### The Psychology of Chaos Engineering Matty Stratton, PagerDuty



### Chaos Engineering is the discipline of experimenting on a system in order to build confidence in the system's capability to withstand turbulent conditions in production.

https://principlesofchaos.org/





What chaos engineering is NOT





### It's not about breaking things



Replying to @mattstratton It's not about breaking things



**Silvia Botros** @dbsmasher

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### Back off, man... I'm a scientist.



### Experimenting in production is preferred



# You can't do this without good measurement



# Minimize your blast radius



### Some helpful tools

- Netflix Simian Army <u>https://principlesofchaos.org/</u>
- Gremlin <u>https://www.gremlin.com/</u>
- ChaosToolkit <u>https://chaostoolkit.org/</u>





But what about the people?



How does it make you feel to know Netflix practices chaos engieering?

# What about your bank?





@mattstratton

### If you discover a service you consume uses chaos engineering in production, you feel:

### Reassured

Uneasy



### Matty @ devopsdays Baltimore

1% 9%

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## Management can get...

...nervous



# Consider your words



# It's about the philosophy





interns)

and challenging



(not fully using chaos engineering, but had some recent interesting failures from

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- In all honesty I generally feel excitement when confronted with a new error that hasn't occurred before. Finding out the
- root of the error (logic, oversite, etc.) is fun





- Know your conditions when will you shut down the experiment?
- This isn't about causing stress on your people be transparent
- There are humans at the other end of those numbers



## Further Reading

- Chaos Engineering Traps Nora Jones <u>bit.ly/2Pr53ZH</u>



ChaosCat: Automating Failure Injection at PagerDuty <u>bit.ly/2UCbdXN</u>

ChaoSlingr: Introducing Security into Chaos Testing <u>bit.ly/2GDZN1V</u>