ThousandEyes part of Cisco

Automating Disaster Recovery: the ultimate reliability challenge

SREcon24 Americas

Ricard Bejarano

Lead Site Reliability Engineer, Infrastructure

Something is up with the system

What is up with the system?

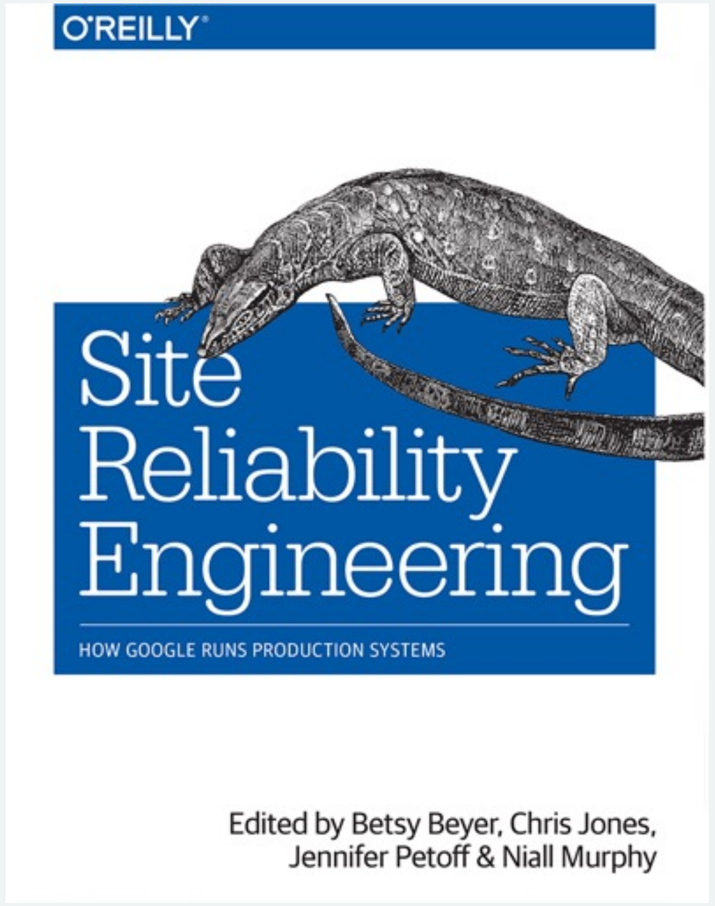
What could’ve been done differently a decade ago that would’ve prevented this?

Most incidents are resolved (prevented) at the drawing board

So… what could’ve been done differently a decade ago?

Reliability cannot be an afterthought

Who has read this book?

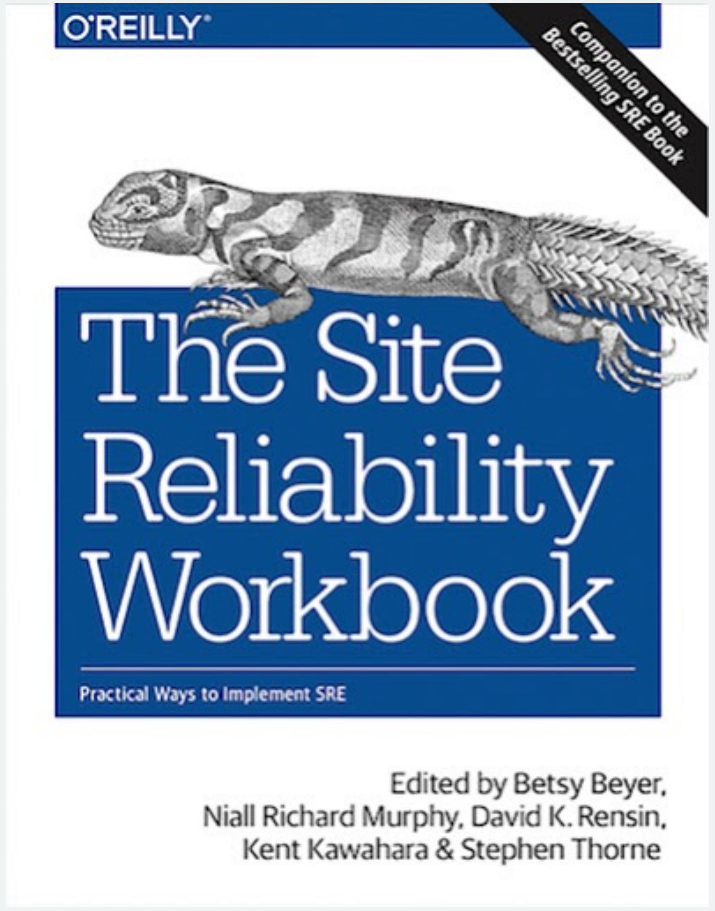

O'REILLY

Site Reliability Engineering

HOW GOOGLE RUNS PRODUCTION SYSTEMS

Edited by Betsy Beyer, Chris Jones, Jennifer Petoff & Niall Murphy

Who has read this other book?


O'REILLY

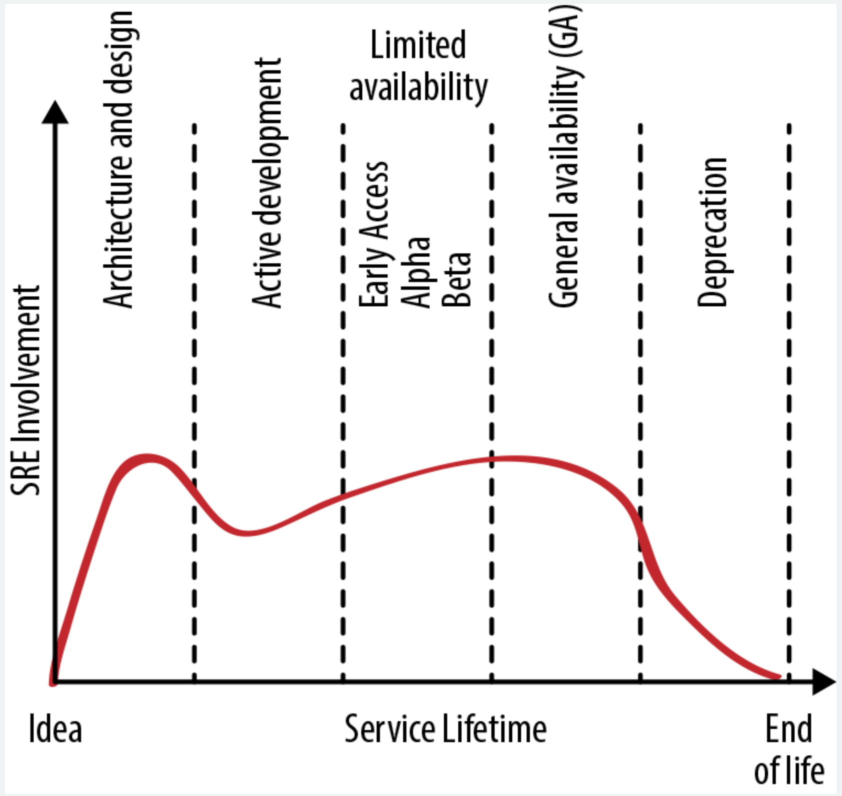
Companion to the Bestselling SRE Book

The Site Reliability Workbook

Practical Ways to Implement SRE

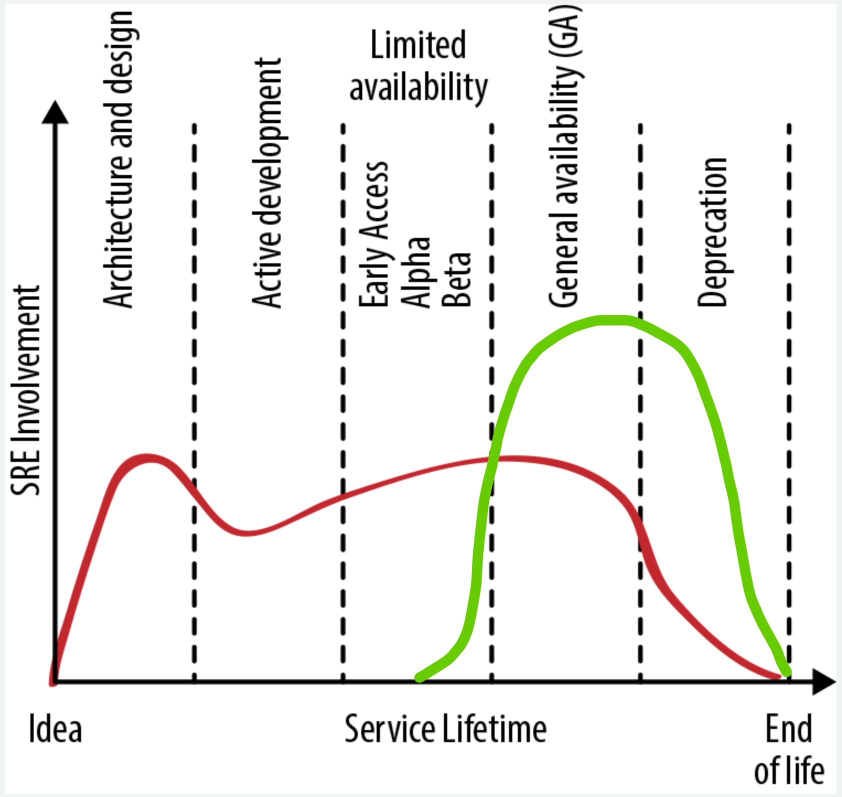
Edited by Betsy Beyer, Niall Richard Murphy, David K. Rensin, Kent Kawahara & Stephen Thorne

Engagement over lifetime



The Site Reliability Workbook
Fig. 18-1

(actual) Engagement over lifetime



The Site Reliability Workbook
Fig. 18-1 (modified)

Reliability cannot be an afterthought

Who’s this?

Melvin Conway

Melvin
Conway's law

The architecture of the software you’re building, will closely resemble that of the human structure you set out to build it

Should SREs influence team structure decisions?

So… what could’ve been done differently a decade ago?

Putting SREs in the room earlier

Reliability-driven development

What about automating system recovery?

Priority number 1 is still recovery

✨ Generic mitigations ✨

oreilly.com/content/generic-mitigations

Generic mitigations

oreilly.com/content/generic-mitigations

Binary rollback

Data rollback

Degrade

Upsize

Block/Quarantine

Drain

Dynamically moving workloads

Reliability cannot be an afterthought

So what did we do?

Closing thoughts

Reliability cannot be an afterthought

...if you’re building reliable systems

ThousandEyes

part of Cisco