

On the road to 10k deployments per day

JAKUB KADLUBIEC • DEVELOPER PRODUCTIVITY, SKYSCANNER

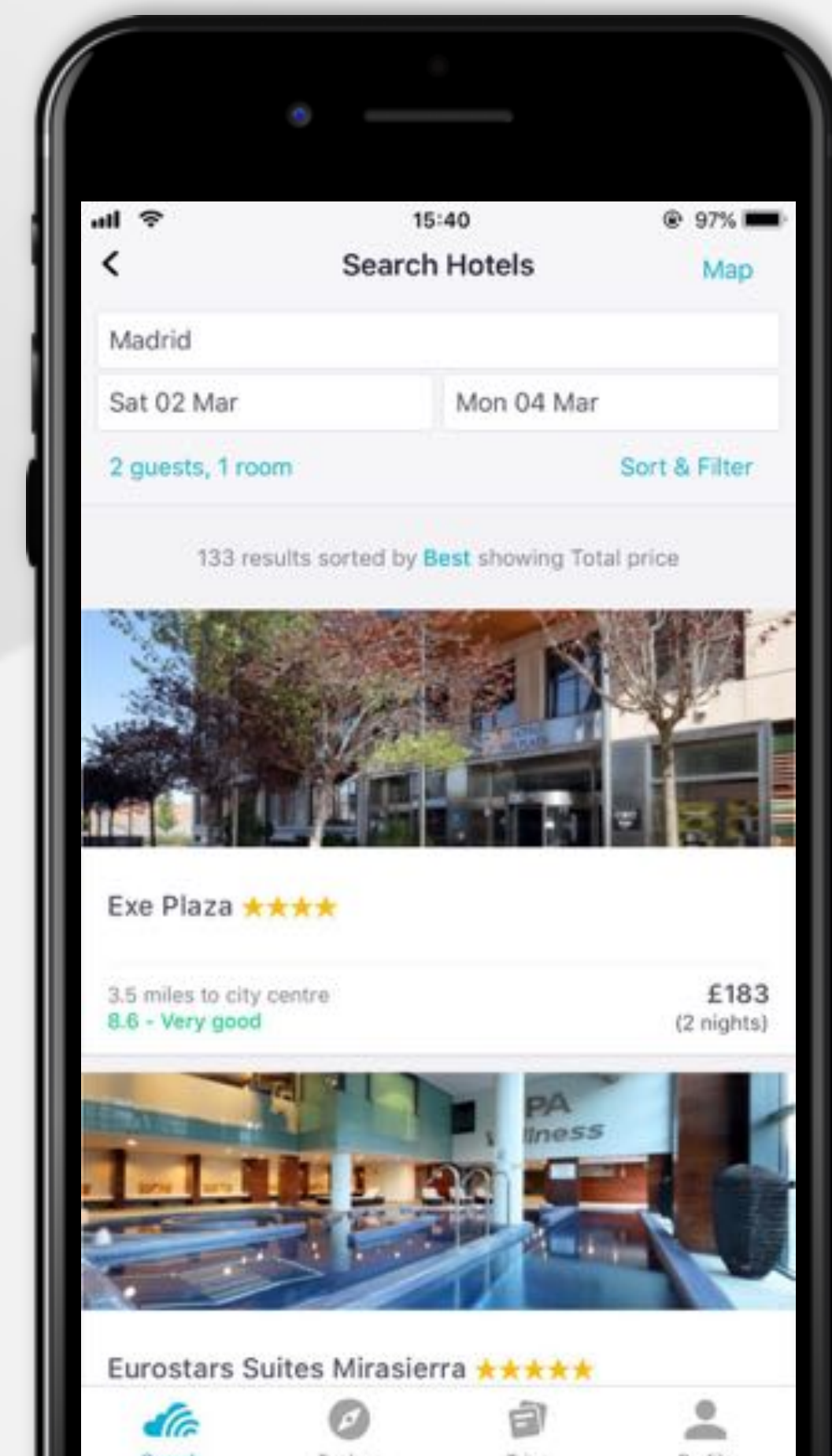
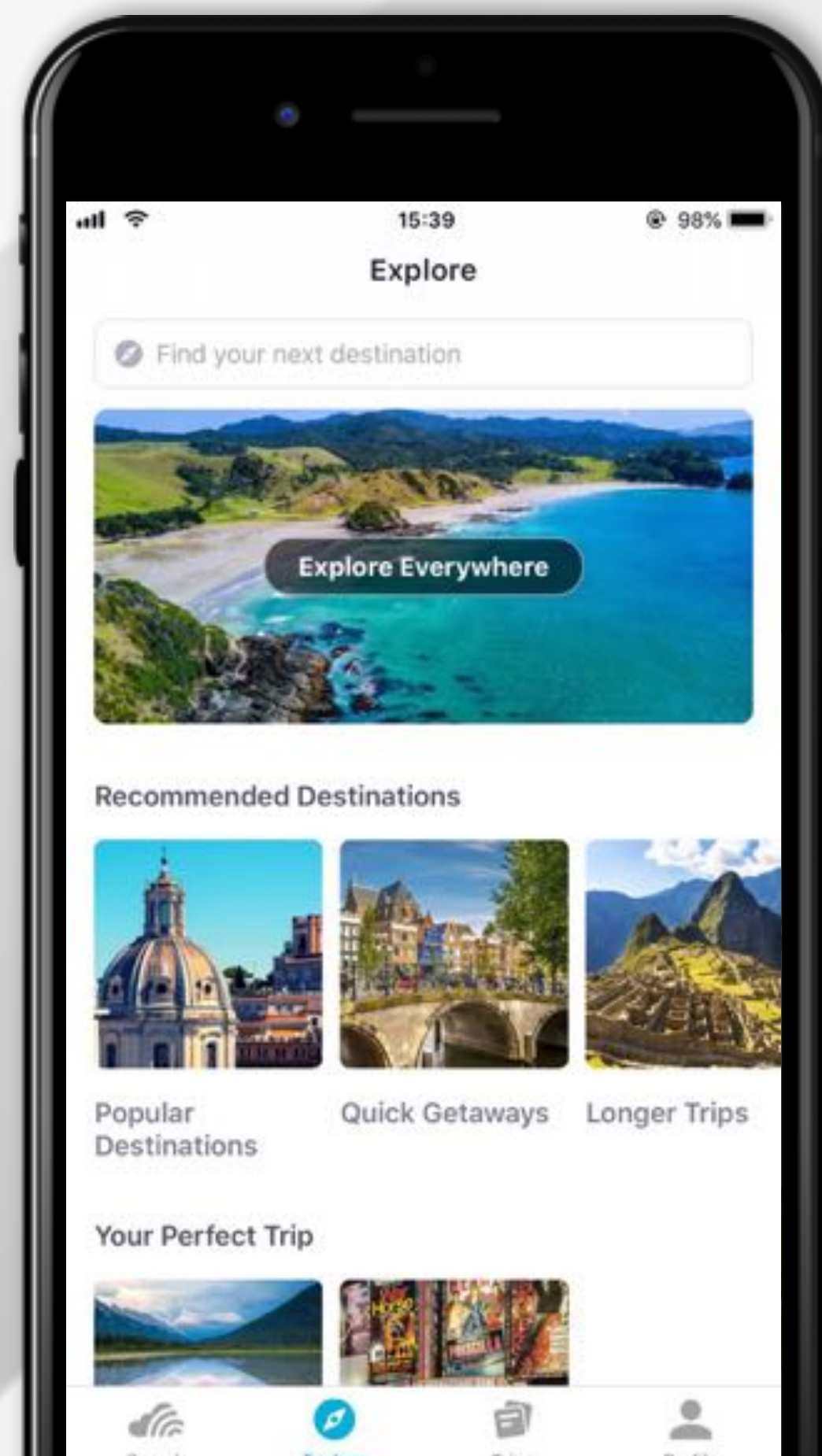
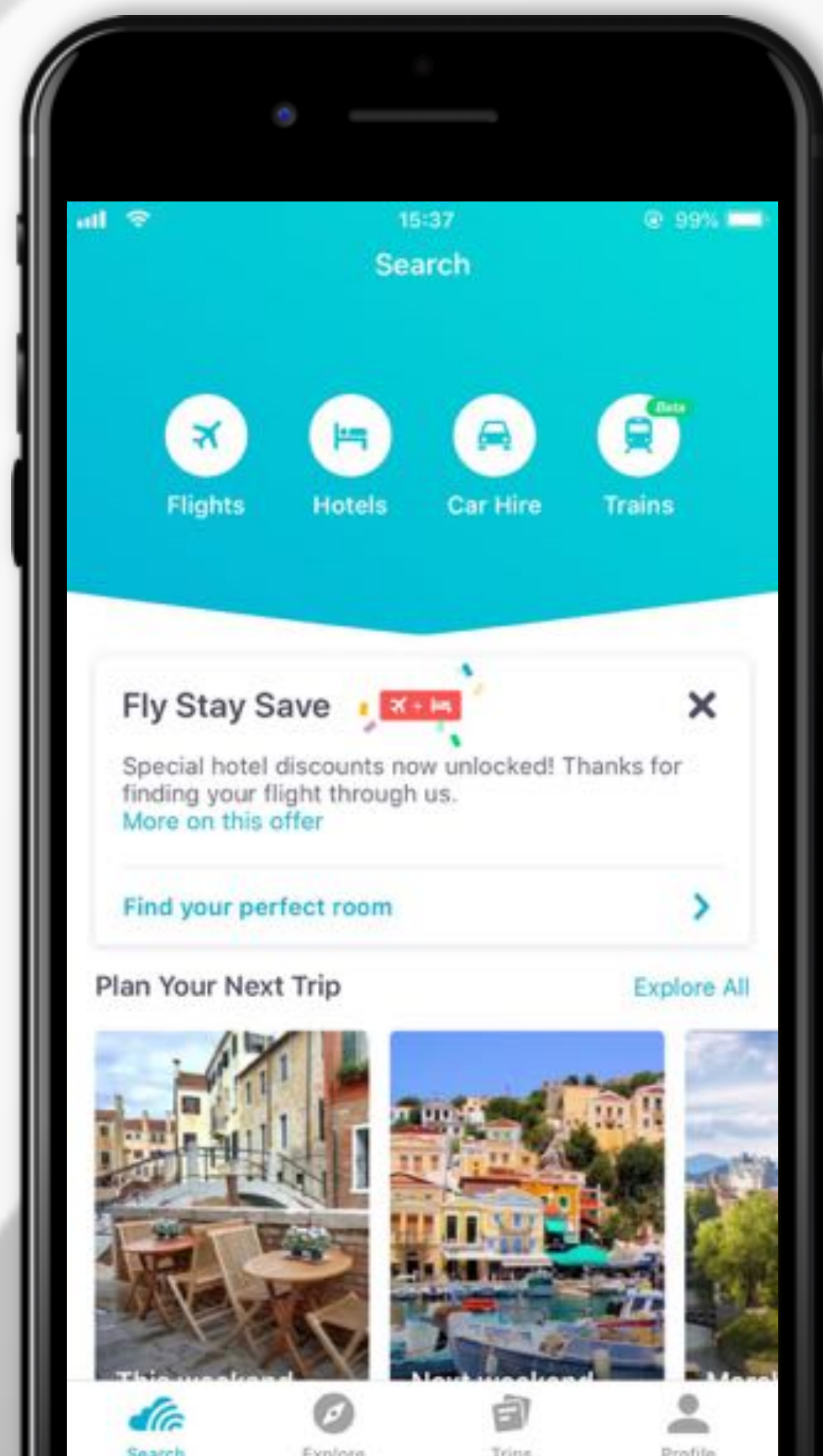


We want to be able to deploy
10k times per day

But why?

And how?

A single app for all your travel needs



80,000,000 app downloads

80,000,000 monthly users

600 engineers

1200 services behind it

MYSELF

Developer Productivity Tribe

- Force multiplier for engineers
- We want to turn every team in the company into a high performing team
- 60 of us now
- We own the platform, CI/CD tooling, frameworks, production standards, ...

How do we measure our
impact?

What is our main goal?

1

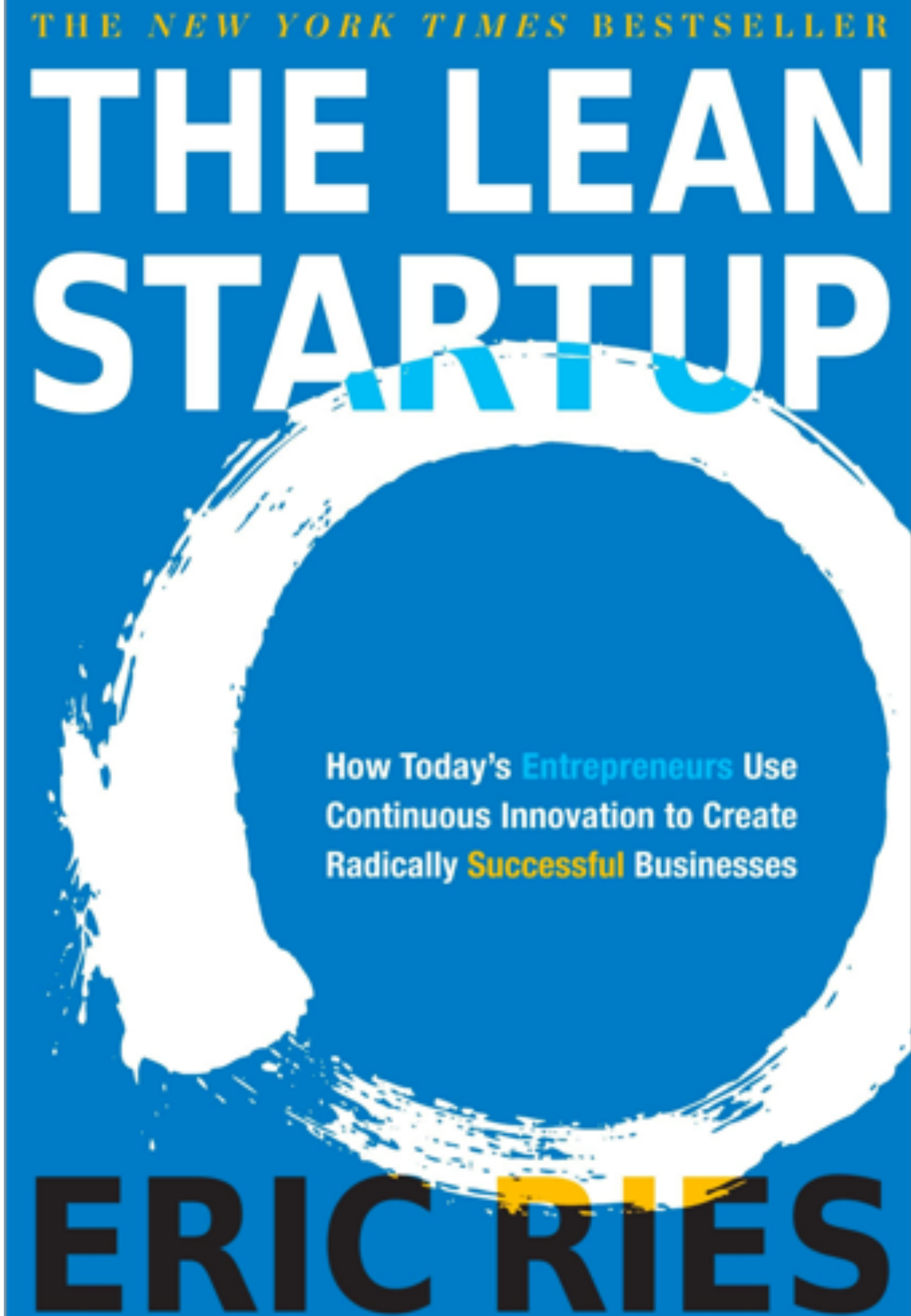
10,000

Why have deployment
frequency as a metric and
goal?

Boyd's Law of Iteration

“Speed of iteration beats
quality of iteration”

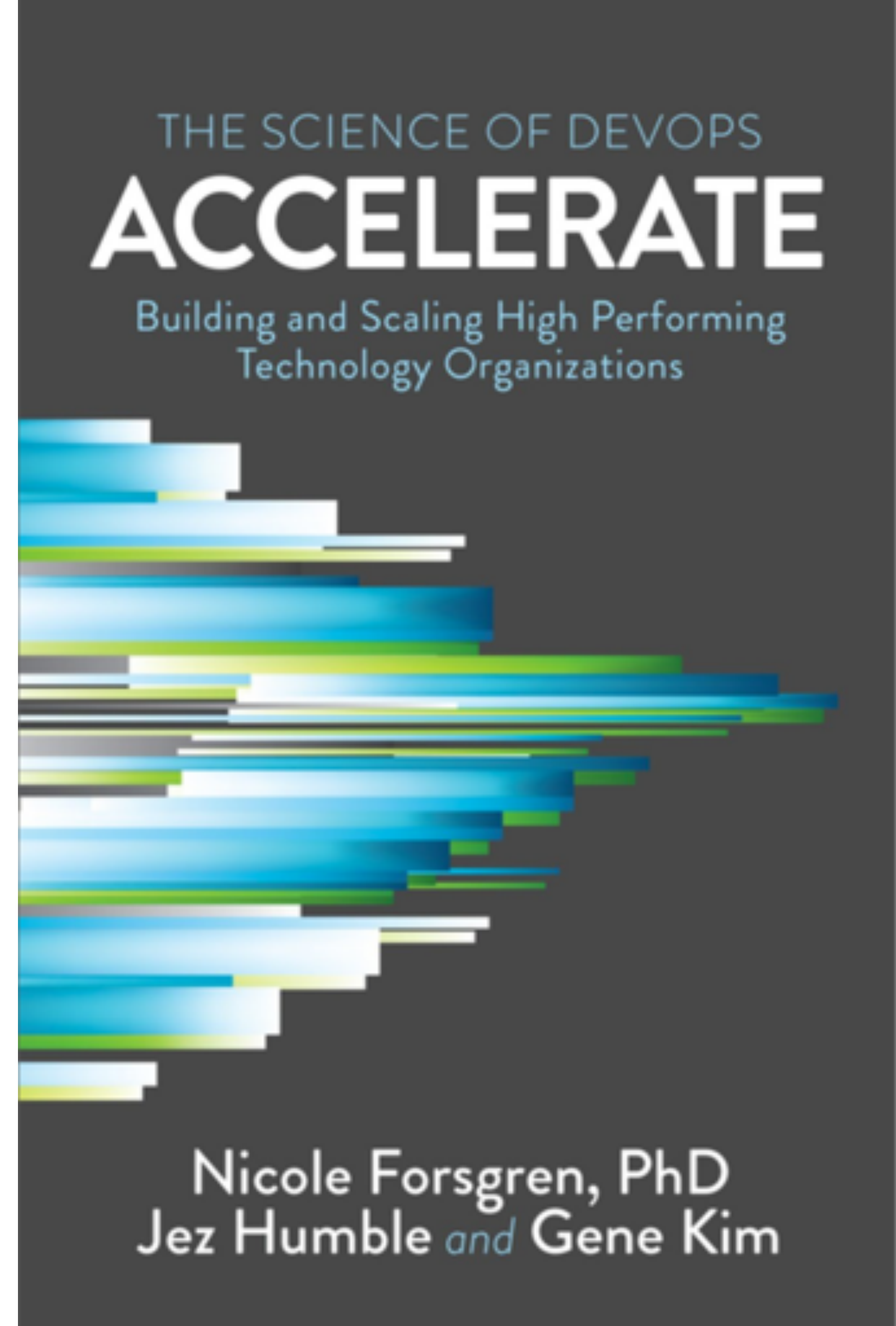
Build-Measure-Learn
Feedback Loop



Software Delivery
Performance

->

Organizational
Performance



Transformational Leadership
Vision
Intellectual Stimulation
Inspirational Communication
Supportive Leadership
Personal Recognition

Lean Product Development
Work in Small Batches
Make Flow of Work Visible
Gather & Implement Customer Feedback
Team Experimentation

Lean Management
Limit Work in Progress (WIP)
Visual Management
Feedback from Production
Lightweight Change Approvals

Test Automation
Deployment Automation
Trunk-Based Development
Shift Left on Security
Loosely Coupled Architecture
Empowered Teams
Continuous Integration
Version Control
Test Data Management
Monitoring
Proactive Notifications

Continuous Delivery

Westrum Organizational Culture

Job Satisfaction

Software Delivery Performance

Identity

Less Burnout

Less Deployment Pain

Less Rework

Organizational Performance

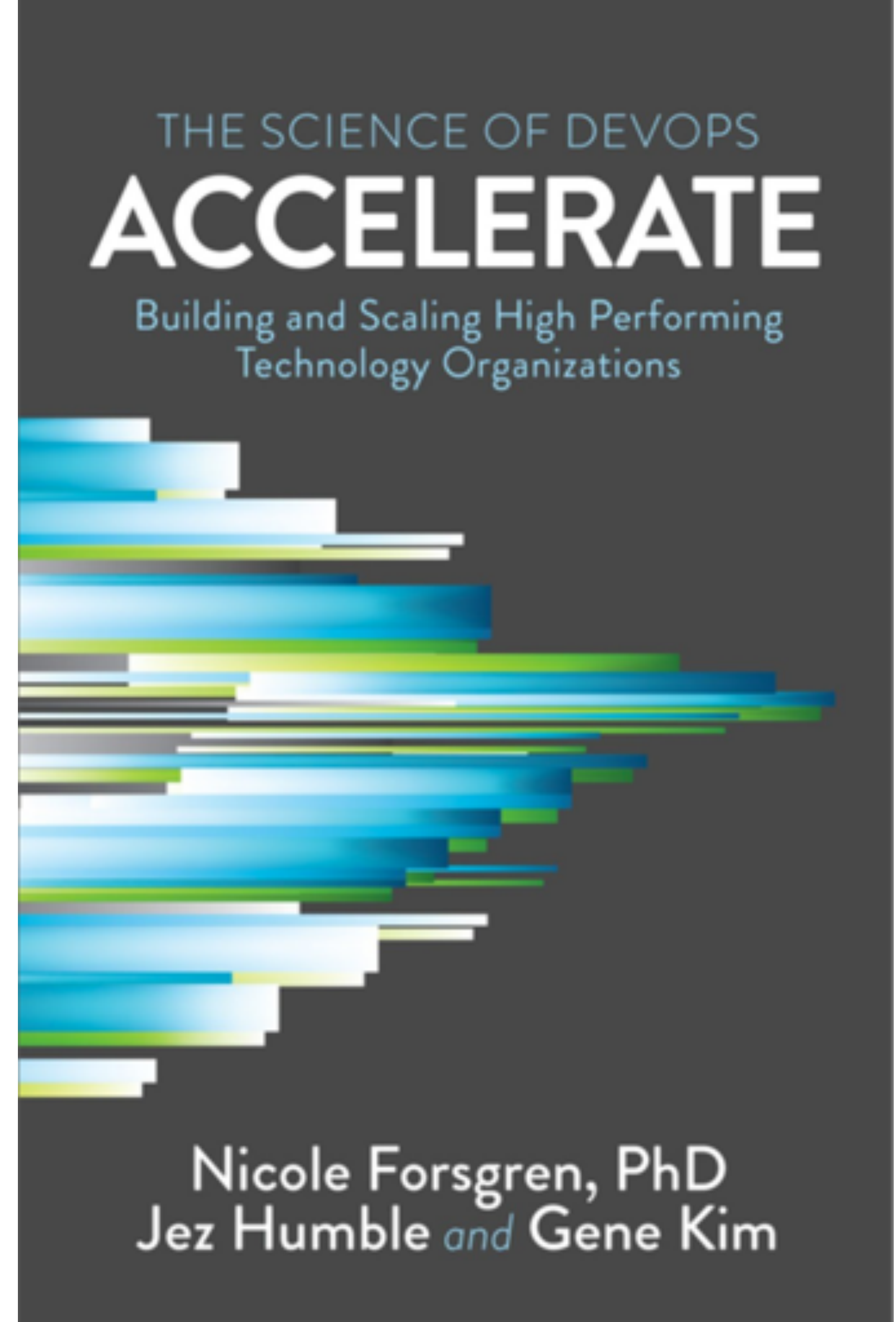
Noncommercial Performance

Deployment
Frequency

Lead Time

Mean Time to
Restore

Change Fail
Percentage



Why 10k?

How?

Step 0

Lean development practices

Step 1

Autonomous teams

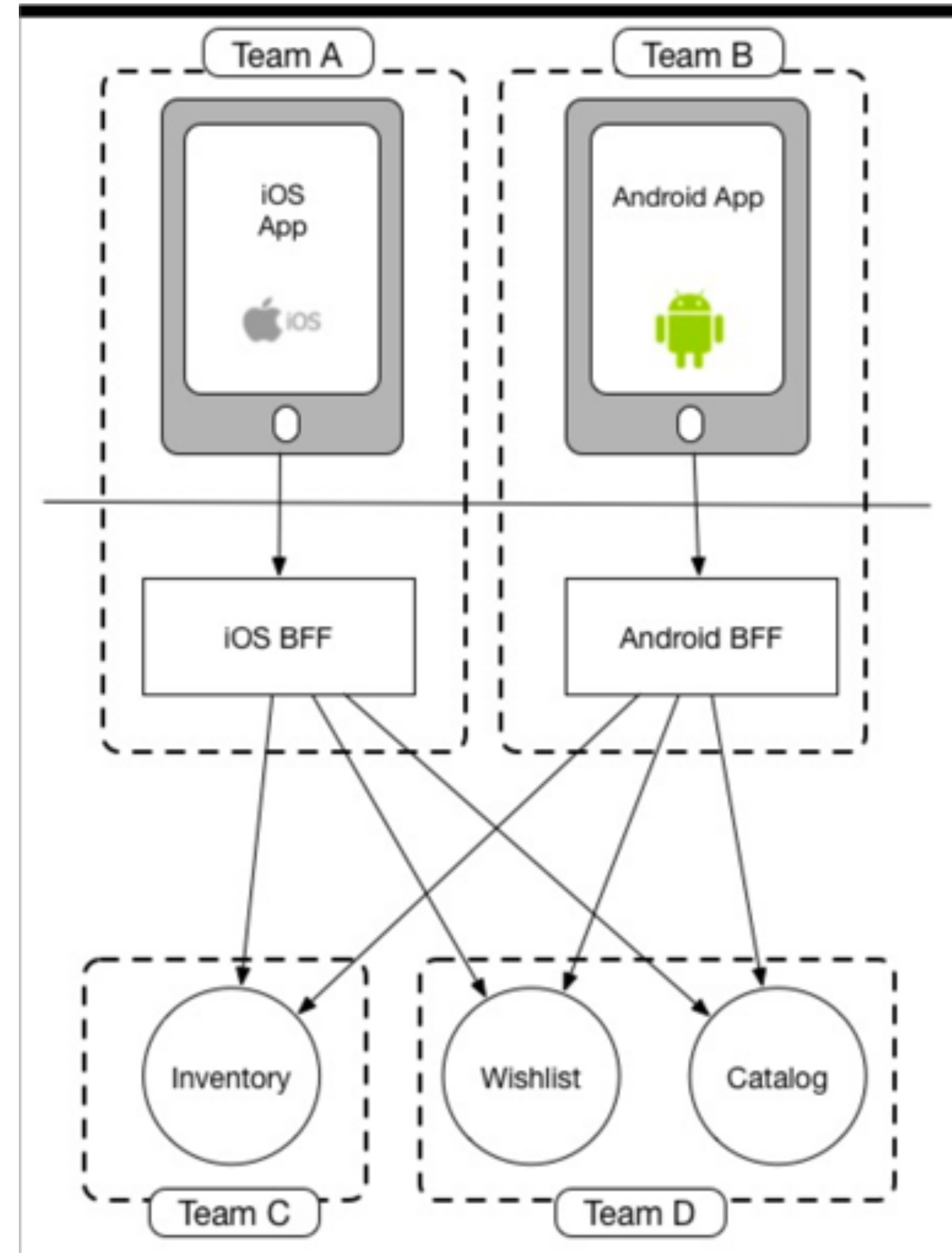
Step 2

Loosely coupled architecture

Microservices

Microsites

Backends for Frontends

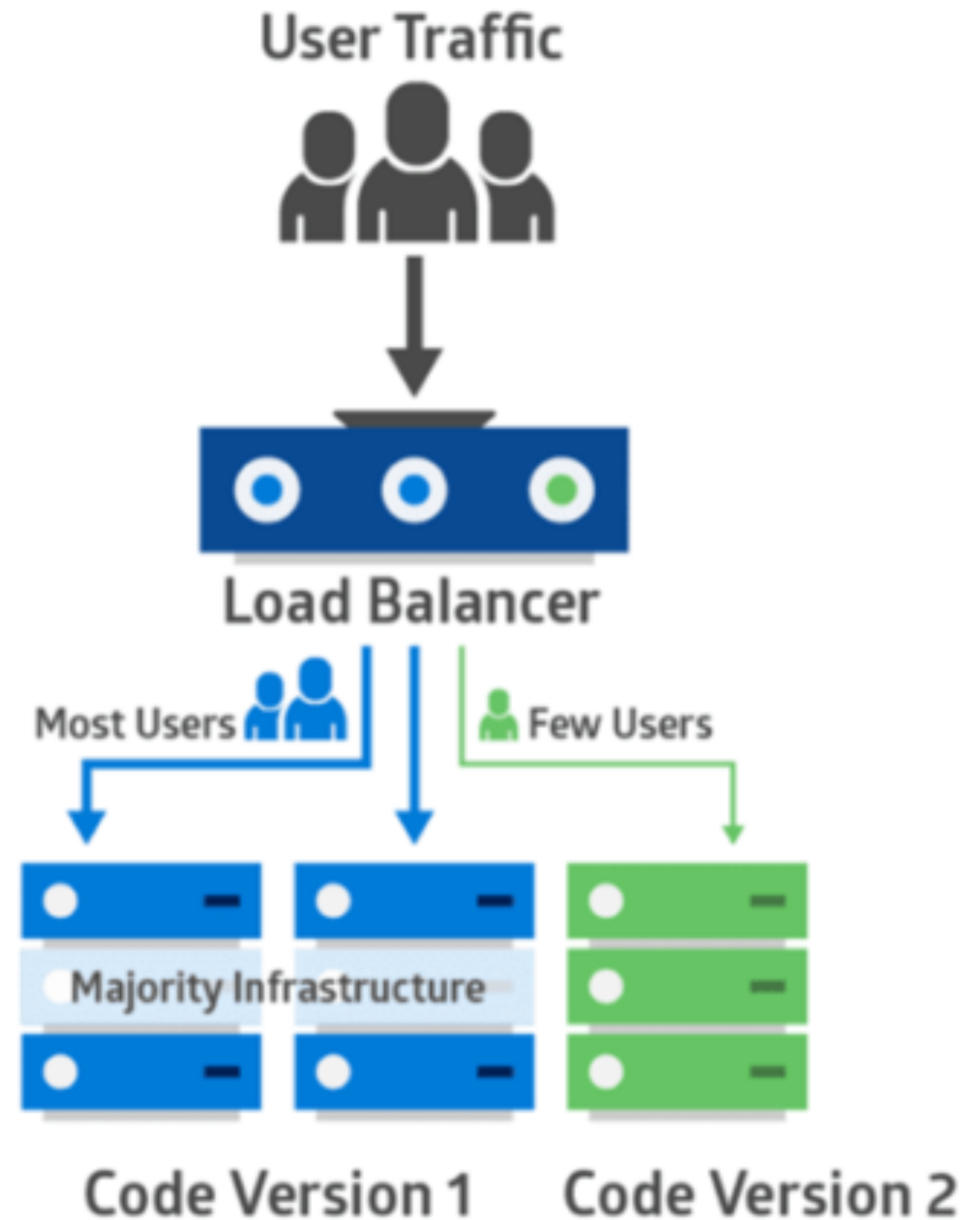


Step 3

Invest into automation and tooling

Continuous Integration

Continuous Deployment + Canary



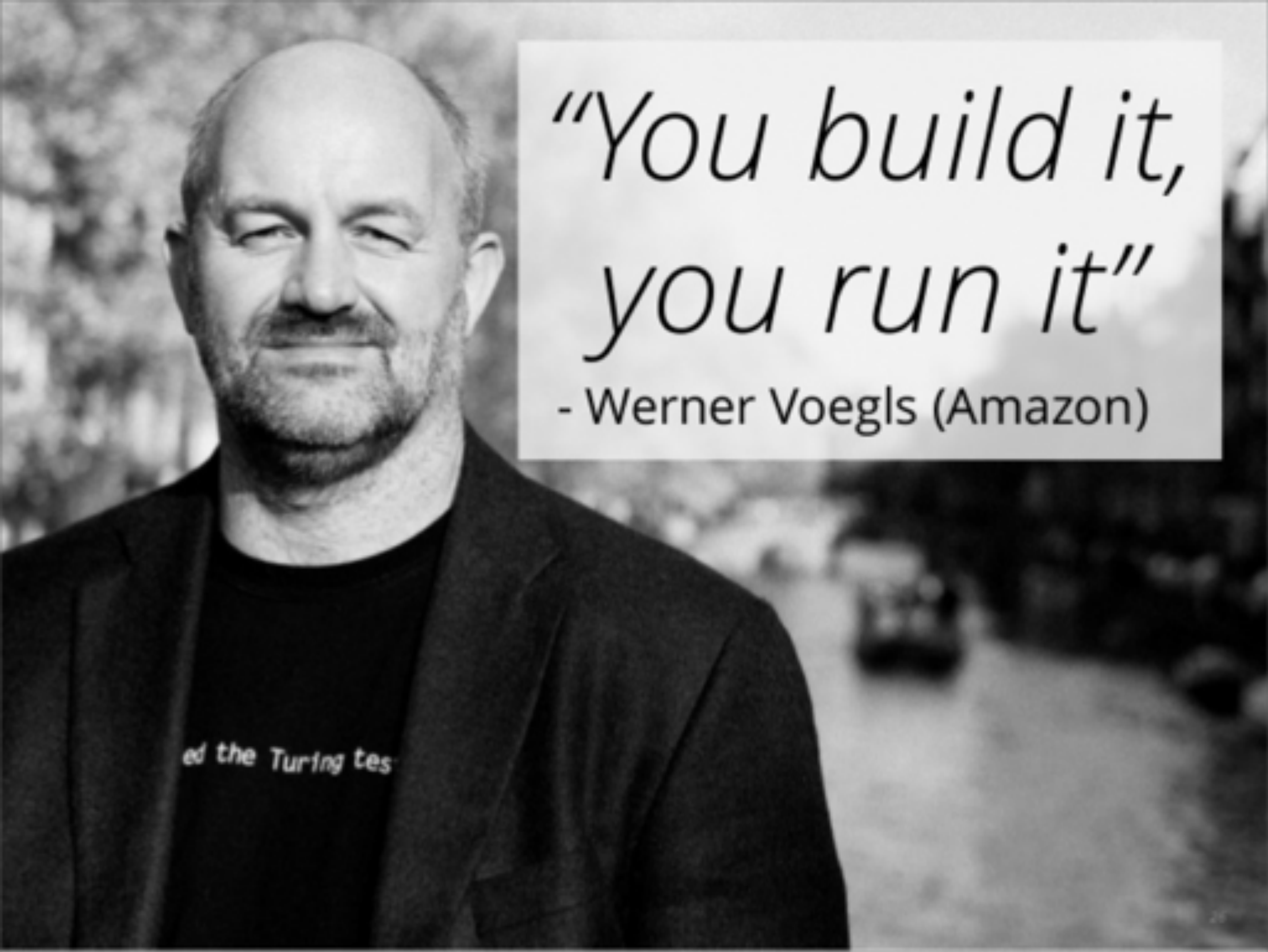
Experimentation
+
Feature flags

Step 4

No handoffs between dev and
QA

Step 5

No handoffs between
development and operations

A black and white portrait of Werner Voegls, a middle-aged man with a beard and mustache, wearing a dark blazer over a dark t-shirt. He is smiling slightly and looking towards the camera. The background is a blurred outdoor scene with trees and a path. A semi-transparent white box is overlaid on the right side of the image, containing a quote and attribution.

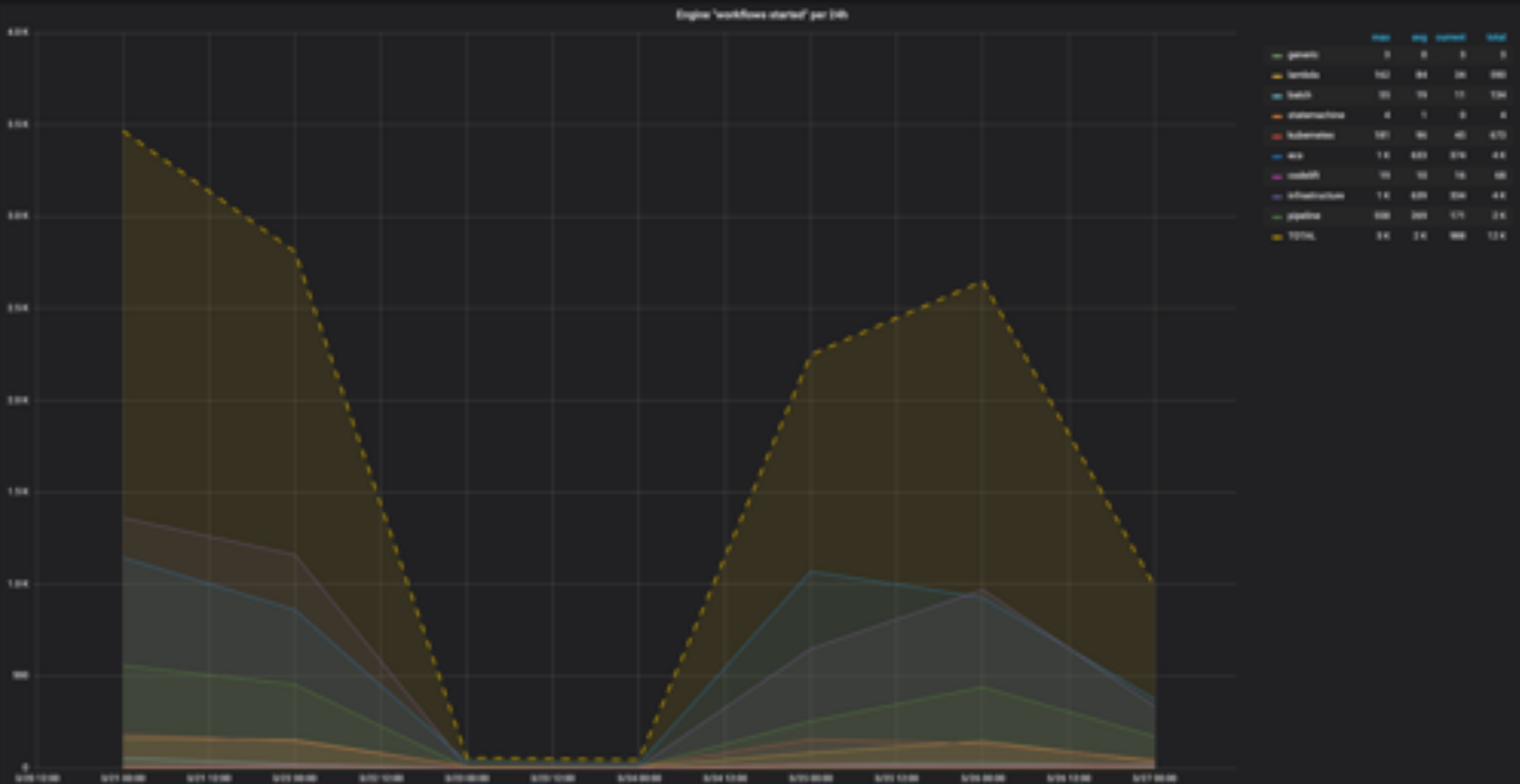
*"You build it,
you run it"*

- Werner Voegls (Amazon)

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Where are we now?

account prod-1 downsampling 24h



Thank you.

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