Break Things on Purpose

Kolton Andrus
CEO, Gremlin
Pathemata mathemta:

Guide your learning through pain

Skin in the Game

Nassim Nicholas Taleb
Hormesis

a favorable response to low exposures to stressors
Inject something harmful, in order to build an immunity
Chaos Engineering:

Thoughtful, planned experiments designed to reveal the weakness in our systems.
We test **proactively**, instead of waiting for an outage.
Why Now?
Effective Experimentation
“What could go wrong?”
“How likely is this to occur?”
“What is the cost of being wrong?”
S3 $150M
Delta $100M
US Annually $700B
It’s Gameday
Picard management tip: Run crisis drills when all is well. A real calamity is not a good time for training.
Minimize the blast radius.

1. Form a hypothesis.
2. Run an experiment.
3. Abort Conditions
   - Failure
   - Find and fix issues.
4. Success
   Scale up and repeat.
Those unwilling to test in production aren't yet confident that the service will continue operating through failures.

And, without production testing, recovery won't work when called upon.

James Hamilton
Distinguished Engineer, AWS
Prepare for

Real World Scenarios.
CDN Selection
Never lose a message
Gracefully degrade
Automation
“What is Tier 1?”

Finding the Critical Services
Automating Failure Testing Research at Internet Scale

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How do I get started?
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