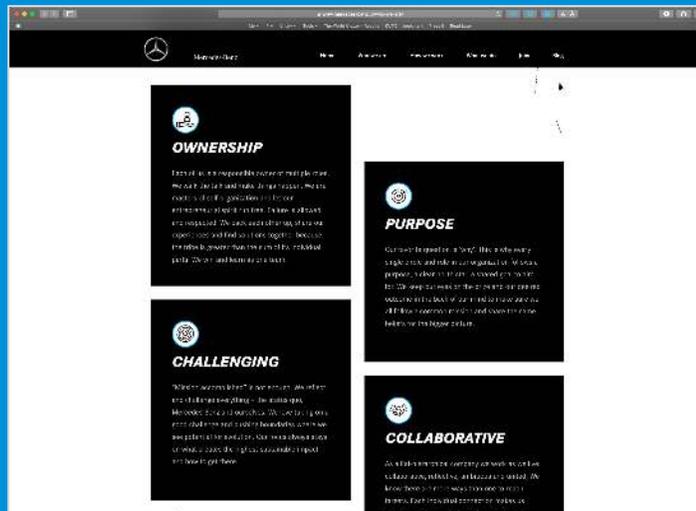
Organizational Learning



Focus on ways of working.....



BT



#14

Make sure your customer is a human, not a dashboard.

Or, “obligatory platform engineering comment”

“We are building this platform not for us, we are building it for Mercedes-Benz developers.”

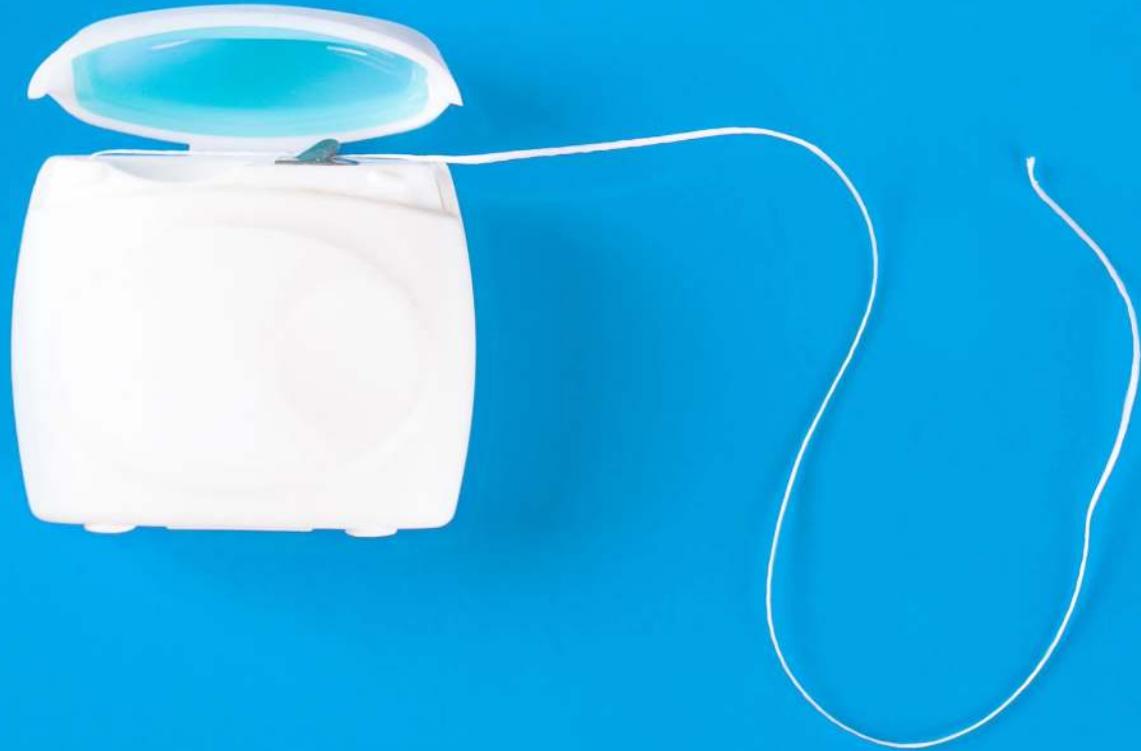
Thomas Müller, Mercedes-Benz



Find the Developer Toil, Confusion, Blockers

Find the Developer Toil, Confusion, Blockers

- What are we making?
- We have a strong vision for our product, and we're doing important work together every day to fulfill that vision.
- I have the context I need to confidently make changes while I'm working.
- I am proud of the work I have delivered so far for our product.
- I am learning things that I look forward to applying to future products.
- My workstation seems to disappear out from under me while I'm working.
- It's easy to get my workstation into the state I need to develop our product.
- What aspect of our workstation setup is painful?
- It's easy to run our software on my workstation while I'm developing it.
- I can boot our software up into the state I need with minimal effort.
- What aspect of running our software locally is painful? What could we do to make it less painful?
- It's easy to run our test suites and to author new ones.
- Tests are a stable, reliable, seamless part of my workflow.
- Test failures give me the feedback I need on the code I am writing.
- What aspect of production support is painful?
- We collaborate well with the teams whose software we integrate with.
- When necessary, it is within my power to request timely changes from other teams.
- I have the resources I need to test and code confidently against other teams' integration points.
- What aspect of integrating with other teams is painful?
- I'm rarely impacted by breaking changes from other tracks of work.
- We almost always catch broken tests and code before they're merged in.
- What aspect of committing changes is painful?
- Our release process (CI/CD) from source control to our story acceptance environment is fully automated.
- If the release process (CI/CD) fails, I'm confident something is truly wrong, and I know I'll be able to track down the problem.
- What aspect of our release process (CI/CD) is painful?
- Our team releases new versions of our software as often as the business needs us to.
- We are meeting our service-level agreements with a minimum of unplanned work.
- When something is wrong in production, we reproduce and solve the problem in a lower environment.



DevOps is
like
flossing...?

Thanks!



<https://newsletter.cote.io>



cotem@vmware.com

