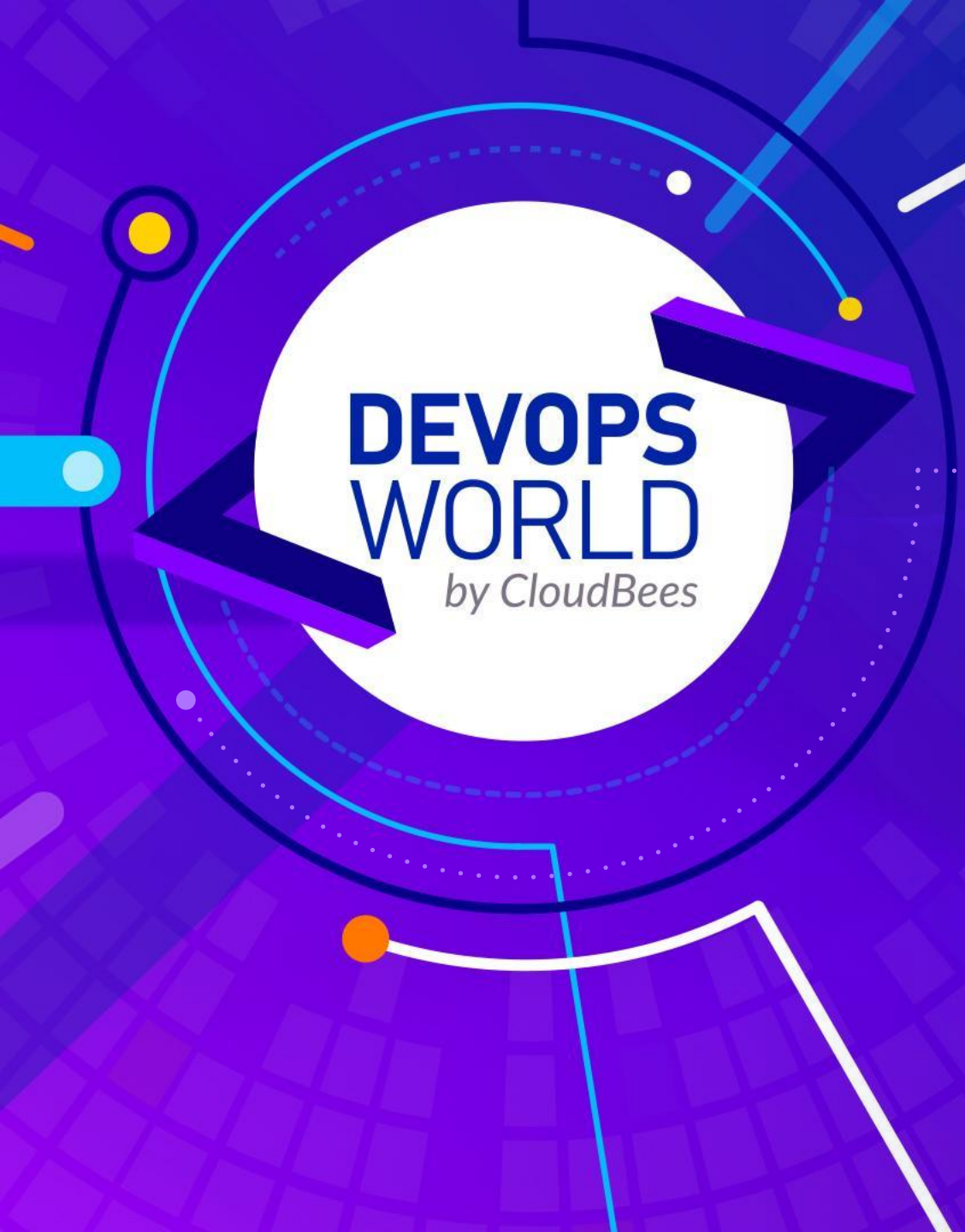


LEADERSHIP

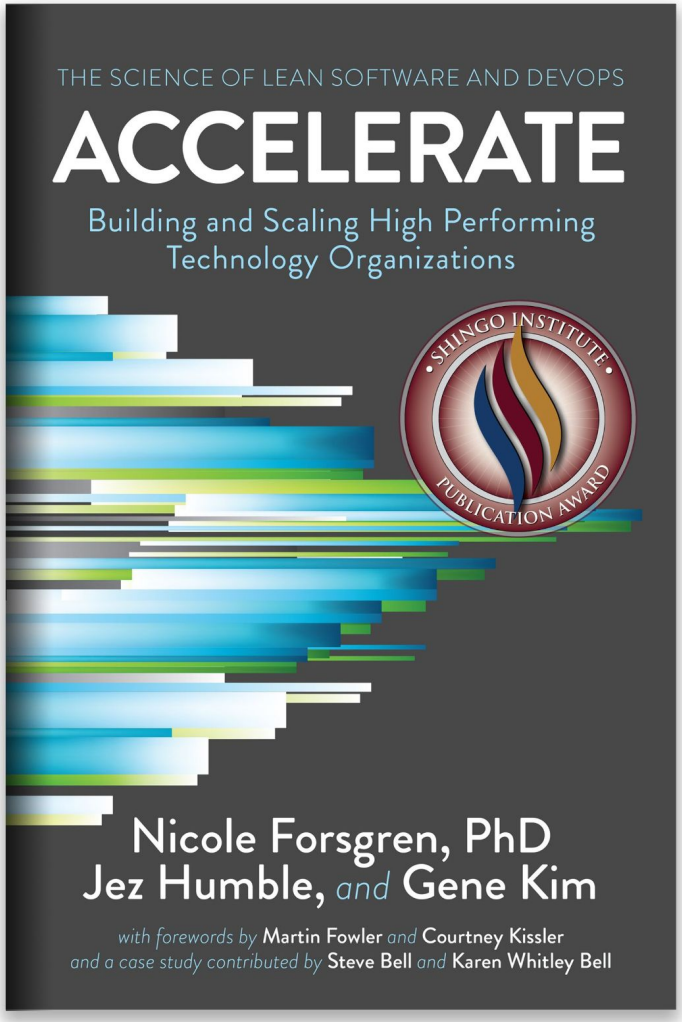
A HUNDRED DEPLOYS A DAY: 5 Steps to Success

Don Brown

CTO, Sleuth

Move fast and break things

-Mark Zuckerberg



Five Steps to Success

Step 1 - **Use** Accelerate Metrics
Step 2 - **Implement** risk reduction
Step 3 - **Dev-owned** deployments
Step 4 - **Actionable** Monitoring
Step 5 - **Communicate** to Stakeholders

LEADERSHIP

Step 1 - Use Accelerate Metrics

The Four Accelerate Metrics

- Change lead time
  - How long it takes to deploy a change to production
- Deploy frequency
  - How often you deploy code to production
- Change failure rate
  - What percentage of deployments are failures
- Mean time to recovery (MTTR)
  - How quickly does your team correct a failure in production, on average

Goodheart's Law

When a measure becomes a target, it ceases to be a good measure

Suggested Plan

Objective	Deliver more customer value, quicker
Key results	Take less than 3 days to deliver a change
	Deploy changes twice a day
	No more than 10% of changes should fail
	Recover from failures within 2 hours

LEADERSHIP

Step 2 - Implement risk reduction

Feature flags, canary deployments, etc

If it hurts, do it more

-Me (and probably most devs)

Feature Flags

- A toggle that you can adjust at runtime to enable or disable a feature
- Goal: **Make deployments non-events**. Code ships disabled until enabled via flag
  - Even better: rollbacks are now instant
- For example: New admin screen
  - Ship under a flag and disabled by default
  - Enable for dogfooding, then low-priority customers, then everyone
  - Disable at any time instantly

Canary deployments

- Deploy code to a subset of customers first
- Goal: **Make deployments non-events**. Minimize impact of change failures
- For example: Internal bug fix
  - Ship to staging, run smoke tests
  - Promote to canary, say 1 server out of 10 or route 5% of traffic
  - Monitor for failure. If detected, rollback
  - Promote to production

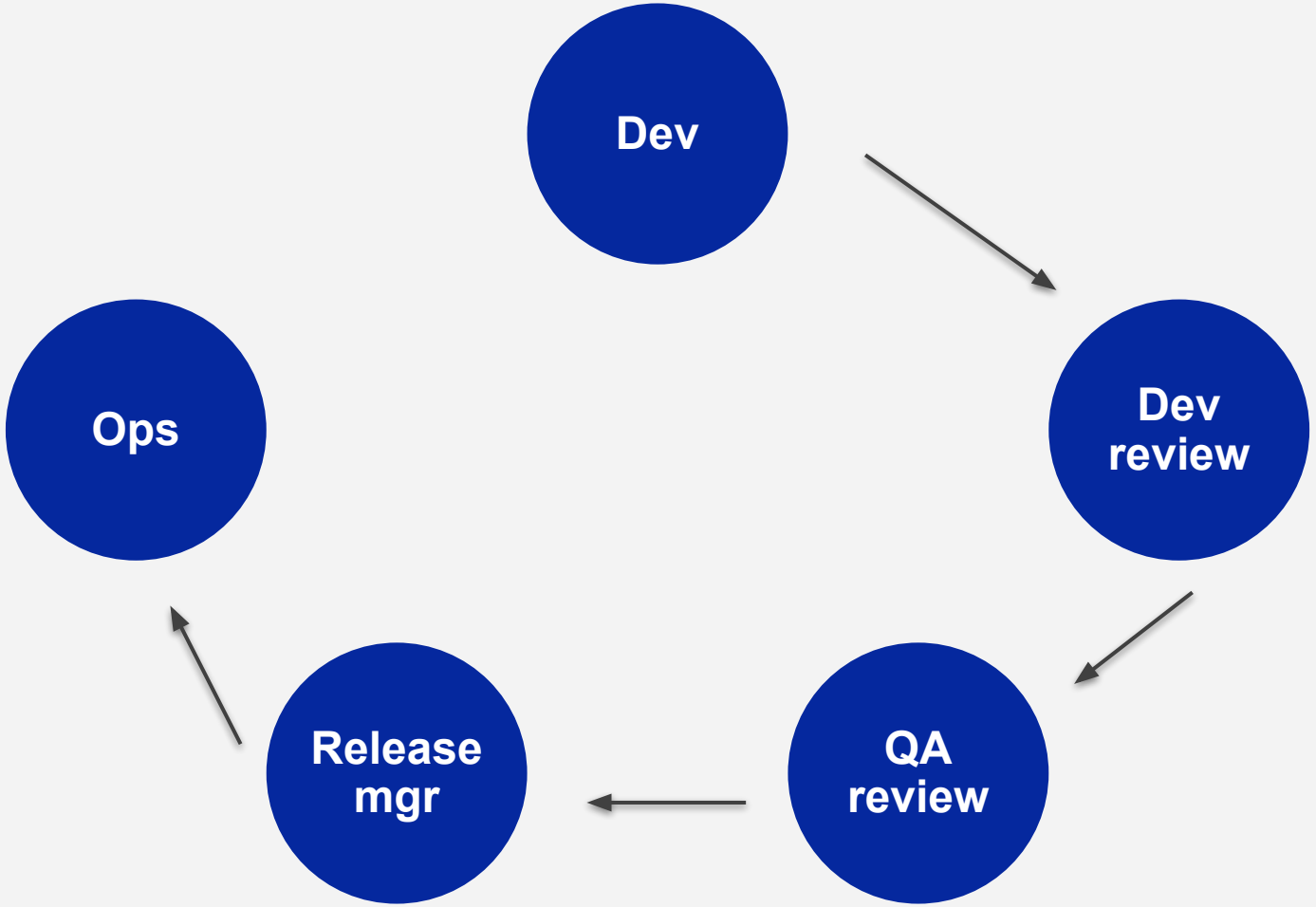
LEADERSHIP

Step 3 - Dev-owned deployments

Self-service releases and rollbacks

DEVOPSWORLD by CloudBees

A typical deployment process



Story time: HipChat

LEADERSHIP

Step 4 - Actionable Monitoring

Avoid: Alert Fatigue

Zero Tolerance Tips

- Every alert **MUST** require a human response
- Support alert priority types
- Extend zero tolerance policy to log errors
- Use disturbed/on-call rotation to improve monitors

LEADERSHIP

Step 5 - Communicate to Stakeholders

Engineering is just one department

Story time: Reciprocity

LEADERSHIP

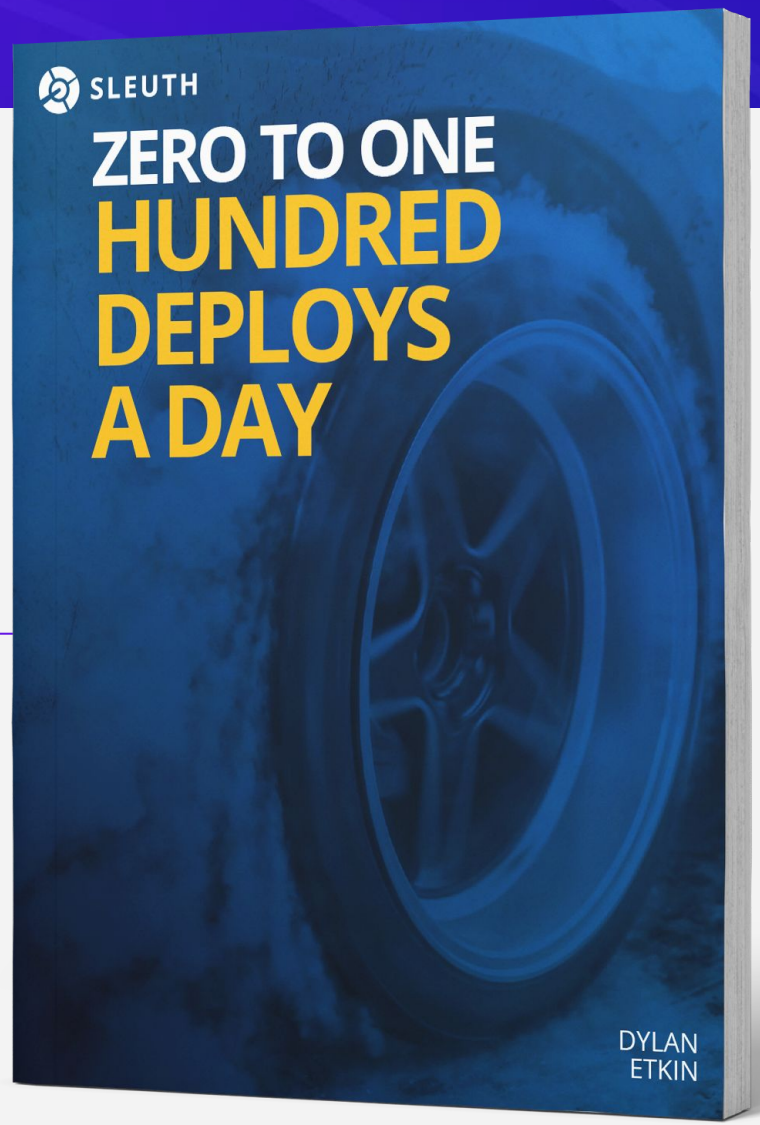
Remember this:

FOCUS ON PEOPLE, NOT TOOLS

Go Deeper

Download our eBook at:

sleuth.io/100deploys



Questions?

SLEUTH

https://sleuth.io

@mrdonbrown

youtube.com/c/sleuthtv

twitch.tv/mrdonbrown

Thank you!

Don Brown

CTO, Sleuth