
facebook
INFRASTRUCTURE



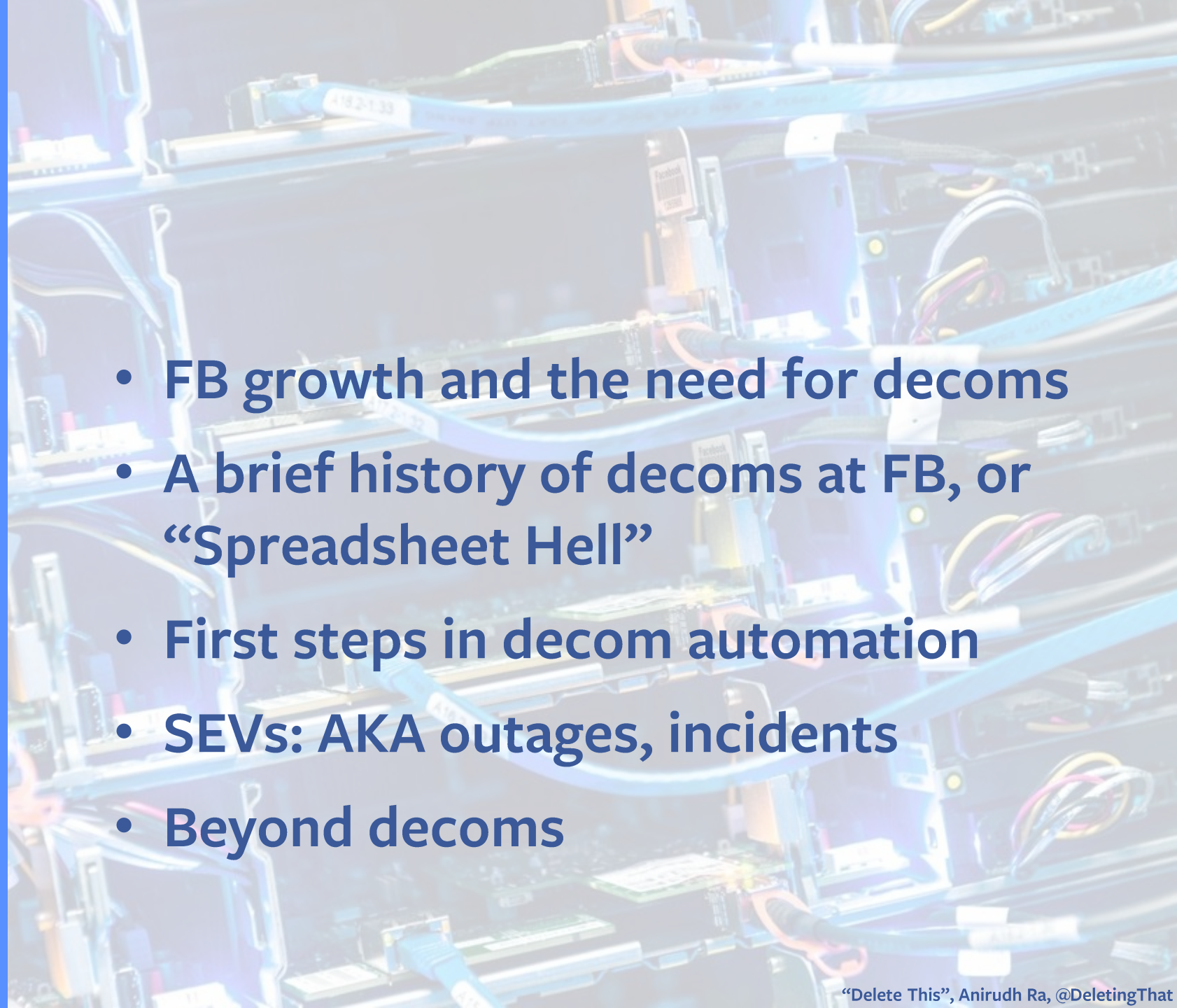
Delete This

Decommissioning Servers At Scale

Anirudh Ra

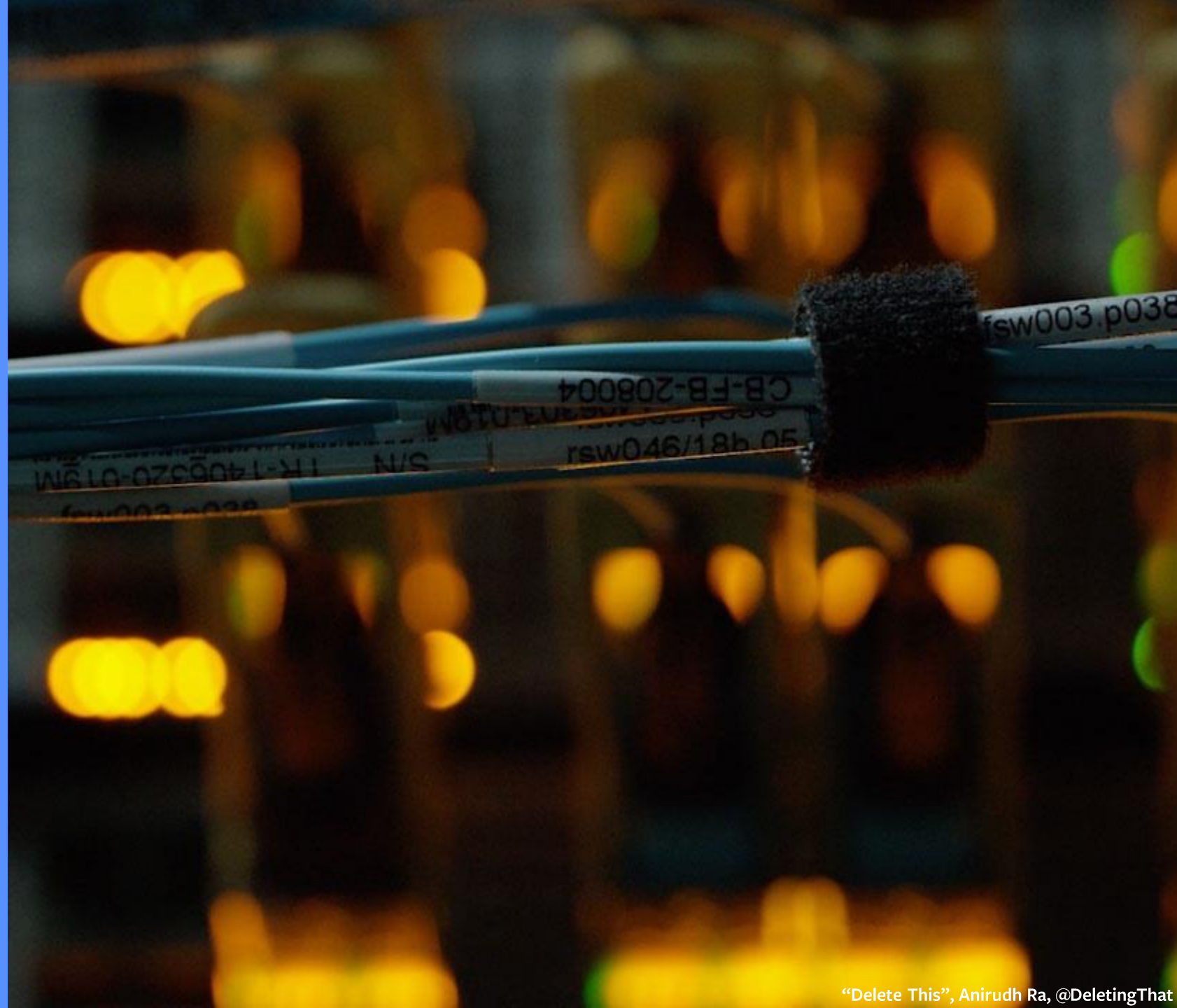
Production Engineer, Rackstorm

What Will be Covered

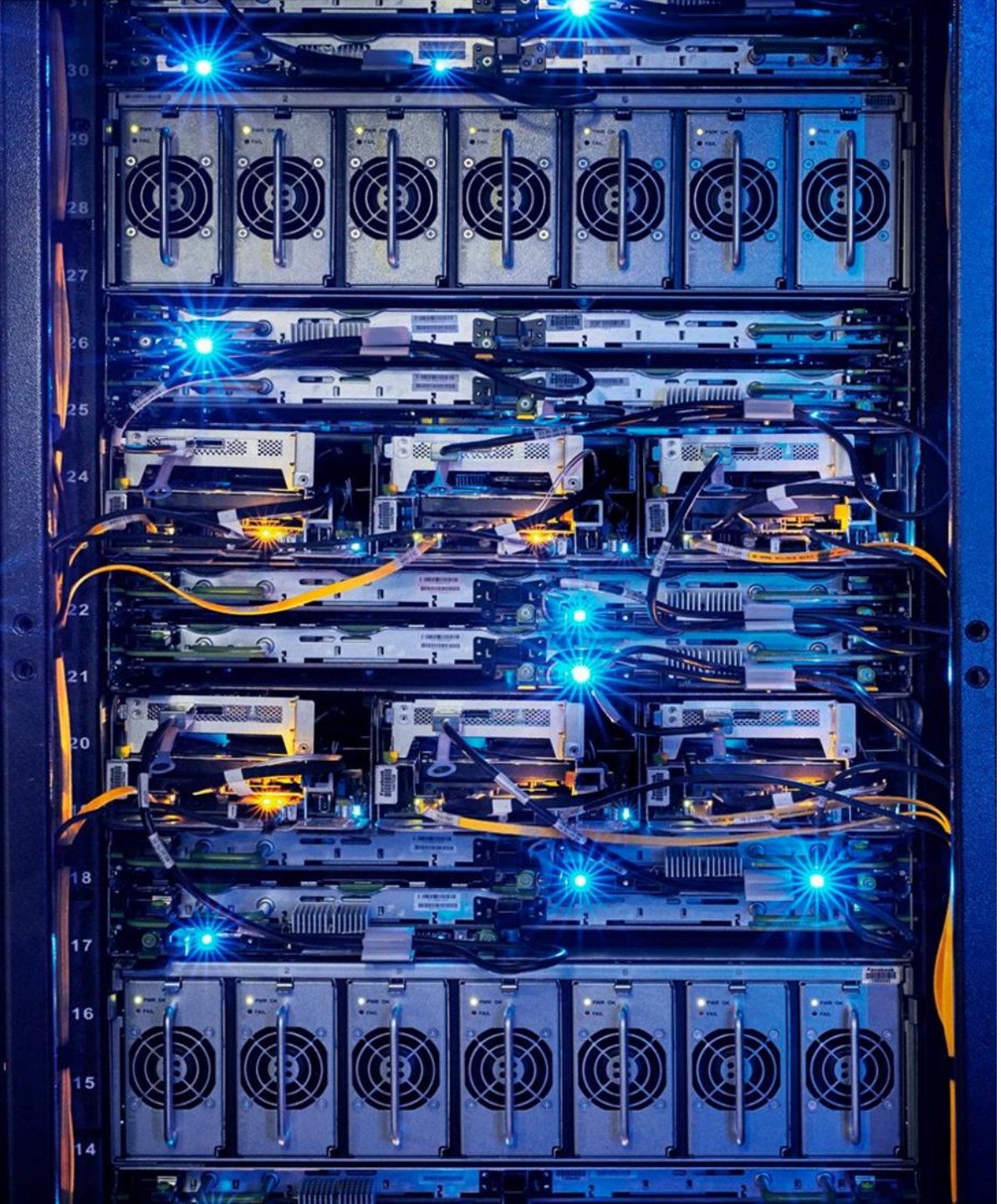


- FB growth and the need for decoms
- A brief history of decoms at FB, or “Spreadsheet Hell”
- First steps in decom automation
- SEVs: AKA outages, incidents
- Beyond decoms

Growth and the need to decom



"Delete This", Anirudh Ra, @DeletingThat



Growth and the need to decom

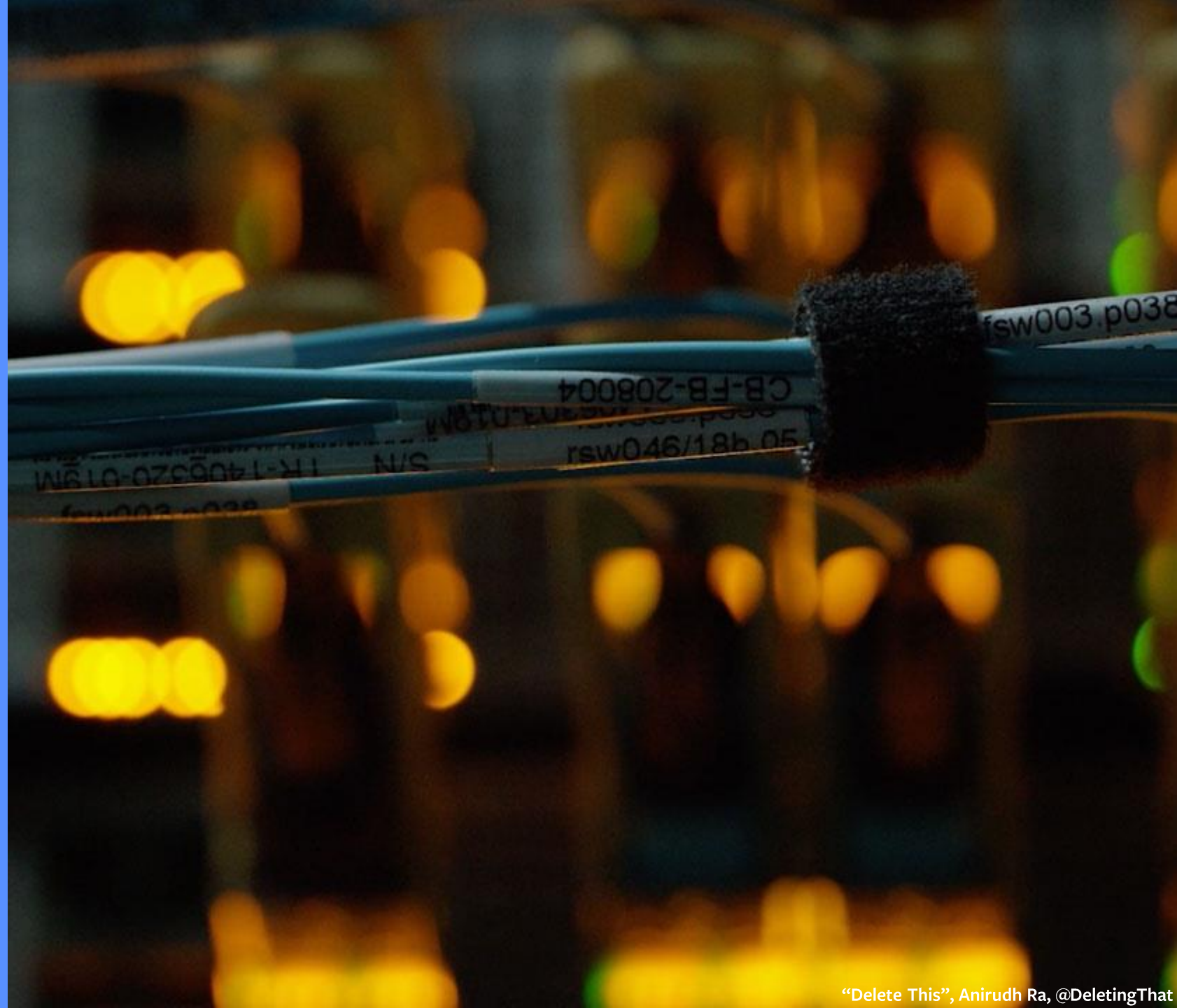
- Advances in compute hardware
- Obsolescence
- Increase in error rate with age



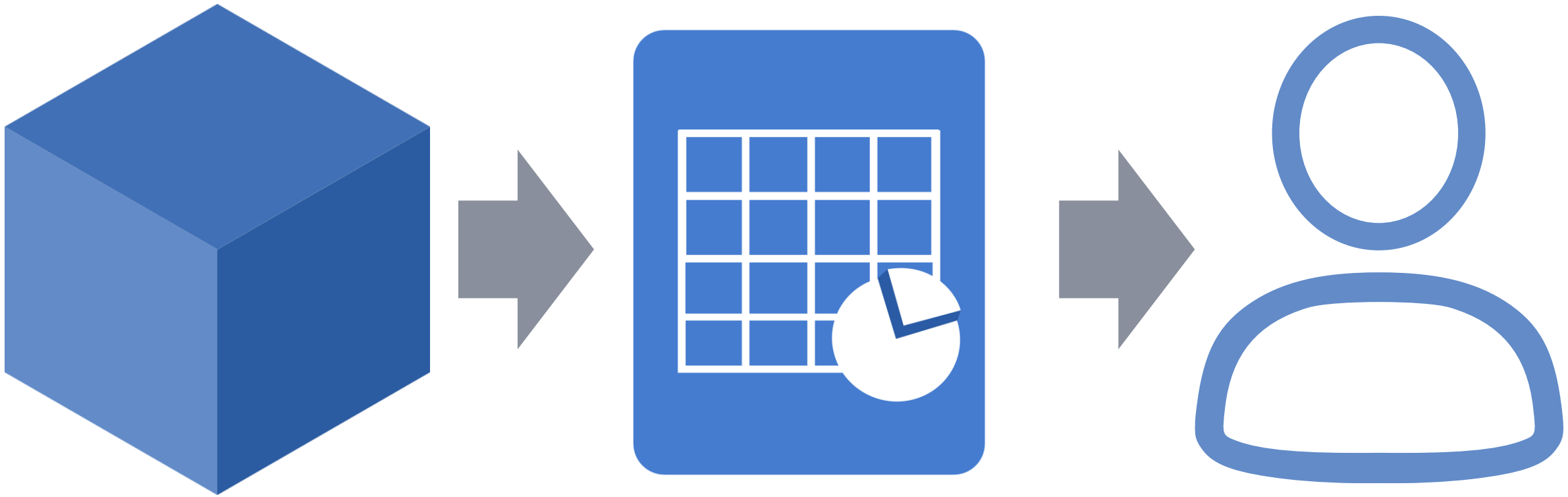
Decom: easy mode

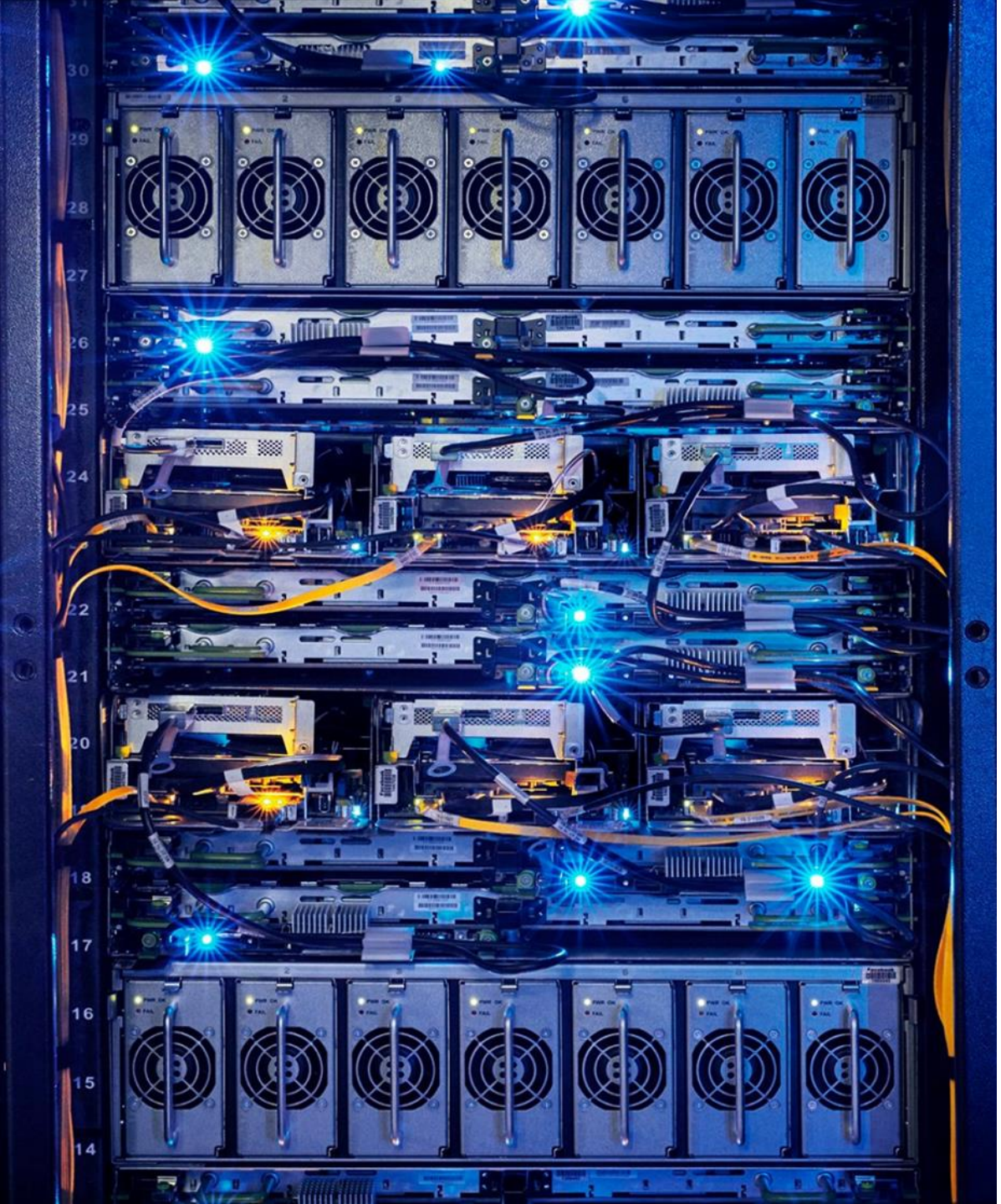
- Find machines that need junking
- Identify running services
- Give replacements
- Ping oncalls, ask to migrate
- SMASH

A brief history of decoms



"Delete This", Anirudh Ra, @DeletingThat





A Brief History Of Decoms

- Spreadsheets
- More spreadsheets
- Human-intensive process
- Did I mention spreadsheets?
- Variable time step: service migration



A Brief History Of Decoms

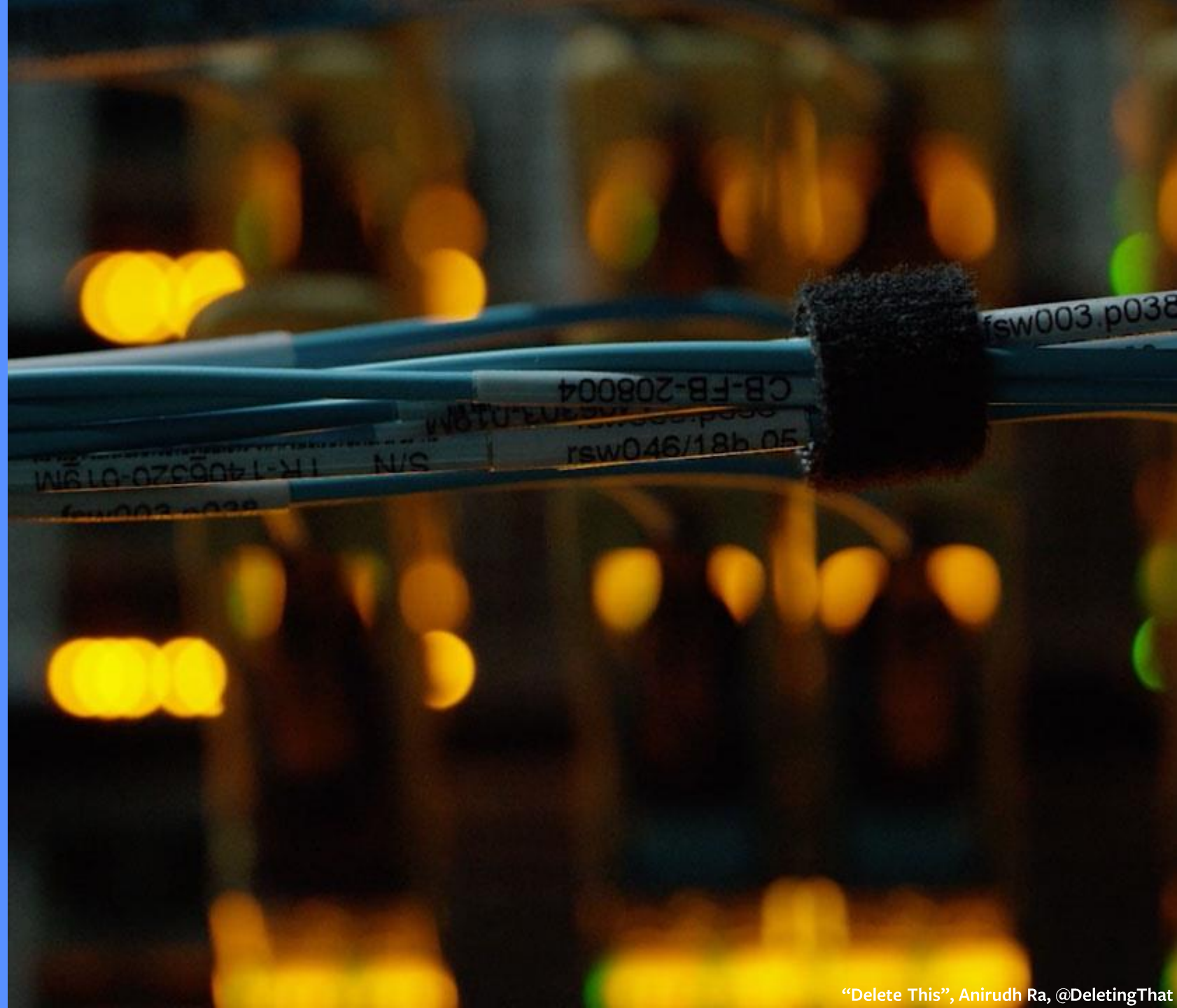
- Services: heterogenous neighbours
- Here's where we spreadsheeted
- Also, ticketing the oncall
- But they have shit to do
- So we beg and plead using any means
- Well except RFC 1149
- Tribal knowledge, yay!



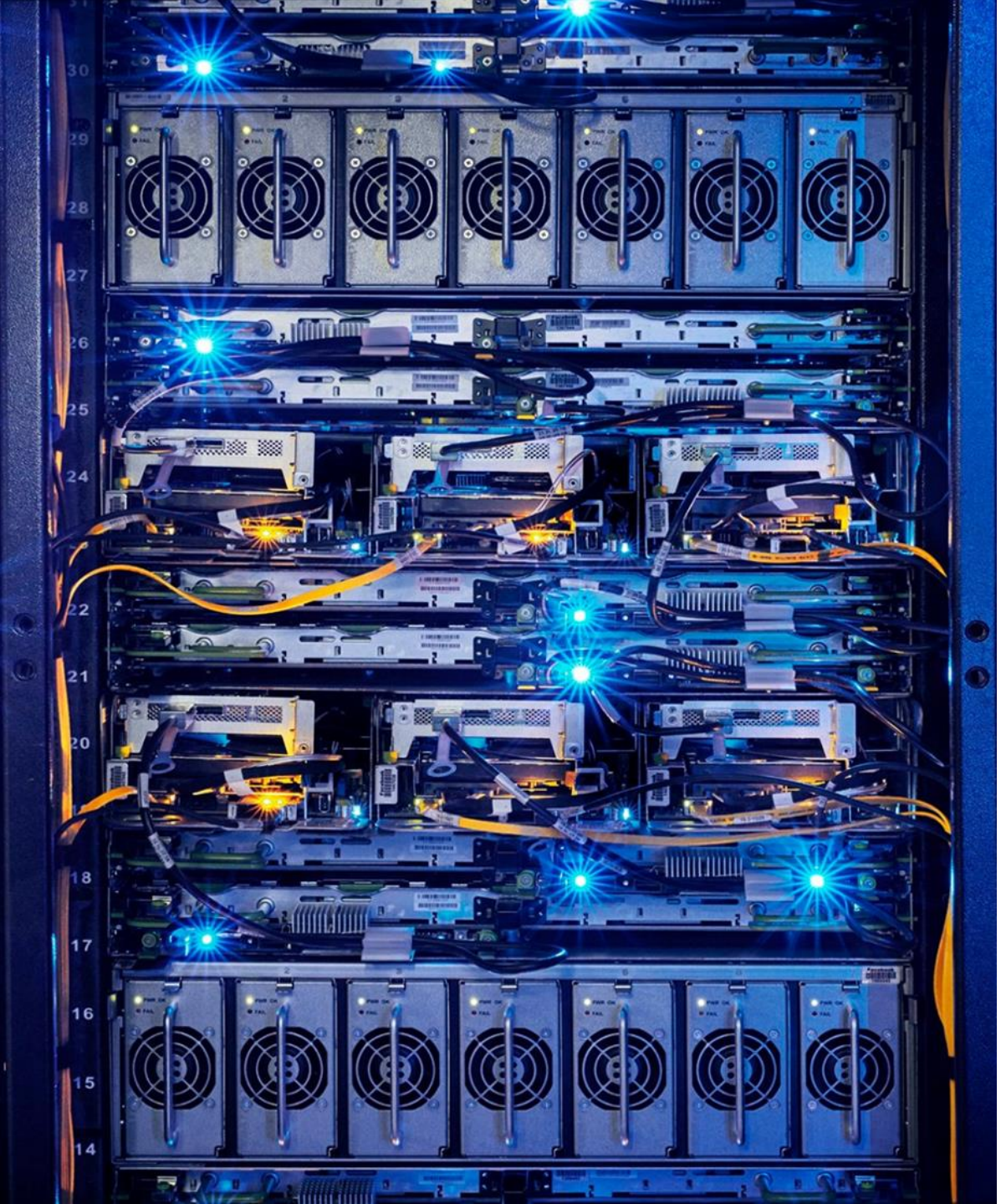
A Brief History Of Decoms

- Not. Fast. Enough.
- The last chap holds everyone back
- To err is human, to not would be nice
- Slooooooooooooooooooooo
- oooooooooow process

First steps



"Delete This", Anirudh Ra, @DeletingThat



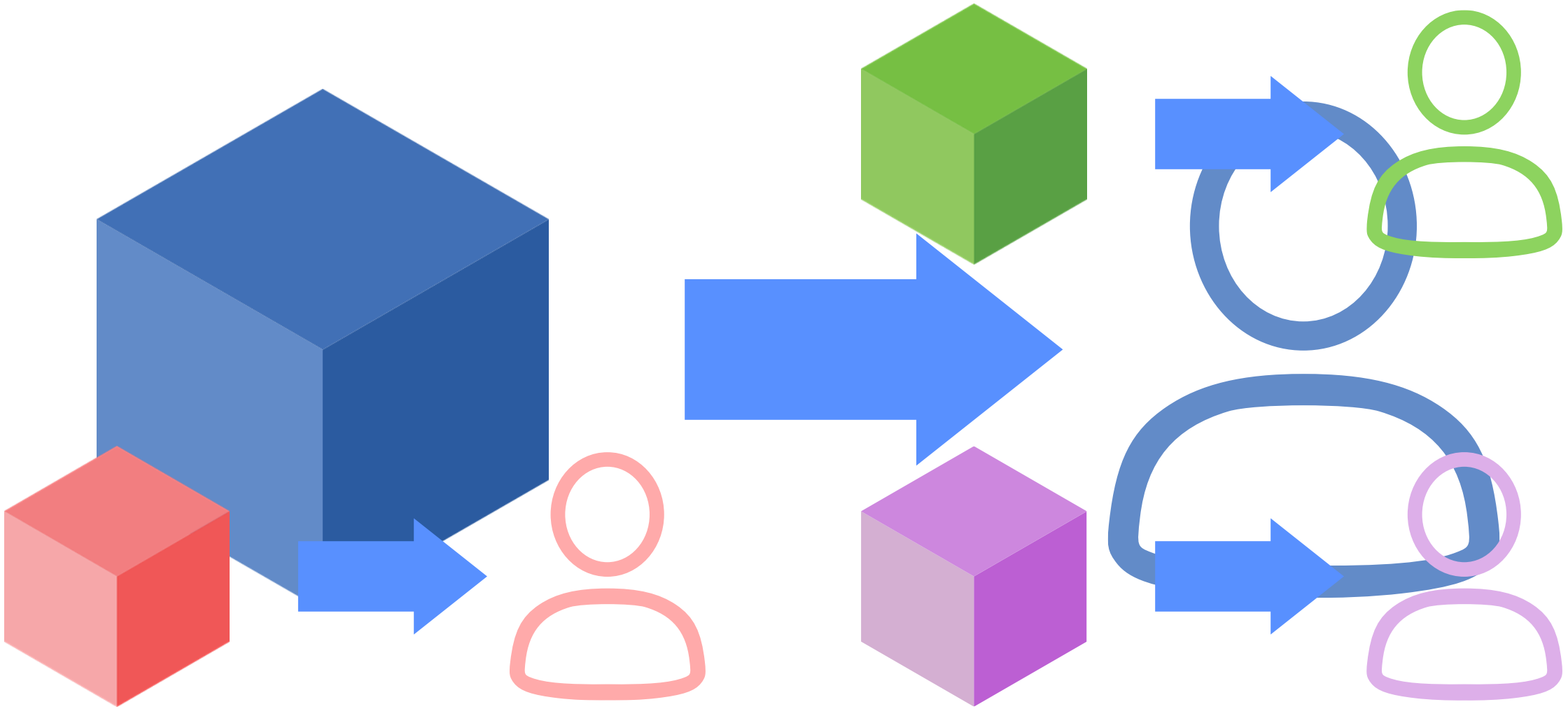
First Steps

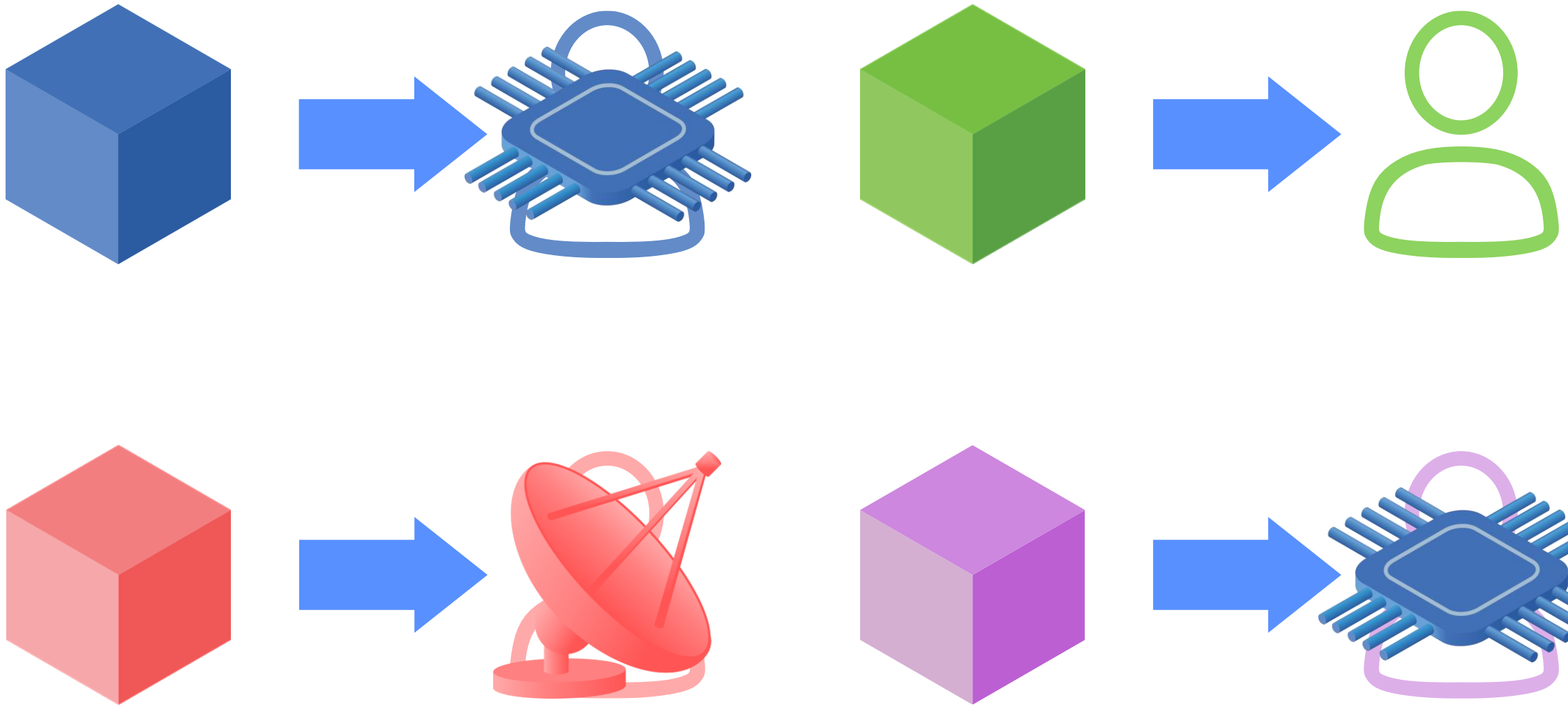
- Built a UI: reduce spreadsheet usage
- Make verification easier
- Framework for automation
- Bail out conservatively to oncall
- Task state machine: retries, complete

#movefast
(no automation
is an error too)



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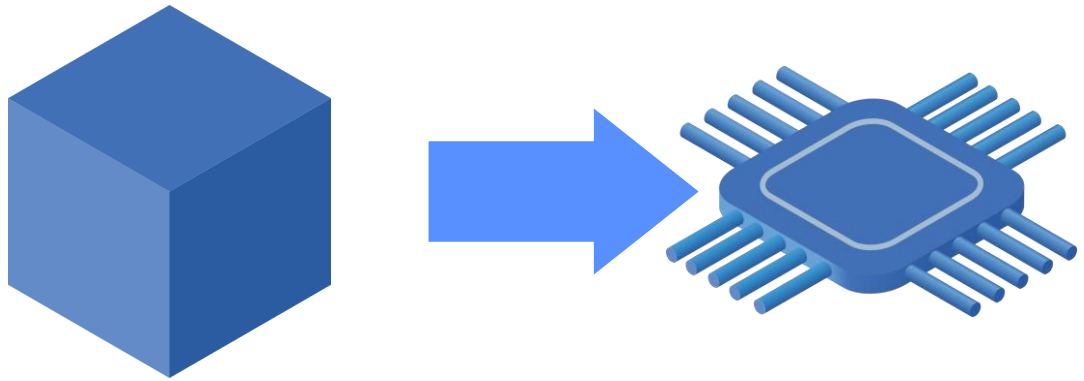


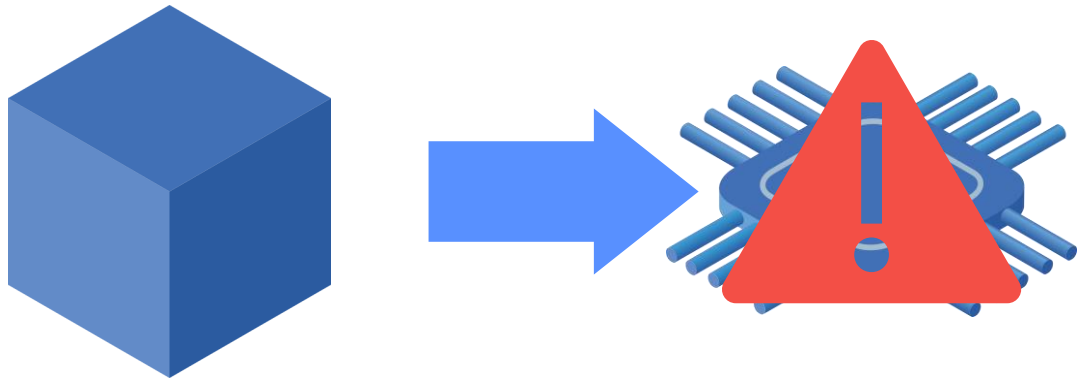


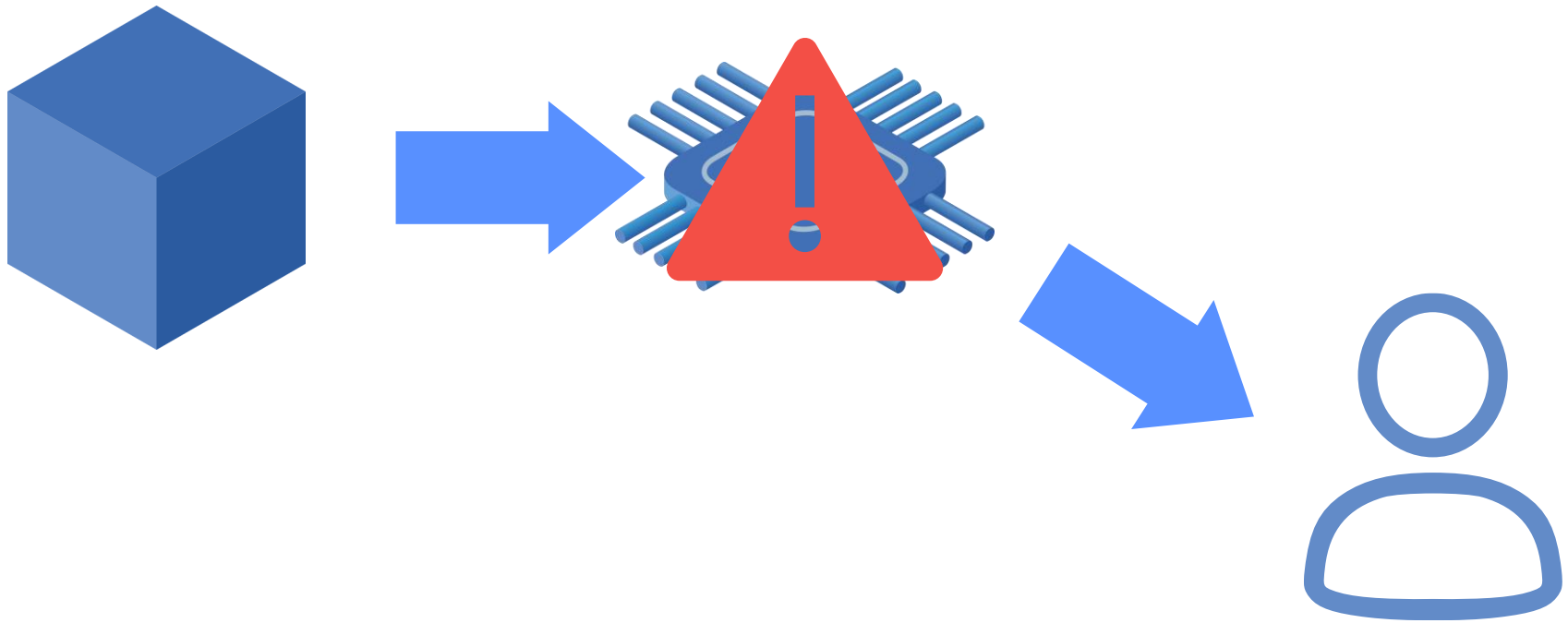


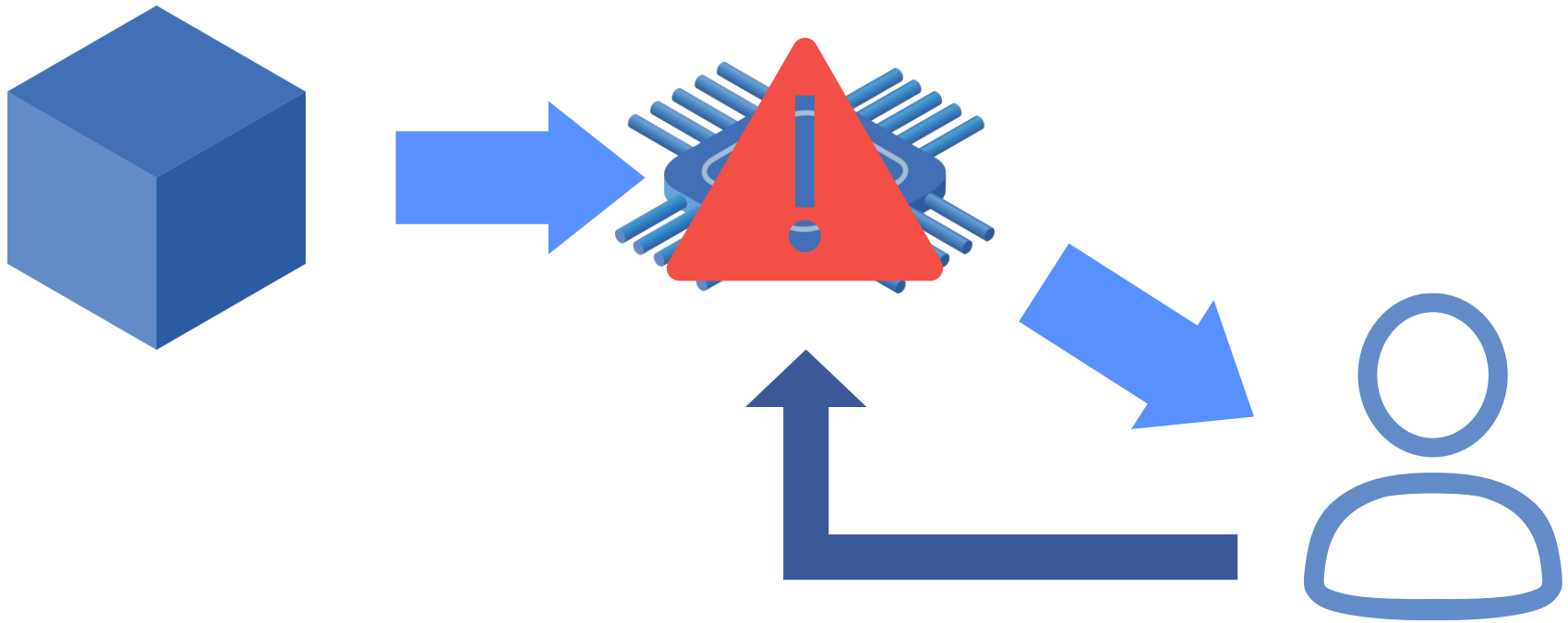
First Steps
And Moving Fast

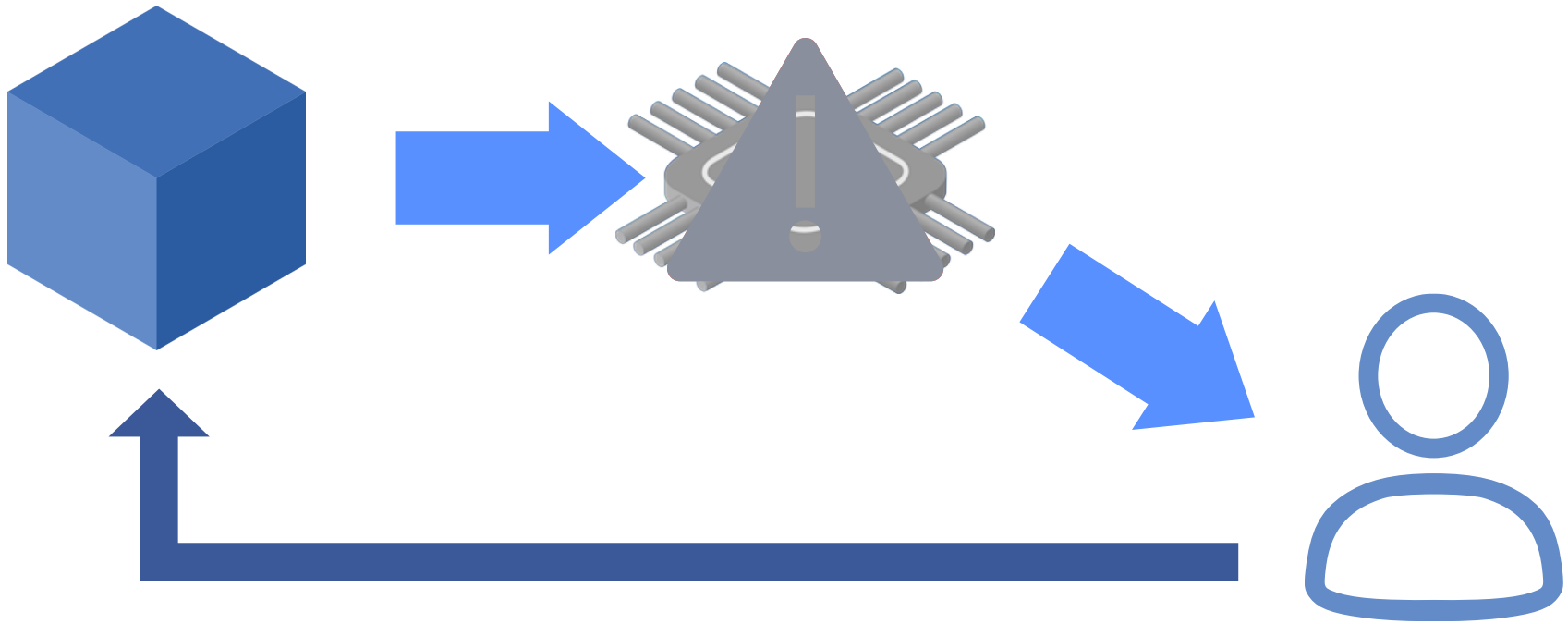
- def migrate(retiring, replacement)
- Simple prototype
- Reusable handlers, or examples



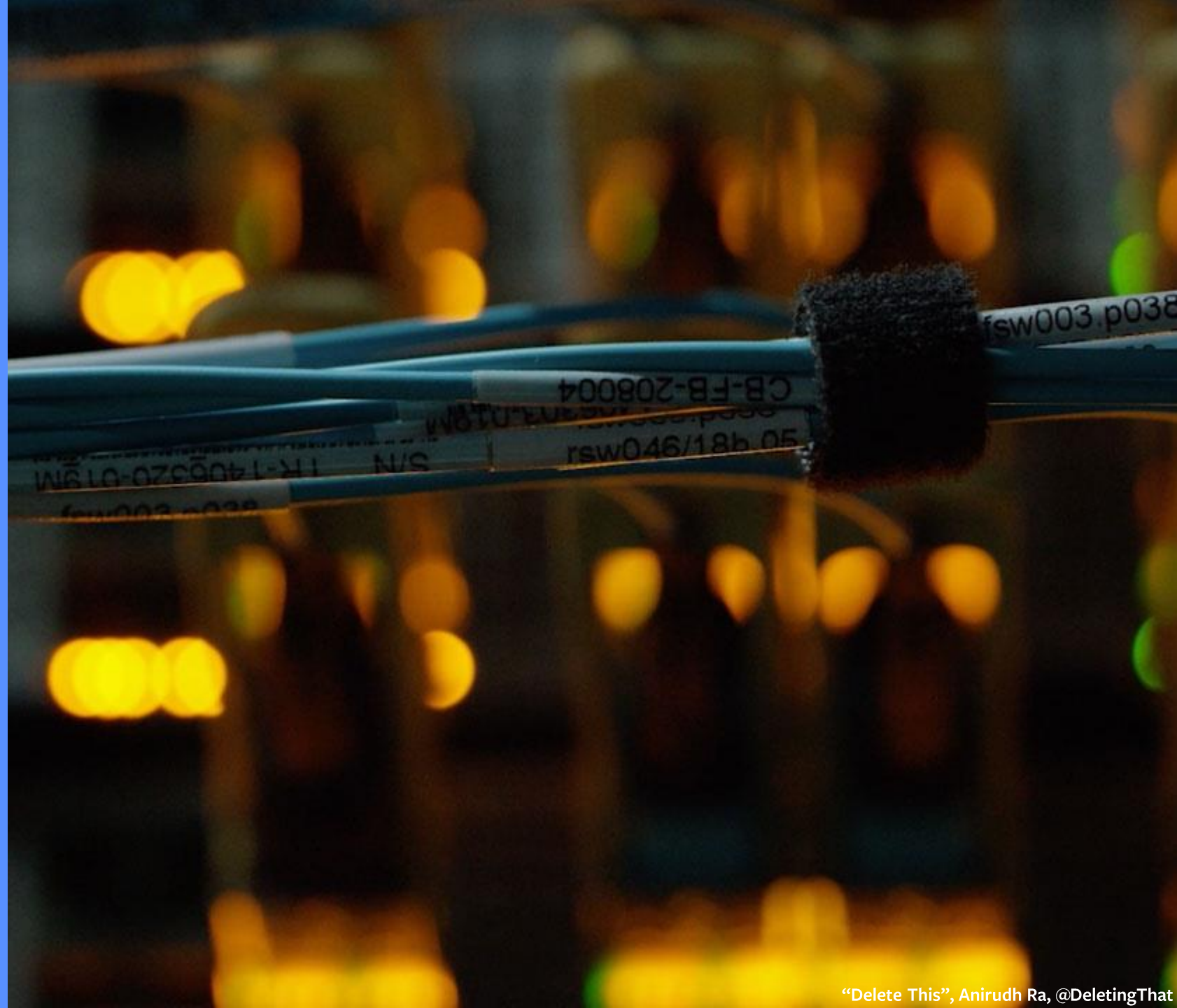








SEVs, outages, incidents



"Delete This", Anirudh Ra, @DeletingThat

SEV: cache killer



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Remember,
meetings
were made
forslaughter.

SEV: cache killer



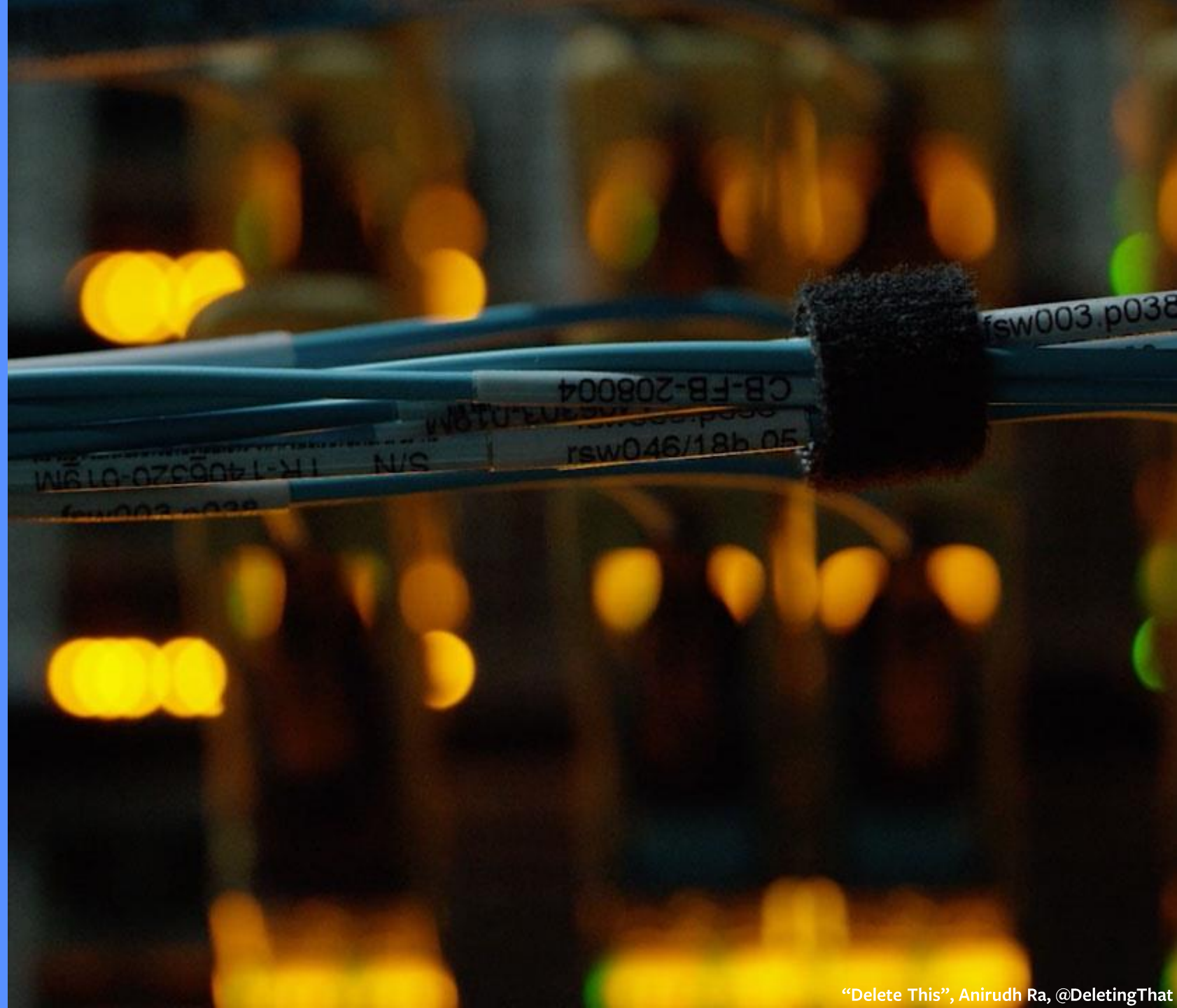
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SEV: humans don’t read (pls read dis tho)



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Service migrations beyond decoms



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Questions

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