

HOW TO INFECT YOUR ORGANIZATION

WITH HUMANE OPS



Matty Stratton

DevOps Advocate, PagerDuty

 @mattstratton















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@mattstratton

Describe your on-call situation in three words:

1:00 PM - 14 May 2018



Rich Adams @r_adams · 6h

Replying to @mattstratton

This is fine.



Josh Hull @VestigialEthics · 4h

Replying to @mattstratton @ChrisShort

You did what?



Dana Bowlin @bowlindm · 3h

Replying to @mattstratton

Just call everyone



Victor Palacio @vjpalacio · 3h

Please mute yourself



Emily Freeman @editingemily · 5h

Replying to @mattstratton

A dumpster fire.



Jan Mara @skullboxx · 4h

Replying to @mattstratton

Works in Dev!



JJ Asghar @jjasghar · 4h

Replying to @mattstratton

Back in the day?

"Scotch, scotch, scotch"

50,000 RESPONDERS RECEIVING A TOTAL OF 760 MILLION NOTIFICATIONS



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- ▶ A total of 330,000 weekend days with interrupt notifications



LET'S HAVE SOME DATA

THE MOST MEANINGFUL METRICS ON ATTRITION ARE



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- ▶ Number of days where a responder's work and life are interrupted



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- ▶ Number of days when a responder is woken overnight
- ▶ Number of weekend days interrupted by notifications.





Charity Majors

@mipsytipsy

Follow



Yes, yes. On call sucks and can destroy your life. I know this. Bored now.

On call is a fact of life for anyone who cares about developing high quality software for the long run. So how can we make it *not* suck?

6:43 AM - 31 Jan 2018 from [City of London, London](#)

9 Retweets 25 Likes



COINED THE TERM "MEME"



**IS NOW IN A MEME
ABOUT MEMES**

EXAMPLES OF MEMES ARE TUNES, IDEAS, CATCH-PHRASES, CLOTHES FASHIONS, WAYS OF MAKING POTS OR OF BUILDING ARCHES. JUST AS GENES PROPAGATE THEMSELVES IN THE GENE POOL BY LEAPING FROM BODY TO BODY, SO MEMES PROPAGATE THEMSELVES IN THE MEME POOL BY LEAPING FROM BRAIN TO BRAIN VIA IMITATION.

Richard Dawkins

SNOW CRASH



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**"IDEOLOGY IS A VIRUS."
- NEAL STEPHENSON**



WHAT IF YOU ARE THE SUPREME LEADER?



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- ▶ “Command and control” doesn’t work



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- ▶ “Command and control” doesn’t work
- ▶ Use measurement for good, not for evil



WHAT IF YOU ARE THE SUPREME LEADER?

- ▶ “Command and control” doesn’t work
- ▶ Use measurement for good, not for evil
- ▶ Avoid “executive swoop”



WHAT IF YOU ARE THE SUPREME LEADER?

- ▶ "Command and control"
- ▶ Use measurement
- ▶ Avoid "executive"



MIDDLE MANAGEMENT TIPS



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- ▶ Encourage safe post-incident review spaces



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- ▶ Drive for a culture of learning



MIDDLE MANAGEMENT TIPS

- ▶ Encourage safe post-incident review spaces
- ▶ Drive for a culture of learning
- ▶ Take care of your people



REVIEW. REVIEW. REVIEW

A CULTURE OF LEARNING

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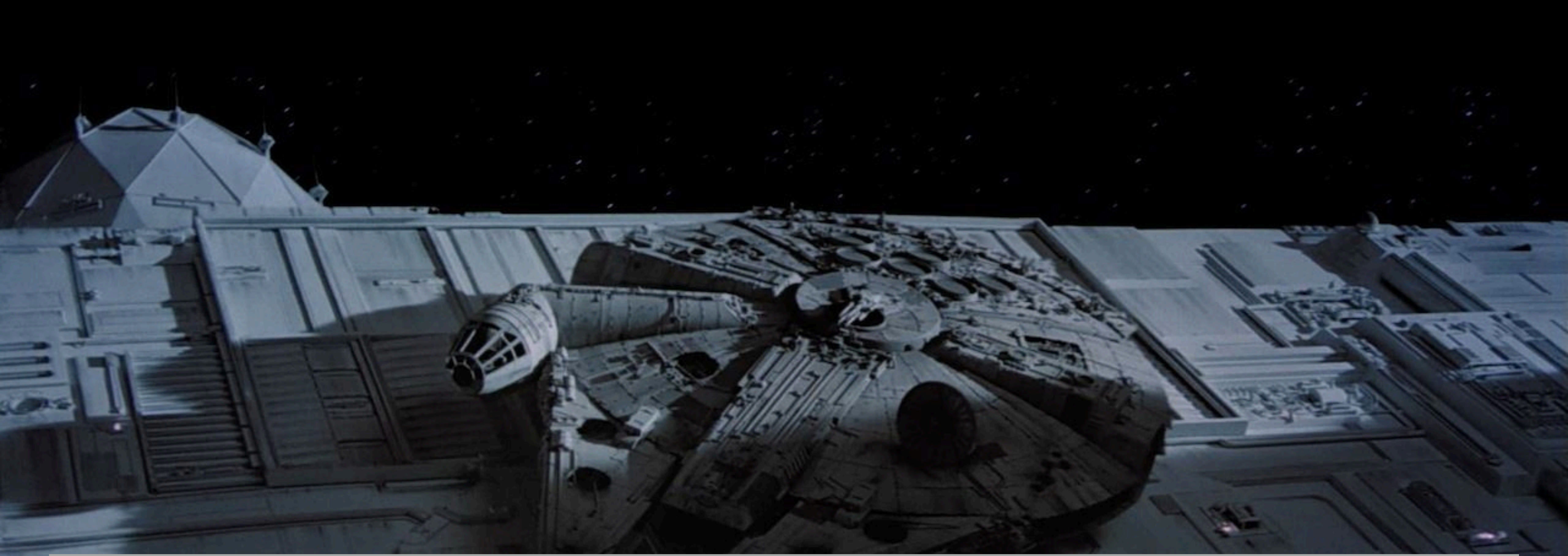
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<http://bit.ly/2KpzKKW>



**USE THE FORCE, EVEN
IF YOU AREN'T A JEDI**



REVIEW ALL THE THINGS

HAND-OFF TIME

THE ON-CALL REVIEW

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- ▶ Approximately a week's worth of on-call history is common
- ▶ Take about 30 minutes, give or take

ON-CALL REVIEW, CONTINUED

- ▶ Typically instituted by a team manager

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- ▶ BETTER PRACTICE - include the entire team!

REVIEW. REVIEW. REVIEW

NORMALIZATION OF DEVIANCE

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<http://bit.ly/2lhj1wV>



QUESTION METRICS

WHY ARE WE USING THESE NUMBERS?

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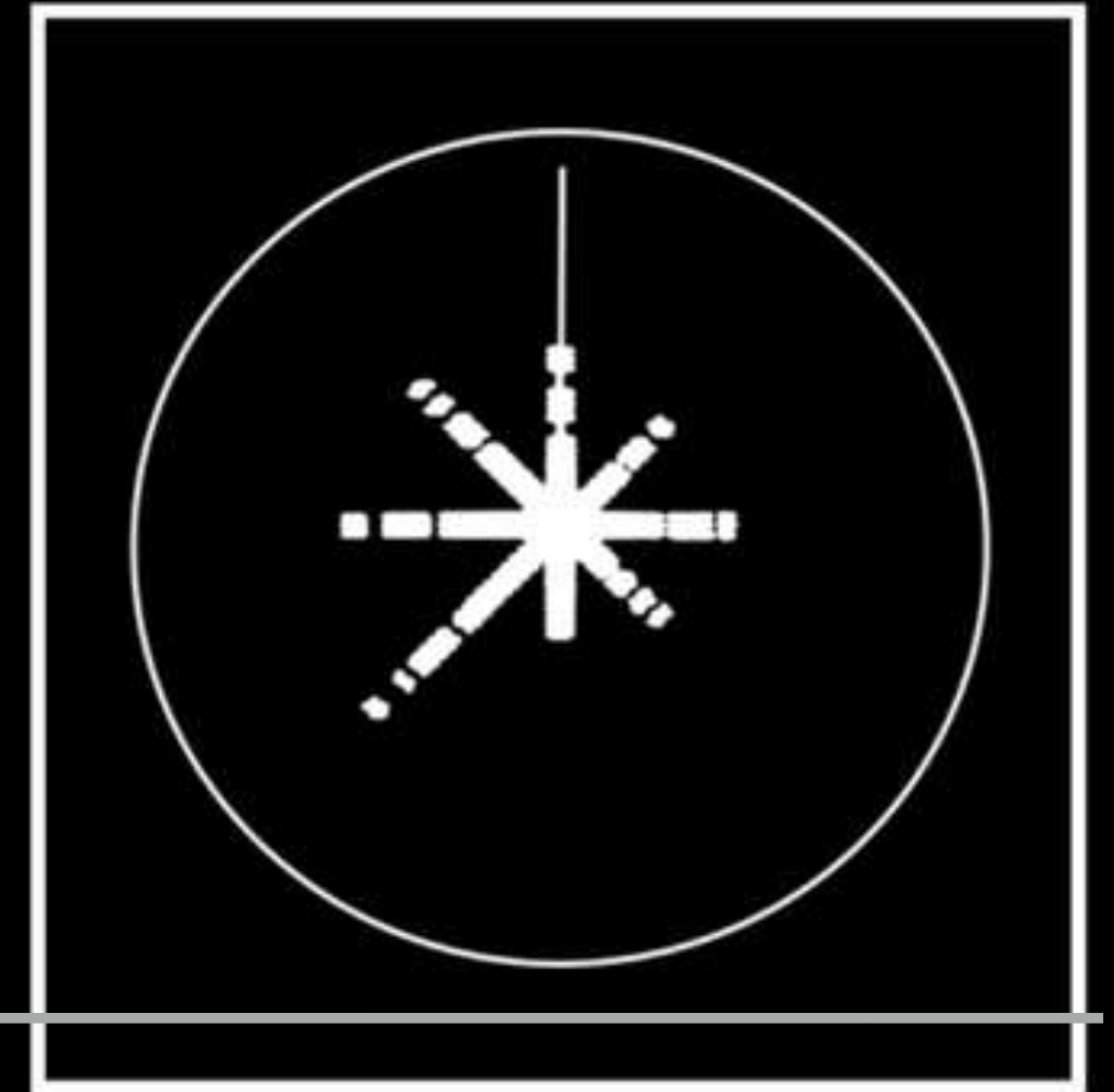
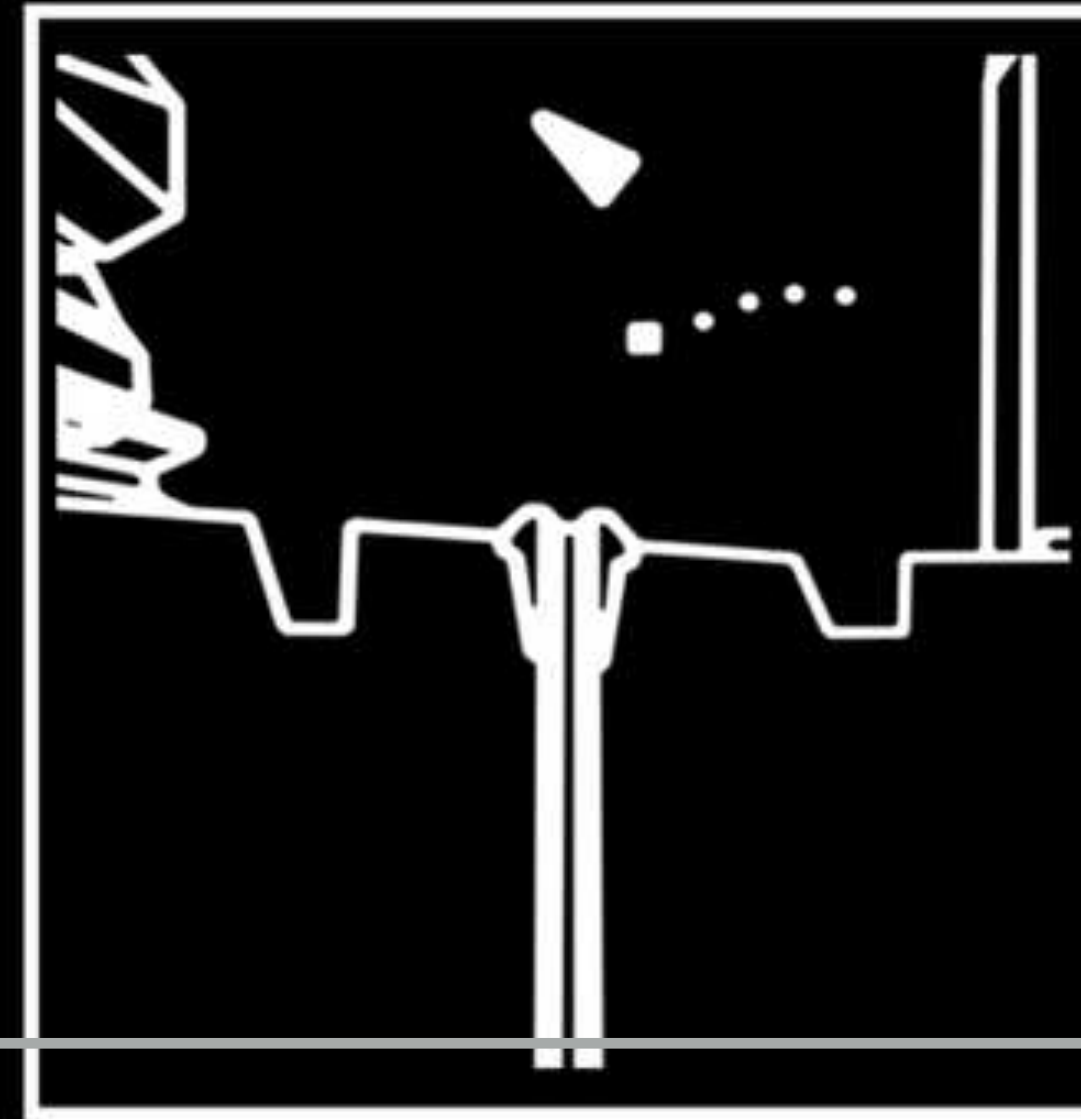
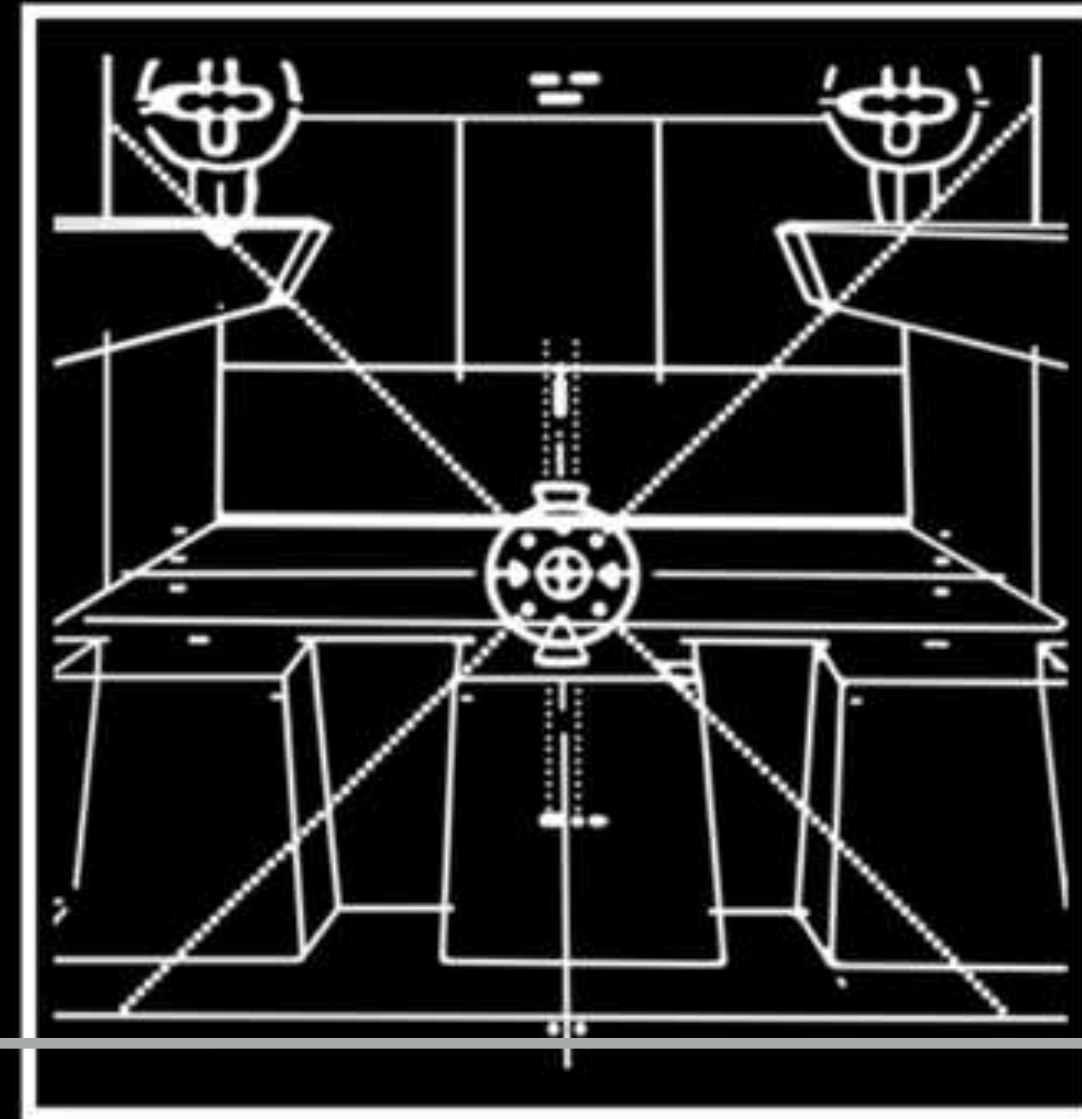
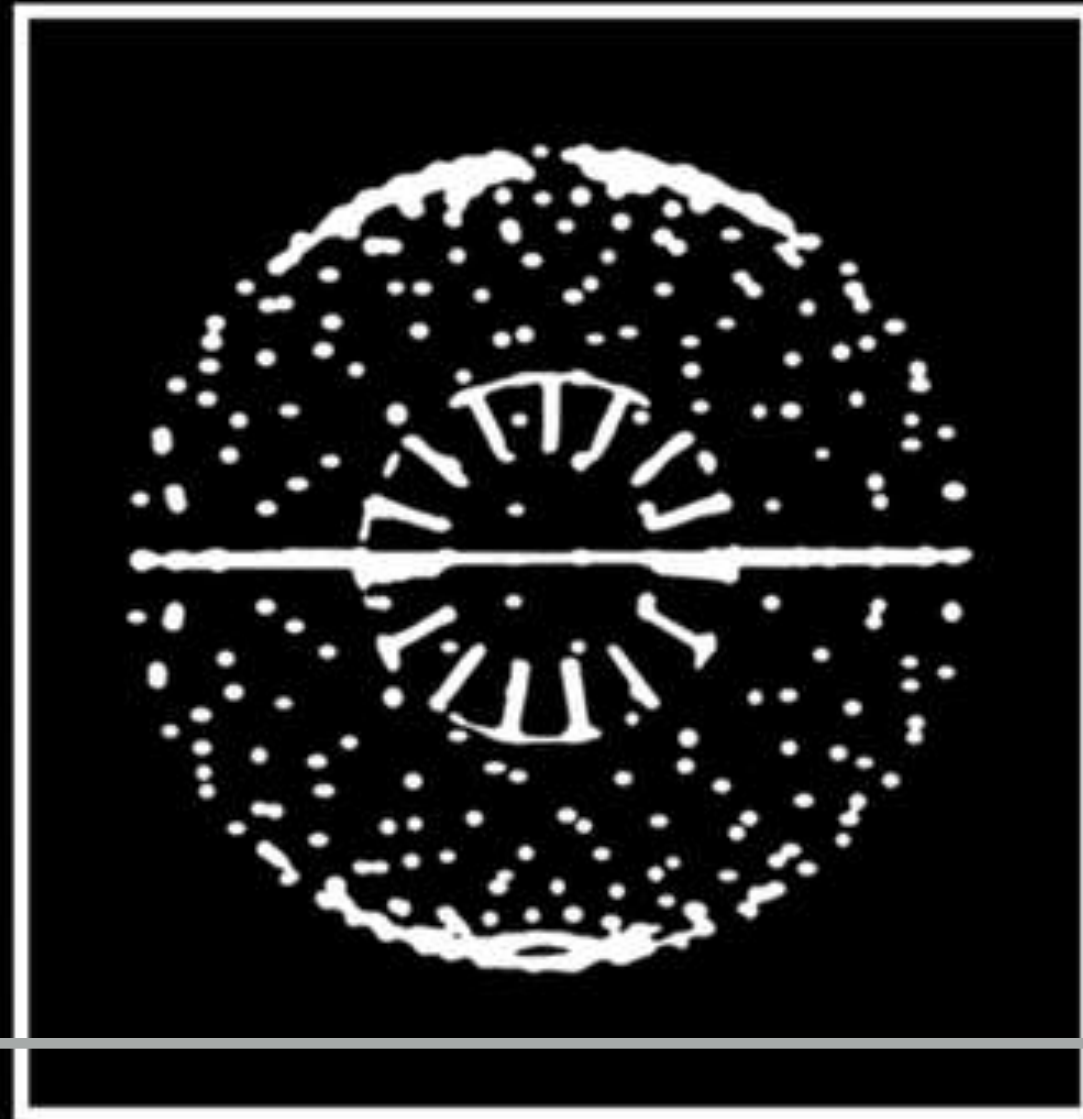
- ▶ What is the data that drive your incident process

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- ▶ Are your metrics tied to business outcomes?

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- ▶ What is the data that drive your incident process
- ▶ Are your metrics tied to business outcomes?
- ▶ Correlation doesn't always equal causation



SIMPLE. ALWAYS.

KEEP IT SIMPLE



**THE MORE RESILIENTLY THE SYSTEM IS
DESIGNED, THE MORE LIKELY IT IS TO CAUSE
A NEGATIVE BUSINESS IMPACT**

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Stratton's Law of Catastrophic Predestination

COMMUNICATE.

TALK TO PEOPLE



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- ▶ Who are your customers? What are their expectations?



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- ▶ Who are your customers? What are their expectations?
- ▶ Whose customer are you? Can you help them out?



TALK TO PEOPLE

- ▶ Who are your customers? What are their expectations?
- ▶ Whose customer are you? Can you help them out?
- ▶ What are the perceptions of your team?



HUMANS, PEOPLE ARE



HUMANS, PEOPLE ARE

- ▶ Consider contextual on-call



HUMANS, PEOPLE ARE

- ▶ Consider contextual on-call
- ▶ The Golden Rule



HUMANS, PEOPLE ARE

- ▶ Consider contextual on-call
- ▶ The Golden Rule
- ▶ Bake cookies



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CookieOps

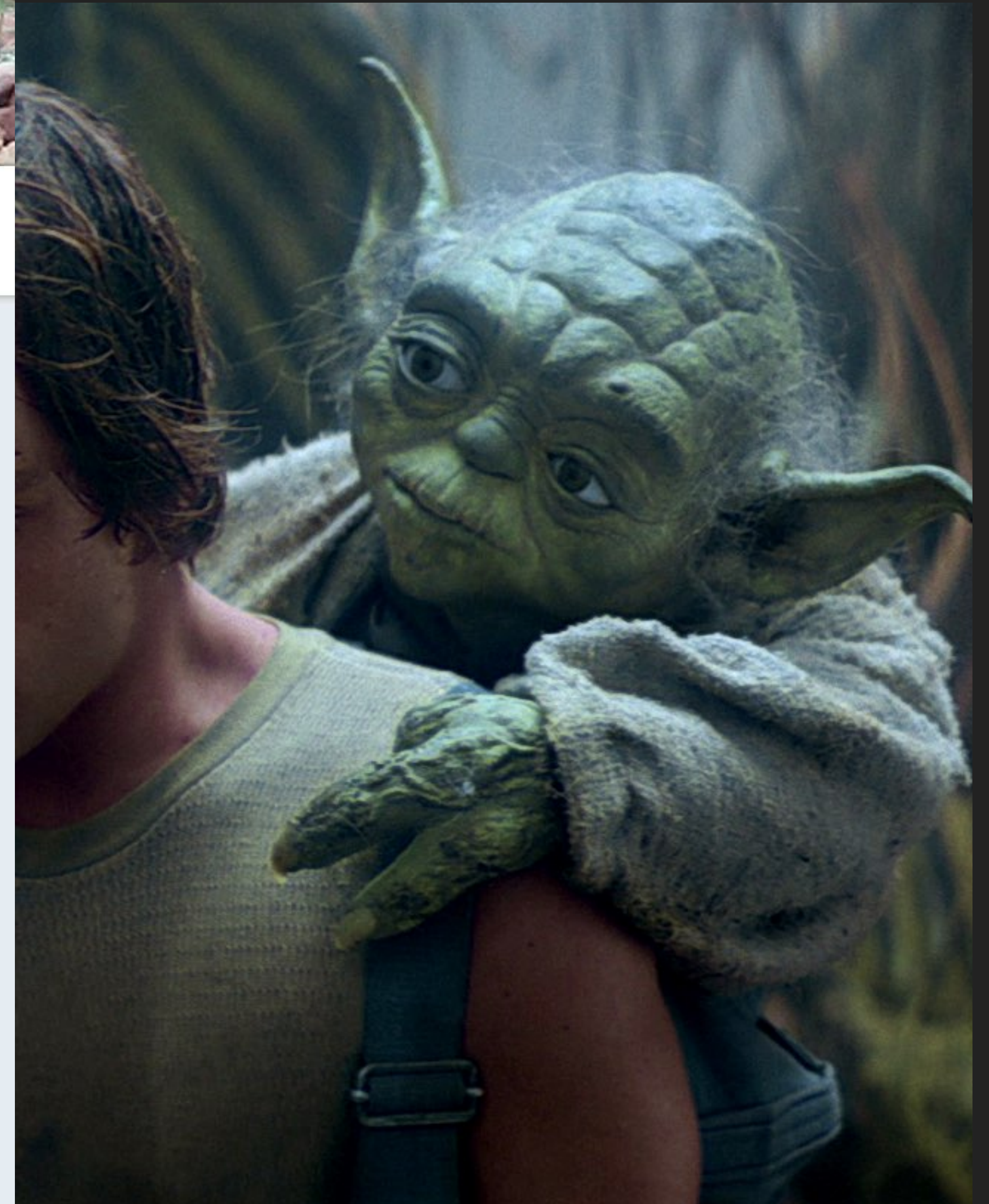
@cookieopsdotcom

#DevOps Makes More Sense with Cookies.

[cookieOps.com](https://cookieops.com)

Joined September 2014

32 Photos and videos





LEARN TO TAKE COMMAND

INCIDENT COMMAND

MAKE IT NICE ON THE BRIDGE

DURING A CALL

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- ▶ Have clearly defined roles

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- ▶ Have clearly defined roles
- ▶ Avoid bystander effect

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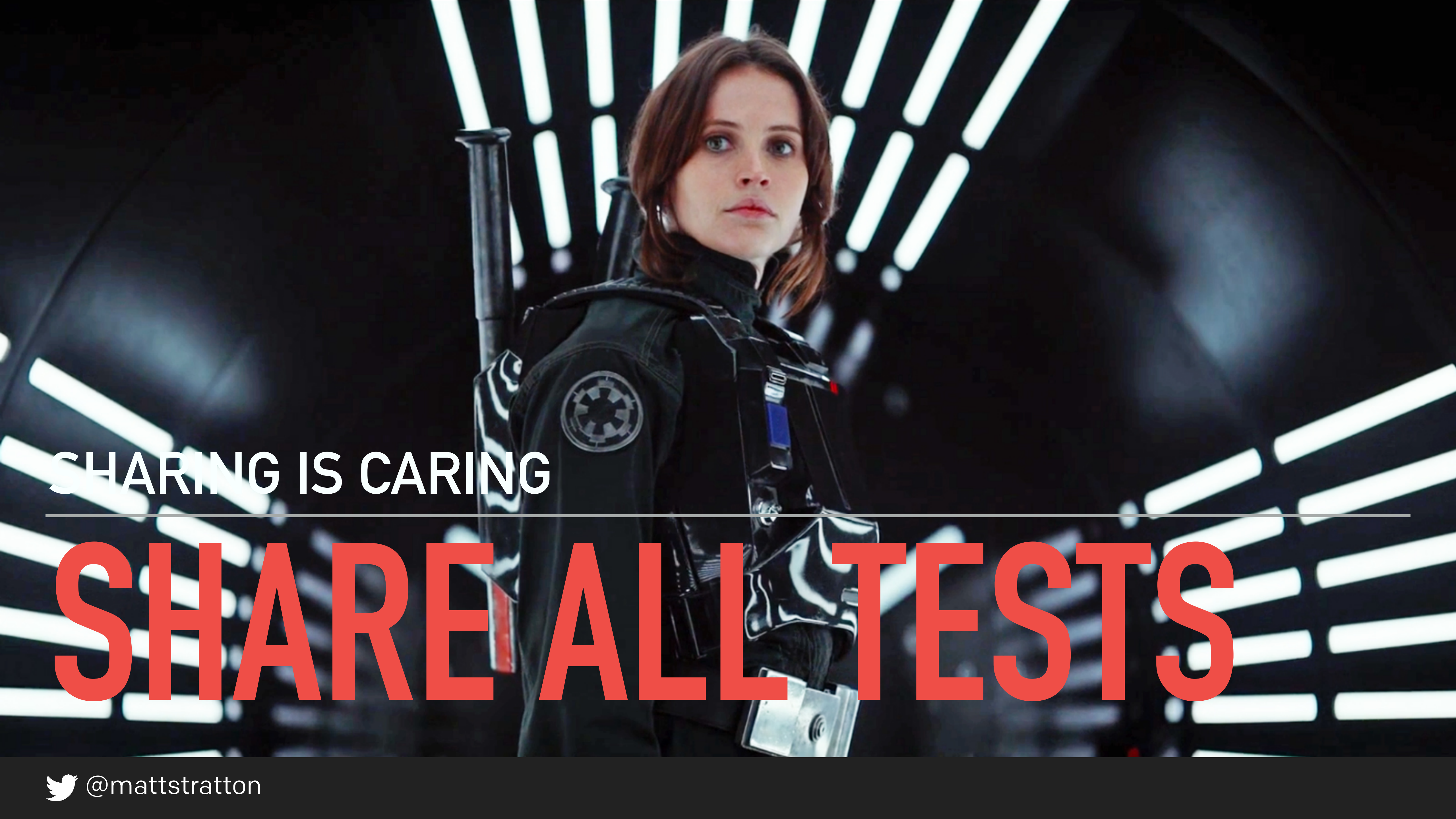
- ▶ Have clearly defined roles
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DURING A CALL

- ▶ Have clearly defined roles
- ▶ Avoid bystander effect
- ▶ Rally fast, disband faster
- ▶ Don't litigate severity
- ▶ Have a clear mechanism for making decisions



SHARING IS CARING

SHARE ALL TESTS

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TESTS ARE FOR SWE AND SRE BOTH

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- ▶ All functional tests used in preproduction should have a corresponding monitor in production
- ▶ All monitoring functionality in production should have corresponding tests in the build/release process
- ▶ Monitoring is testing with a time dimension. **There should be full parity between preproduction and production.**



EVERY SPRINT

DO ONE NICE THING

HELP YOUR RESPONDERS IN EACH AND EVERY SPRINT

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- ▶ In each sprint/work unit, add value to your responders

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- ▶ Even if it's not on a card

HELP YOUR RESPONDERS IN EACH AND EVERY SPRINT

- ▶ In each sprint/work unit, add value to your responders
- ▶ Even if it's not on a card
- ▶ You rebel, you.

ADDING VALUE

SOME EXAMPLES

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- ▶ Provide better context in logging (stacktraces alone don't count)
- ▶ Remove some technical debt. Yes, you have some.
- ▶ Add some (useful) tests
- ▶ Remove something unused

ADDING VALUE

- ▶ If you use feature flags, add a description field to the configuration

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- ▶ If you use runbooks, ensure they are up to date every time you cut a release. If you don't do this, abandon the runbook altogether (an incorrect runbook is considered harmful)

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- ▶ If you use runbooks, ensure they are up to date every time you cut a release. If you don't do this, abandon the runbook altogether (an incorrect runbook is considered harmful)
- ▶ SIMPLIFY, MAN!



@MATTSTRATTON
LINKEDIN.COM/IN/MATTSTRATTON
MATTSTRATTON.COM
ARRESTEDDEVOPS.COM

**SHARE YOUR ON-CALL
STORIES WITH ME LATER**

 @mattstratton

SPEAKING.MATTSTRATTON.COM

FURTHER READING AND REFERENCES

- ▶ Improving Your Employee Retention With Real-Time Ops Data - <http://bit.ly/2rGTnq4>
- ▶ Page It Forward! - <http://bit.ly/2In8Lzc>
- ▶ The study of information flow: A personal journey - <http://bit.ly/2KpzKKW>
- ▶ The Normalization of Deviance (If It Can Happen to NASA, It Can Happen to You) - <http://bit.ly/2Ihj1wV>

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- ▶ *Snow Crash* by Neal Stephenson - <http://bit.ly/2liuc8L>
 - ▶ The Cybersecurity Canon: *Snow Crash* - <http://bit.ly/2InDYGI>
 - ▶ Disasters! Arrested DevOps Episode 37 - <https://arresteddevops.com/37>
 - ▶ PagerDuty Incident Response - <https://response.pagerduty.com>
 - ▶ Operational Reviews - <https://reviews.pagerduty.com>