Lyon Wong, Blameless; Christina Tan, EloquentSpeaking

How to Champion SRE investment to Different Levels of Leadership

www.usenix.org/srecon19apac/program
This Session

- Advanced
- Intermediate
- Basic
Stages of SRE Adoption

- **CEO / CTO**
  - SLOs & Error Budgets

- **VP / Director**
  - Automated Metrics & Continuous Learning

- **Manager / Lead**
  - Incident Management

- **Individual Engineer / PM**
  - Pre-SRE Commitment
Stages of SRE Adoption

Per stage:
- Definition
- Case Study
- Incentive
- Resistance
- Counters
- Action

Individual Engineer / PM
Pre-SRE Commitment

Manager / Lead
Incident Management

VP / Director
Automated Metrics & Continuous Learning

CEO / CTO
SLOs & Error Budgets
The Art of Persuasion

Inception: You vs. Them
The Art of Persuasion

LED

- Logic
- Emotions
- Data
Convincing Your Lead / Manager to Invest in Incident Management
Convincing Your Lead / Manager to Invest in Incident Management

Incident Management includes:

- Incident Response Playbooks
- Measuring Time to Detection/Assemble/Investigate/Resolution
- Integrations with Monitoring Systems and Ticketing Workflow
Convincing Your Lead / Manager to Invest in Incident Management

Case Study: MasterClass (Celebrity MOOC)
## Convincing Your Lead / Manager to Invest in Incident Management

<table>
<thead>
<tr>
<th>Your Perspective</th>
<th>Manager’s Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I don’t want to get paged at 2am”</td>
<td>“You don’t want your boss to call you at 5am”</td>
</tr>
<tr>
<td>“Automation will reduce context switching for me”</td>
<td>Incidents will get resolved faster</td>
</tr>
<tr>
<td>“Playbook will keep me organized and thorough”</td>
<td>You’ll get a more dependable process</td>
</tr>
<tr>
<td>“I want to measure TTR”</td>
<td>You’ll get data to show off how much your team efficiency improved</td>
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</table>
Convincing Your Lead / Manager to Invest in Incident Management

Resistance to Adoption: OSAGE syndrome
Convincing Your Lead / Manager to Invest in Incident Management

Resistance to Adoption: OSAGE syndrome

Our Systems Are Good Enough
## Convincing Your Lead / Manager to Invest in Incident Management

### Overcoming OSAGE - “Our systems are good enough”

<table>
<thead>
<tr>
<th>Logic</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Our infrastructure and its dependencies are getting more complex (cloud, micro-services, containers, etc…)</td>
<td>[Action] Create a service catalog on the number of services/micro-services, and their dependencies</td>
</tr>
<tr>
<td>- You might lose your team to burnout</td>
<td>[Action] Roll out a solution in one team, track the trends of TTD and TTR. Decrease in time can lead to rollout to more teams</td>
</tr>
<tr>
<td>- At the rate we’re scaling, we won’t meet our reliability goals</td>
<td></td>
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<table>
<thead>
<tr>
<th>Emotion</th>
<th></th>
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<tbody>
<tr>
<td>- Our systems are good (acknowledge ego) BUT others are doing it better (FOMO)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- [Action]</td>
<td></td>
</tr>
</tbody>
</table>
Convincing Your Lead / Manager to Invest in Incident Management

Common Trap
Do not stop at incident management! It is only a piece of SRE. Otherwise, you reach a local maxima that will fall short long term.
Convincing Your VP / Director to Invest in **Automated Metrics & Continuous Learning**
This phase of SRE adoption includes:

- Automated reporting on incident specific metrics (MTTR, customers impacted. etc.)
- Customized dashboards
- Blameless Postmortem / Learnings
Convincing Your VP / Director to Invest in Automated Metrics & Continuous Learning

Case Study: Procore (Construction SaaS)
Incentives for adoption:

• Removes silos and promotes collaboration
• Reporting to executives and stakeholders is toil
• Preventing future incidents through deep analysis
• Training exercises accelerate engineers’ growth and maintain org-wide reliability maturity
Convincing Your VP / Director to Invest in Automated Metrics & Continuous Learning

Resistance to adoption:

- Incident management is enough
- Reliability is not a priority issue
- Post-mortems are too much time to write and tedious to review
Convincing Your VP / Director to Invest in Automated Metrics & Continuous Learning

Resistance: Incident Management is enough

• Without post-mortems, you’re not improving. Default path is worse reliability over time.

  • [Action] Do postmortem on the 5-10 past incidents
  • [Action] Generate work items for detection, mitigation and prevention
Convincing Your VP / Director to Invest in Automated Metrics & Continuous Learning

**Resistance:** Reliability is not a priority

- Reliability is all existing features combined
- Sum of all features > 1 new feature
Resistance: Post-mortems take too much time to write and tedious to review

- **[Action]** Find a tool that automates postmortem generation

- **[Action]** Create metadata schema to automatically generate reports/data (e.g., services impacted, customers impacted, contributing factors)
Convincing Your CEO / CTO to Invest in SLOs & Error Budgets
This phase of SRE adoption includes:

- User journeys mapped
- SLOs, SLIs
- Negotiated error budget responses
Incentives for adoption:

Convincing Your CEO / CTO to Invest in SLOs & Error Budgets
Incentives for adoption:

- Long-term competitive advantage
- Reliability is feature #1 for customer experience
- Opportunity to drain technical debt and avoid months-long feature freeze
- Reduce spend on maintenance
- Drive up the right areas of reliability over time
Convincing Your CEO / CTO to Invest in SLOs & Error Budgets

Case Study: Evernote
Convincing Your CEO / CTO to Invest in SLOs & Error Budgets

Resistance: Don’t see the connection to business and why SRE should be a company level priority
**Resistance:** Don’t see the connection to business and why SRE should be a company level priority

<table>
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<tr>
<th>Counters</th>
<th>LED</th>
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<tbody>
<tr>
<td>Customer impact</td>
<td>- Expensive</td>
</tr>
<tr>
<td></td>
<td>- Lose brand and customer trust</td>
</tr>
<tr>
<td></td>
<td>- Catch things before SLAs get triggered</td>
</tr>
<tr>
<td></td>
<td>- [Action] Quantify cost of downtime</td>
</tr>
<tr>
<td></td>
<td>- [Action] Quantify brand value and customer sentiment (NPS) vs. reliability</td>
</tr>
<tr>
<td>Competitive advantage</td>
<td>- We look worse when competitors resolve incidents faster, or has fewer incidents</td>
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Convincing Your CEO / CTO to Invest in SLOs & Error Budgets

Common Trap
Don’t expect to have 100 SLOs right away.
How to Champion SRE Investment to Different Levels of Leadership

- Persuasion - always from the other’s perspective
  - Logic, Emotion, Data
  - Higher in management, more robust your argument needs to be

- Incident Management -> Manager/Lead (Masterclass)
  - Overcome OSAGE with LED
  - Don’t stop at Incident Management

- Automated Metrics & Continuous Learning -> VP/Director (Procore)
  - Prevention is possible.
  - Default is worse reliability over time.
  - Sum of all features > 1 new feature

- SLOs & Error Budgets -> CEO/CTO (Evernote)
  - Competitive Advantage
  - Drain technical Debt and avoid code freeze
  - Don’t expect to have 100 SLOs right away
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Feedback: https://tinyurl.com/SREConPersuasion
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