

DevSecOps

- what does it mean and where is it taking us?

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Agenda

What are we talking about?

Autonomy Reality Check - Icebreaker

DevOps

DevSecOps

Hype

The platform team

What's in a name?

Development (Dev)

the process of conceiving, specifying, designing, programming, documenting, testing, and bug fixing involved in creating and maintaining applications, frameworks, or other software components

Security (Sec)

the protection of computer systems and networks from information disclosure, theft of or damage to their hardware, software, or electronic data, as well as from the disruption or misdirection of the services they provide

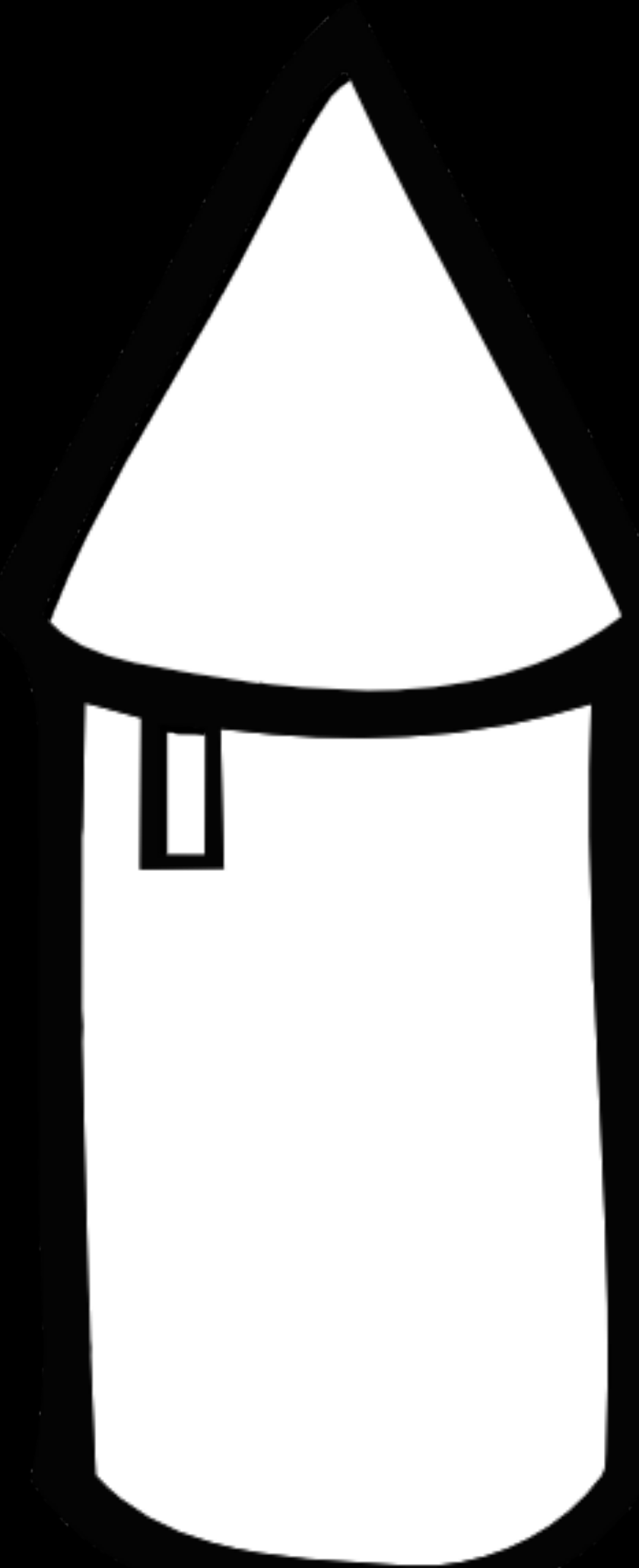
Operations (Ops)

the processes, activities, tools, and standards involved with operating, administering, managing and maintaining any system

Silo

[in software] the term implies there are multiple silos, each of which is independent of any of the other silos, from a technical or organisational perspective.

So you use the term to denote isolation between several complex systems.



Autonomous team

teams [that are] fully autonomous throughout the entire life-cycle of the product ... should possess all the necessary expertise to take on the end-to-end responsibility



The manifesto says ...

*the best architectures, requirements, and designs
emerge from self-organizing teams.*

How does **self-organizing** relate to **cross-functional**?

Can there ever be **autonomy** in a **siloed** organization?

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What's in a name?

Skills my team has

Skills that we rely on other teams to provide

UX *Environment
management* *Automated
testing*
Deployment
CI pipelines
*Production
monitoring* *Architecture*

Only write on ONE SIDE of the card

1. Pass the card FACE UP to the person on your left
2. Read the card you have been passed
3. On the BACK of the card, write a score from 1 - 10 for autonomy:
1 - not autonomous, 10 - completely autonomous
4. Repeat until you get your own card back

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What's in a name?

DEVOPS

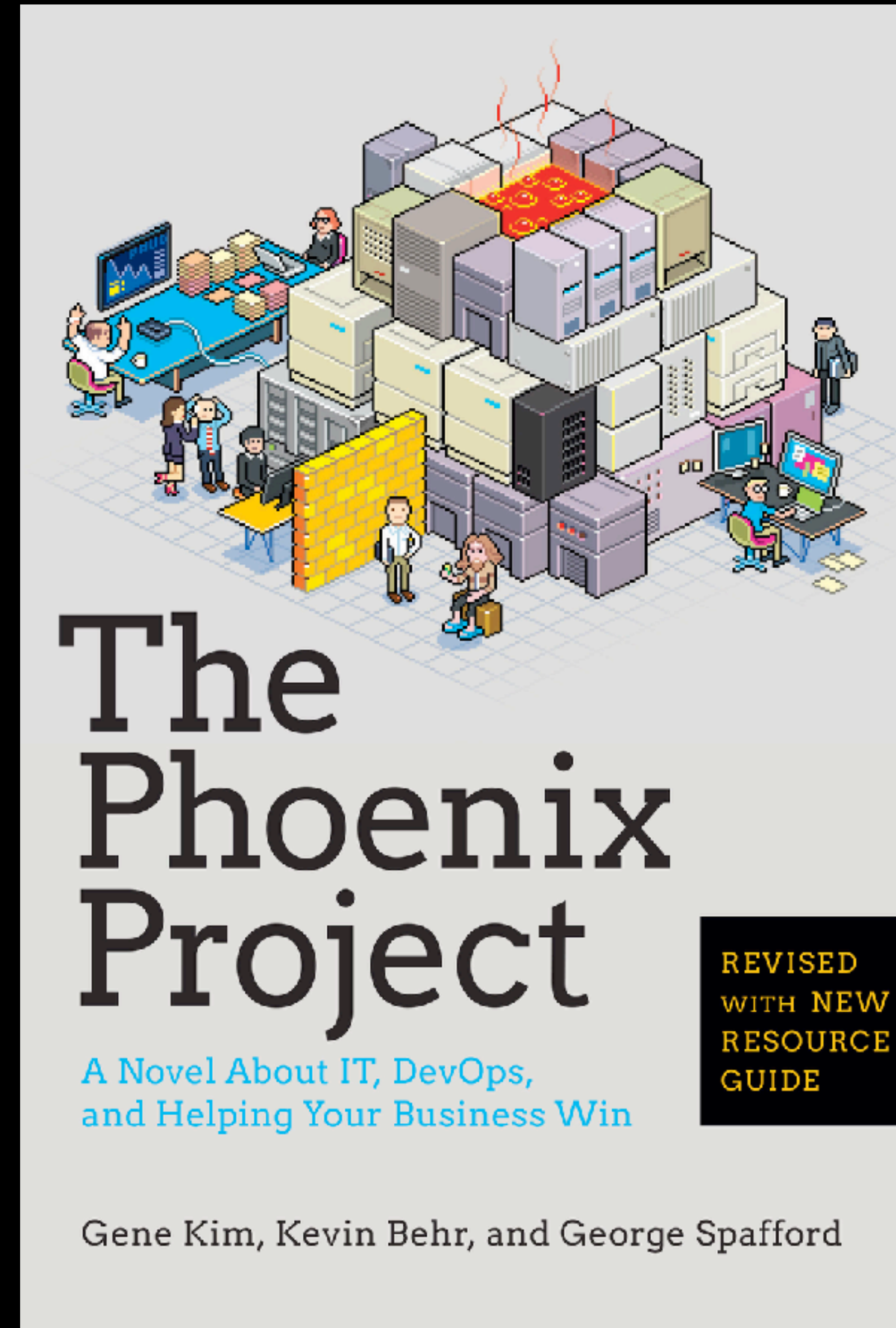
There is no universally agreed definition of the term.

Characterized by key principles: shared ownership, workflow automation, and rapid feedback. At its most successful, DevOps is a combination of specific practices, culture change, and tools.

“A set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality” - Bass, Weber, Zhu

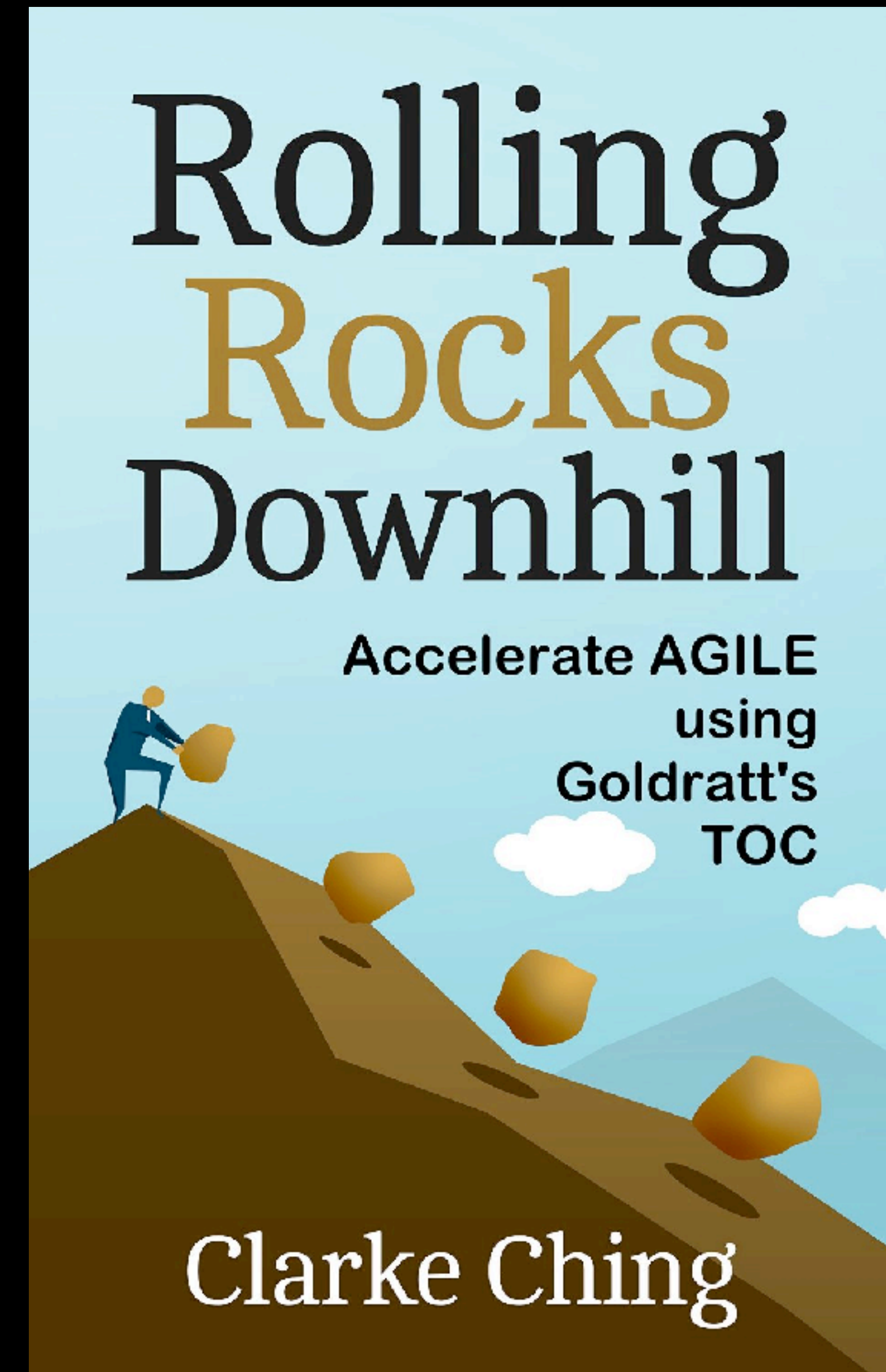
Idealised transformation (US)

With the help of a prospective board member and his mysterious philosophy of The Three Ways, Bill starts to see that IT work has more in common with manufacturing plant work than he ever imagined. With the clock ticking, Bill must organize work flow streamline interdepartmental communications, and effectively serve the other business functions at Parts Unlimited.



Idealised transformation (UK)

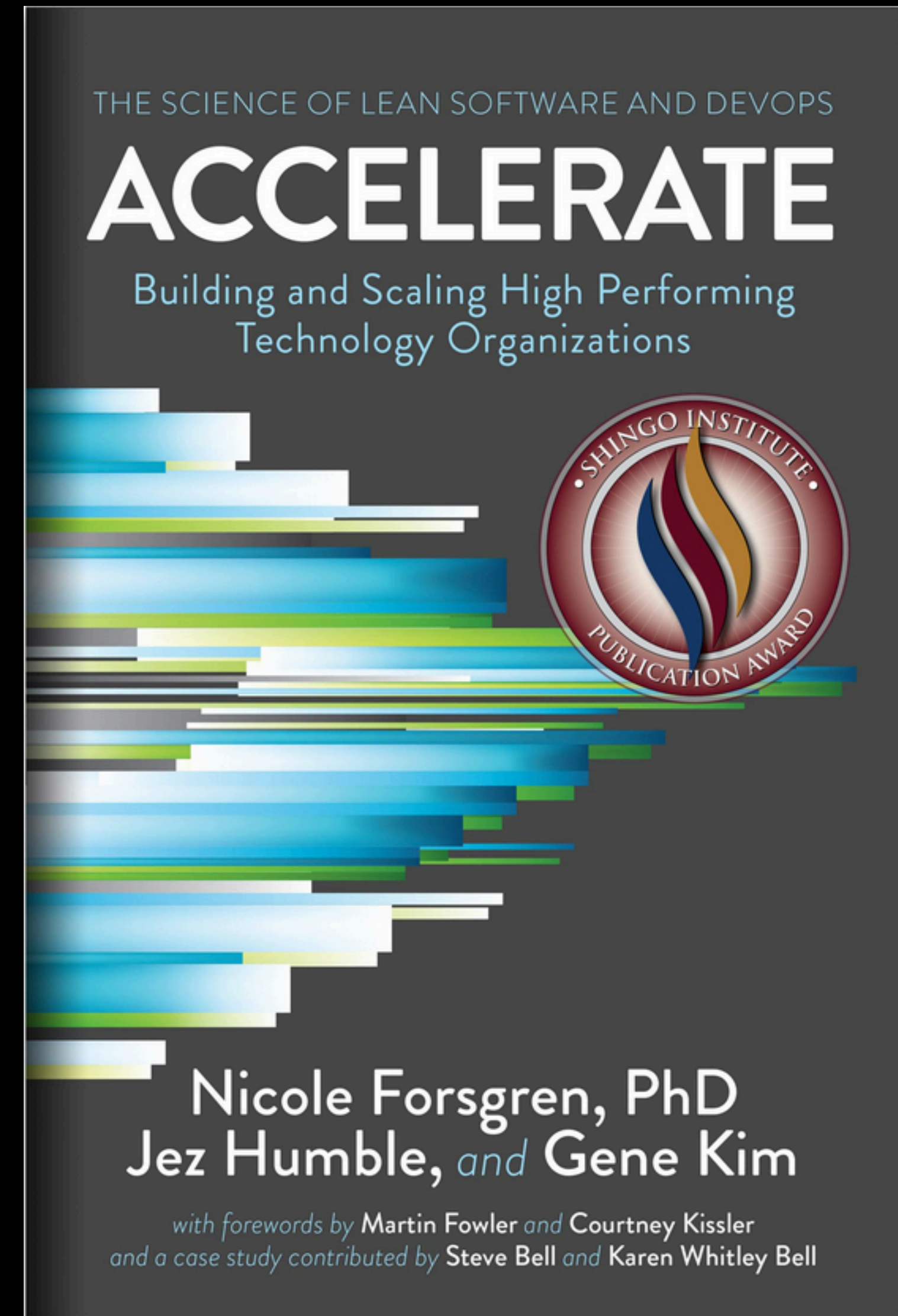
Watch a large software-intensive project, called FPP, that has been running late since day 1, but now, suddenly, needs to launch on an impossibly early date, or else. You feel their pain, and their joy, as they battle problem after problem until, slowly, torturously, they rediscover the few - but fundamental - principles underlying successful commercial software development.



Ideal outcomes

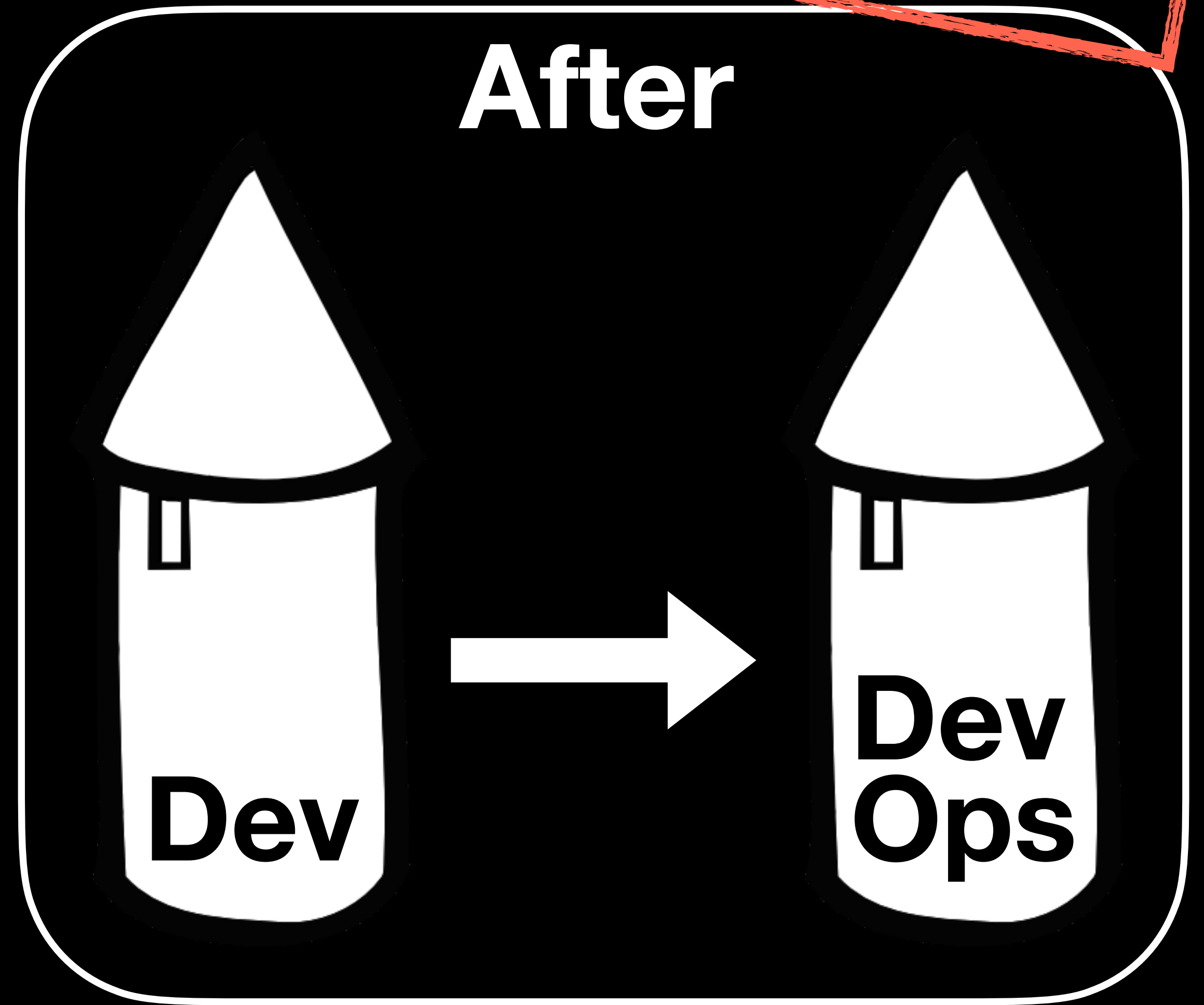
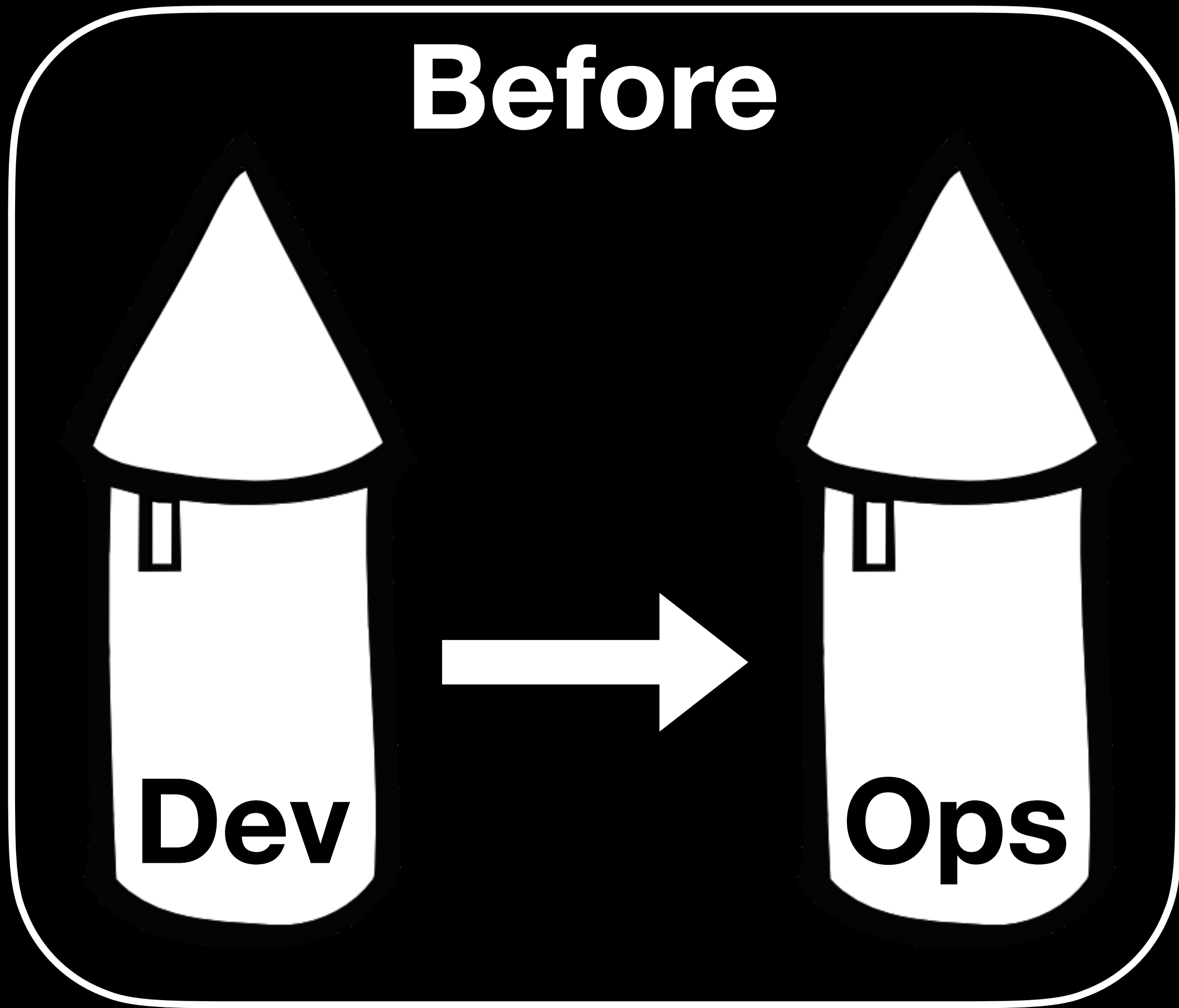
DORA metrics

- *Lead/cycle time (shorter)*
- *Deployment frequency (higher)*
- *Mean time to restore (shorter)*
- *Change fail percentage (lower)*



Typical “transformation”

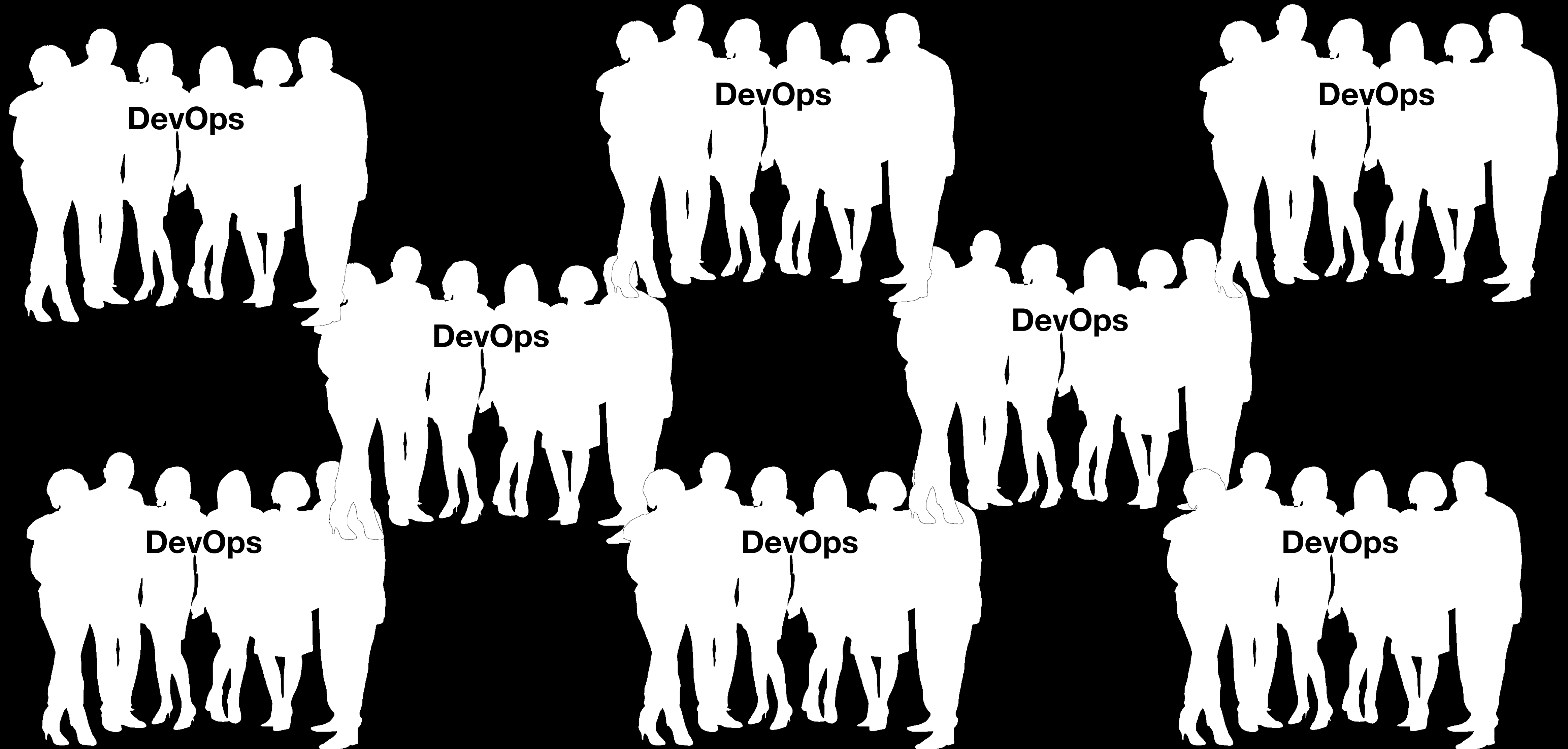
Excessively cynical?



Living the dream

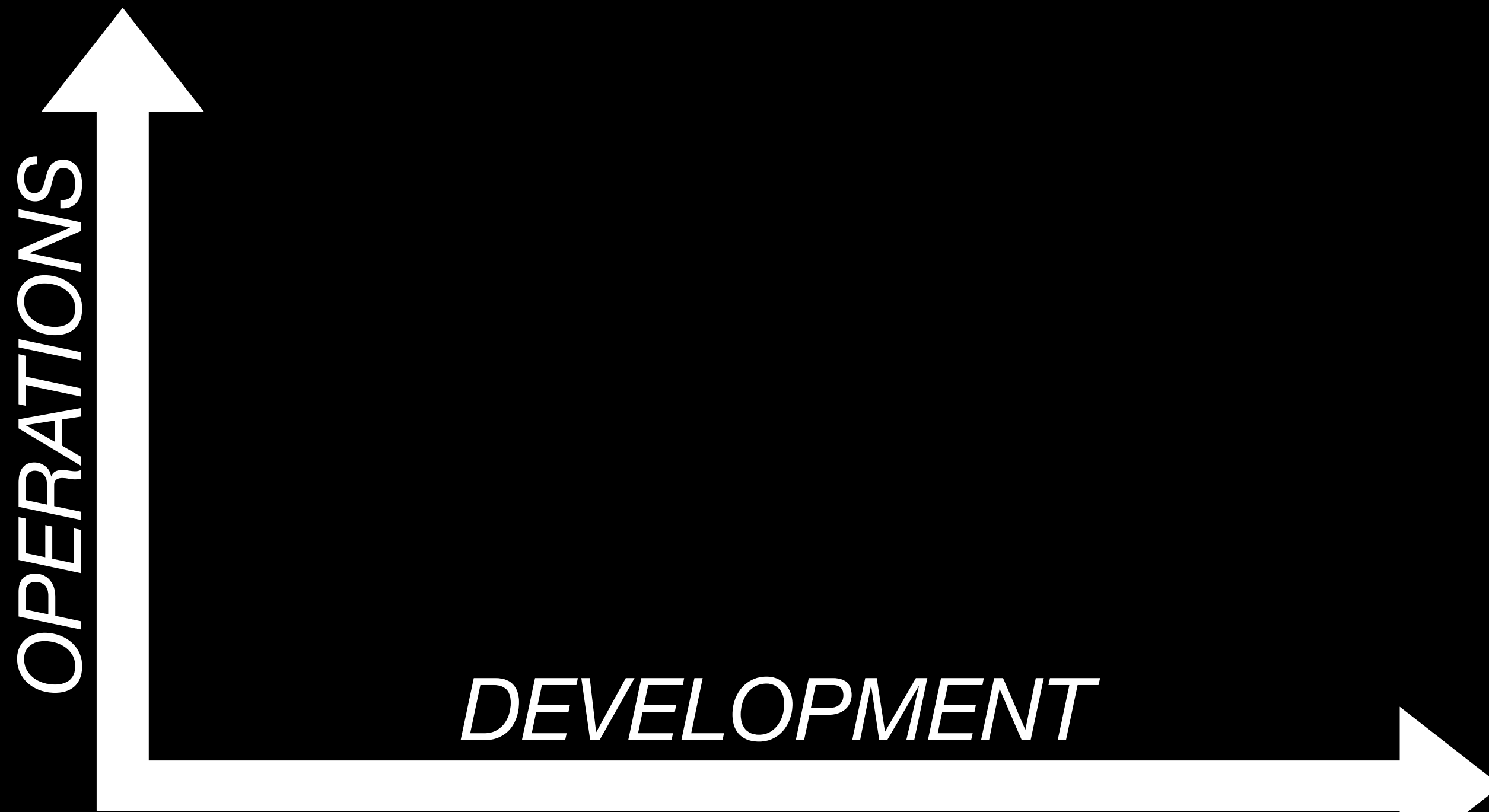


Scaling the dream



Orthogonal concerns

Build pipelines
Cloud providers
Source control



Dev practices and tools
Architecture and design

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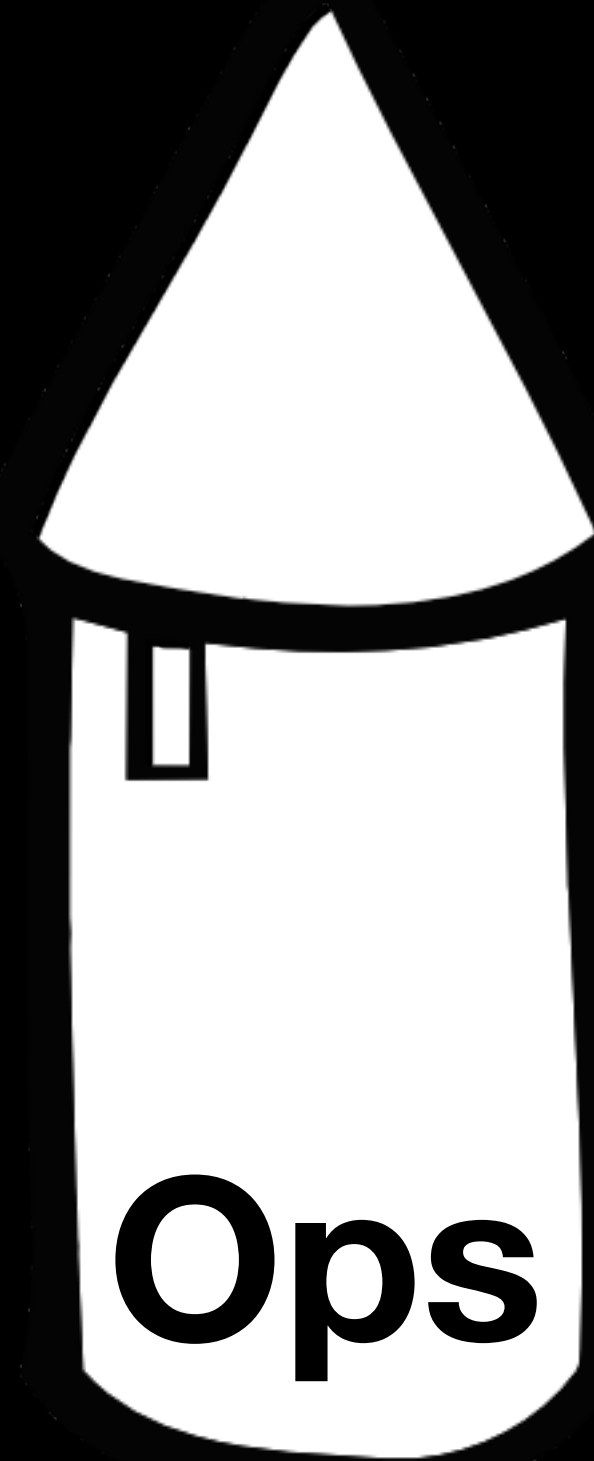
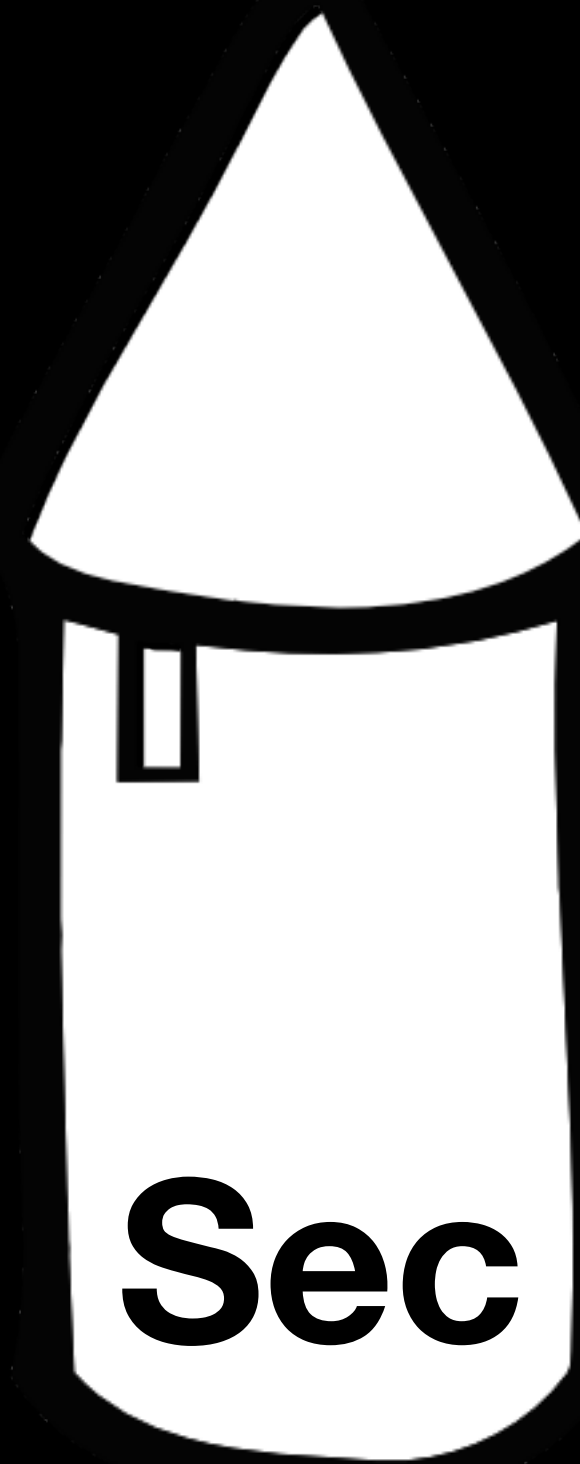
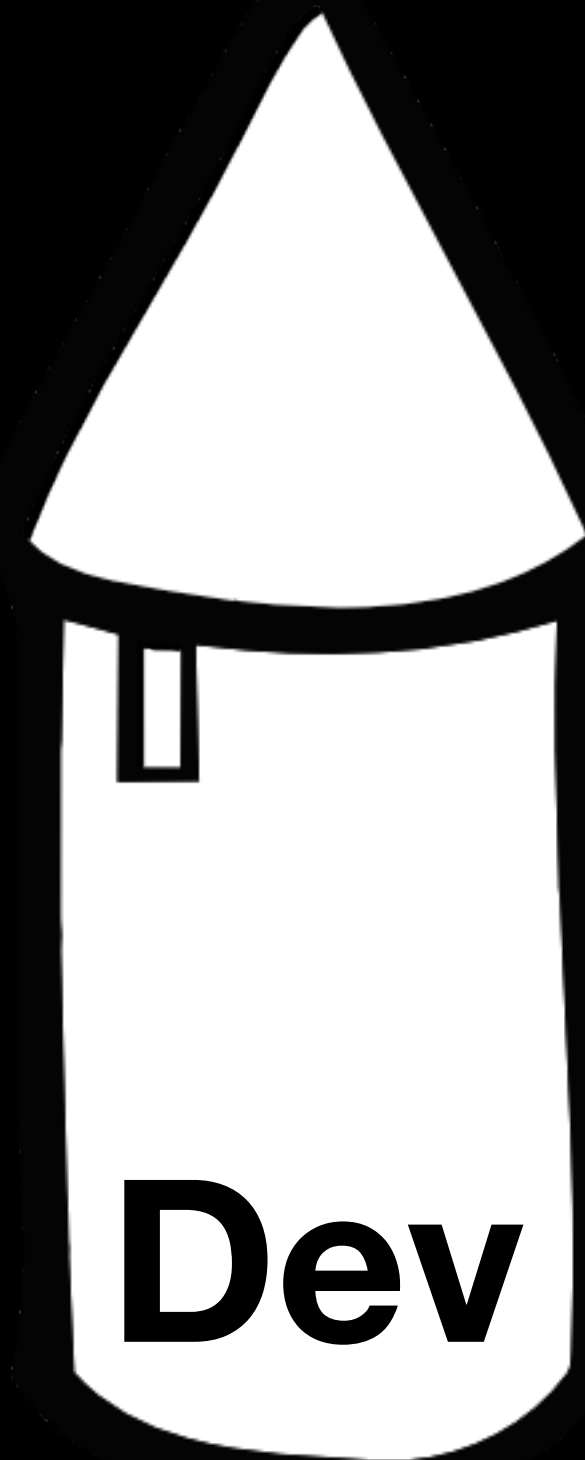
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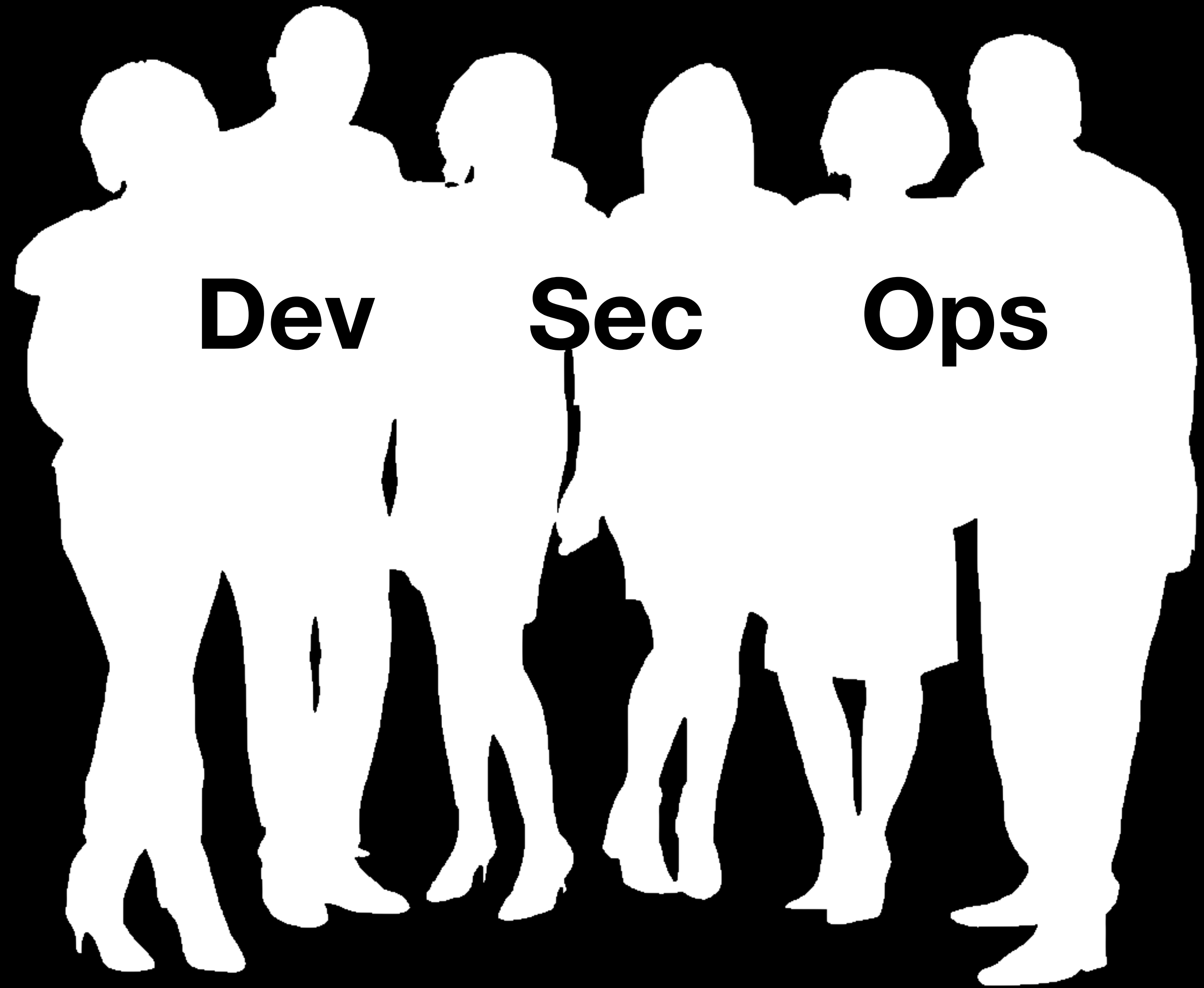
The platform team

What's in a name?

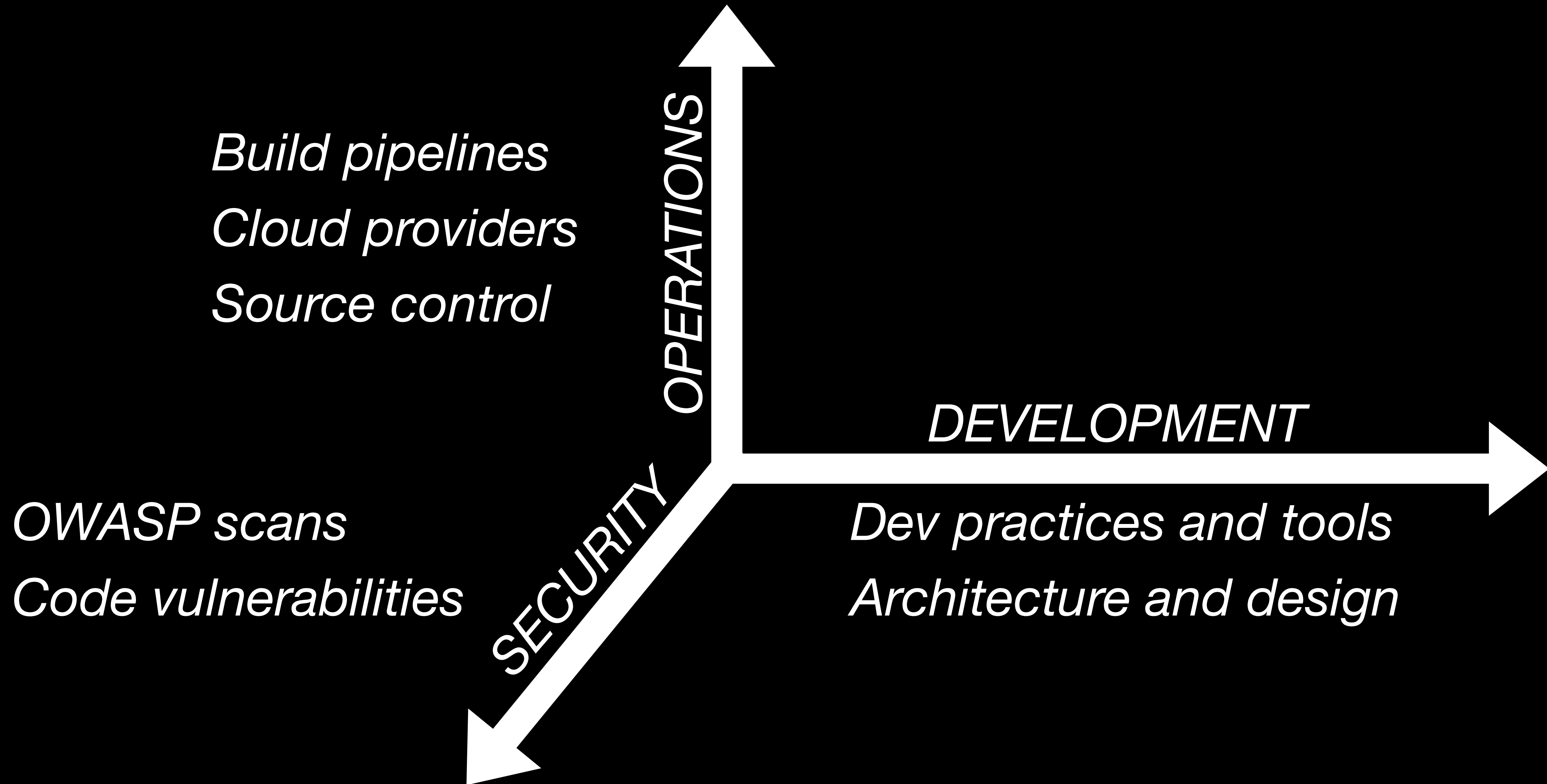
Traditional silos



Agile dream



Orthogonal concerns



Who owns security?

The [dev] team is trusted to do its own security research and implementation

There's a security team, but it doesn't involve face to face with us, the dev team. So we just run the dev process without counting on them

I regularly put security suggestions in the box of suggestions, only to be ignored

**Survey
2020**

I am the only one who actually cares about security in my organization

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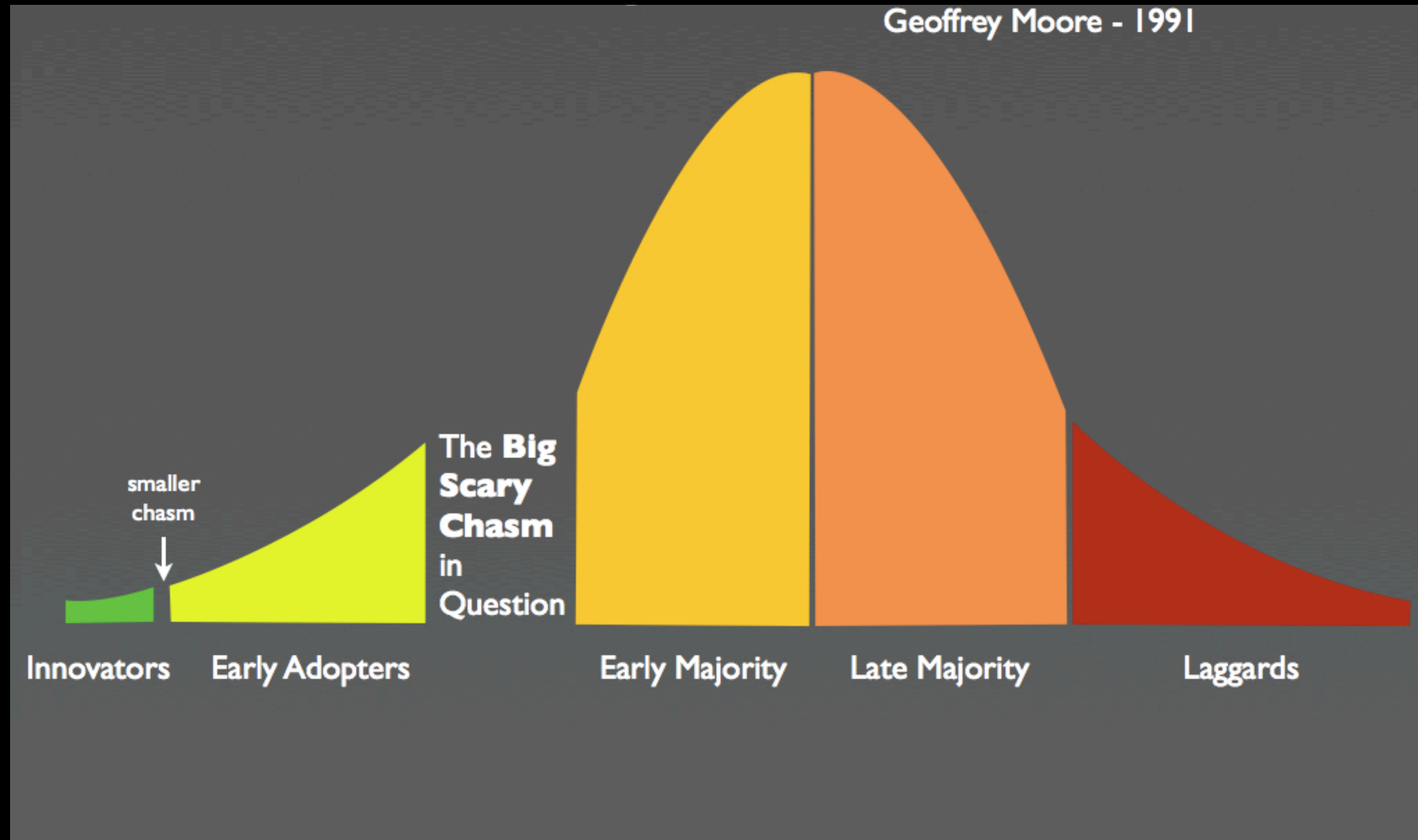
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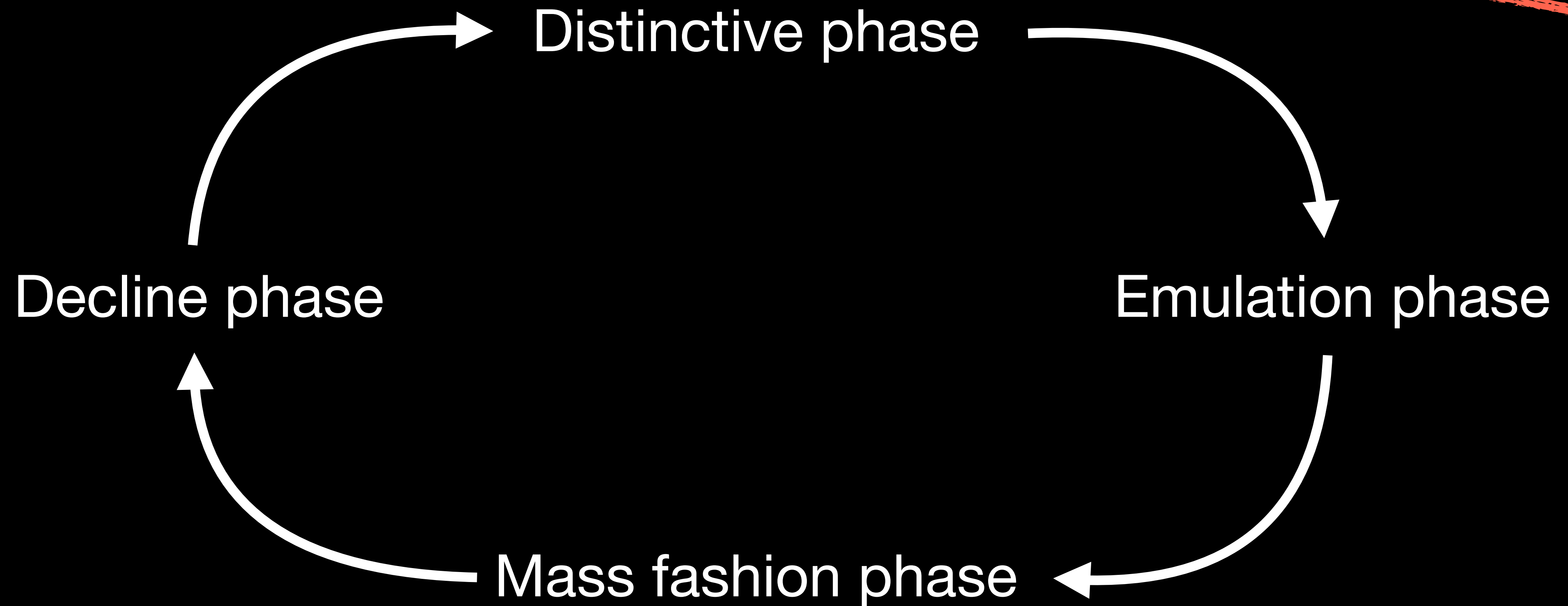
What's in a name?

Crossing the chasm



Cycle of adoption and rejection

Fashion!



Analysts and consultancies

“Gartner continues to observe that the major driver in the evolution of the AST market is the need to support enterprise DevSecOps and cloud-native application initiatives.

Customers require offerings that provide high-assurance, high-value findings, while not unnecessarily slowing down development efforts.

Clients expect offerings to fit earlier into the development process, with testing often driven by developers, rather than security specialists.”

@sebrose



Semantic divergence



Victims? Don't be melodramatic. Look down there. Tell me. Would you really feel any pity if one of those dots stopped moving forever? If I offered you twenty thousand pounds for every dot that stopped, would you really, old man, tell me to keep my money, or would you calculate how many dots you could afford to spare? Free of income tax, old man. Free of income tax - the only way you can save money nowadays.

What's next?

Take a piece of paper and try to invent the next software fad. (2 minutes)

Let your imagination run wild. Write down as many as you can think of.

Aim for **plausible OR amusing!**

Observable

Scalable

Cloud-native

Enterprise

AI

UX

ML

Adaptive

Dev-led

Micro-service

Data-driven

What's next?

1. Share your ideas with the person next to you
2. Together pick the “best” one or two (2 minutes)
3. Share your chosen idea(s) with the rest of the table
4. Together pick the “best” one or two (2 minutes)

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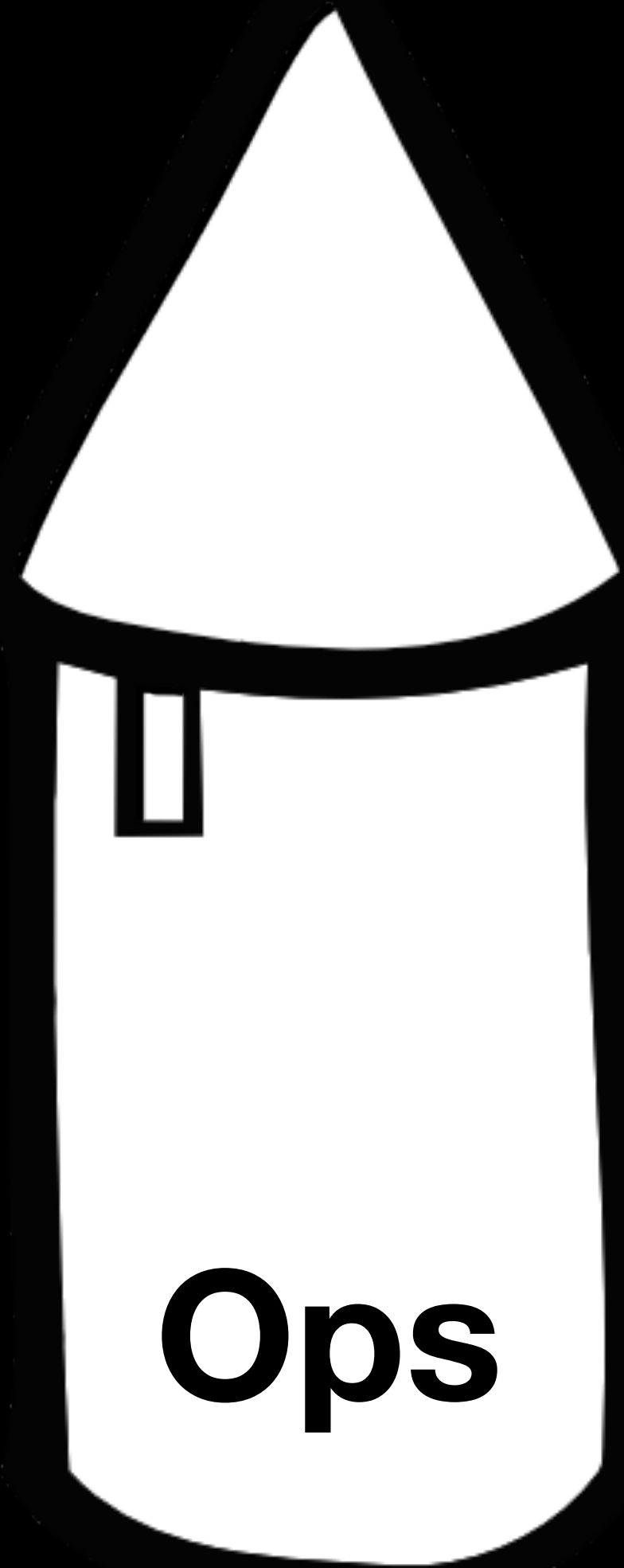
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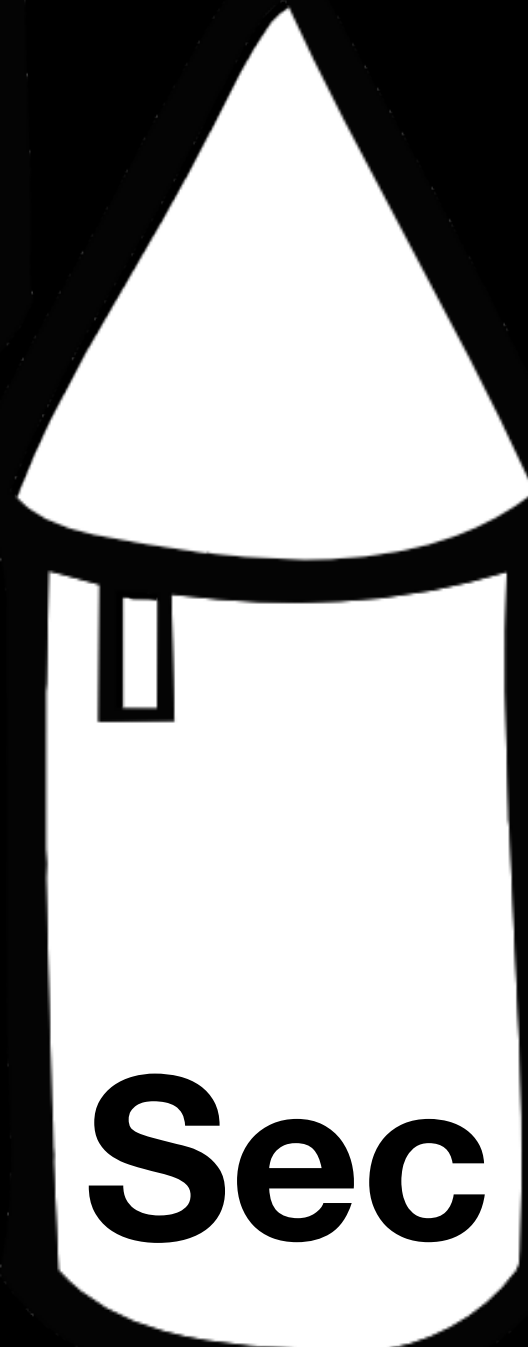
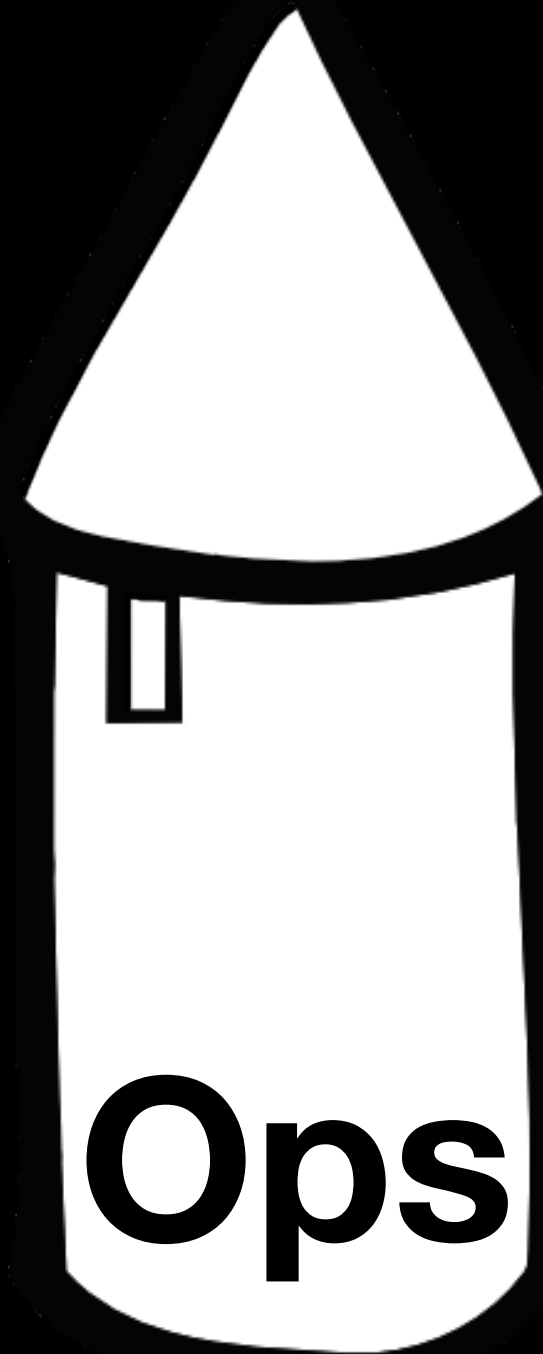
Desire paths



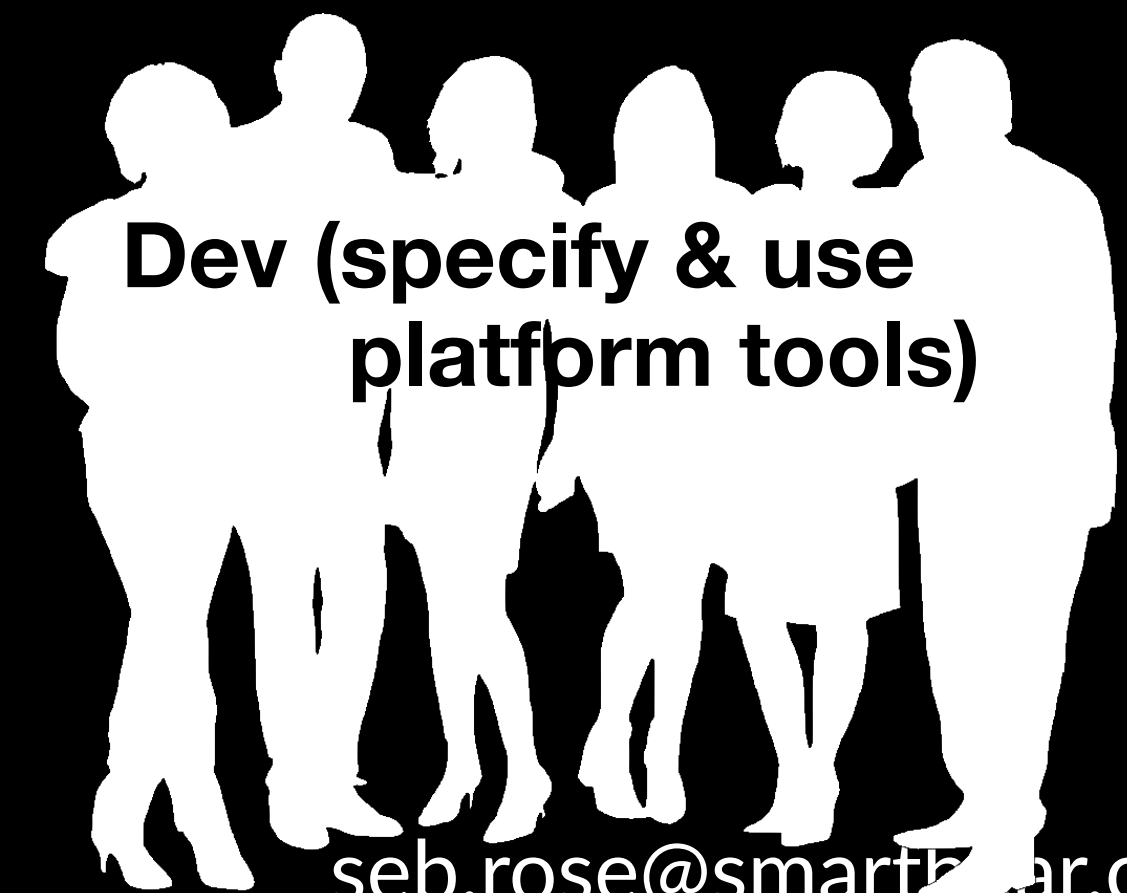
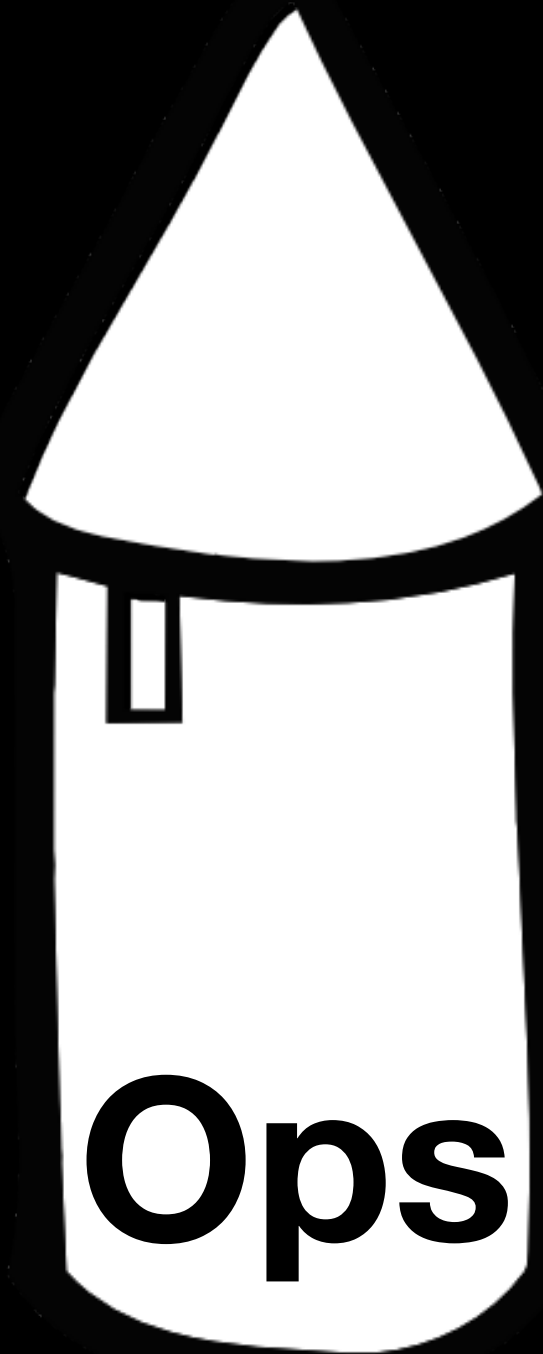
Ops as platform team



Sec as platform team



Dev enablement



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What's in a name?

What's in a name?

O, be some other name!

*What's in a name? That which we call a rose
By any other name would smell as sweet*

William Shakespeare, Romeo and Juliet



Language games

A language-game is a philosophical concept developed by Ludwig Wittgenstein, referring to simple examples of language use and the actions into which the language is woven.

Wittgenstein argued that a word or even a sentence has meaning only as a result of the "rule" of the "game" being played.

Depending on the context, for example, the utterance "Water!" could be an order, the answer to a question, or some other form of communication.

The name is not the thing



Names are important



Get Obvious Nonsense



Find What It Does



Split into Chunks



Show Context

Naming as a Process

Developed by @ArloBelshee
<http://bit.ly/namingasprocess>

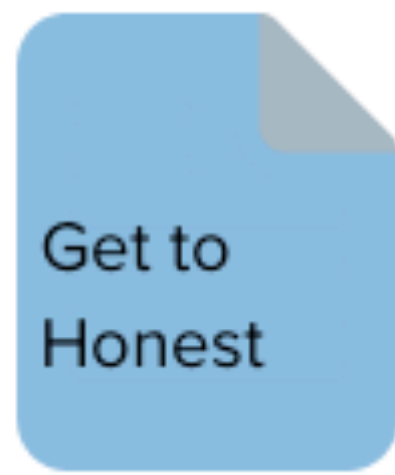
Article 2



Applesauce()



Article 3



probably_DoEvil
ToDB_AndStuff()



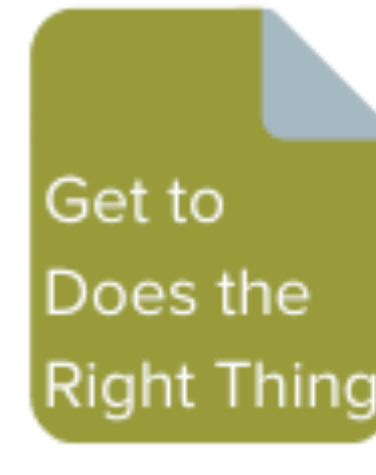
Article 4



parseXMLAndAddFlightToDBAndLocalCacheAndAddToScreenIfVisible()



Article 5



- parseXML()
- SaveFlightToDB()
- ShowFlightOnScreenIfVisible()



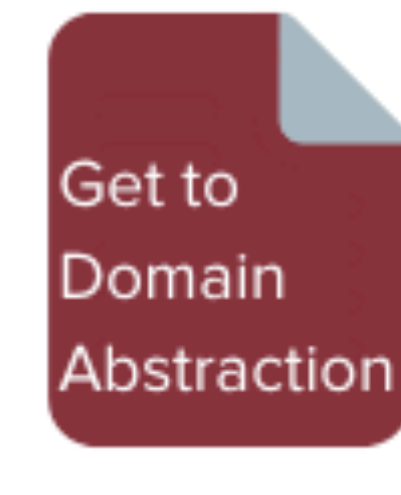
Article 6



- ShowFlightOnScreenIfVisible()
- SaveFlightToDB()

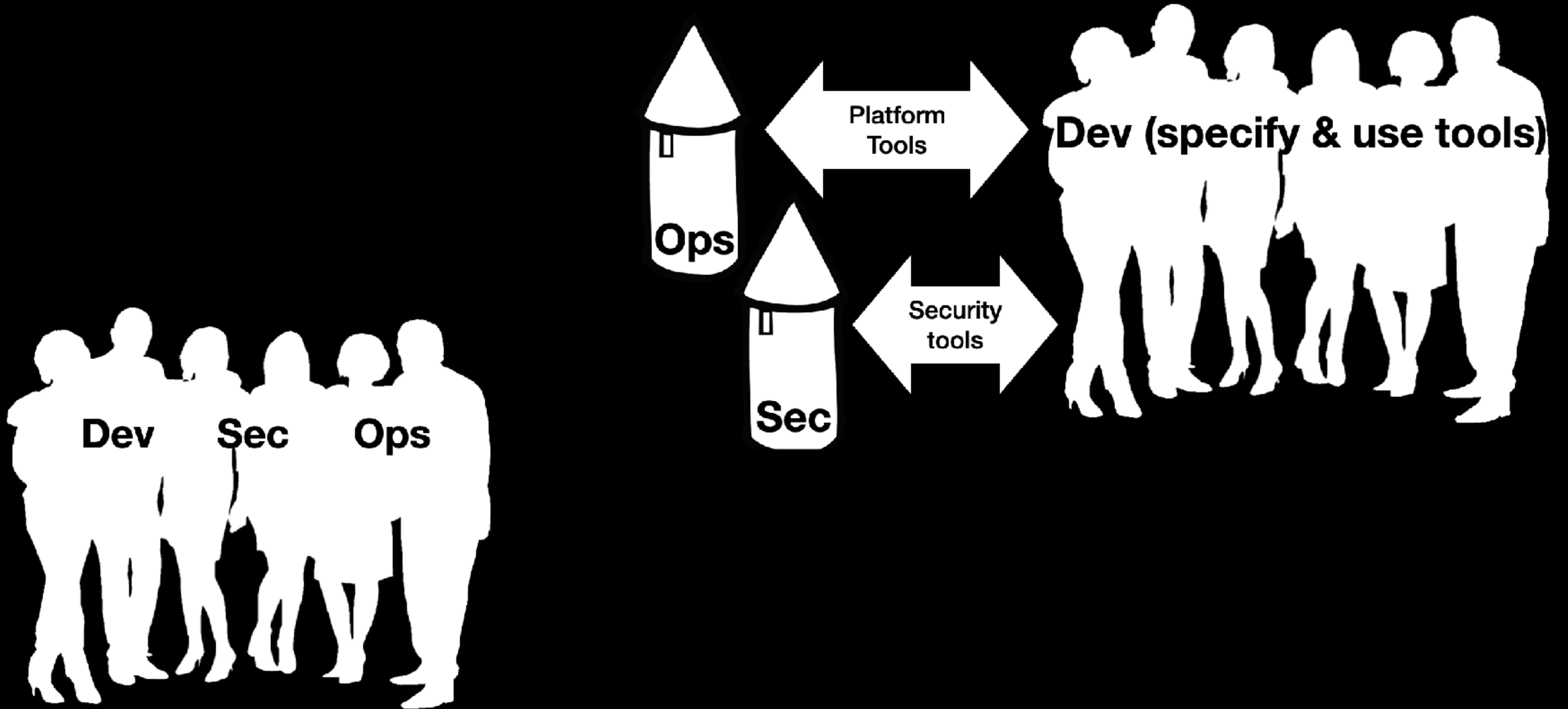


Article 7

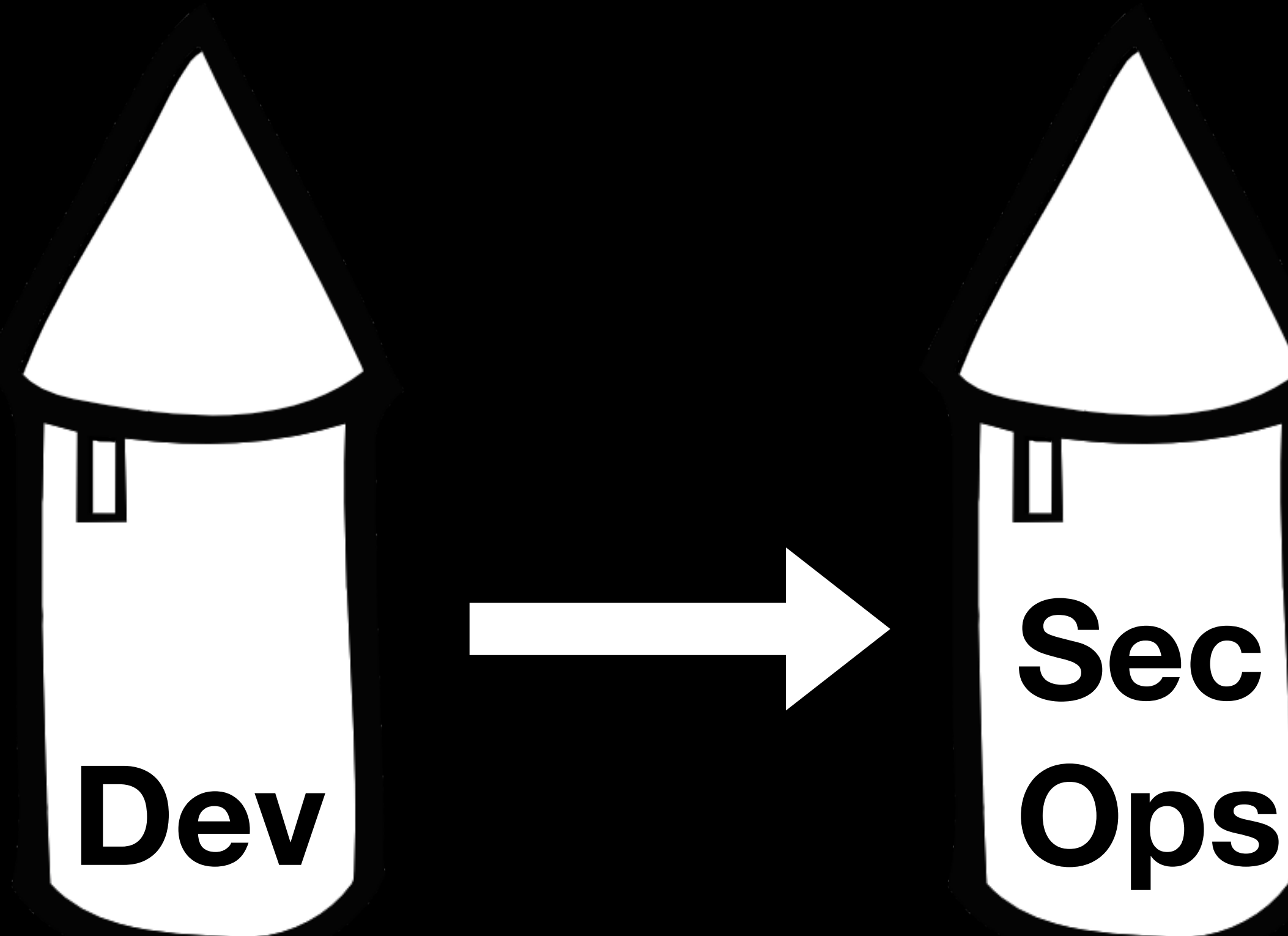


ShowFlightOnScreenIfVisible()

Honest



Dishonest



Takeaways

The name is not
the thing

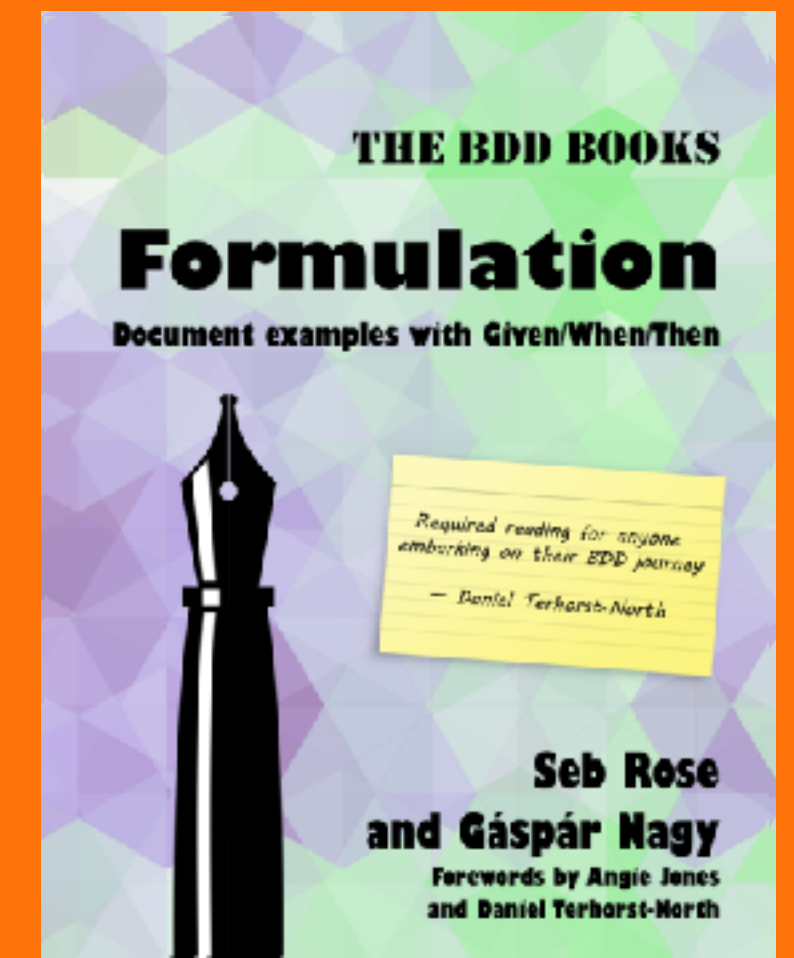
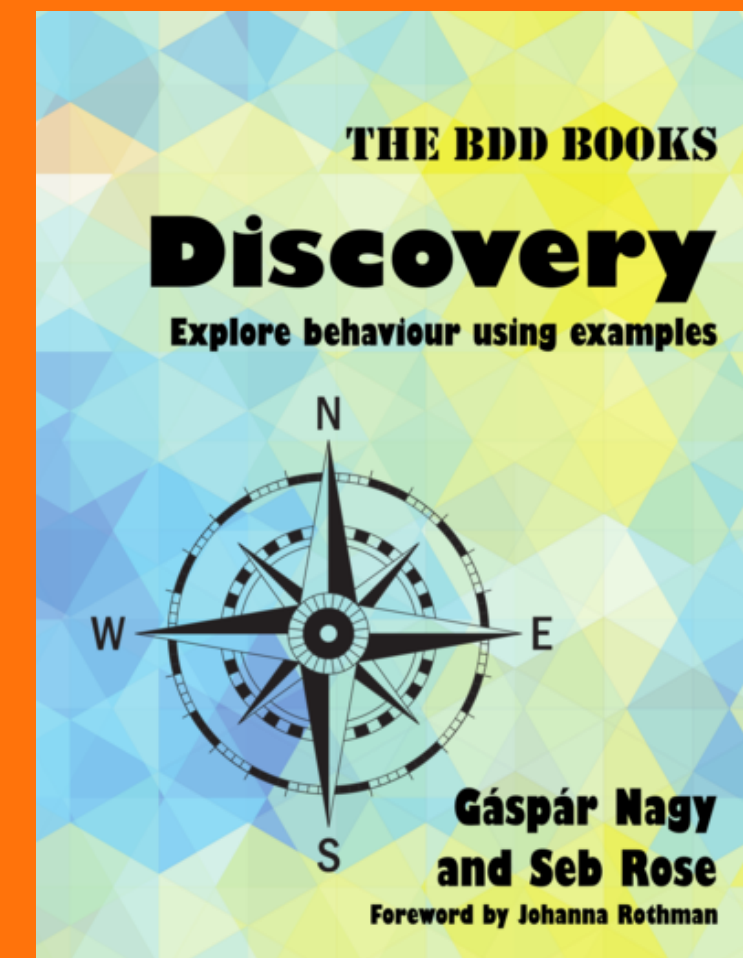
Burnout is a thing

Beware:

- Vague definitions
- Silver bullet products/training
- Analyst/consultant hype

The fashion cycle
applies to
software
development

Platform teams
facilitate delivery
AND
consistency



<http://bddbooks.com>

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