From nothing to SRE

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Why SRE?
Common challenges in small(er) organisations
{Software, Network, Systems} engineering as a lever
Complexity catches us by surprise

@matthewhuxtable
How does your team navigate risk?
Where do we start?
Where do we start?

Innovative

Continually learning

agile
Embedded Model
The dedicated team model
Handoffs
The dedicated team model

“You want us to do your deploys?”
The dedicated team model

“We can’t enforce error budgets on these teams!”

“You want us to do your deploys?”
You build it...
You run it!
Everyone is an SRE
Dickerson’s Hierarchy of Reliability

- Monitoring
- Incident Response
- Postmortem / Root Cause Analysis
- Testing + Release procedures
- Capacity Planning
- Development
- Product
Context >> Control
(in most cases)
The Compliance Budget: Managing Security Behaviour in Organisations

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ABSTRACT
A significant number of security breaches result from employees' failure to comply with security policies. Many organizations have tried to change or influence security behaviour, but found it a major challenge. Drawing on previous research on usable security and economics of security, we propose a new approach to managing employee security behaviour. We conducted interviews with 17 employees from two major commercial organizations, asking why they do or don't comply with security policies. Our results show that key factors in the compliance decision are the actual and anticipated cost and benefits of compliance to the individual employee, and perceived effort and benefits to the organization. We present a new paradigm — the Compliance Budget — as a means of demonstrated that many human failures are caused security mechanisms that are too difficult for ordinary users. Even users with good technical skills such as systems administrators and software developers often struggle to keep up with the increased complexity and workload created by security mechanisms (Zurko & Simon, 1996; Flechtner et al. 2003). The primary goal of the flourishing research community focusing on usable security, known as HCIsec, is to provide security tools that the intended users can operate correctly [e.g. Yee 2005] and complete a security task — such as encrypting an email — effectively. Other key usability criteria established by the HCI research community — user satisfaction and user cost — have hitherto been addressed implicitly rather than explicitly in usable security research.
SRE is a...
SRE is a...

Cost centre?
SRE is a… 

cost centre?
SRE is a... 
cost centre? 
source of bureaucracy?
SRE is a... cost centre? source of bureaucracy?
SRE is a...

cost centre?

source of bureaucracy?

gatekeeper to production?
SRE is a...
cost centre?
source of bureaucracy?
gatekeeper to production?
????????
SRE is a force multiplier
How do you want your users to feel?
How do you want your users to feel?

(Measure it)
How do you do SRE?
Successful SRE at small scale

Measure positive value signals

Dial up autonomy, dial down control

Incentivise shared context and a common approach
Attribution


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