

HOW TO INFECT YOUR ORGANIZATION

WITH HUMANE OPS

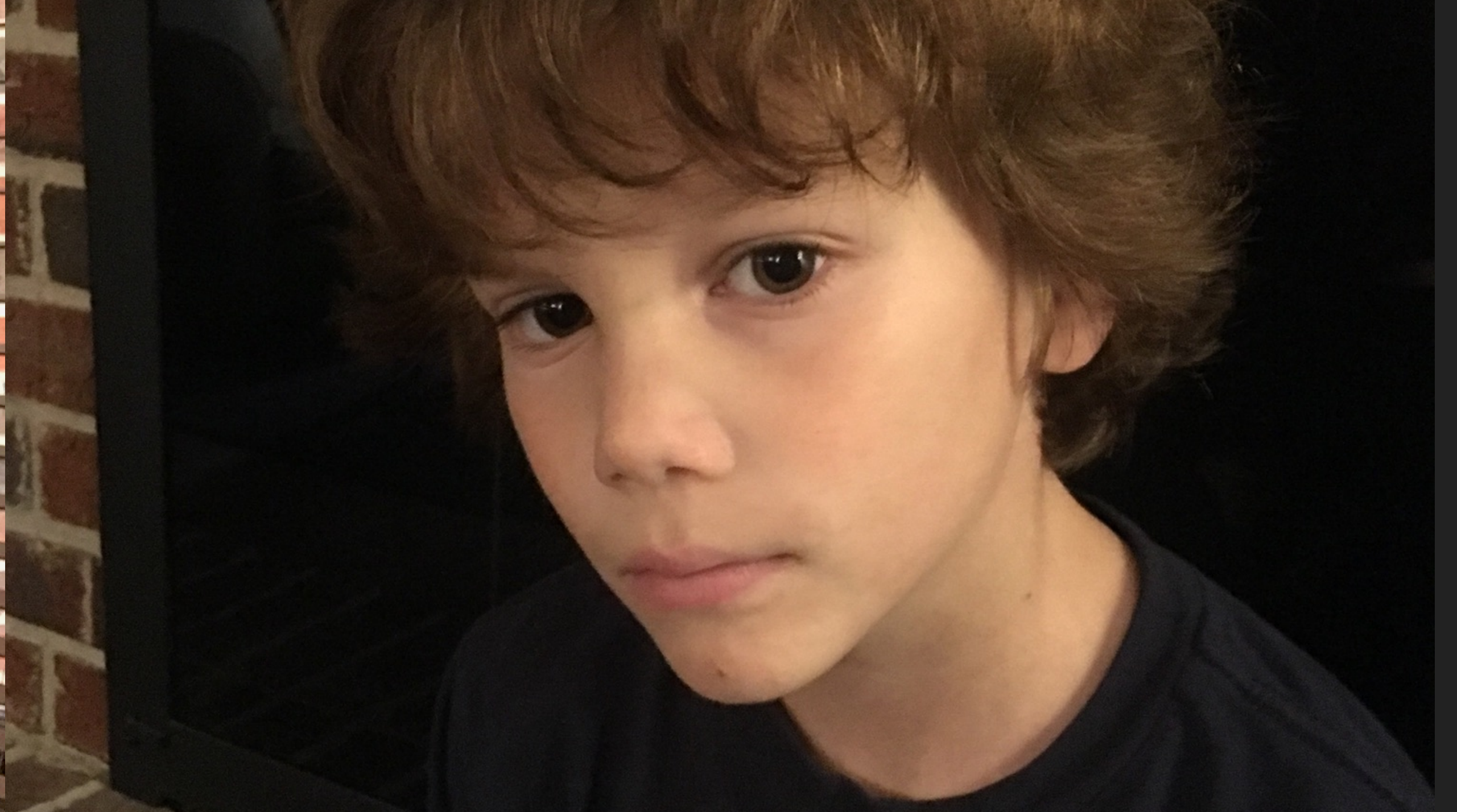


Matty Stratton

DevOps Evangelist, PagerDuty



@mattstratton





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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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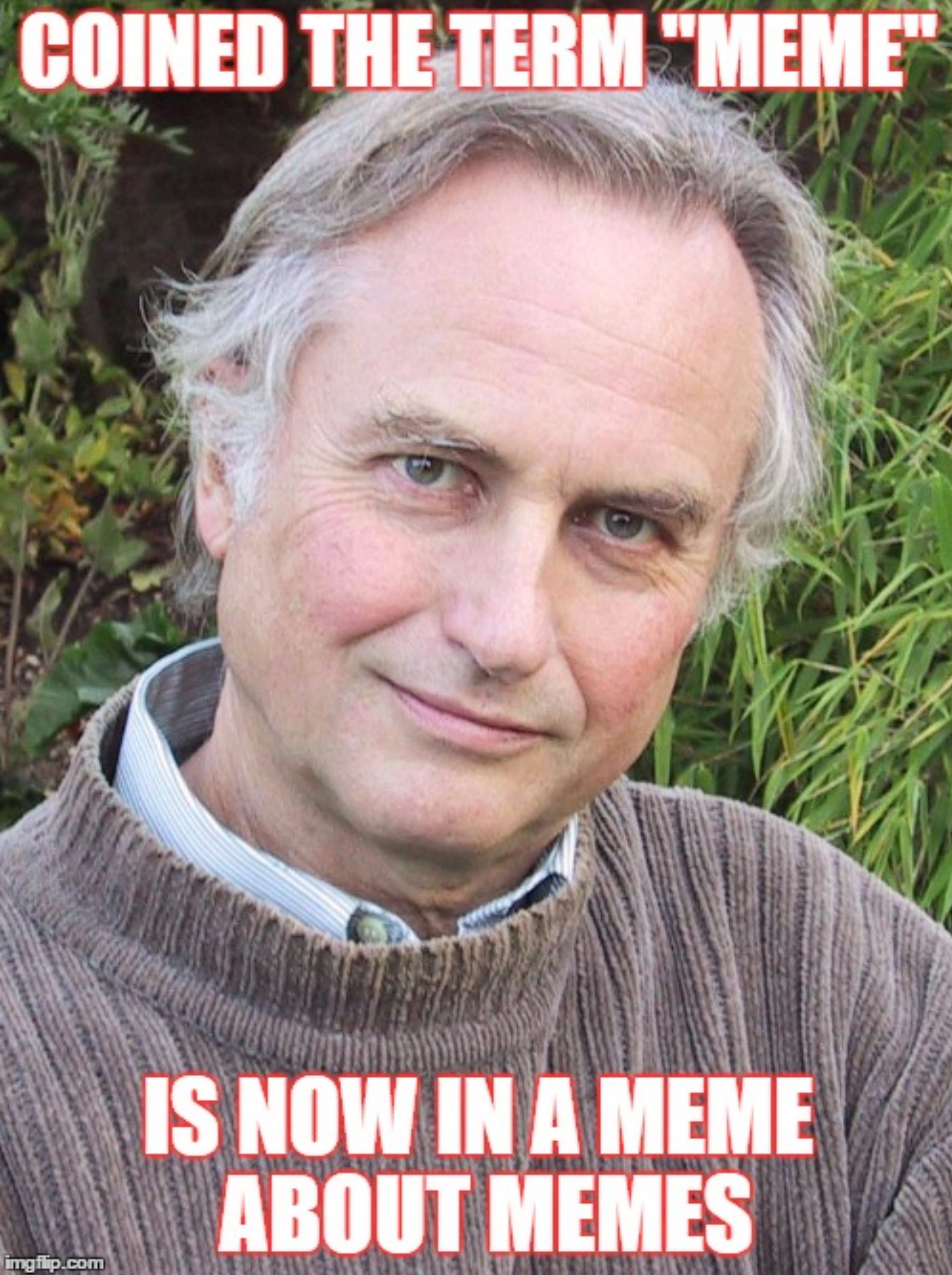
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- ▶ Number of days where a responder's work and life are interrupted
- ▶ Number of days when a responder is woken overnight
- ▶ Number of weekend days interrupted by notifications.





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

 @mattstratton

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 order"



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
- ▶ You hired smart people - use them



REVIEW. REVIEW. REVIEW

A CULTURE OF LEARNING

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

A CULTURE OF LEARNING

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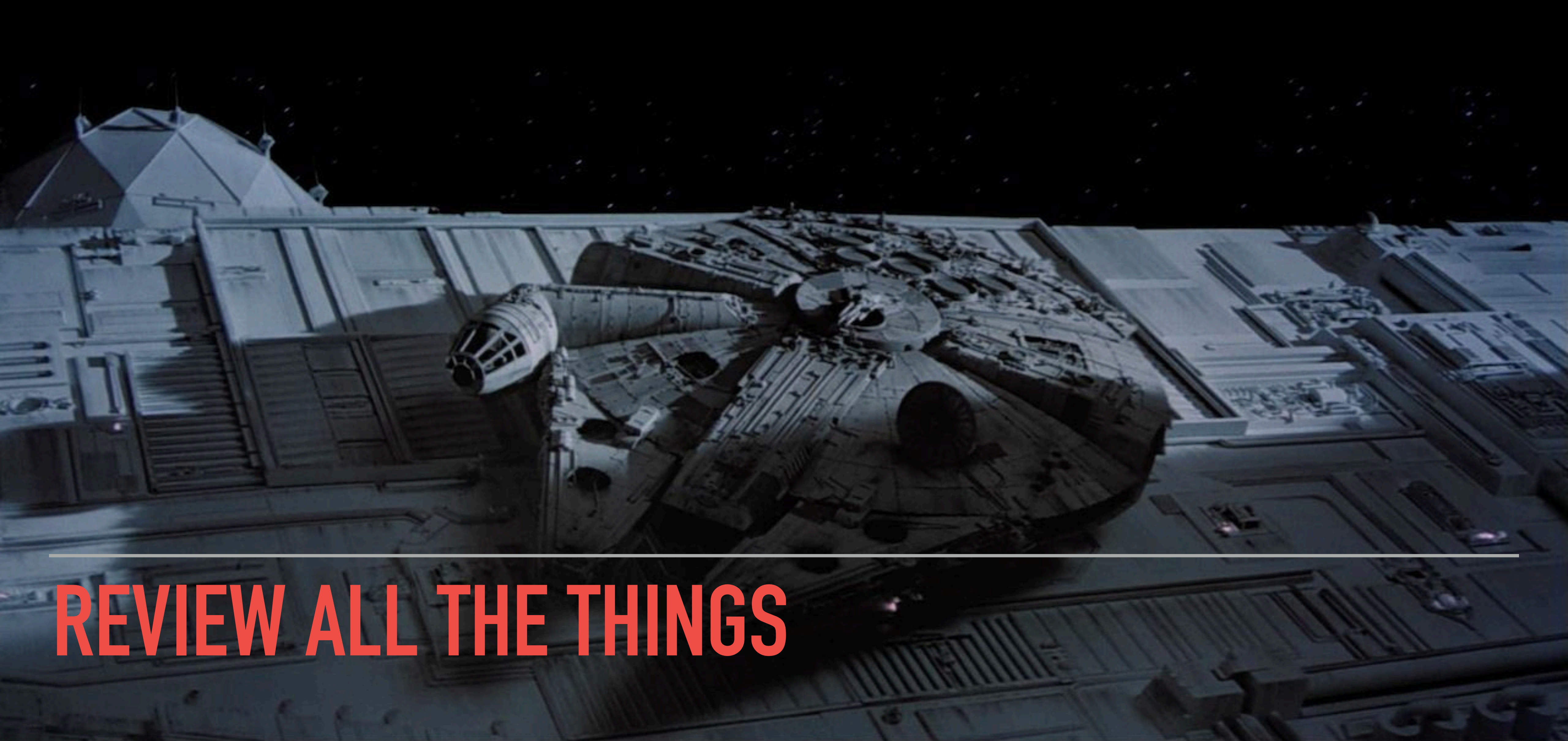
A CULTURE OF LEARNING

- ▶ In a generative, performance-oriented organization, "failure leads to inquiry."
- ▶ Don't take my word for it. Ask Ron Westrum.
- ▶ You can also ask Dr. Nicole Forsgren - @nicolefv

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



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



REVIEW ALL THE THINGS

REVIEW. REVIEW. REVIEW

NORMALIZATION OF DEVIANCE

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

NORMALIZATION OF DEVIANCE

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NORMALIZATION OF DEVIANCE

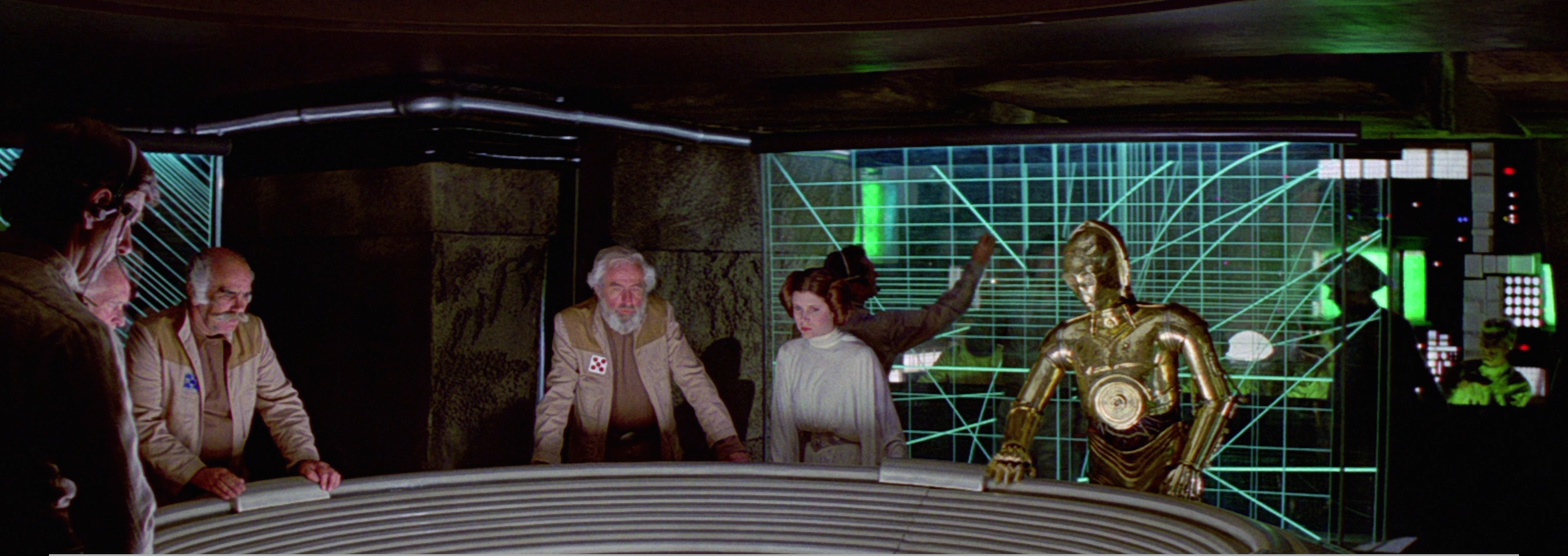
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- ▶ This happened to NASA. Twice.

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NORMALIZATION OF DEVIANCE

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- ▶ This happened to NASA. Twice.
- ▶ In our case, we start to accept alerts or degradations as acceptable.

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QUESTION METRICS

WHY ARE WE USING THESE NUMBERS?

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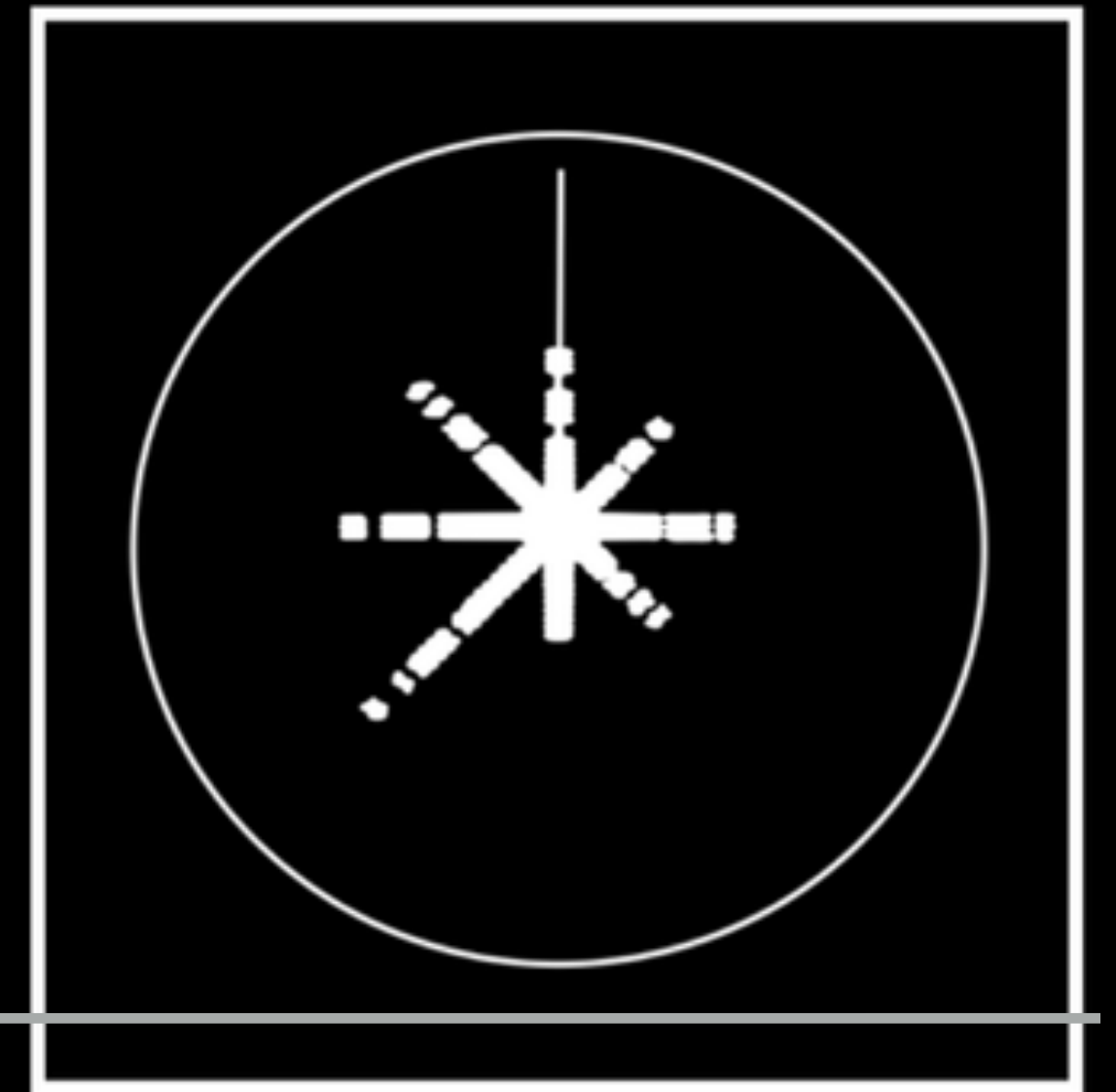
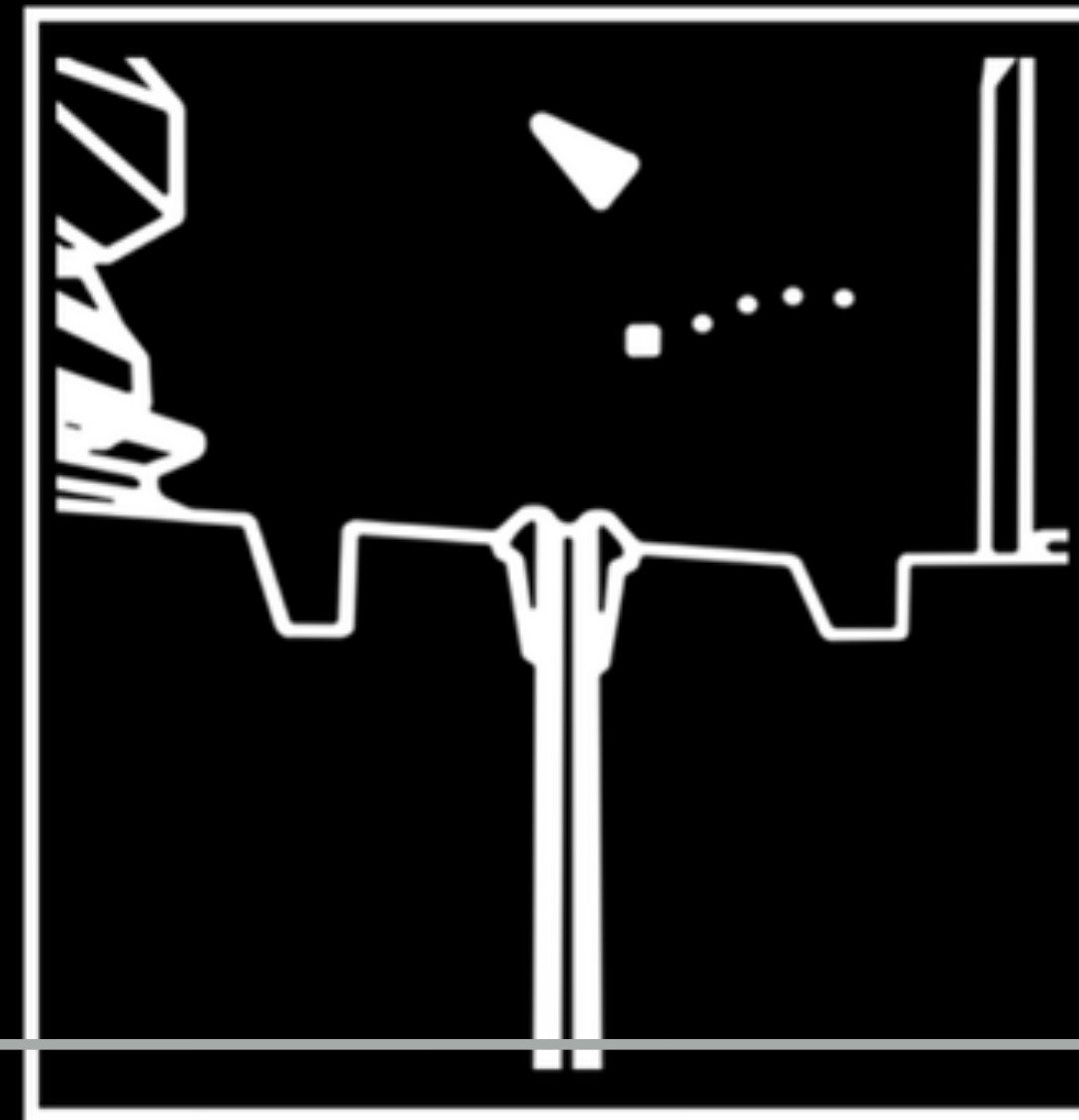
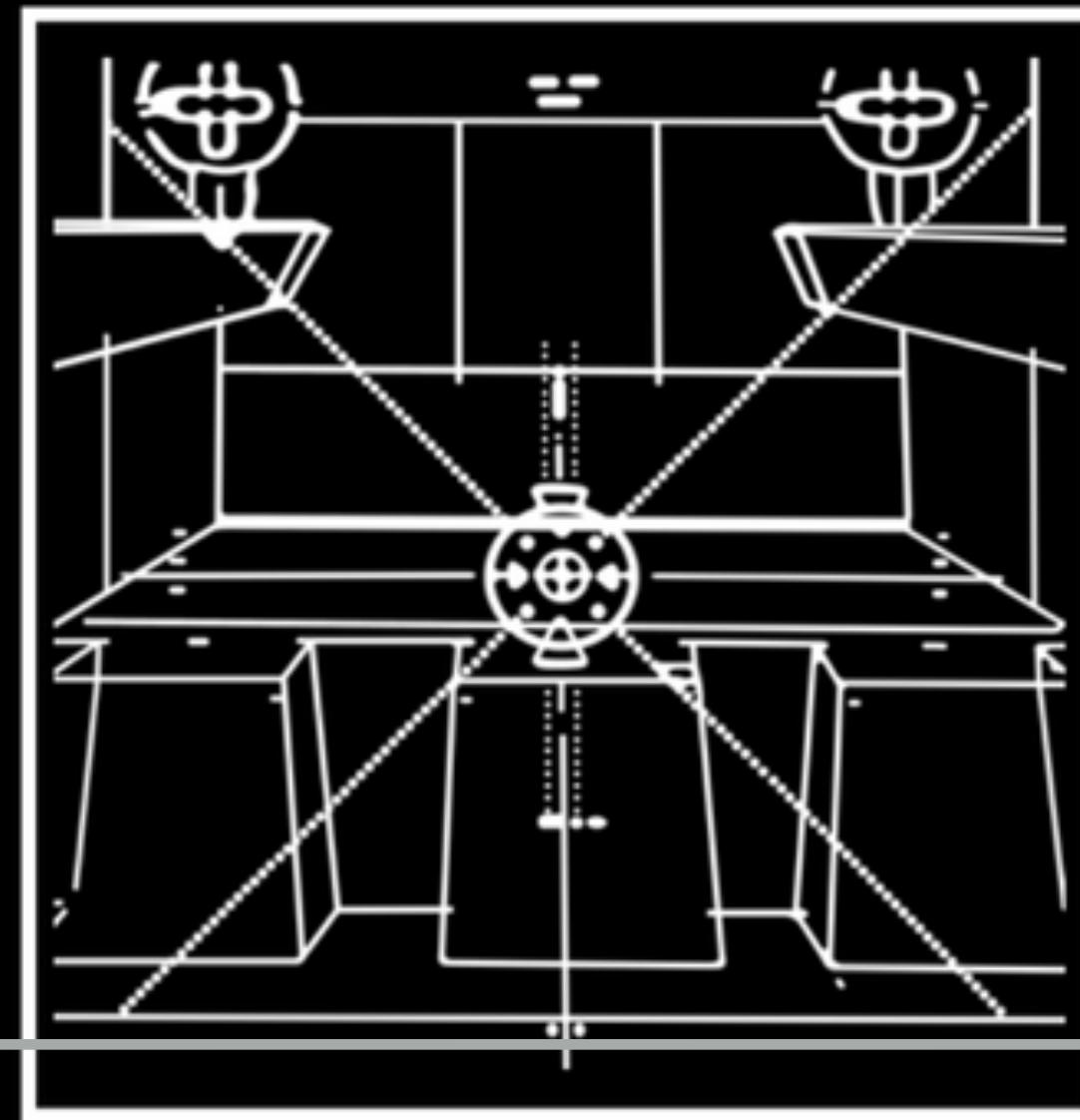
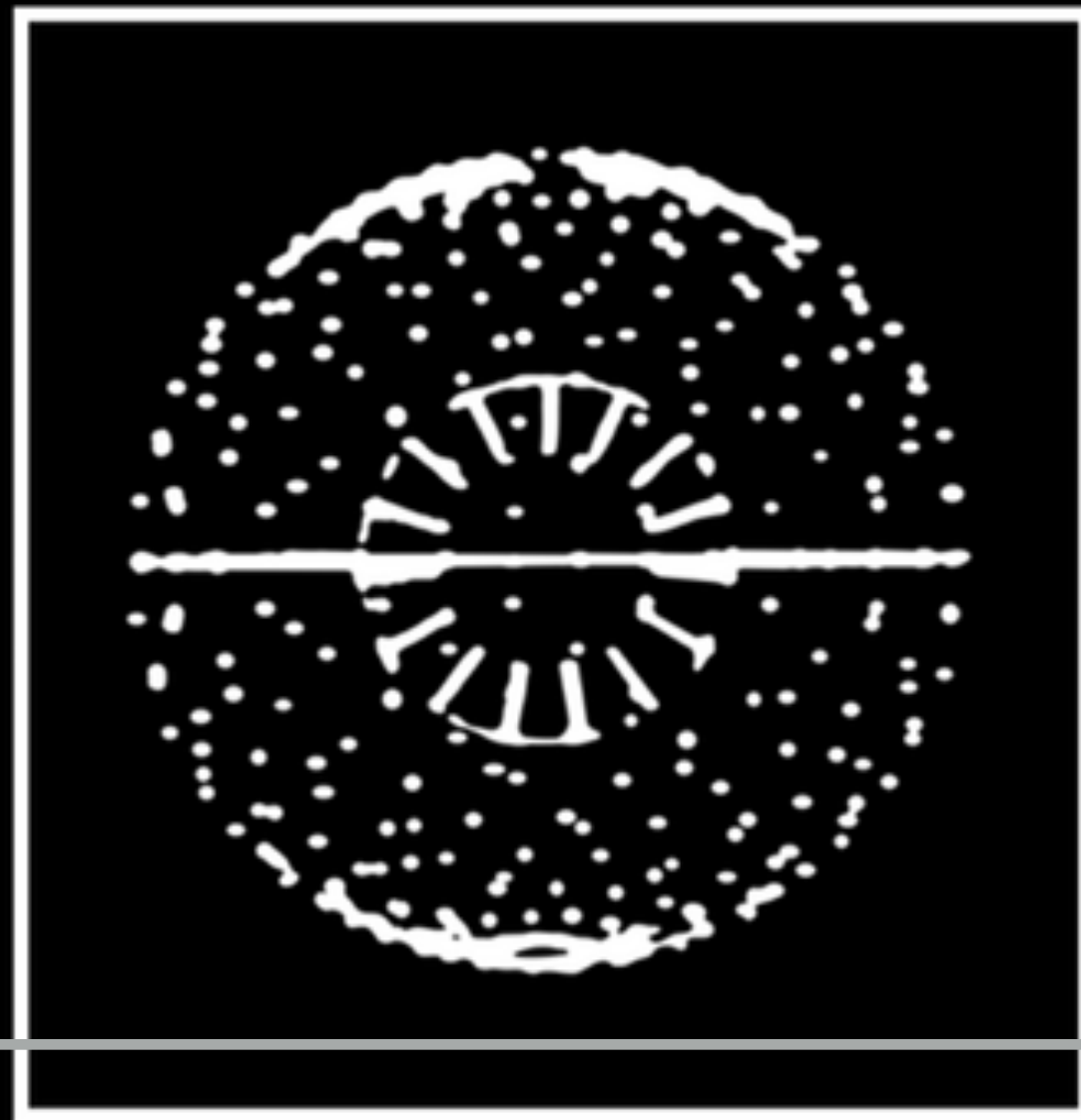
- ▶ What is the data that drive your incident process

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- ▶ What is the data that drive your incident process
- ▶ Are your metrics tied to business outcomes?

WHY ARE WE USING THESE NUMBERS?

- ▶ 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



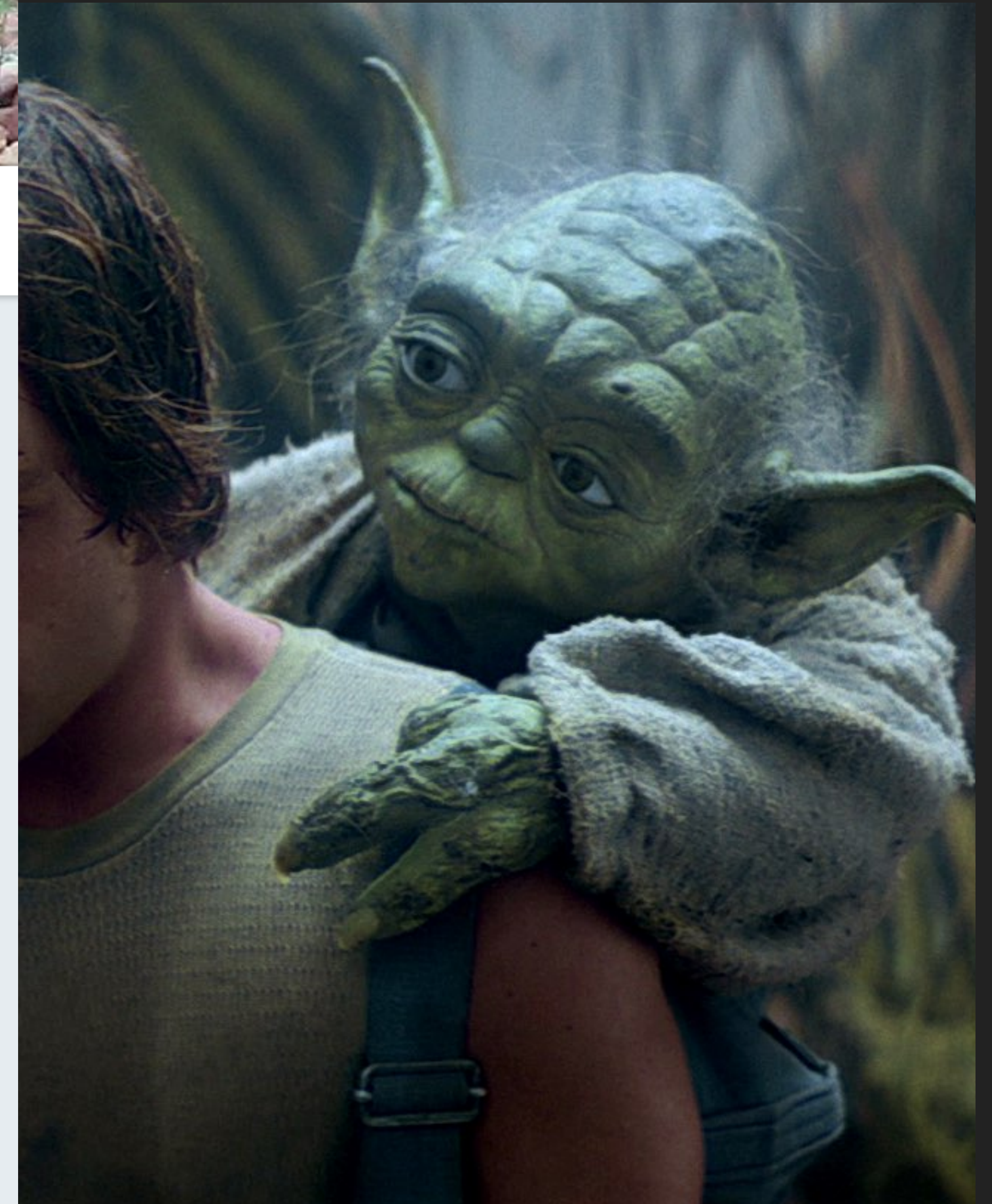
HUMANS, PEOPLE ARE

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



HUMANS, PEOPLE ARE

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



A close-up shot of a man with dark, curly hair and a mustache, wearing a military uniform with a blue and white checkered scarf. He is smiling slightly and looking off-camera to the right. The background is a blurred interior of a ship, with other crew members and equipment visible.

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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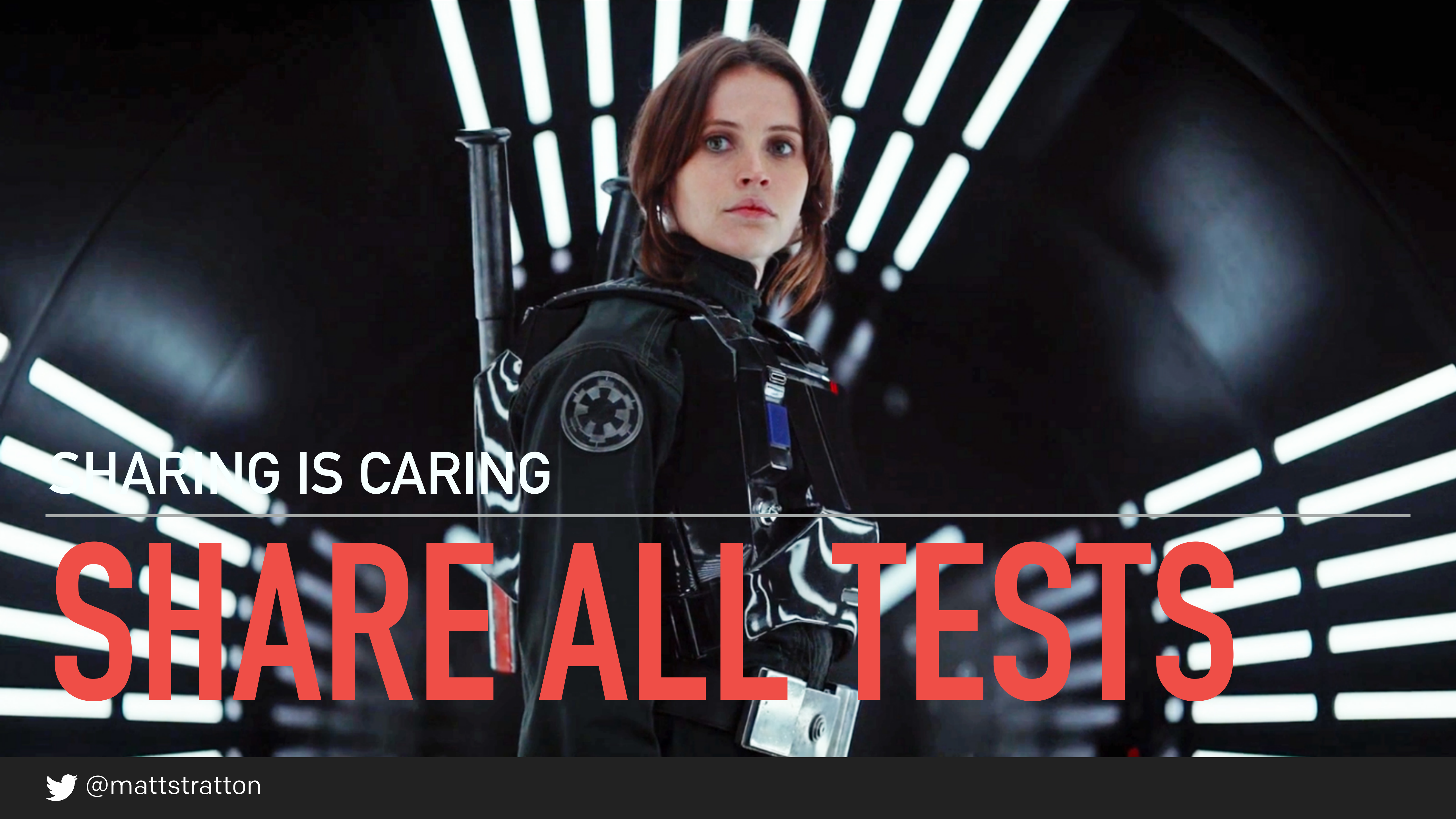
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DURING A CALL

- ▶ Have clearly defined roles
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- ▶ 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 at time dimension. **There should be full parity between preproduction and production.**

A close-up, low-angle shot of the droid R2-D2 from Star Wars. He is positioned in the center-left of the frame, looking towards the right. The background is a blurred desert landscape with warm, golden-hour lighting. A thin white horizontal line is positioned below the text "EVERY SPRINT".

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

- ▶ 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)
- ▶ SIMPLIFY, MAN!



@MATTSTRATTON

[LINKEDIN.COM/IN/MATTSTRATTON](https://www.linkedin.com/in/mattstratton)

[MATTSTRATTON.COM](https://mattstratton.com)

[ARRESTEDDEVOPS.COM](https://arresteddevops.com)

SHARE YOUR ON-CALL STORIES WITH ME LATER

 @mattstratton

NOTI.ST/MATTSTRATTON

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 - <http://response.pagerduty.com>