

SoundCloud's Story of Seeking Sustainable SRE

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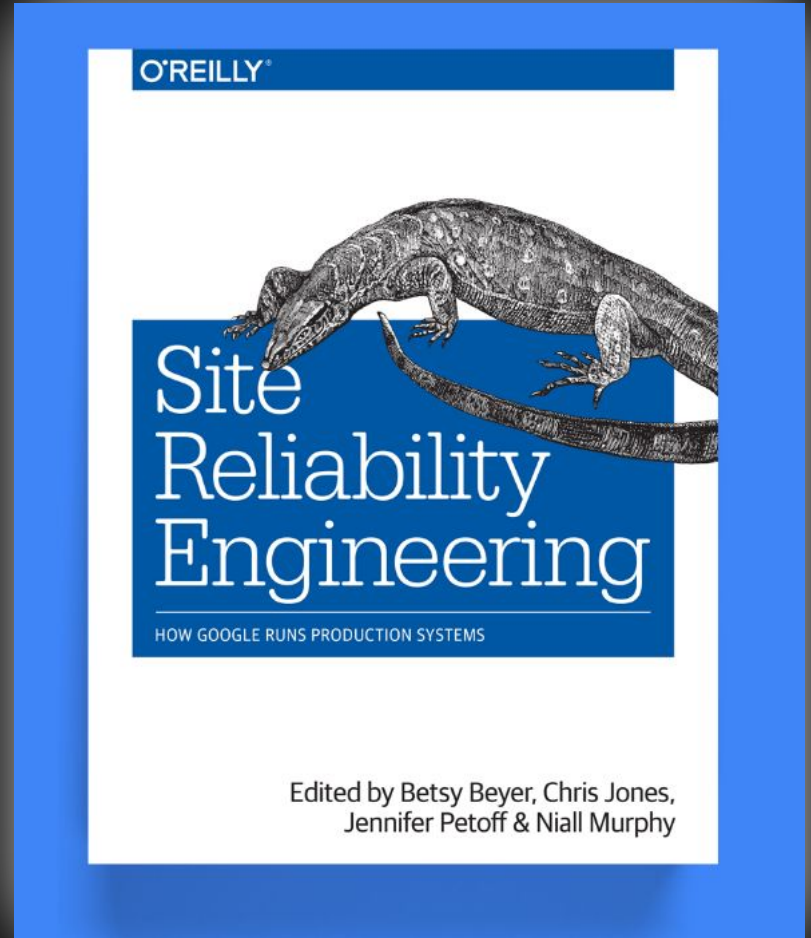
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SRE

SoundCloud's Story of Seeking Sustainable **SRE**



Source: <http://sre.org/>

SoundCloud's Story of Seeking Sustainable SRE



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SOUNDCLOUD

~100M users

~100 engineers

engineers < services

SoundCloud's

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SRE



~100M users

~100 engineers

engineers < services



~1B users

~10k engineers

engineers > services

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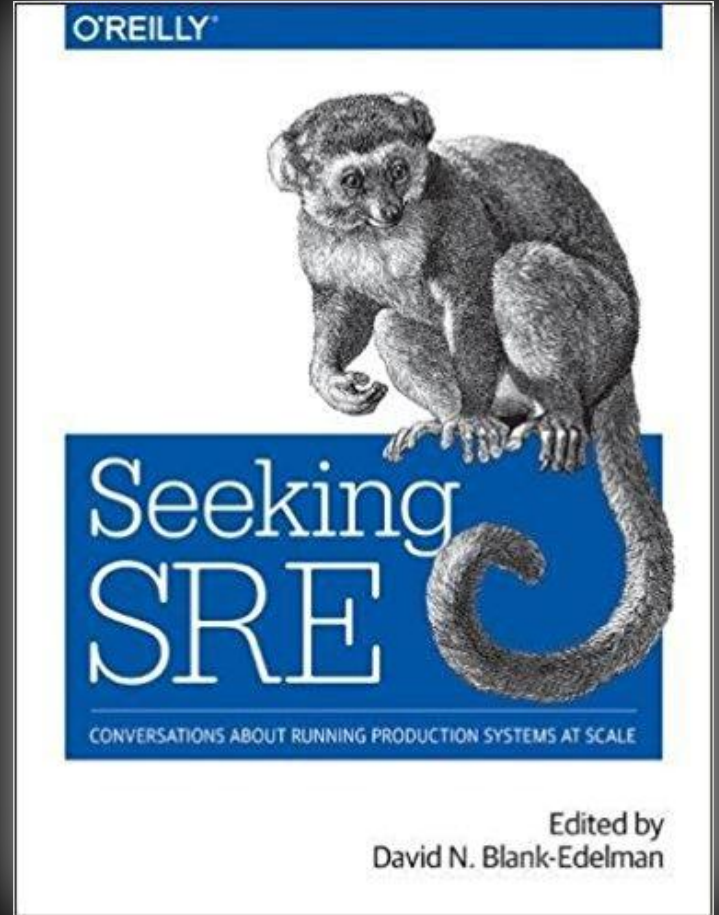
FAILING AT SRE



BEFORE IT WAS COOL

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"In 2018, our theme is *Sustainable Reliability Engineering.*"

"... technical debt ..."

"... dark debt ..."

"... operational overload and individual burnout ..."

Error budgets

Error budgets – prerequisites:

- Monitoring.
- Management support.
- Nuclear option: Return the pager.

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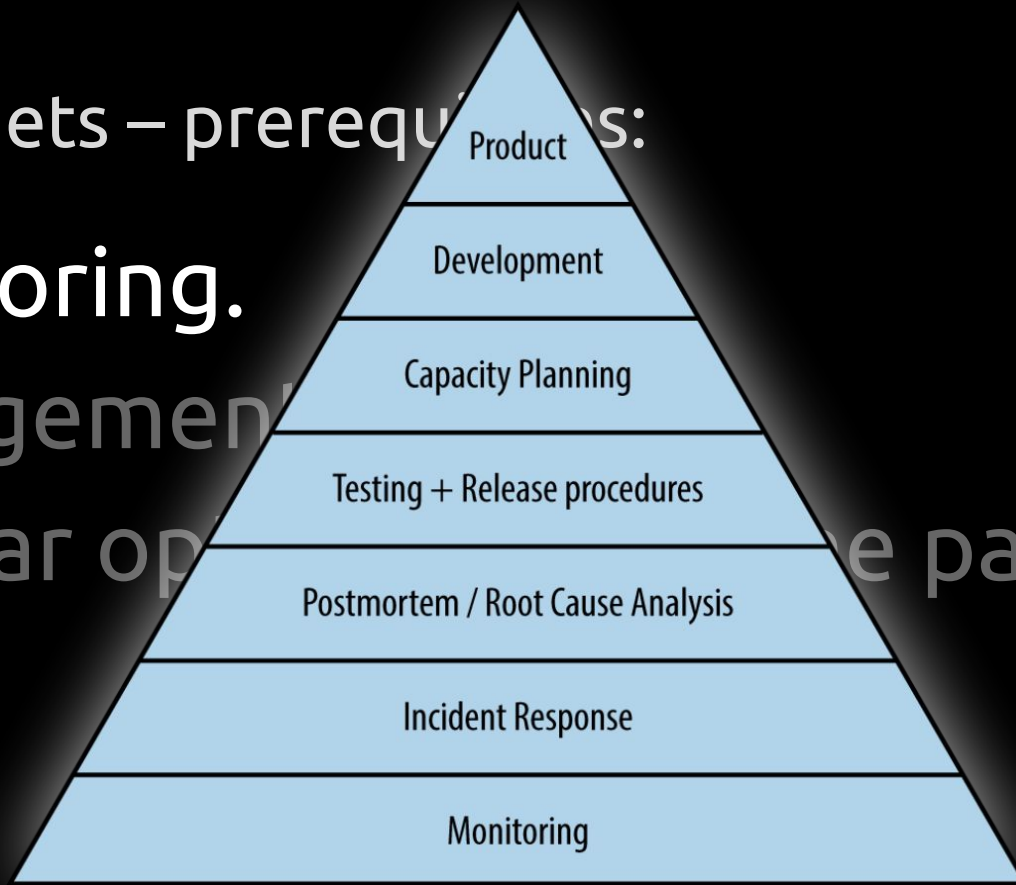
- **Monitoring.**
- Management support.
- Nuclear option: Return the pager.

Error budgets – prerequisites:

- **Monitoring.**

- Management

- Nuclear ops



the pager.

Dickerson's hierarchy of service reliability

Site Reliability Engineering – How Google Runs Production Systems, B. Beyer et al. (ed.), O'Reilly 2016, p104

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- Minimal size of an on-call rotation:
 - 6 if following the sun.
 - 8 otherwise.
- Minimal size of a dedicated SRE team: 8.
- Feasible percentage of all engineers in SRE: 5%? 10%?
- Number of SRE teams SoundCloud could afford: 1.

Less than 50% ops work.

React to pages in a competent way.

SRE is what happens
when you ask a software
engineer to design an
operations team.

Ben Treynor, Google Inc.

“True” DevOps is if there are
no separate dev and ops
teams anymore, and not
even designated dev or ops
roles within a team.

*Björn Rabenstein & Matthias Rampke,
SoundCloud Ltd.*

Take your own pager! It's still "SRE in spirit":

- Automate operations as far as possible.
- On-call rotations of the right size.
- Meaningful monitoring & alerting.
- Actionable symptom-based pages. With runbooks.
- Strictly (much) less than 50% ops work.
- Effective self-regulation of features vs. stability.

Error budgets?



<https://github.com/beorn7/talks>

Bonus slides

SRE in a smaller organization is similar to how Google runs production systems for which dedicated SRE support is unavailable.

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