

usenix
SRE
CON — ASIA
PACIFIC

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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

CEO / CTO



SLOs &
Error Budgets

VP / Director



Automated Metrics &
Continuous Learning

Manager / Lead



Incident Management



Individual
Engineer / PM

Pre-SRE Commitment

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)



MASTERCLASS

Convincing Your Lead / Manager to Invest in Incident Management

Your Perspective	Manager's Perspective
"I don't want to get paged at 2am"	"You don't want your boss to call you at 5am"
"Automation will reduce context switching for me"	Incidents will get resolved faster
"Playbook will keep me organized and thorough"	You'll get a more dependable process
"I want to measure TTR"	You'll get data to show off how much your team efficiency improved

Convincing Your Lead / Manager to Invest in Incident Management

Resistance to Adoption: **OSAGE** syndrome



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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”

Logic	<ul style="list-style-type: none">- Our infrastructure and its dependencies are getting more complex (cloud, micro-services, containers, etc...)- You might lose your team to burnout- At the rate we're scaling, we won't meet our reliability goals
Emotion	<ul style="list-style-type: none">- Our systems are good (acknowledge ego) BUT others are doing it better (FOMO)
Data	<ul style="list-style-type: none">- [Action] Create a service catalog on the number of services/ micro-services, and their dependencies- [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

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



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

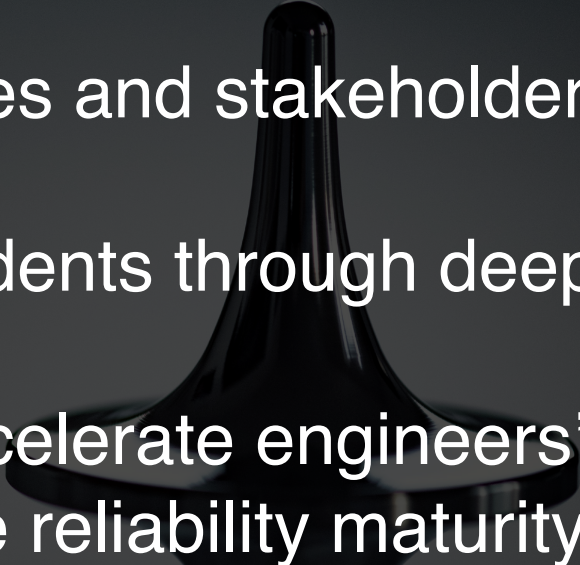
Convincing Your VP / Director to Invest in Automated Metrics & Continuous Learning

Case Study: Procore (Construction SaaS)

PROCORE®

Convincing Your VP / Director to Invest in Automated Metrics & Continuous Learning

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 take 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

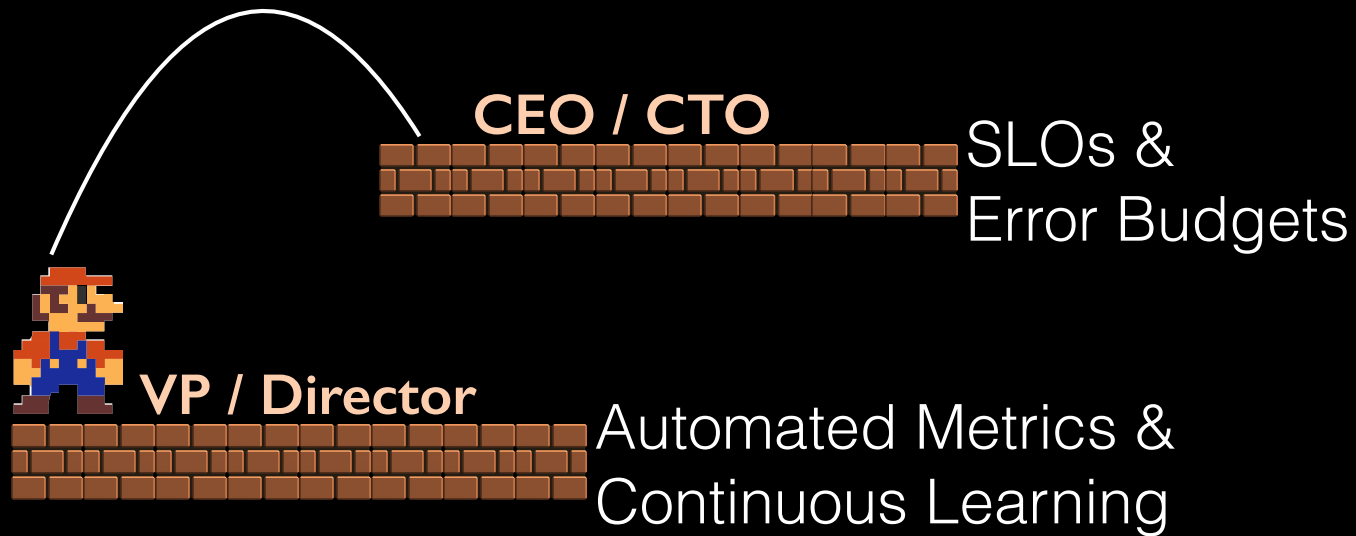
- Reliability is all existing features combined
- Sum of all features $>$ 1 new feature

Convincing Your VP / Director to Invest in Automated Metrics & Continuous Learning

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 (eg. services impacted, customers impacted, contributing factors)

Convincing Your CEO / CTO to Invest in SLOs & Error Budgets



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


Convincing Your CEO / CTO to Invest in SLOs & Error Budgets

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

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

Counters	LED
Customer impact	<ul style="list-style-type: none">- Expensive- Lose brand and customer trust- Catch things before SLAs get triggered- [Action] Quantify cost of downtime- [Action] Quantify brand value and customer sentiment (NPS) vs. reliability
Competitive advantage	<ul style="list-style-type: none">- We look worse when competitors resolve incidents faster, or has fewer incidents



Convincing Your CEO / CTO to Invest in SLOs & Error Budgets

Common Trap

Don't expect to have 100 SLOs right away.



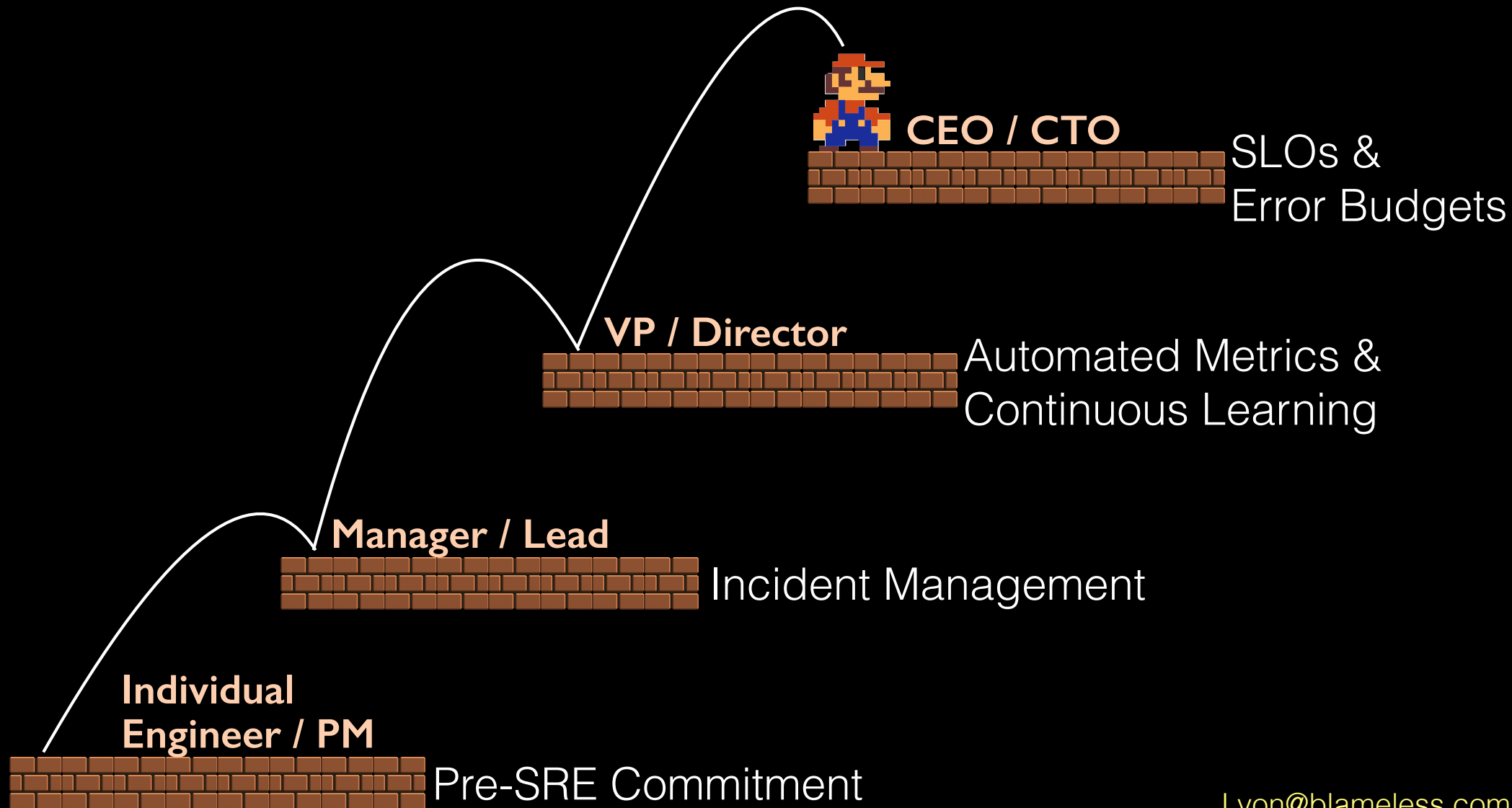
How to Champion SRE Investment to Different Levels of Leadership

- 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



How to Champion SRE Investment to Different Levels of Leadership

Feedback: <https://tinyurl.com/SREConPersuasion>



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