the journey from devops to cloud engineering
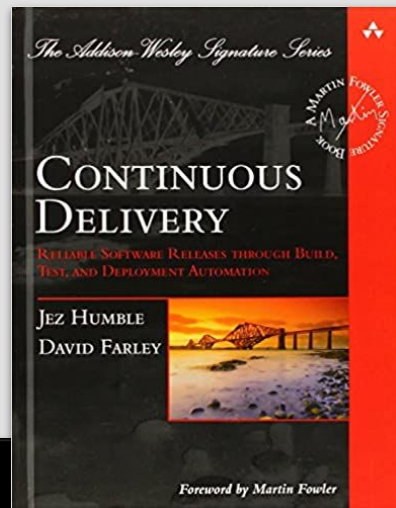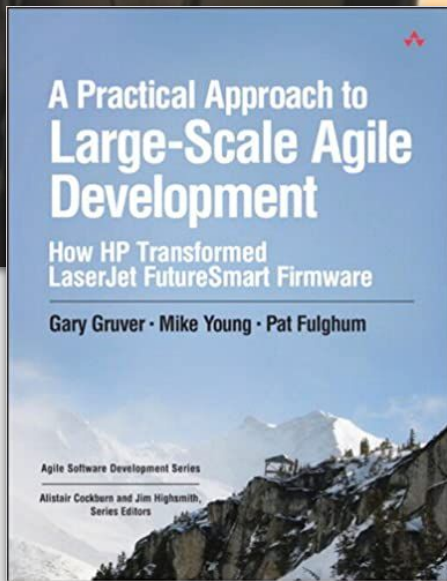
...

Matty Stratton
Director of Developer Relations, Aiven

let's start by looking back

A Practical Approach to Large-Scale Agile Development

How HP Transformed LaserJet FutureSmart Firmware

Gary Gruver · Mike Young · Pat Fulghum

Agile Software Development Series

Alistair Cockburn and Jim Highsmith, Series Editors

CONTINUOUS DELIVERY

RELIABLE SOFTWARE RELEASES THROUGH BUILD, TEST, AND DEPLOYMENT AUTOMATION

JEZ HUMBLE
DAVID FARLEY

Foreword by Martin Fowler

wear a mask 雷启理
@littleidea

Don't just say 'no', you aren't respecting other people's problems... #velocityconf #devops #workingtogether

3:32 PM · Jun 23, 2009 · Twitter Web Client

8 Retweets   **2** Quote Tweets   **12** Likes

@mattstratton

#DevOpsDays

The conference that brings development and operations together.

Home Contact Events Presentations Blog

Devopsdays Ghent 2009

welcome program reactions speakers participants

This is how the first devopsdays was announced:

DevOpsDays '09

The first devopsdays happened in Belgium - Ghent and was a great success. Have a look at the reactions is created and the presentations that were held. See you next time!

Tweets from devopsdays events

Non-Functional Requirements: do user stories help? [PDF][Video] Rachel Davies

**Cucumber-nagios** [slideshare][Video] **Flapjack … rethinking monitoring for the cloud** [slideshare][Video] Lindsay Holmwood

Building Agile Infrastructures with Puppet [PDF][Video] Teyo Tyree

Introducing Kanban in operations [PDF][Video] Mattias Skarin

Continuous Integration, Pipelines and Deployment [slideshare][Video] Chris Read

A private openQRM Cloud use-case for a developer team … not only for sysadmins. [ODP][PPT][Video] Matthias Rechenburg
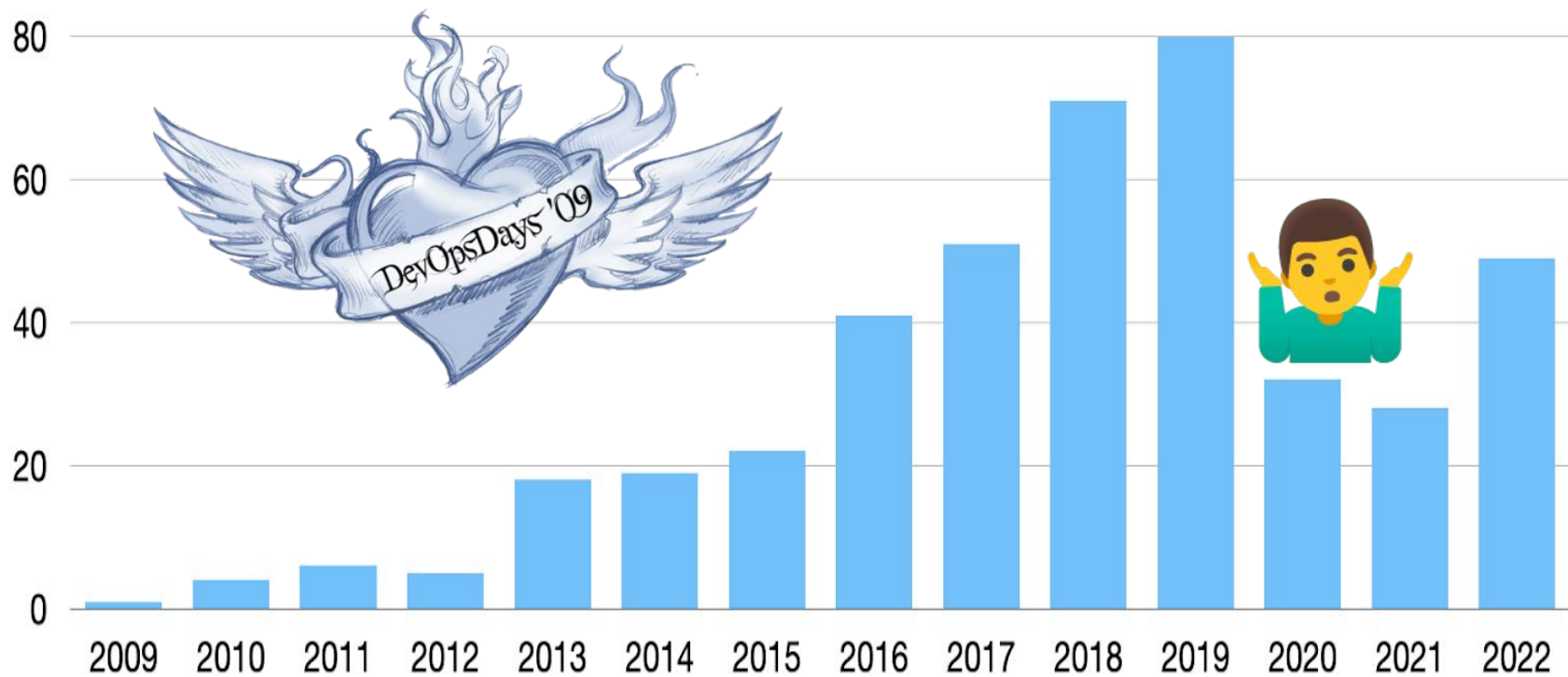
@mattstratton

#DevOpsDays

Optimizing the human experience and performance of operating software with software and humans

Andrew Clay Shafer

An engineering culture of collaboration, ownership, and learning with the purpose of accelerating the software development life cycle from ideation to production.

Emily Freeman

Khushil Dep @khushil

#DevOpsIsNot copy-pasting answers from #stackoverflow

ಠ_ಠ DevOps @joshhertzse

#devopsisnot a fullstack 10x rockstar engineer.

Rachael @halfwrittentale

#DevOpsIsNot just developers being on call

Rainbow DashOps @mattstratton

#DevOpsIsNot just reading The Phoenix Project

Jason Walker @TheDesktophero

#DevOpsIsNot about avoiding discipline and structure, or just about t-shirts & stickers

James Hebden @james_hebden

#DevOpsIsNot your ▮▮▮▮ khakis.

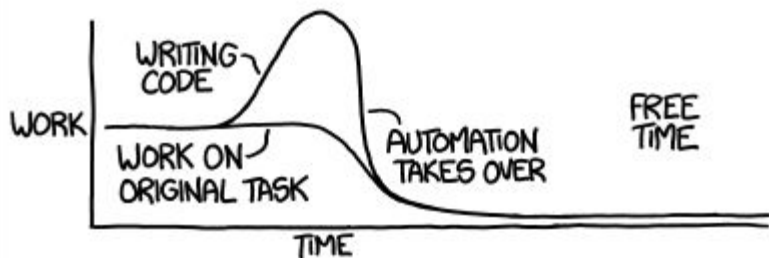@mattstratton   #DevOpsDays

CALMS

culture

You can't directly change culture. But you can change **behavior**, and behavior becomes culture
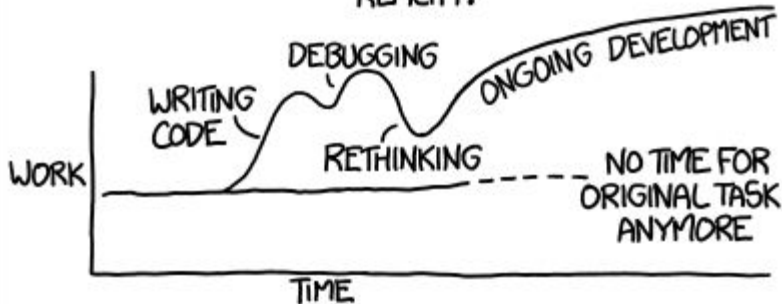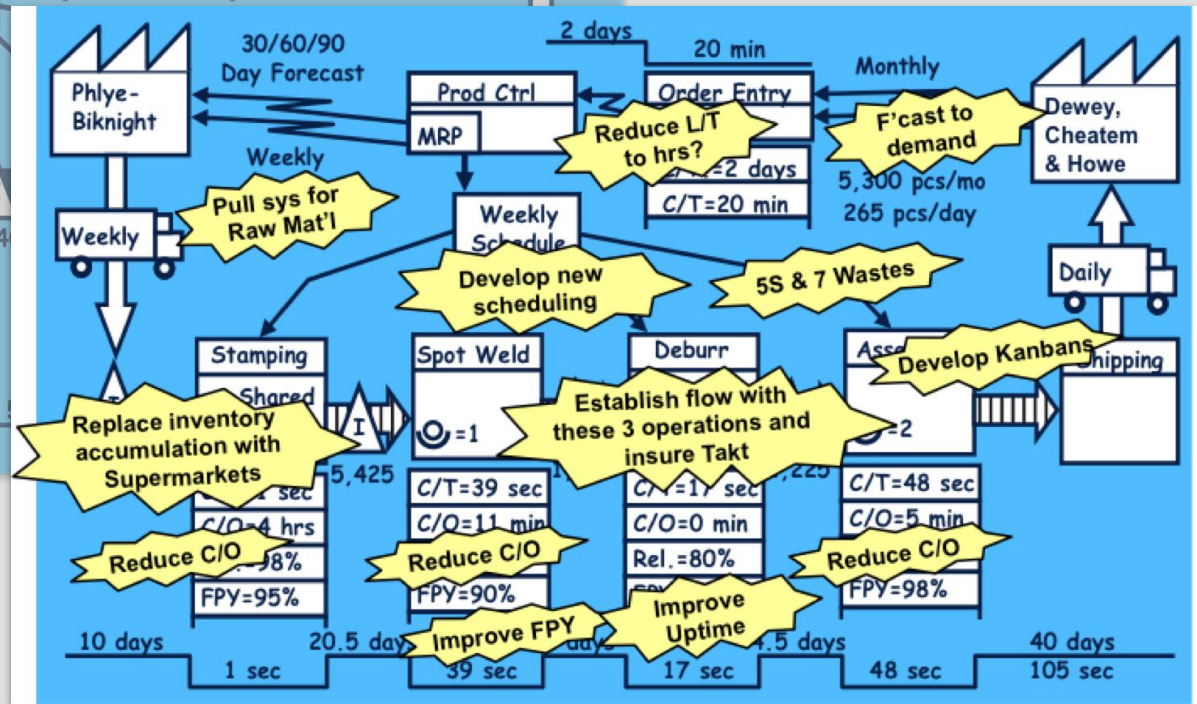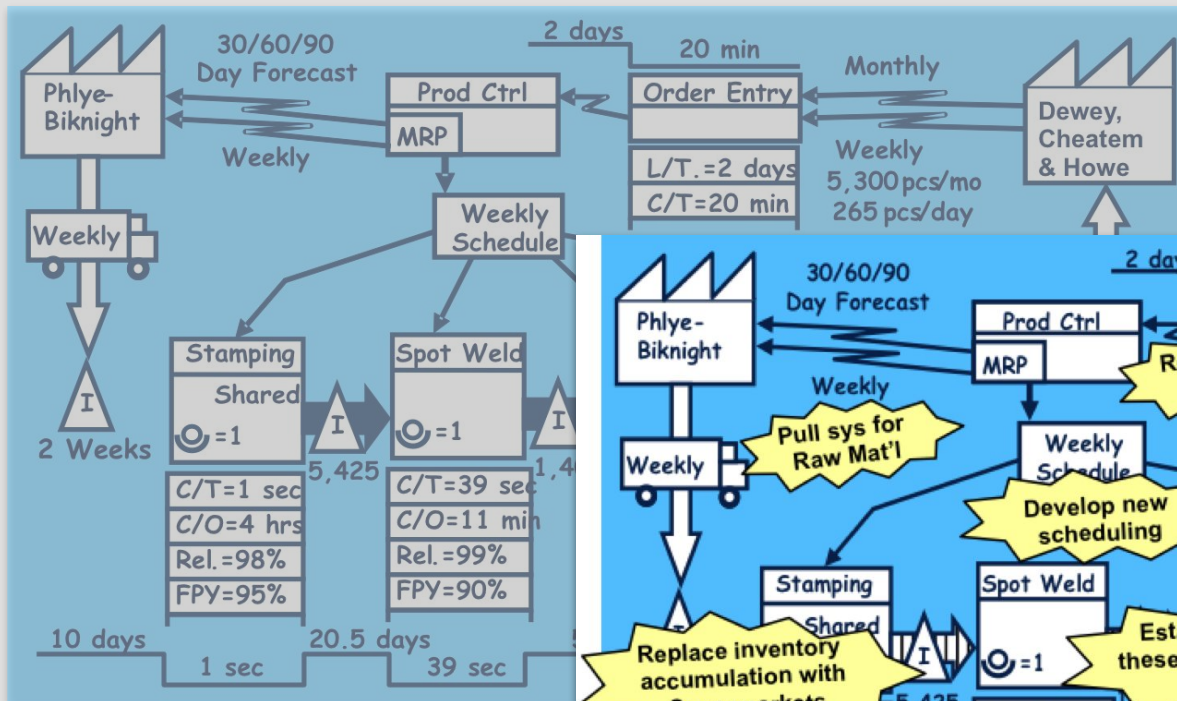
–Lloyd Taylor, VP Infrastructure, Ngmoco

automation

Asking experts to do boring and repetitive, and yet technically demanding tasks is the most certain way of ensuring human error, short of sleep deprivation, or inebriation.
– *Continuous Delivery*, Jez Humble and David Farley

lean

measurement

sharing

but... what happened?

it's all about automation?

kubernetes will save us all

"culture is for yoghurt"

devops is being sold to you

"You can't buy devops, but I can definitely sell it to you"
– Matty Stratton, charismatic grifter

DevOps

DevSecOps

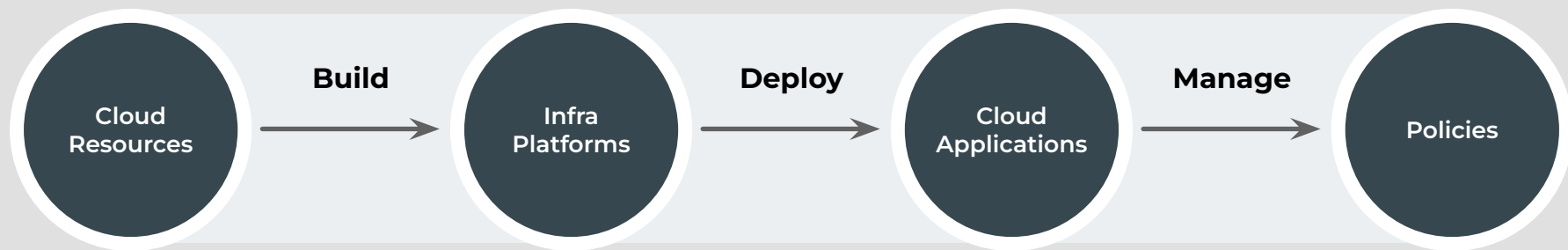BizDevOps

DevOps

DevSecDE

DevSecOps

words are hard

don't worry

I have more words for you

Cloud Engineering

Cloud Engineering applies standard **software engineering practices** and tools across infrastructure, application development, and compliance teams to **effectively leverage the modern cloud**.

Cloud Resources → **Build** → Infra Platforms → **Deploy** → Cloud Applications → **Manage** → Policies

@mattstratton

#DevOpsDays

build

Build

★ Shared services platforms

★ Reusable infrastructure components

★ Apply existing frameworks and tools

build + calms

[build] culture

★ focus on differentiators
★ common development experience
★ drives empathy

___

[build] automation

★ reusable components

★ leverage ecosystems

★ avoid bespoke implementation

———

[build]
lean

★ focus on value

★ drive efficiency

★ review for improvement

[build] measurement
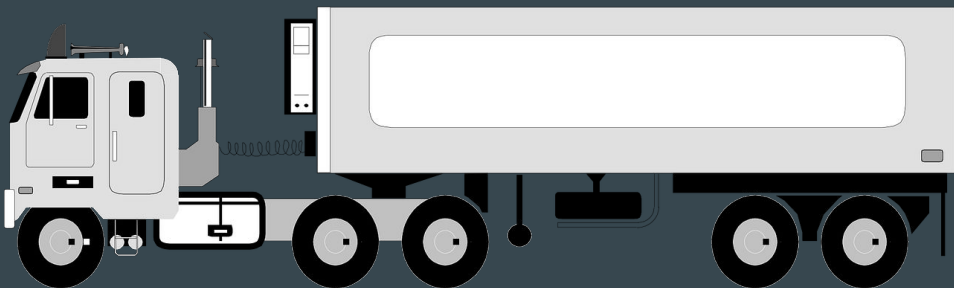
★ consistency breeds visibility

———

[build]
sharing

★ reusable components
★ ecosystem promotes outside sharing
★ learn from existing practices
___

deploy

Deploy

★ The same way, every time

★ I mean, *every* time

★ Quality and security checks

★ Automate checklists!

★ Infrastructure is part of the application

deploy + calms

[deploy]
culture

★ "it doesn't count until it's in prod"
★ iterative development
★ enables continuous improvement

___

[deploy] automation

★ CI/CD pipelines

★ automated checks

★ checklists are great!

let's automate them

___

[deploy]
lean

★ enables fast feedback

★ visibility into the supply chain

★ identify bottlenecks

___

[deploy] measurement
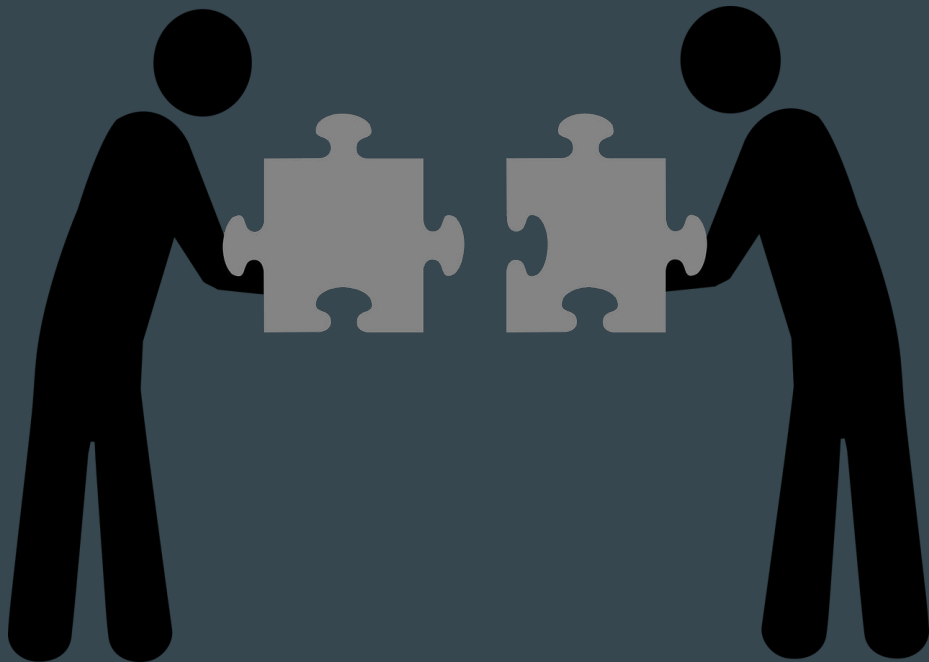
★ visibility again

★ measure cycle time

★ it's not just speed

———

[deploy] sharing

★ look, more visibility

★ common pipeline means less duplicate work

★ everyone knows "what changed?"

___

manage

Manage

- ★ Visibility
- ★ Security is everyone's job
- ★ Common "vocabulary"
- ★ Controls and process that enable and enhance

manage + calms

[manage] culture

★ collaboration enabled through common code

★ guardrails enable confidence

★ increase common understanding across disciplines

___

[manage] automation

★ computers can't lie
★ trust of process/checks
★ policy goes from vague to understandable

___

[manage]
lean

★ determine improvements for safety

★ express value stream changes in code

___

[manage] measurement

- ★ visibility into current policy
- ★ view of current state of compliance
- ★ identify when policy and value collide

[manage] sharing

★ shared vocabulary

★ utilize success patterns

★ share learning

___

let's take devops back

Thank You

Twitter - @mattstratton

GitHub - mattstratton

Slides - speaking.mattstratton.com

LinkedIn - linkedin.com/in/mattstratton

Podcast - ArrestedDevOps.com

DevOps Party Games - devopspartygames.com