Lesson 3.3: Monitoring with a DevOps Mindset

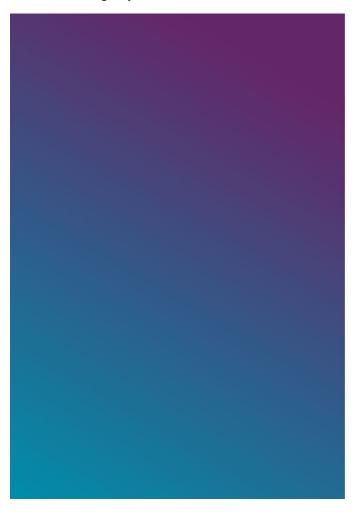




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Slide 1: Learning Objectives



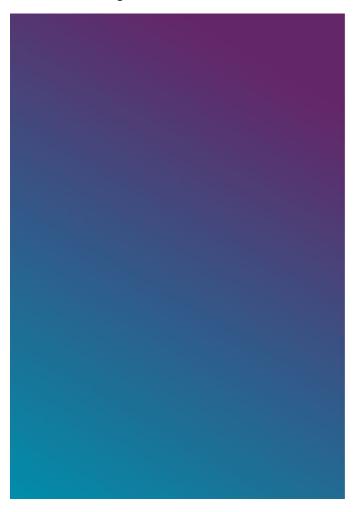
Learning Objectives

Explain why incident dashboards aren't always helpful

Discuss importance of transitioning to proactive monitoring

Identify business metrics for monitoring

Slide 2: Monitoring Has Evolved



Monitoring Has Evolved

Old way: Focus was primarily on system and infrastructure metrics

Related to availability and performance

"Is the server up?"

Performance measured inconsistently

Slide 3: Boy Who Cried Wolf DevOps



Boy Who Cried Wolf DevOps

Reactive dashboards sounded the alarm

No proactive alerts before a problem

False alarms caused alerts to be ignored

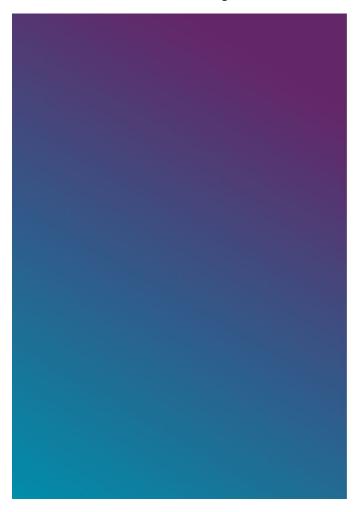
Slide 4: Old Way of Monitoring was NOT a Recipe for Long-term Success



Old Way of Monitoring was NOT a Recipe for Long-term Success

Server up but application not available
Sending alerts that required no action
Stable infrastructure but *unstable* apps

Slide 5: We Realized Our Monitoring Had to Evolve



We Realized Our Monitoring Had to Evolve



Slide 6: Business Metrics as a Way of Monitoring



Business Metrics as a Way of Monitoring

Metric dip alerts team to investigate

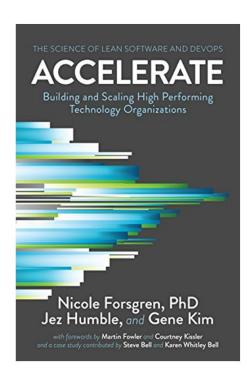
Started tracking Mean Time To Detect

No more 30 minutes to calls to help desk!

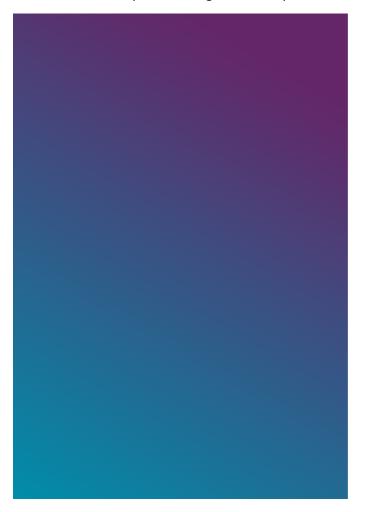
Automated alert triggers system to solve in seconds

Slide 7: Accelerate





Slide 8: Observability is Becoming the Industry Norm



Observability is Becoming the Industry Norm

You have the instrumentation you need to understand what's happening within your software

Slide 9: Charity Majors on Benefits of Observability



Charity Majors on Benefits of Observability

Thought leader on current best practices

Approach to monitoring is lagging

Health of the **system** no longer matters

What matters is health of each event

Slide 10: Observability Instead of Monitoring



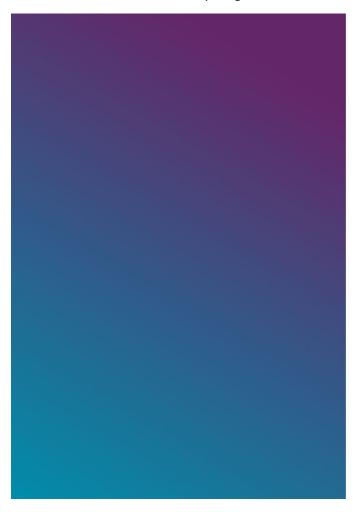
Observability Instead of Monitoring

It's now about unknown unknowns

It's no longer about known unknowns

Gone are the days...

Slide 11: You Can't Monitor Everything



You Can't Monitor Everything

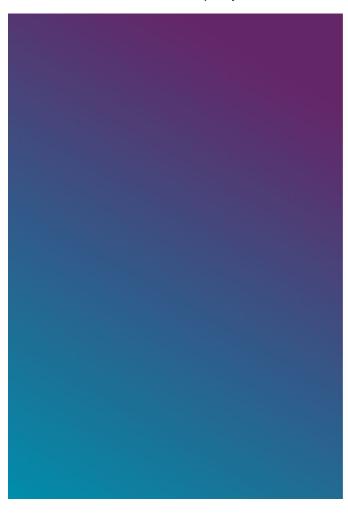
Engineers have vital responsibilities

Auto-remediate what you can

Fail gracefully where you can't

Shift ops load to providers as much as possible

Slide 12: Learn More from Charity Majors



Learn More from Charity Majors

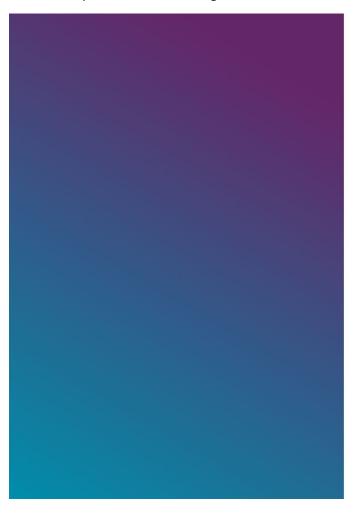
You can't predict all **unknown** unknowns Focus energy where you can **predict**:

Instrumentation

Resilience to failure

Fast and safe deployment

Slide 13: Stop the Sustained Barrage



Stop the Sustained Barrage

If you know how to fix it, fix it

Auto-remediate the problem

Disable paging alerts in off hours

Make **system resilient** enough to wait

Slide 14: Check Out Charity Majors' Company: Honeycomb



Check Out Charity Majors' Company: Honeycomb

Explore this further

See amazing sampling documents

Check out more **best practices**



The importance of monitoring cannot be overstated

Transition to some form of proactive monitoring

Identify and diagnose unknown unknowns

Observe business metrics and sampling to provide early warnings