

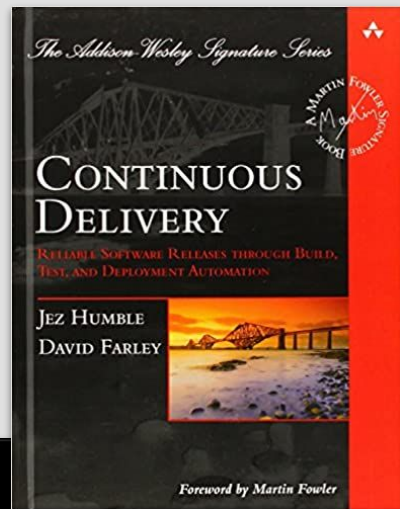
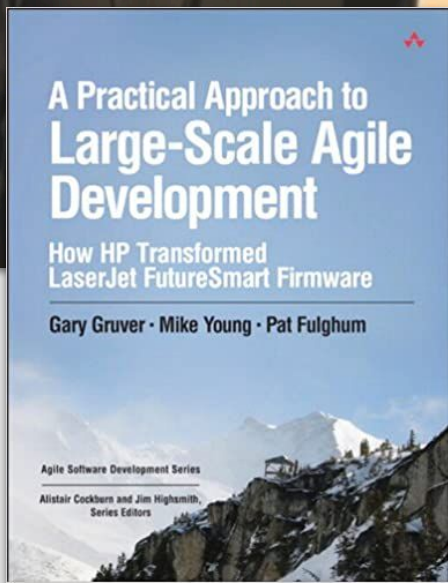
# the journey from devops to cloud engineering



Matty Stratton  
Director of Developer Relations, Aiven



let's start by  
looking back





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:



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](#)

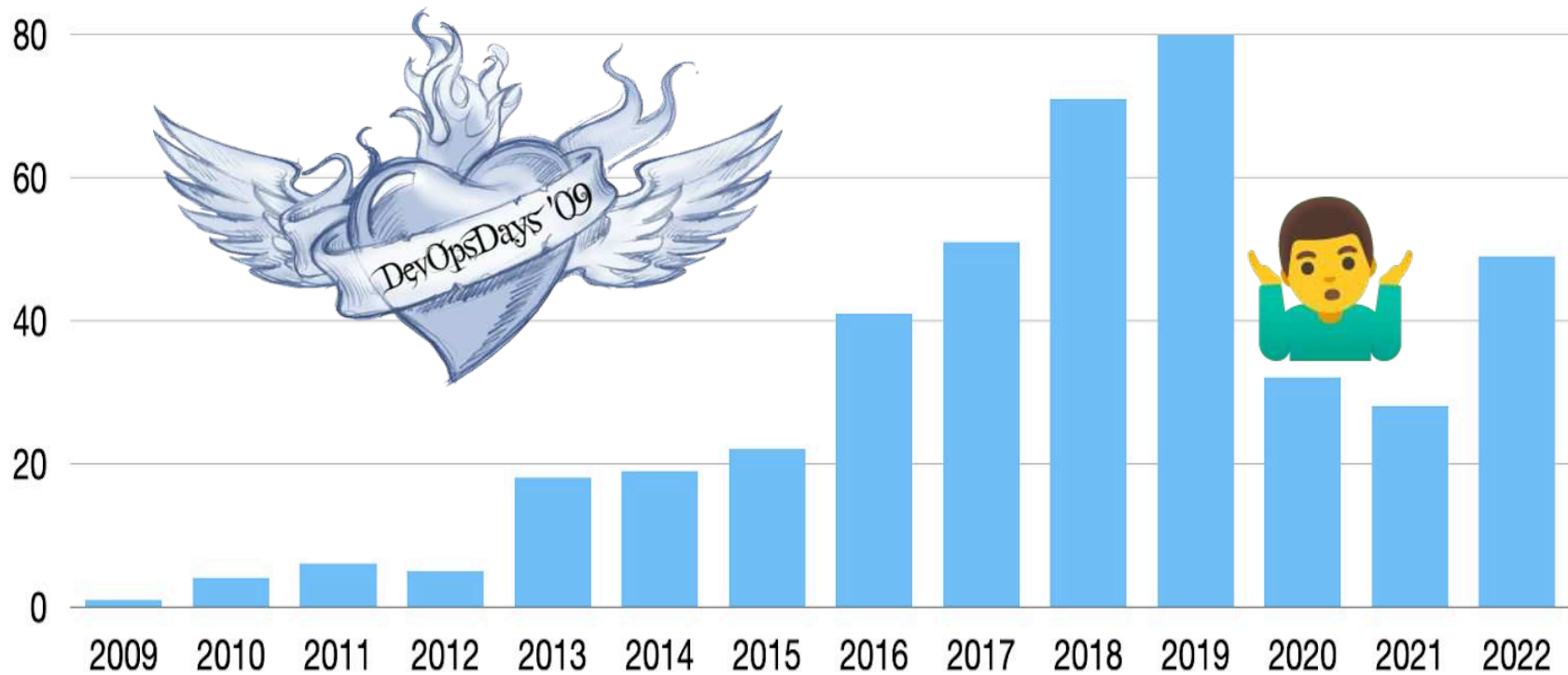
**Cucumber-nagios** [\[slideshare\]](#)[\[Video\]](#)  
**Flapjack ... rethinking monitoring for the cloud** [\[slideshare\]](#)[\[Video\]](#) [Lindsay Holmwood](#)

**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](#)



What is DevOps?



**DevOps is the union of people,  
process, and products to  
enable continuous delivery of  
value to our end users**

Donovan Brown

@mattstratton

#DevOpsDays

What is DevOps?



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

Andrew Clay Shafer

## What is DevOps?



**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



Follow

#DevOpsIsNot copy-pasting answers from  
#stackoverflow



**DevOps**  
@joshhertze



Following

#devopsisnot a fullstack 10x rockstar  
engineer.



**Rachael**  
@halfwrittentale



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#DevOpsIsNot just developers being on call



**Rainbow DashOps**  
@mattstratton

#DevOpsIsNot just reading The Phoenix  
Project



**Jason Walker**  
@TheDesktophero



Following

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



**James Hebden**  
@james\_hebden



Follow

#DevOpsIsNot your [redacted] khakis.

# CALMS

# culture

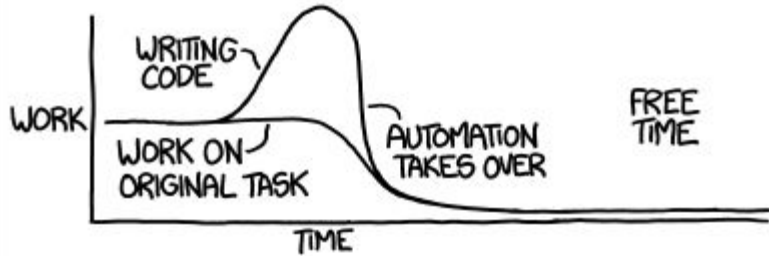
You can't directly change  
culture. But you can change  
**behavior**, and behavior  
becomes culture

–Lloyd Taylor, VP Infrastructure, Ngmoco

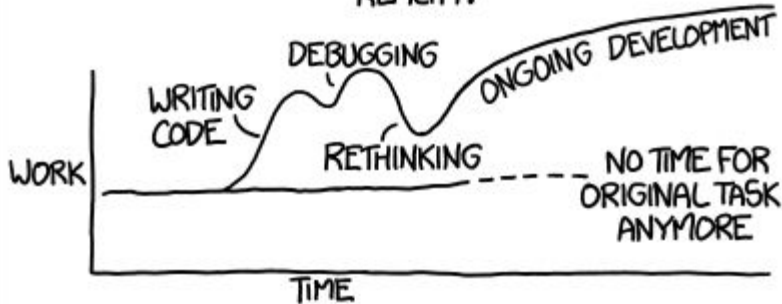
# automation

"I SPEND A LOT OF TIME ON THIS TASK.  
I SHOULD WRITE A PROGRAM AUTOMATING IT!"

THEORY:

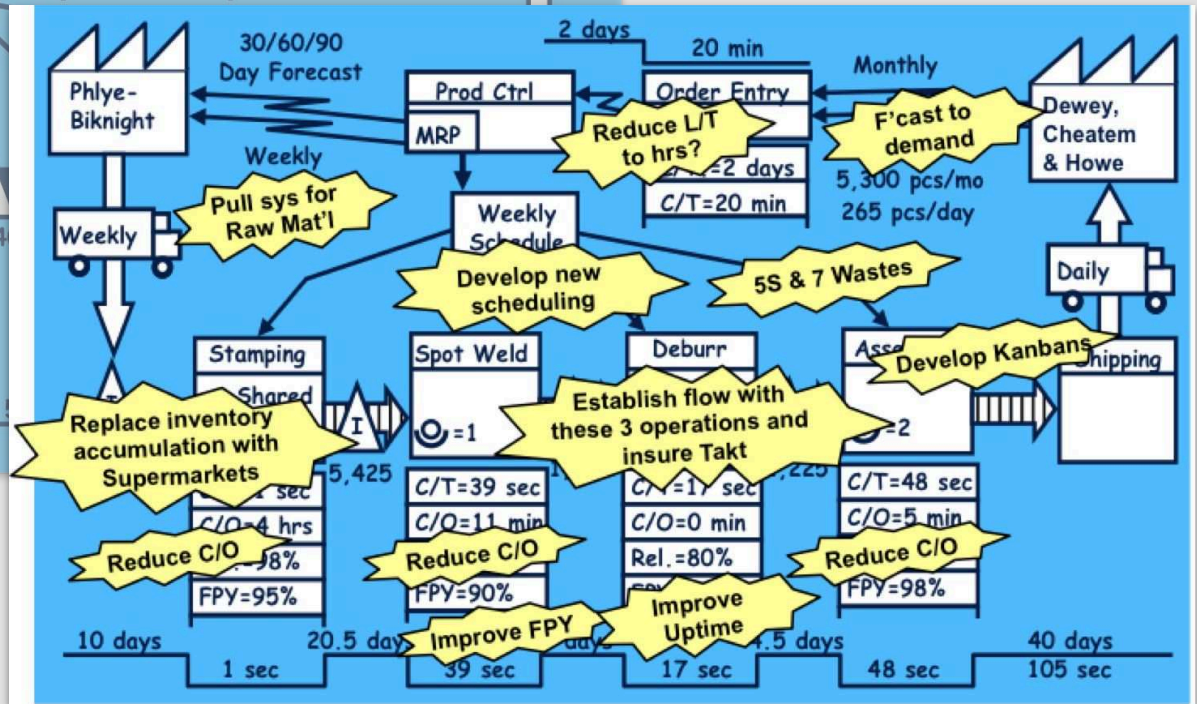
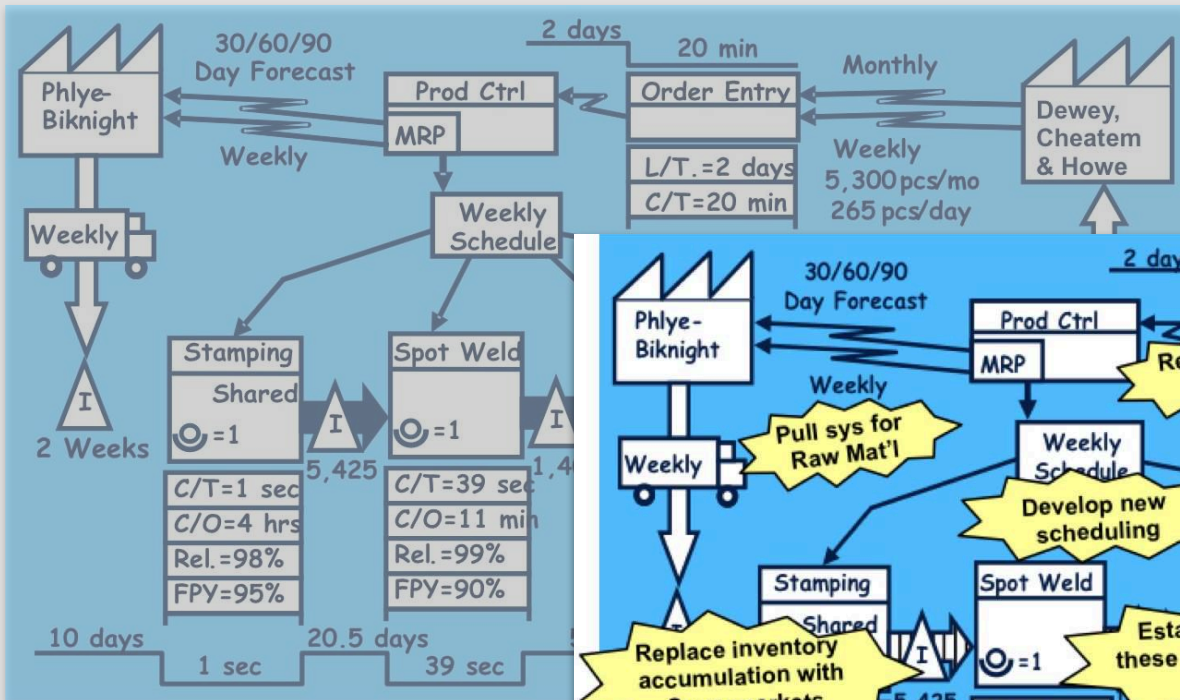


REALITY:



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

OpsDevOps

BizDevOps

DevOps

DevSecDE

DevSecOps



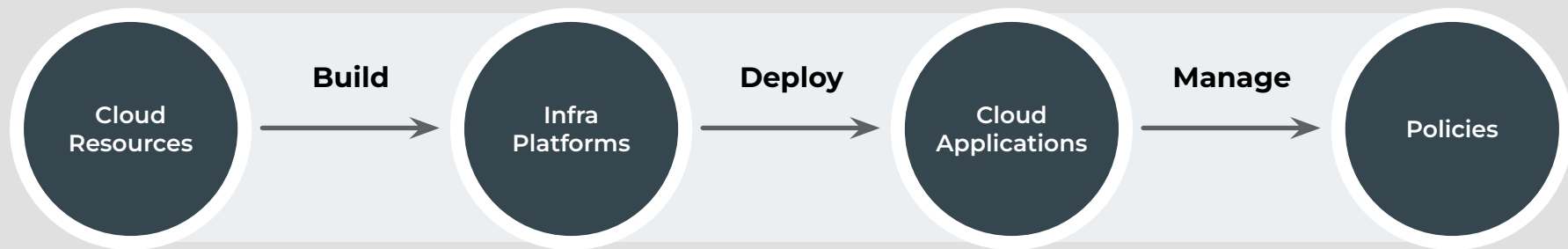
words are hard

# 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.**



# 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

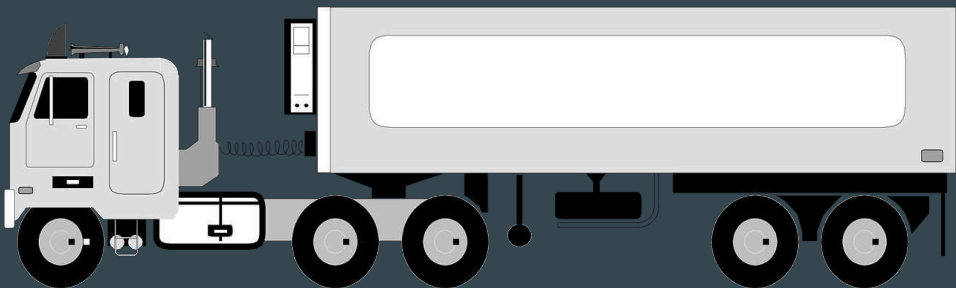
★ consistency breeds  
visibility

# [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

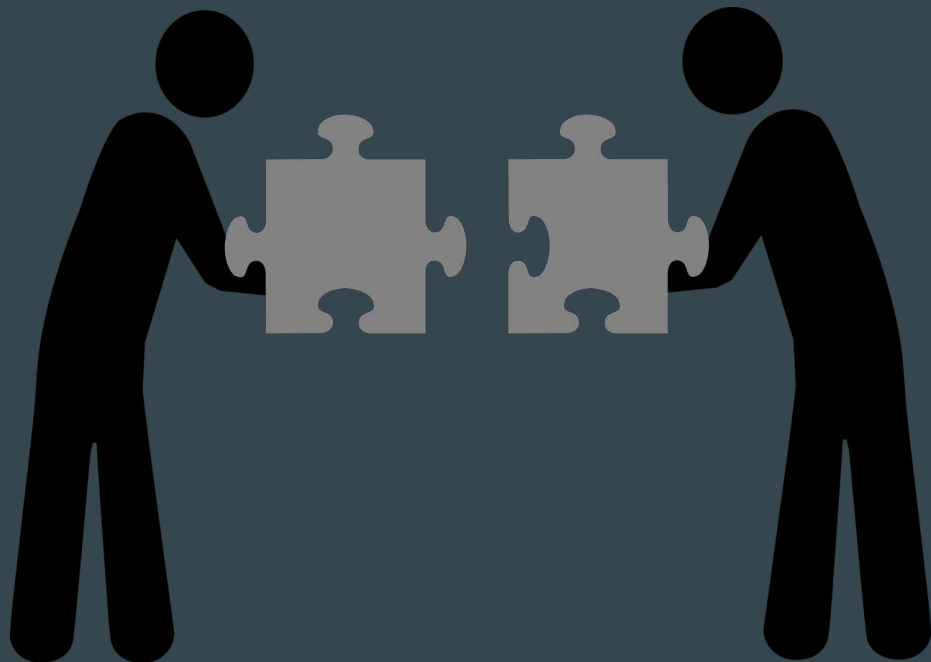
- ★ visibility again
- ★ measure cycle time
- ★ it's not just speed

# [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](https://twitter.com/mattstratton)

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Slides - [speaking.mattstratton.com](https://speaking.mattstratton.com)

LinkedIn - [linkedin.com/in/mattstratton](https://linkedin.com/in/mattstratton)

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