

Pivotal®

Reliability Engineering for Humans

Is Site Reliability Engineering Good for You?

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DevOpsDays London | HumanOps London

High Blood Pressure

Cardiovascular Disease

Diabetes

Obesity

Some of the health impacts of sleep deprivation and stress

Some of the health impacts of ~~sleep deprivation and stress~~
poor engineering practices

This is not ok.



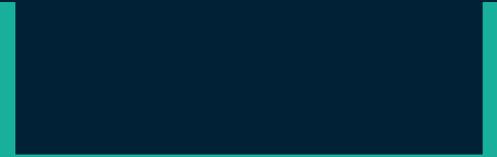
#HUMANOPS

Anonymous CEO

**“You don’t need SRE unless you’re
the size of Google”**

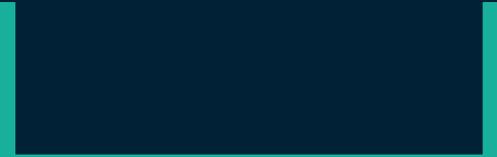


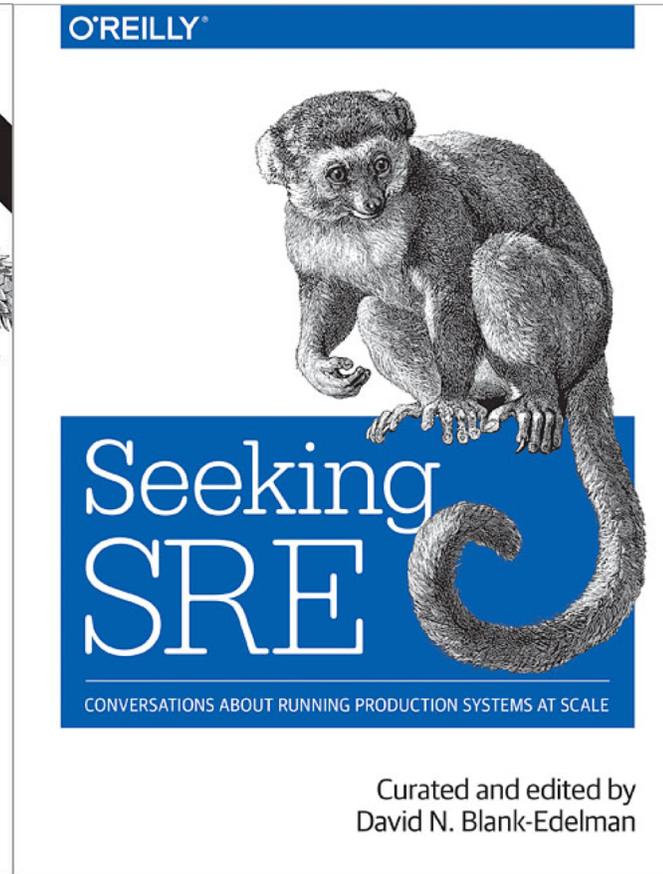
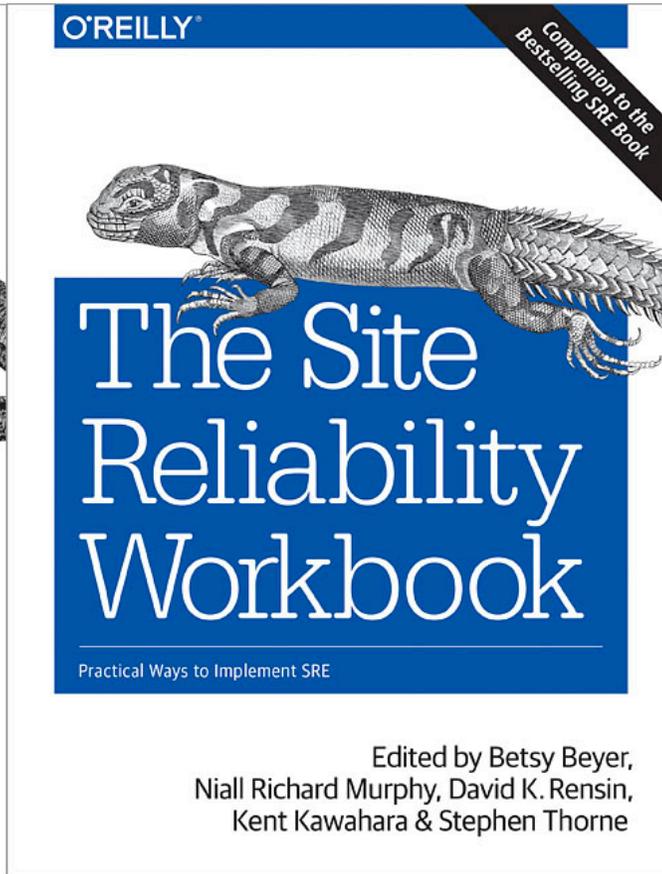
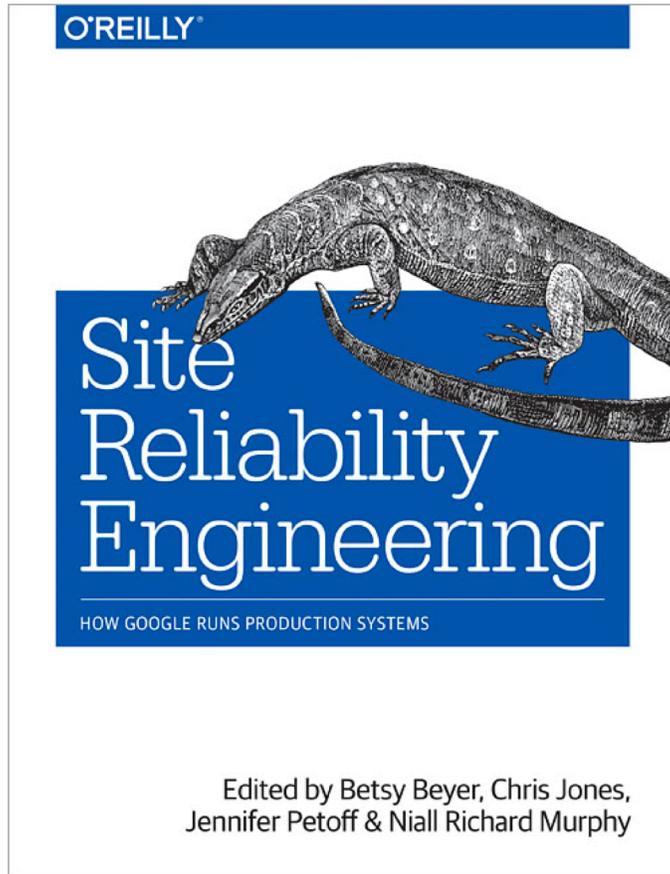
Failure is Normal



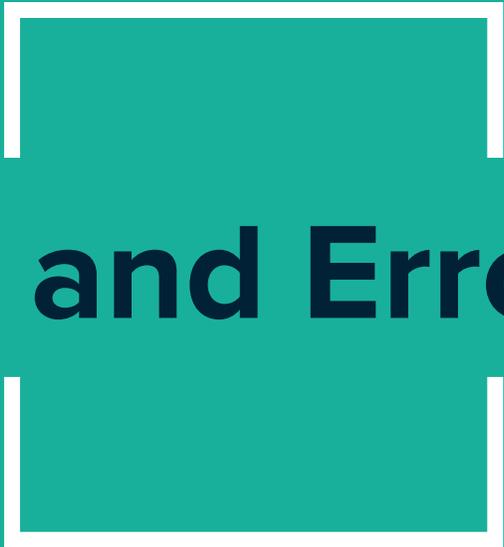


Reliability is Fundamental





Free: <https://landing.google.com/sre/book>



SLIs, SLOs and Error Budgets

SLO

Service Level Objective

SLI

Service Level Indicator

Error Budget

100% Availability is not your target.

So what is?

SLO	Error Budget (per 30 Days)
99%	432 mins
99.5%	216 mins
99.9%	43.2 mins
99.95%	21.6 mins
99.99%	4.32 mins
99.999%	0.43 mins

Agree your SLI's and SLO's with everyone.

Yes, everyone.

- Everyone understands the importance of reliability
- Everyone understands the error budget and how it works
- Everyone understands the new rules!

Oops! We broke something.

What now?

- On-call / Playbooks / Fire drills
- Blameless Incident Review / Retrospective
- Review error budget
- Reduce risk and invest in reliability

Set Your Service Level Objectives

Measure Your Service Level Indicators

Enforce Your Error Budgets



Psychological Safety

Amy Edmondson– Harvard Business School Professor

“Psychological safety is a shared belief that the team is safe for interpersonal risk taking”

Amy Edmondson– Harvard Business School Professor

“Psychological safety is a belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns, or mistakes.”

Research

Psychological safety
was studied in a
medical environment

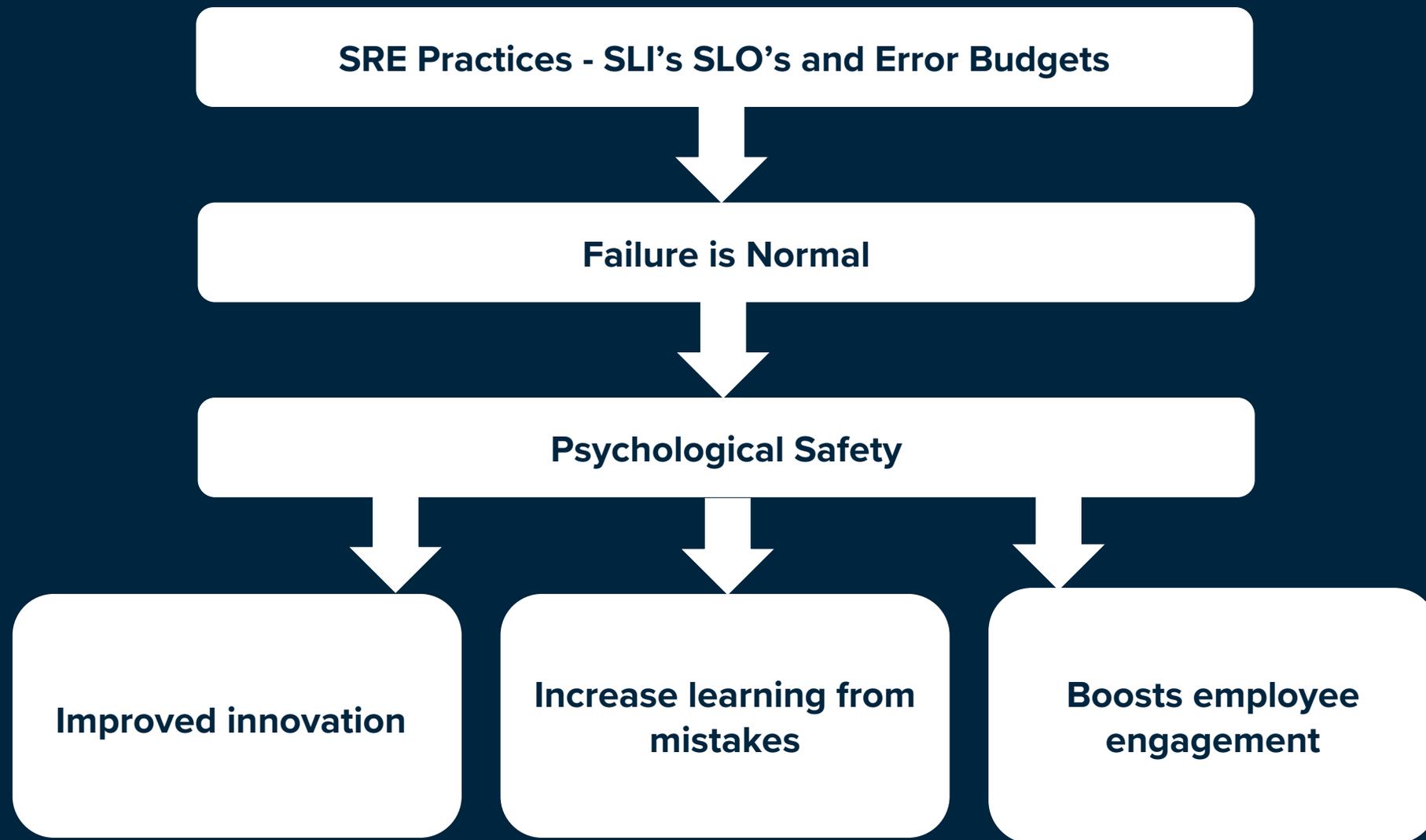
- Teams were measured on Psychological Safety, Error Rates and Team Performance
- Higher Psychological Safety correlated to higher Error Rates
- **However, higher Error Rates correlated to higher Team Performance**
- **Better practices. More lives saved.**

Amy Edmondson— Learning from mistakes is easier said than done

Google's Project Aristotle

Hannah's Hypothesis

SRE Practices can transform teams by improving their Psychological Safety



Greg Thomson

“The only normal way to begin speaking a new language is to begin speaking it badly”



Is SRE good for you?

Tell me your story...

 @HannahFoxwell

SLO's

Error Budget policy

Blameless culture

SRE

SRE

SRE

SRE

SRE

Pivotal®

Thank
You x