Lessons from Iraq for Building and Running SRE Teams
Site Reliability @ LinkedIn®

The graph shows the growth in site reliability from 2013 to 2016, with a steady increase each year.
Site Reliability @ LinkedIn
Site Reliability @ LinkedIn®
TEAM OF TEAMS
NEW RULES OF ENGAGEMENT FOR A COMPLEX WORLD

GENERAL STANLEY McCHRISTAL
U.S. Army, Retired

with Tantum Collins, David Silverman, and Chris Russell

“...is an indispensable guide to organizational change.” —WALTER ISAACSON, from the foreword
|     | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  |
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Hope is not a plan
Taylorist Management

- Planning,
- Organizing,
- Commanding,
- Coordinating, and
- Controlling

- Incentivizes: ...gather and centralize more information in order to push more and more efficient directives to the organization
Taylorist Worker

• Feed the cycle, and
• Await the next commands
Scientific Management

...is premised upon:

1. Absolutely rigid and inflexible standards throughout your establishment

2. That each employee of your establishment should receive every day clear-cut, definite instructions as to just what he is to do and how he is to do it, and these instructions should be exactly carried out, whether they are right or wrong.
To each unit, the piece of the war that really mattered was the piece inside their box on the org chart.
What’s your job?

If you play defense, . . .?
  • Most people say their job is to prevent the other team from scoring goals.

If you play offense, . . .?
  • Most people say their job is to score goals.

Most people are wrong.
• Adaptability is more characteristic of small interactive teams than large top-down hierarchies

• Shifting from tactical to strategic adaptability requires organizing teams into teams of teams instead of command-delegated teams
SRE Tactics for Teams of Teams

- Virtual teams and working groups
  - great for bootstrapping new technologies and driving adoption
SRE Tactics for Teams of Teams

SRE Learn [in] Day
SRE Tactics for Teams of Teams

- PM Roll Up
SRE Tactics for Teams of Teams

- Inter-team rotations
Most organizations are more concerned with how best to control information than how best to share it.
<table>
<thead>
<tr>
<th>Prisoner B Choices</th>
<th>Stay Silent</th>
<th>Confess and Betray</th>
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<tbody>
<tr>
<td>Stay Silent</td>
<td>Each serves one month in jail</td>
<td>Prisoner A goes free</td>
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<tr>
<td></td>
<td></td>
<td>Prisoner B serves full year in jail</td>
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<tr>
<td>Confess and Betray</td>
<td>Prisoner A serves full year in jail</td>
<td>Each serves three months in jail</td>
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<td></td>
<td>Prisoner B goes free</td>
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FLOWERS SEEM SO... TRITE. SOMETHING HOMEMADE? EASY TO LOOK HALF-EARTHED.

VALENTINE'S DAY IS A CORPORATE CONSTRUCT. BUT HARD TO GET OUT OF. I DON'T WANT TO BE A CONSUMER TOOL OR AN INCONSIDERATE JERK.

HOW DO I RIGHT Cliché? I COULD GET HER A GIFT ON A DIFFERENT DAY. BUT WHAT AM I PROVING?

FORTY PRESENTS: NO, NO! NO GIVE HER FIVE ITEMS AND THEN STEAL TWO FROM HER.

OK, BREATHE. KEEP IT TOGETHER.

AND WHAT IF HE GETS ME SOMETHING AND I DON'T RECIPECATE?

PRISONERS DILEMMA!!!

I GOT YOU EASTER CANDY AND A JAR OF HAMMERS. I PANICKED AND STAPLED MY HAND TO MY FACE. WE OVERTHOUGHT THIS.

YES.

IT'S SUCH A CONTRIVED RITUAL. BUT MAYBE RITUALS ARE NECESSARY SOCIAL GLUE.
“It is the idea flow within a community that builds the intelligence that makes it successful.”

—Alex Pentland
Engagement

Exploration
Manager:
“What if I spend all this money training and developing my staff and they leave?”

Consultant:
“What if you don’t and they stay?”
WE NEED TO DISRUPT OUR ENTIRE INDUSTRY. AND WE NEED TO MOVE QUICKLY.

BUT CHECK WITH ME BEFORE YOU DO ANYTHING.

I WANT YOU TO THINK LIKE ENTREPRENEURS, BUT NOT LIKE THE BRAVE ONES. CAN DO.
Push decision making as close to the action as possible
Effective Incident Response

... 1400, Friday afternoon ... pager has just exploded ... service has stopped serving any traffic in an entire datacenter. A few minutes in, ... another alert: a second datacenter has stopped serving. Then the third of your five datacenters fails ... *Is this going to be one of those days or weekends?*

• Technical Focus
• Poor Communication
• Freelancing

or

• Recursive Separation of Duties
  • Incident Command
  • Operational Response
  • Communication
  • Planning
“When we find that things go right under difficult circumstances, it’s mostly because of people’s *adaptive capacity*; their ability to recognize, adapt to, and absorb changes and disruptions, some of which might fall outside of what the system is designed or trained to handle.”

– Sidney Dekker
Task Force findings

• With local authority to make decisions:
  quality & speed increased

• Old way ("try harder")
  10 → 18 raids per month

• New way: → 300 per month (17x)
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<tr>
<th>VISION</th>
<th>Mission</th>
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<tr>
<td>• Provide personalized and timely communications to enable members to realize economic opportunity</td>
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<td>• For members, deliver messages that help you accomplish your professional goals across all of LinkedIn's value propositions</td>
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<td>• For product teams, provide a targeting and delivery platform that delivers your product's value to members</td>
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<td>• Leverage LinkedIn's assets, look holistically across apps, and involve the member</td>
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<td>Build a world-class team</td>
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<tr>
<td>Technology</td>
<td>Data-driven dev at scale</td>
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<td>Product</td>
<td>Products that our members love</td>
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<td>Monetization</td>
<td>Scale profitable business lines</td>
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<td>Members first</td>
<td>Relationships matter</td>
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What are you inspiring others toward?
Relationships matter
Kurt Andersen
@drkurta
kurta@linkedin.com
Resources

• Team of Teams, Stanley McChrystal

• Social Physics, Alex Pentland

• Conscious Business, Fred Kofman

• Peter Siebel’s blog: gigamonkeys.com

• Rule of 3 & 10:
  https://www.sequoiacap.com/article/the-rule-of-3-and-10/