

***DEVOPS FOR
DEVELOPERS...
OR MAYBE AGAINST THEM?***





24



Posted by u/ThePoetWalsh57

Just got my first job in devops. What exactly is devops?

Title explains itself really. What am I in for? I used to work as a software engineer but recently got moved to a devops position.



CONSPIRACY THEORY?!

DETACHED FROM REALITY

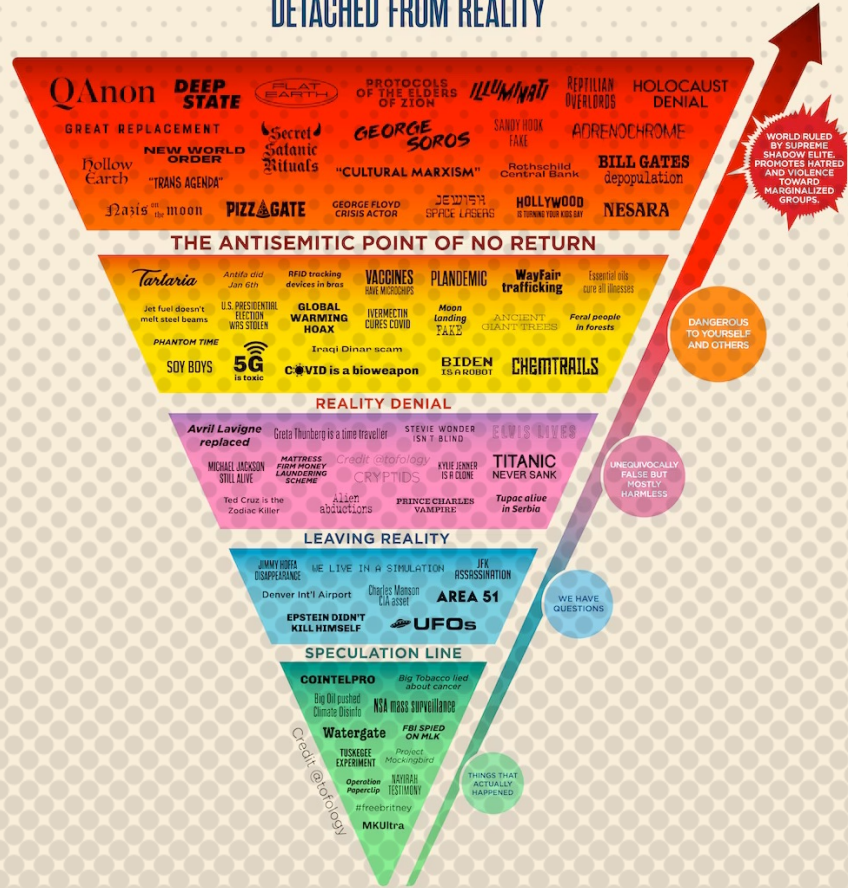


CHART BY ABBIE RICHARDS



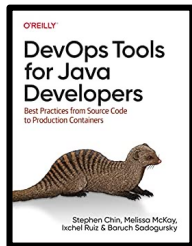
GROUNDING REALITY

***DEVOPS IS A
CONSPIRACY BY OPS
PEOPLE TO MAKE US,
THE DEVELOPERS,
DO THEIR JOB***



BARUCH SADOGURSKY - @JBARUCH

- × Developer Productivity Advocate
- × Gradle Inc
- × Development → DevOps → #DPE



SHOWNOTES

- × speaking.jbaru.ch
- × Slides
- × Video
- × All the links!





AlphaCSP

6 yrs 1 mo

- **Training Division Manager**

Jan 2007 - Oct 2010 · 3 yrs 10 mos

- Development and delivery of most of AlphaCSP courses on different Java-related topics and in different levels;
Among the customers: IDF, Cisco, IDI direct insurance, Rafael, PayPal, Opal, BMC, Malam, Checkpoint, HP Software and others.
- Development and delivery Artifactory training for JFrog customers world-wide;
Among the customers: Cisco, Sita, Ansys and others.
- JTeam – Extremely successful internal training program in AlphaCSP – ¼ of AlphaCSP personnel are JTeam alumni.
- Java department technical lead at MalamTeam Training Center – development and delivery of all Java courses.
- Named one of the best speakers in all AlphaCSP events through the years.

- **Consultant & Architect**

Jan 2007 - Oct 2010 · 3 yrs 10 mos

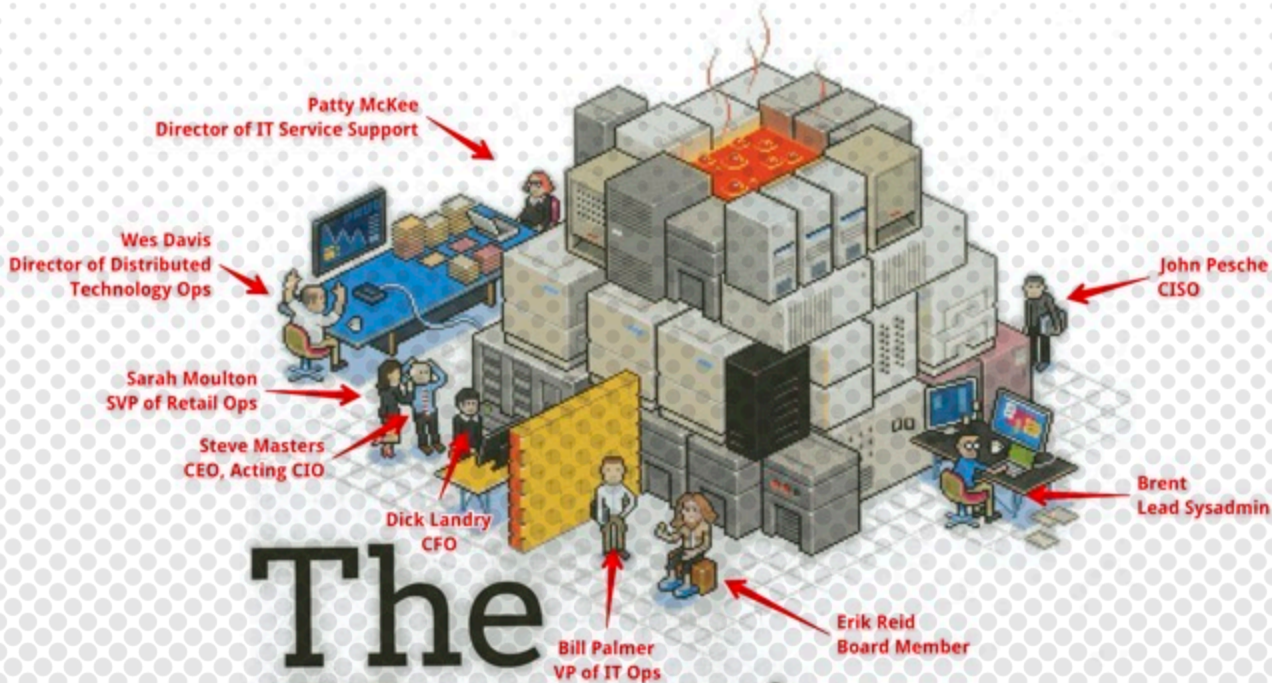
Consulting, building architectures and design, mentoring, and developing in various Java-related projects on the topics, described in Specialties section above;
Among the customers: BMC, Logia, IDF, Starhome (Comverse), Malam, Cisco, IDI, IDIT, Isracard, Virtual Tweens, Amobee, SolarEdge, Checkpoint, Cadence, Evolgen, ExLibris, Retalix, Schema, Time To Know and others.

- **Senior Developer**

Oct 2004 - Jan 2007 · 2 yrs 4 mos

Working on various projects in BMC Software Israel





The Phoenix Project

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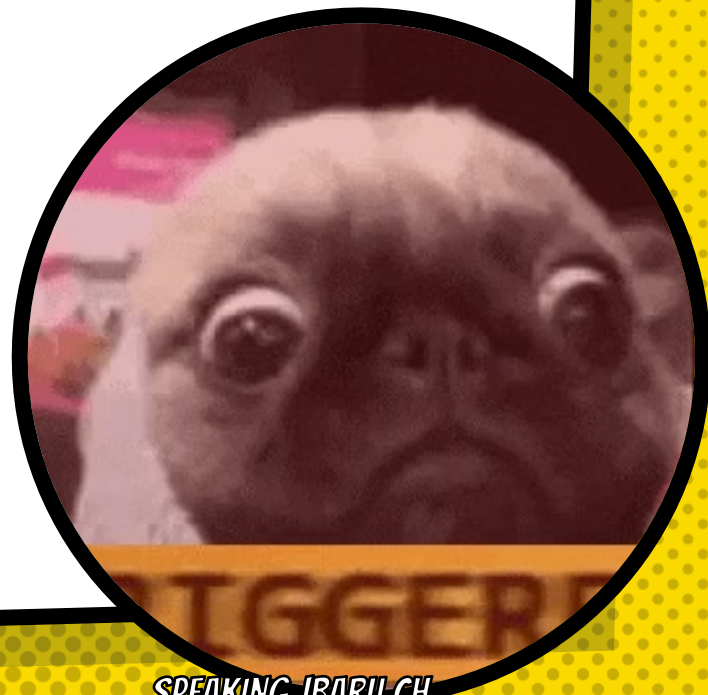
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***NOT A SINGLE
DEVELOPER!***



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About 350,000,000 results (0.40 seconds)



Amazon.com

<https://aws.amazon.com> › devops › what-is-devops

What is DevOps? - DevOps Models Explained

DevOps is the combination of cultural philosophies, practices, and tools that increases an organization's ability to deliver applications and services at ...

[AWS DevOps Competency](#) · [What is Continuous Integration?](#)



Atlassian

<https://www.atlassian.com> › devops

What is DevOps?

DevOps is a set of practices, tools, and a cultural philosophy that automate and integrate the processes between software development and IT teams.



GitLab

<https://about.gitlab.com> › topics › devops

What is DevOps?

DevOps is a combination of software development (dev) and operations (ops). It is defined as a software engineering methodology which aims to integrate the work ...

[Continuous Delivery \(CD\): Continuous deliver...](#) [Agile: Agile development means taking iter...](#)

[Continuous Integration \(CI\): The practice of re...](#) [Version control: The fundamental practice o...](#)

[DevOps explained](#) · [The four phases of DevOps](#) · [The DevOps lifecycle and how...](#)



Microsoft

<https://learn.microsoft.com> › en-us › what-is-devops

What is DevOps?

Jan 25, 2023 — DevOps enables coordination and collaboration between formerly siloed roles like development, IT operations, quality engineering, and security.

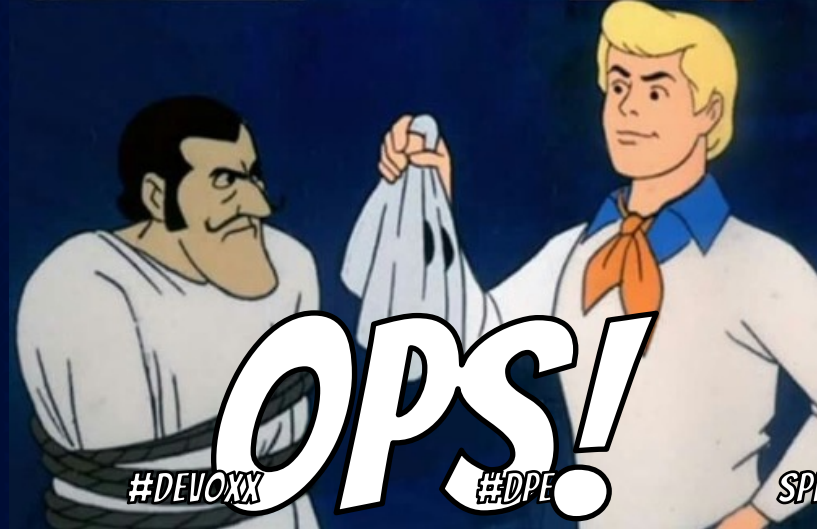
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Y THO...



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As a Linux system administrator, how do I shift my career to DevOps?



Disha Rathod

DevOps Online Trainer (2013–present) · 5y

Hi,

Being a Linux administrator will help you to easily get started with DevOps because it starts with learning Linux fundamentals, DevOps also includes cloud computing concepts like AWS. More importantly DevOps is all about tools, it comes with hundreds of tools **Git**, Chef, Maven, Jenkins, Puppet, Docker are modern and most popular DevOps tools.

So in order to move into DevOps industries you should have prominent knowledge following concepts

1. Linux Fundamental; Shell Scripting
2. Cloud Computing (AWS)
3. DevOps Fundamentals
4. Software Development Life Cycle
5. Continuous Integration, Deployment, and Delivery.

System Administrator Salary

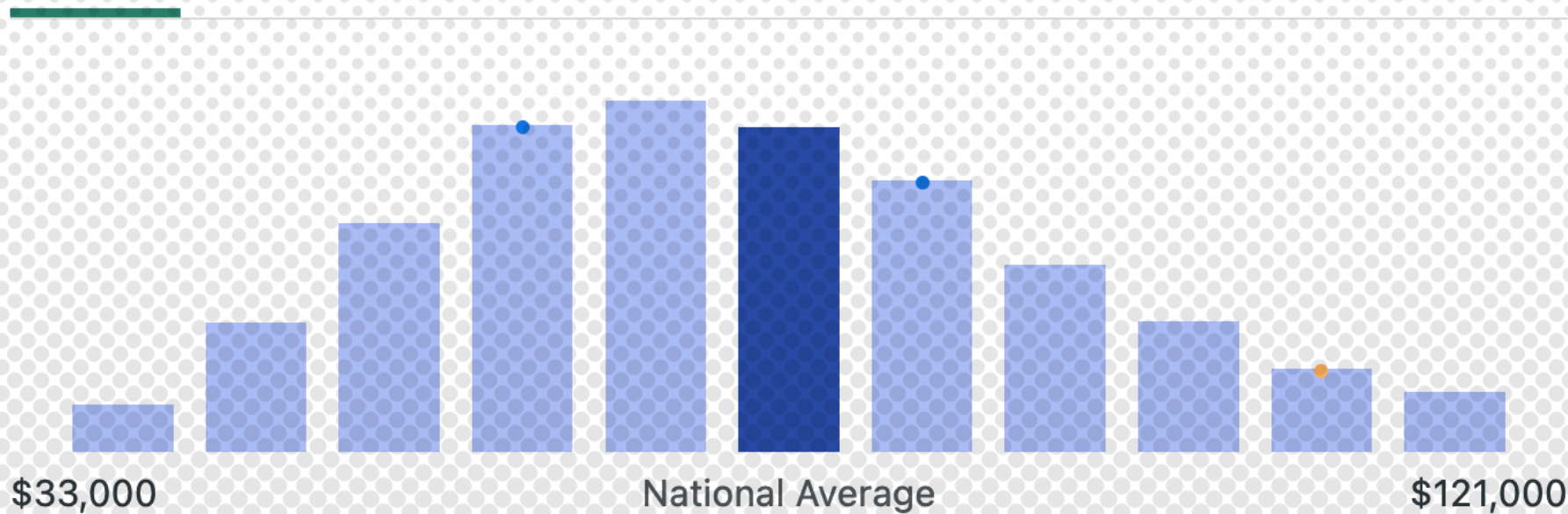
Yearly

Monthly

Weekly

Hourly

Table View



\$33,000

National Average

\$121,000

\$76,644 /year



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\$37 /hour *#DPE*

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Devops Engineer Salary

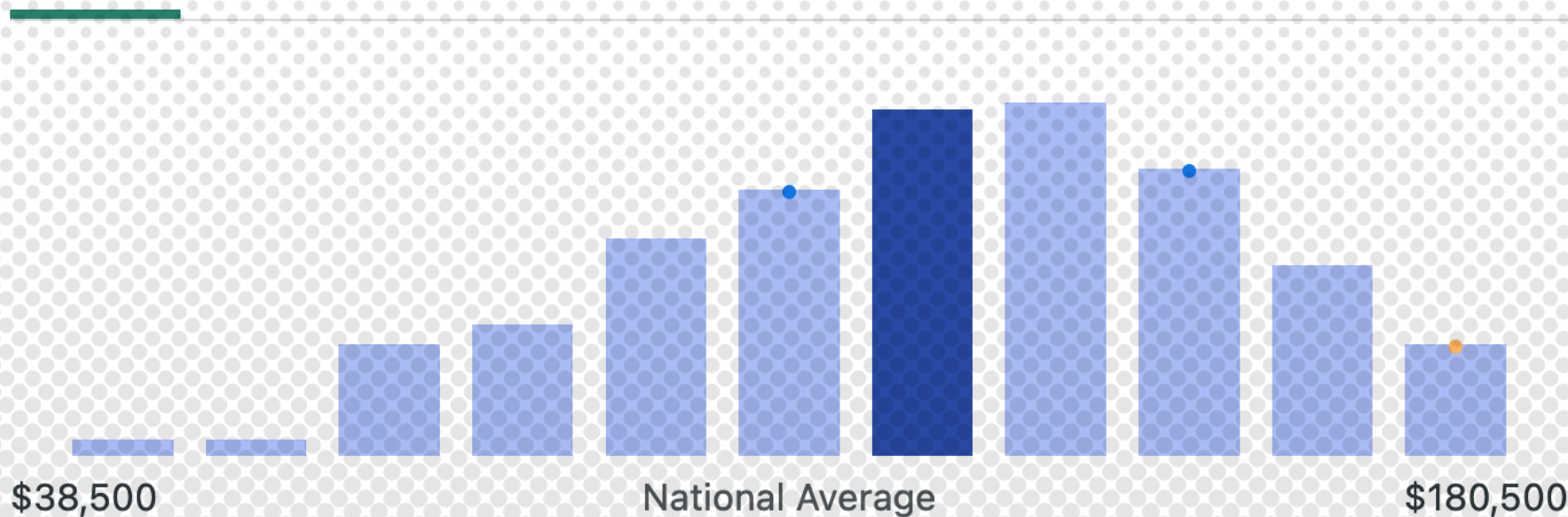
Yearly

Monthly

Weekly

Hourly

Table View



\$127,036 /year

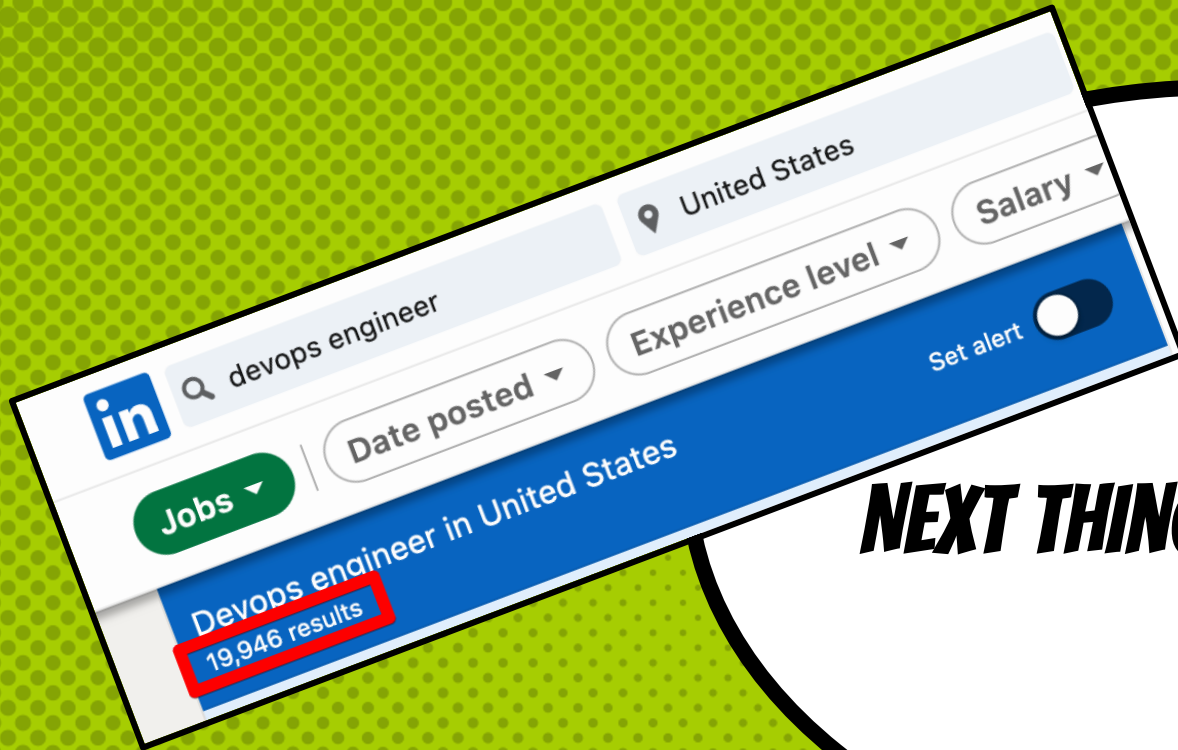


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\$61 /hour #DPE

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NEXT THING YOU KNOW...



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AND THIS:



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BBC NEWS | MUNDO



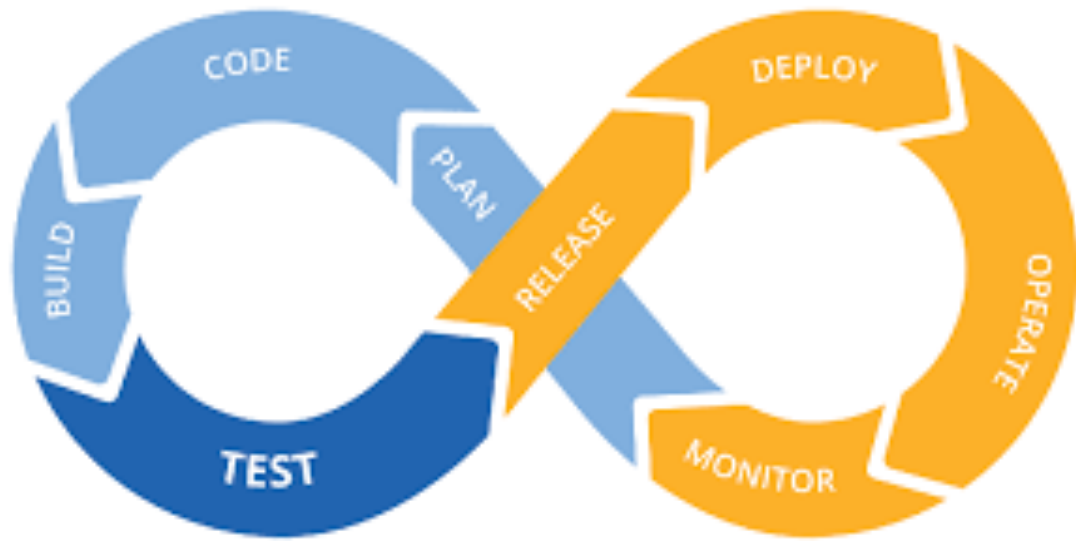
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Parrot learns how to ask “Why?” repeatedly and is promoted to Engineering Manager





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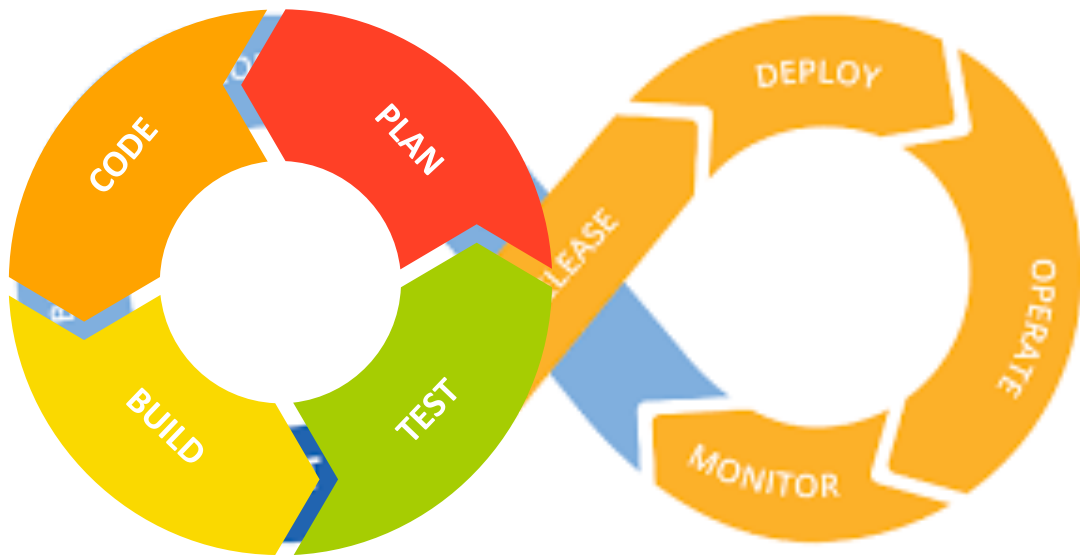
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AGILE!





Accelerate

State of DevOps Report 2023



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Time Spent	Elite	High
NEW WORK	50%	50%
Unplanned work and rework	19.5%	20% ^a
Remediating security issues	5%	5% ^b
Working on defects identified by end users	10%	10% ^c
Customer support work	5%	10%



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TYPES OF WORK ACCORDING TO DEVOPS

Planned Work	Business projects or new features
Internal Projects	Server migrations, software updates and so on
Changes	Driven by feedback on completed work
Unplanned Work	Support escalations and emergency outages



**SO
FASCINATING...**



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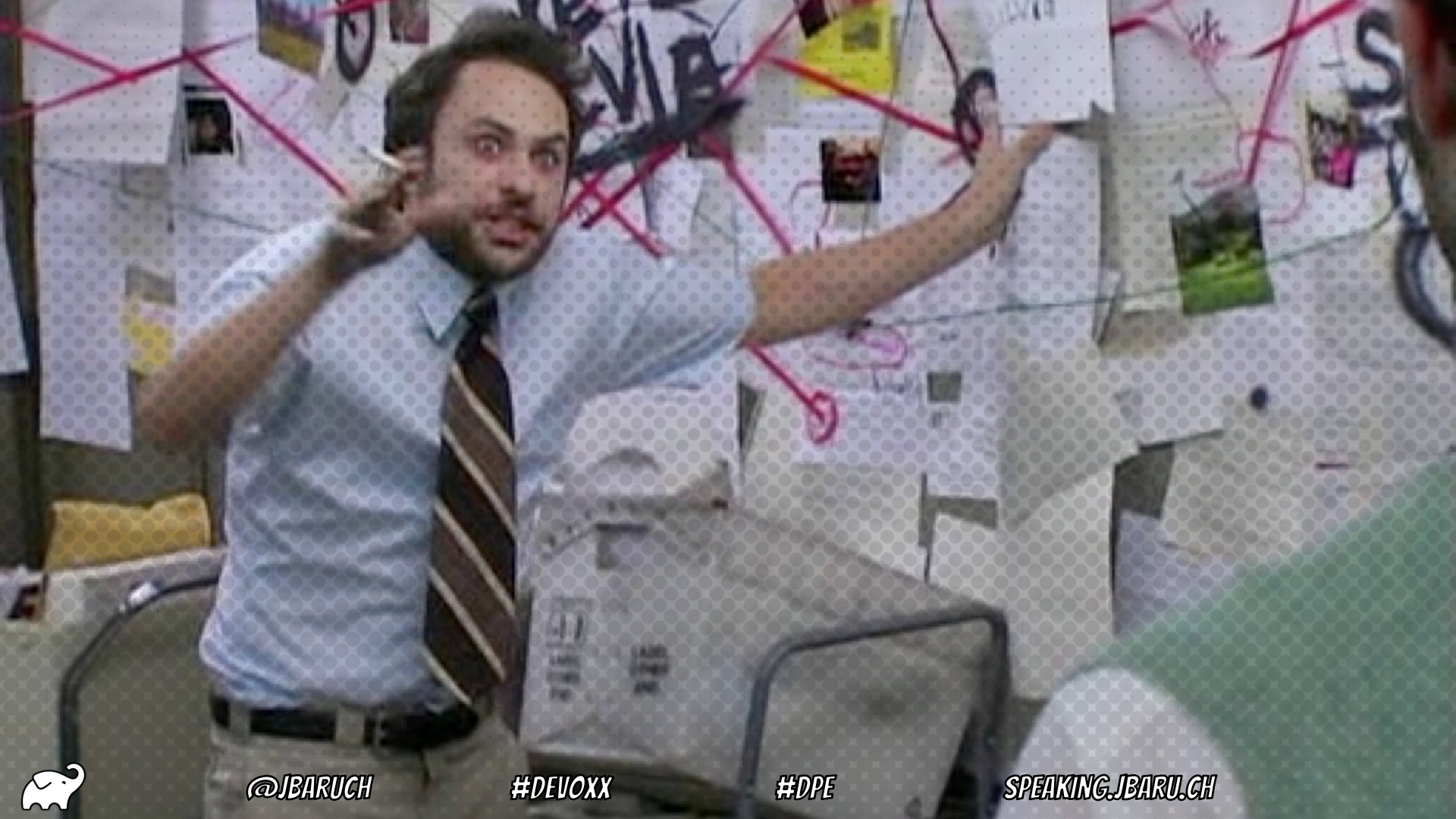
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TYPES OF WORK ACCORDING TO DEVELOPERS

New Features	Writing code
Refactoring	Writing code
Bug Fixes	Writing code





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Manifesto for Software Craftsmanship

Raising the bar.

As aspiring Software Craftsmen we are raising the bar of professional software development by practicing it and helping others learn the craft. Through this work we have come to value:

Not only working software,
but also **well-crafted software**

Not only responding to change,
but also **steadily adding value**

Not only individuals and interactions,
but also **a community of professionals**

Not only customer collaboration,
but also **productive partnerships**

That is, in pursuit of the items on the left we have found the items on the right indispensable.

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SOFTWARE CRAFT-PERSON DEFINITION OF DONE

- × We got what they want
- × Clear code
- × Easy to deploy
- × Non-func reqs - ✓
- × No new tech dept
- × Tests - ✓
- × QA are happy
- × Team lead is happy
- × Product owner is happy - (i.e. customer is happy)



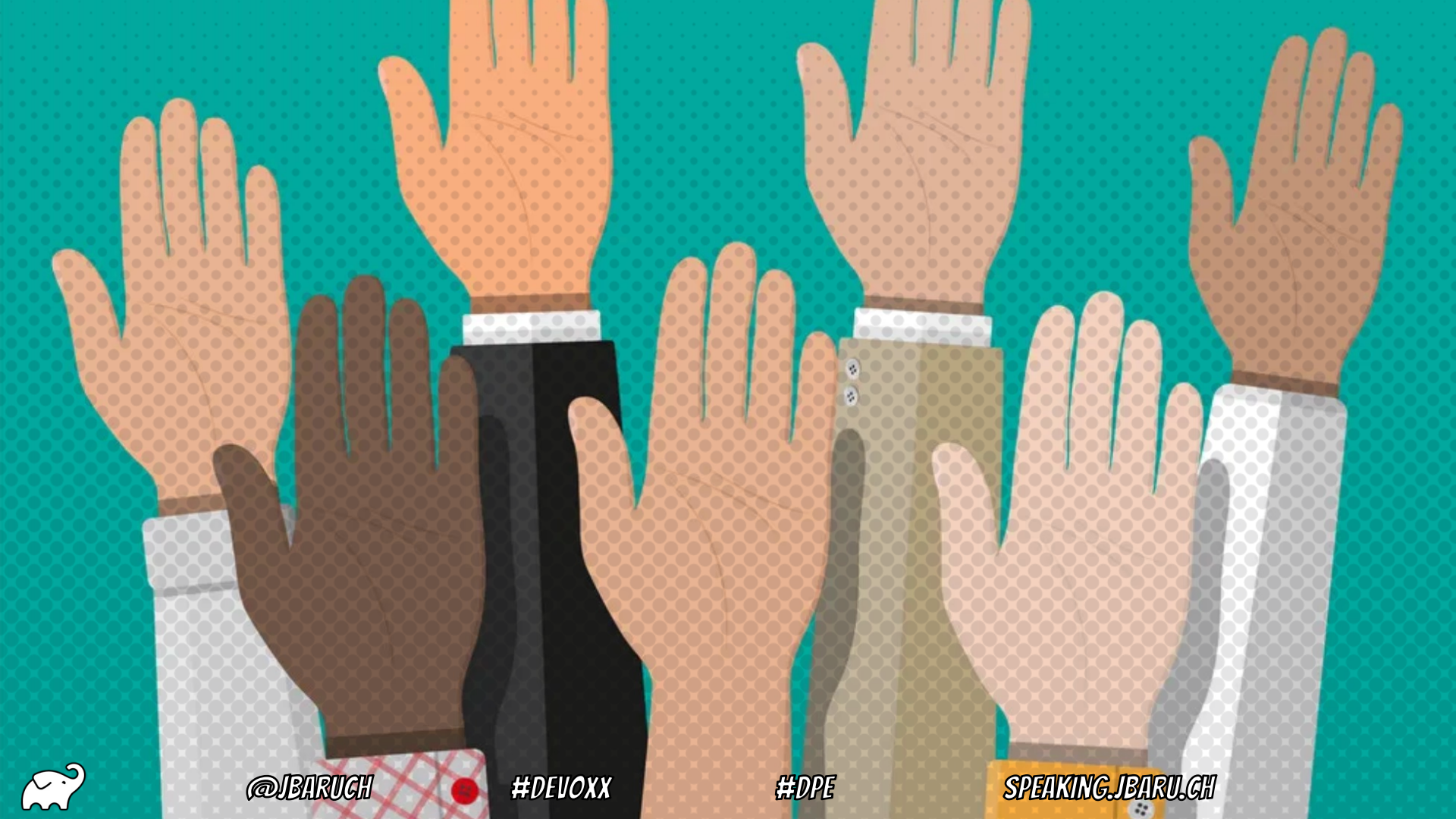


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TRACTORMEN, IMPROVE THE QUALITY OF TRACTOR-TRAILER TRACKING!

INTERNET ARCHIVE

Wayback Machine



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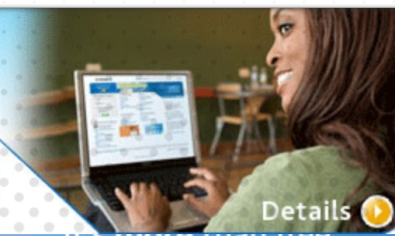
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Start banking online now
Get a User ID

GO



IT'S MORE THAN FREE.

Get the Details

Returning Users: Log On

User ID:

Password:

Remember my User ID

[Forgot User ID/Password?](#)

Log On



Security Center Highlights

Chase helps keep you safe and informed.

- Enhanced online security to help prevent fraud.
- Scams involving advance fees and cashier's check.
- Online fraud and e-mail scams
- Ways we protect you
- How you can protect yourself

Personal Banking

- Checking
- Credit Cards
- Savings
- CDs
- Debit Cards
- Online Banking & Bill Pay

Business

- Business Banking
Revenues up to \$10MM
- Commercial Banking
Revenues over \$10MM
- Business Credit Cards

Personal Lending

- Home Equity
Loans & Lines
- Mortgage
- Auto/Vehicle Loans
- Student Loans

Insurance & Investing

- Insurance
- Investing
- Retirement Planning

Enter the Chase
"Log On to Cash In"
Sweepstakes.

DETAILS

GET MORE
CASH BACK.

Click to
LEARN MORE.

Tell me about...

- Premier Platinum Banking
Exclusive banking and investment benefits for clients with higher balances

News & Announcements

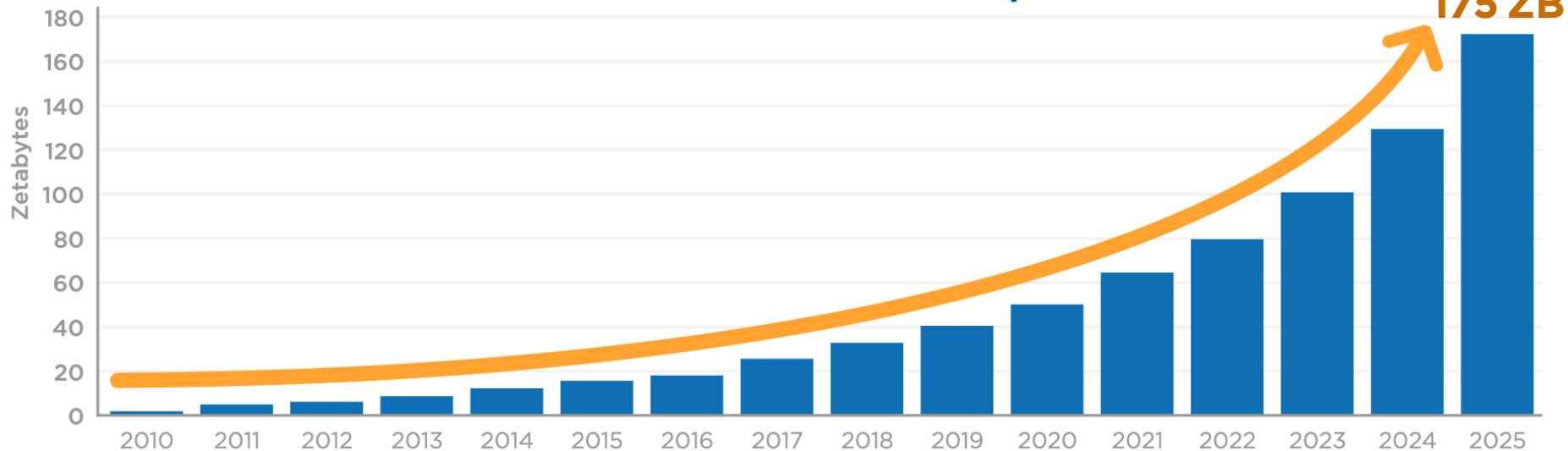
- U.S. Armed Forces Overseas
Please contact us if you need assistance with your Chase accounts.
- Chase offers Zero-Fees!
For academic year 2007-2008 the origination fee will be paid on all Federal Stafford Loans that Chase funds directly to students.
- Fair Lending & HMDA Data
- Chase Clear & Simple Expands

12 HOURS MAINTENANCE FOR WEBSITE UPDATE TO ENSURE QUALITY



CODE QUALITY IS NOT ENOUGH

Annual Size of the Global Datasphere



Source: Data Age 2025, sponsored by Seagate with data from IDC Global DataSphere, Nov 2018



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STAGING SERVER

JOLLY WHERE THE TIMES
WHEN WE COULD TEST EVERYTHING
BEFORE DEPLOYING TO PRODUCTION

1985 - 2015



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WHAT DO WE DO?!



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PRODUCTION STEAMS ITS WAY TO THE DEVELOPERS!



WELCOME TO ON-CALL!

SOFTWARE CRAFT-PERSON DEFINITION OF DONE

- × We got what they want
- × Clear code
- × Easy to deploy
- × Non-func reqs - ✓
- × No new tech dept
- × Tests - ✓
- × QA are happy
- × Team lead is happy
- × Product owner is happy - (i.e. customer is happy)
- × It's DevOps ready



DEVOPS-READY SOFTWARE (A.K.A. CLOUD-NATIVE)

- × Clear deployment plan
- × Stable and fast build
- × Stateless code
- × Fast startup and stop
- × Observability
- × Feature flags
- × Backwards and forward-compatible
- × Event streaming





WELCOME TO DEVOPS!

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**10 YEARS OF TRYING...
AND DEVELOPERS STILL
AREN'T EXCITED ABOUT
DEVOPS**



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**HOW DO WE GO
FROM 😞 TO 😄 ?!**

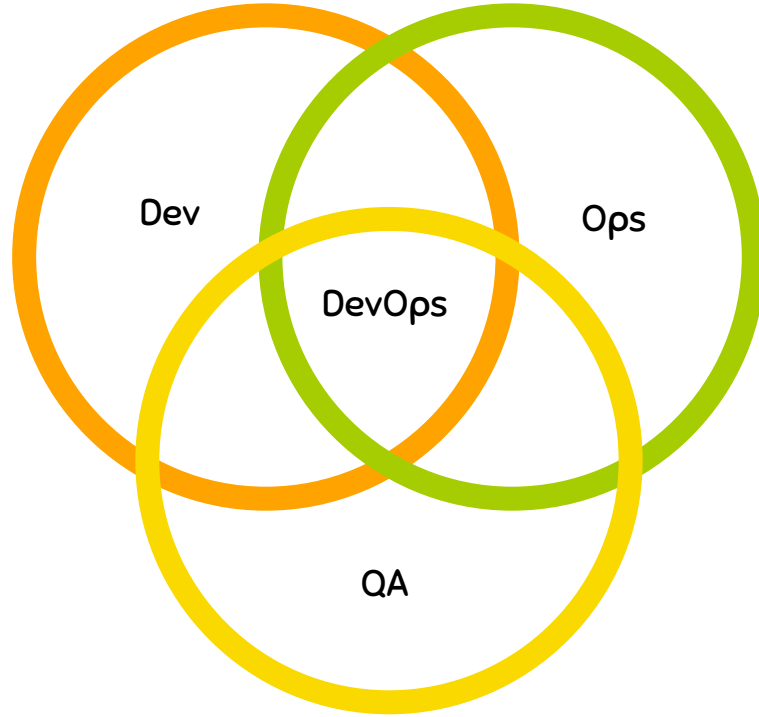


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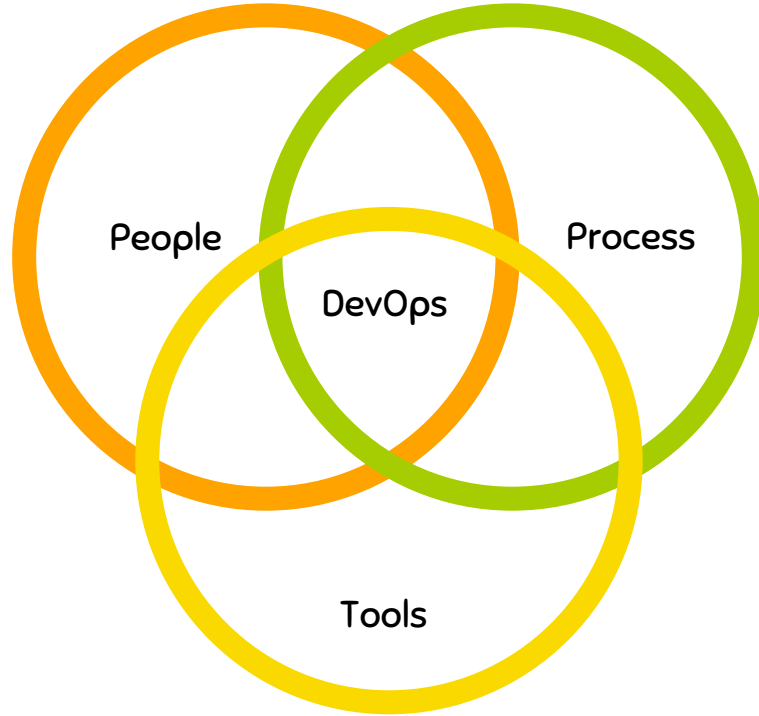


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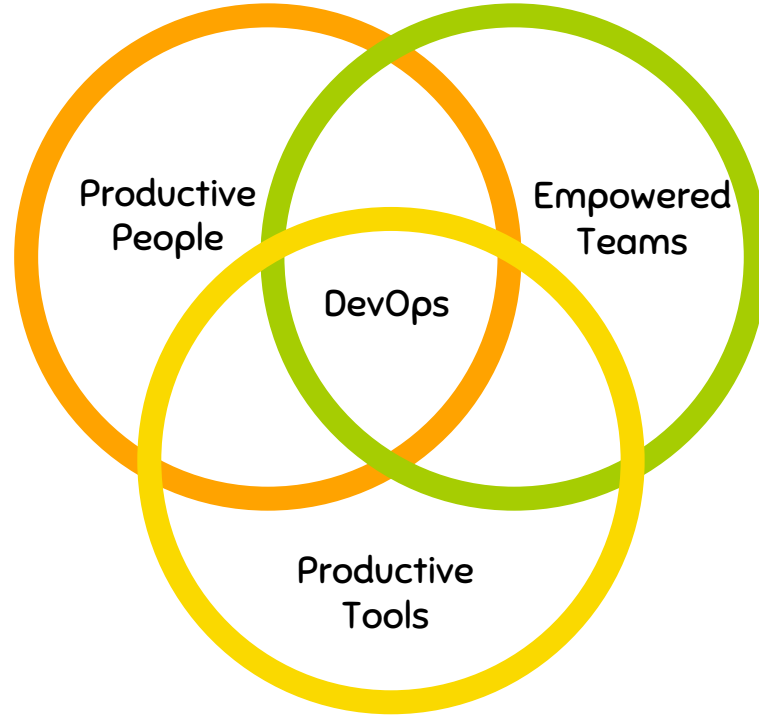


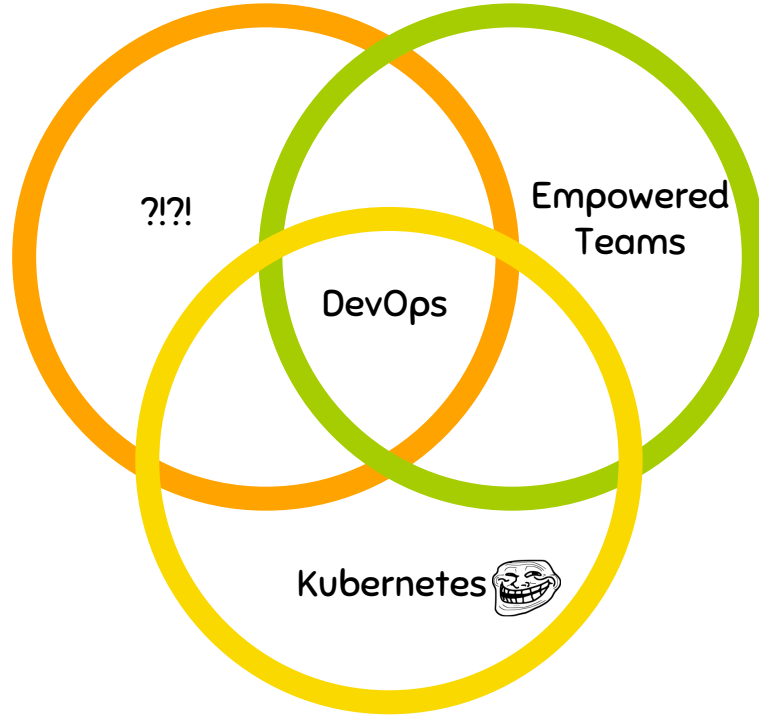
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THE PAIN IS REAL

Builds and Tests are Slow!

90% of surveyed IT organizations experienced challenges with too much time spent waiting on build and test feedback.



✓ Validated

Published: Sep. 25, 2023 TVID: AE3-632-6FE

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TechValidate
by SurveyMonkey

Development Pains are Widespread

Which of the following challenges or pain points did your organization experience prior to implementing Developer Productivity Engineering?

Too much time spent waiting on build and test feedback either locally or during CI

84%

Inability to easily troubleshoot and determine the root cause of build, test and CI failures including flaky tests

65%

Insufficient observability of analytics on build and test performance and regressions, failure trends, and productivity bottlenecks

59%



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THE NEXT FRONTIER:
PRODUCTION SYSTEM
OF YOUR PRODUCTION
SYSTEMS

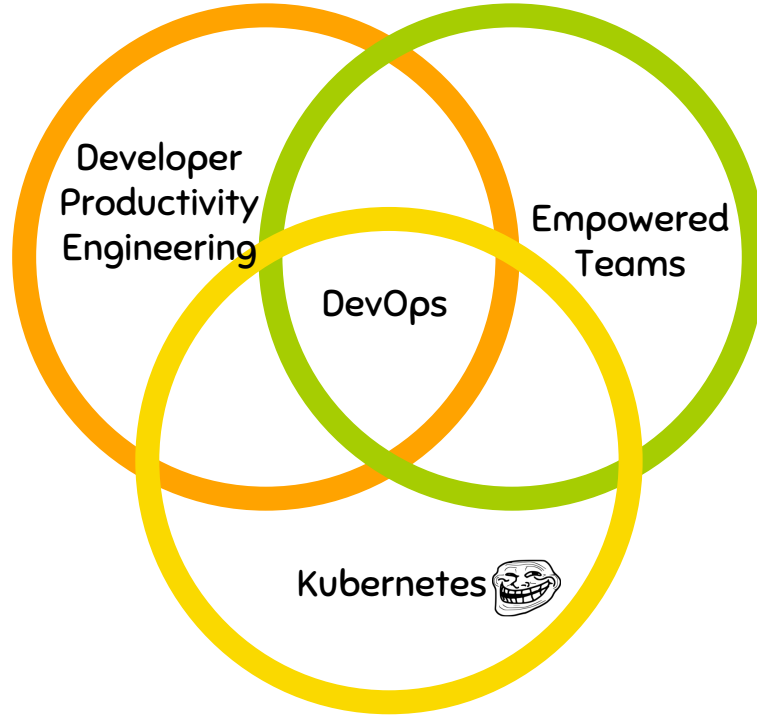


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DEVELOPER PRODUCTIVITY ENGINEERING

Foster Faster Feedback

Collaborate through
Effective Tooling

Embrace Rigorous
Observability for
Proactive Improvement

Eliminate Toil for
Developers

Prioritize Automation
and Eliminate
Bottlenecks

Dedicated
Organizational Mindset

Outcomes Over Output



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DEVOPS AGAINST DEVELOPERS?

- × DevOps mainly solves Ops' concerns by making processes and ops tools more productive
- × Developer Productivity Engineering makes devs more productive
- × This is how we bring developers into the fold of DevOps



DEVELOPER PRODUCTIVITY ENGINEERING

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FEEDBACK EFFICIENCY

- × IDE: Sub-seconds (I type, it marks it red)
- × Build: Seconds
- × CI: Minutes
- × Production: Hours/Days



REVERSE DEPENDENCY ON DISTANCE FROM DEVELOPERS



TWO TYPES OF FEEDBACK

ASYNCHRONOUS

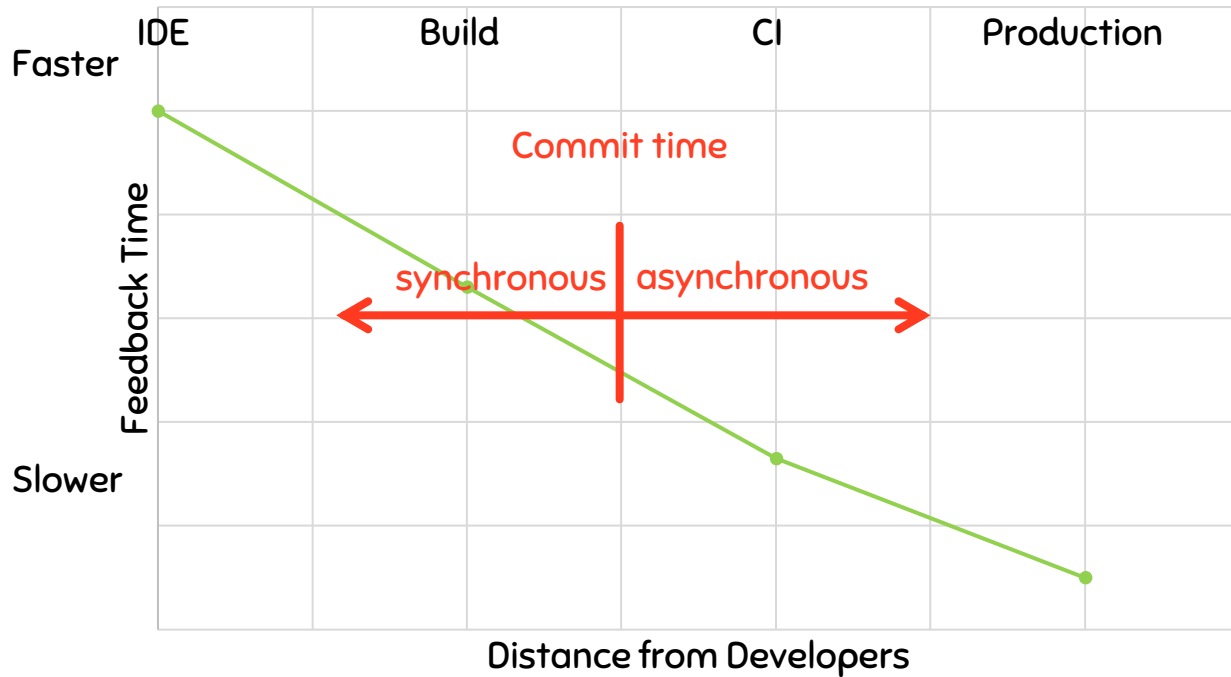
- x e.g., CI/CD
- x we never wait for it
- x results are distracting

SYNCHRONOUS

- x e.g., build
- x we'll wait for it in the flow
- x we'll be pissed off when it's slow



REVERSE DEPENDENCY ON DISTANCE FROM DEVELOPERS



HOW CAN WE ENGINEER LESS CONTEXT SWITCHES?

- × Measure local build times!
- × Avoid building and testing what didn't change
- × Speed up what can't be avoided
- × Fight evil flaky tests!
- × Watch your build like a hawk for degradations



WHAT YOU CAN DO TODAY (FOR FREE)

- × Parallel local
- × Local caching
- × Remote caching*
- × Build Scans
- × Win Prizes (a.k.a. speed challenge)



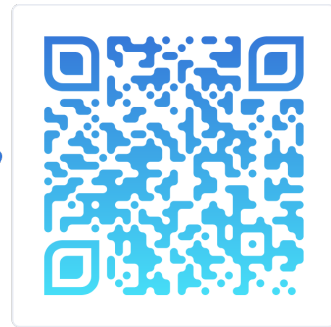
WHAT YOUR COMPANY SHOULD PAY FOR

- × All the books (see shownotes)
- × Top development hardware
- × Develocity (or similar)



LEARN MORE AND TRY IT TODAY!

- × Take the Gradle/Maven Speed Challenge
- × Be DPE Agent of Change!
- × Read the DPE Handbook
- × Watch the DPE Summit videos



Scan me

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WATCH THE KEYNOTES!

2024

DPE SUMMIT

September 24-25 | The Midway | San Francisco

Discover the only event dedicated to the practice of Developer Productivity Engineering (DPE) and Developer Experience (DX). Register by August 18 to

get your **Early-Bird ticket for \$249**



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THANKS!



Q&A and Twitter X/Bsky/Mastodon/LinkedIn ads:

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x #Devoxx

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