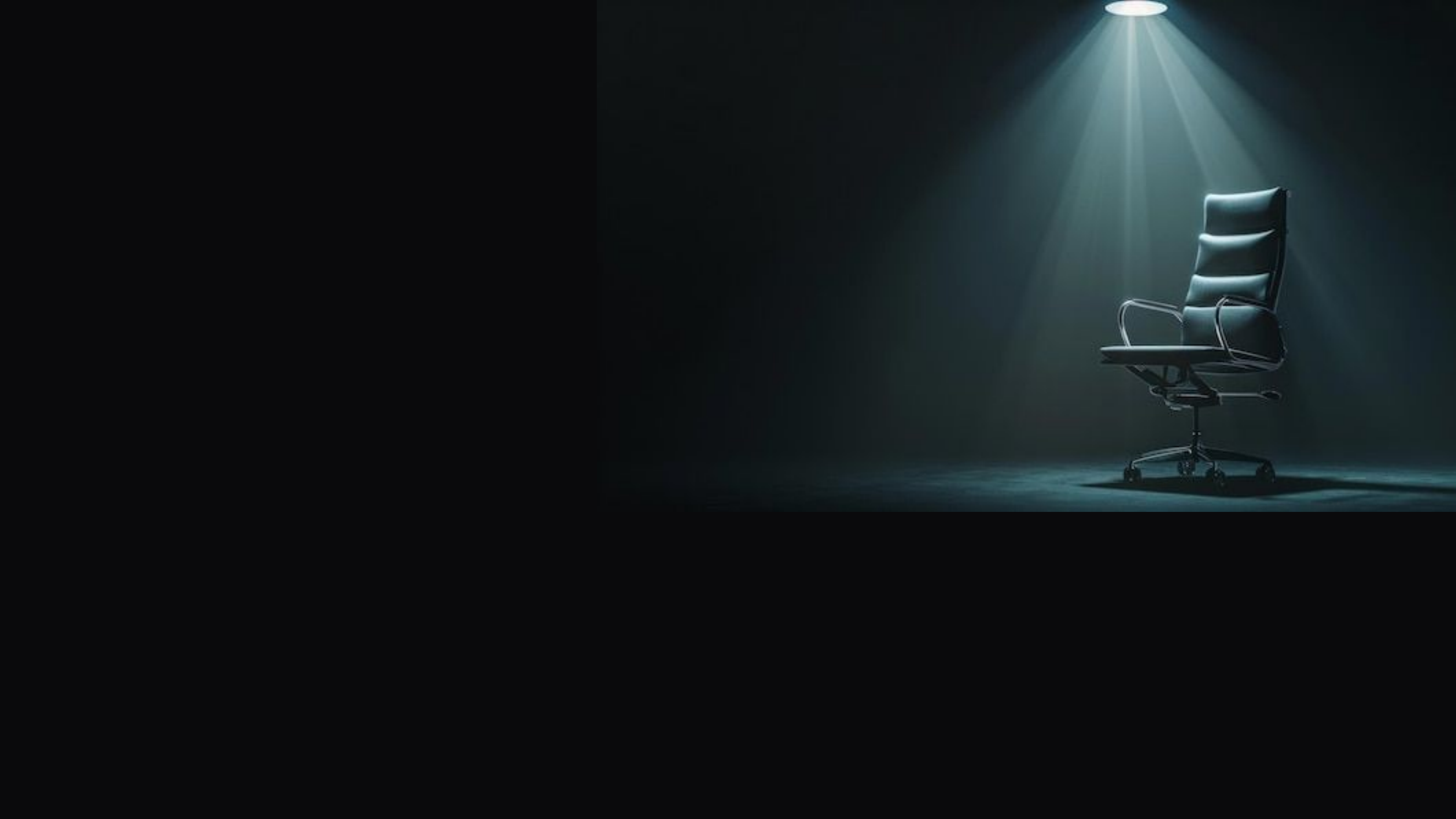


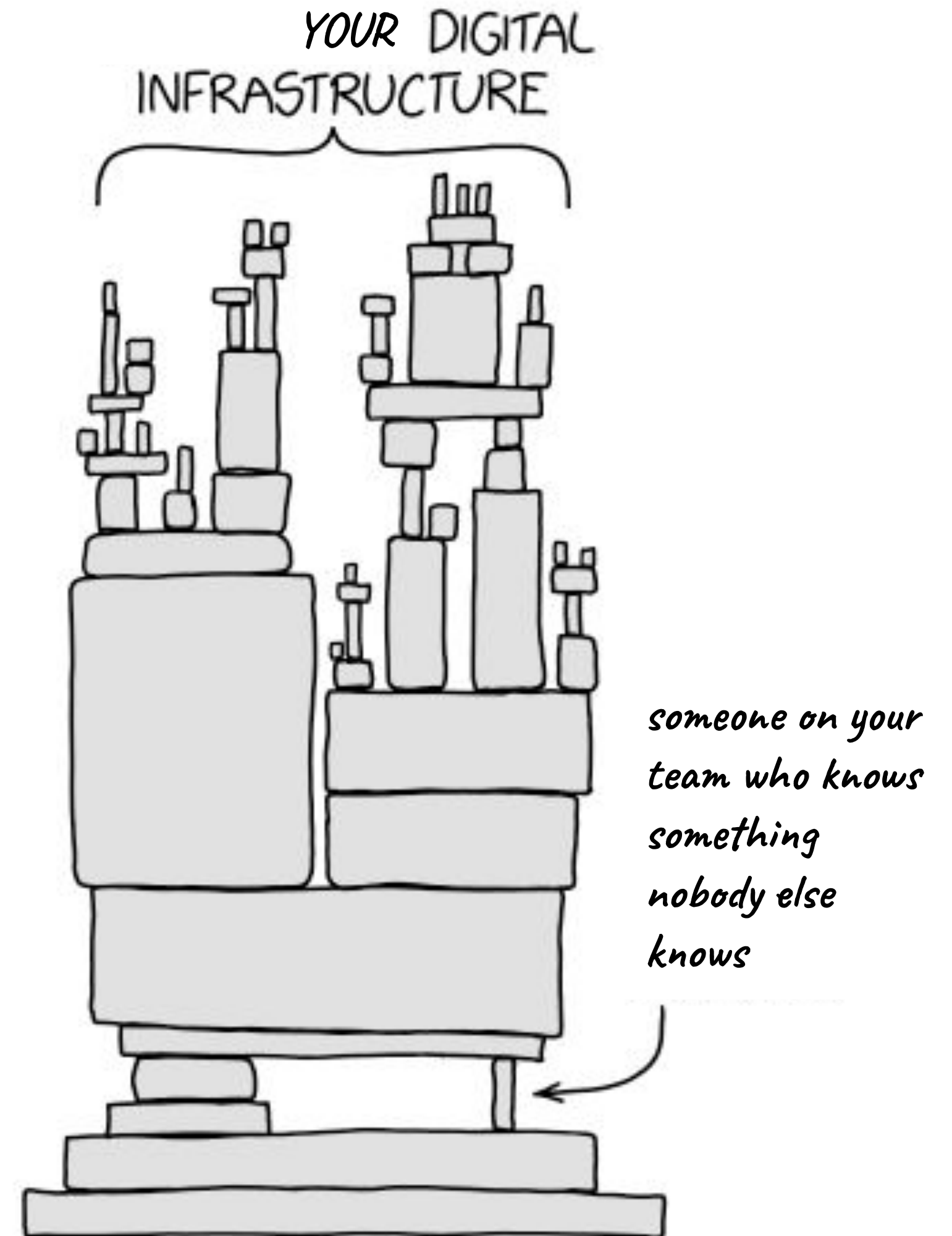


Right now, there is someone on your team who knows something nobody else knows.



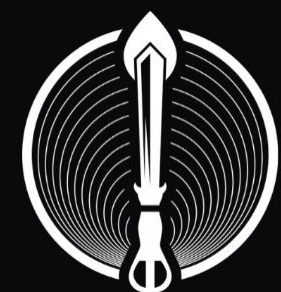
NOT YOUR SAFETY NET

Evidence that your safety net doesn't exist.



THE REALITIES OF NETDEVOPS

CHRIS GRUNDEMANN



KHADGA
CONSULTING

IT'S NOT JUST ME...

18% 38%

COMPLETE SUCCESS

FAILURE OR UNCERTAINTY

EMA, 354 IT PROS, JAN 2024



THE GAP ISN'T TECHNICAL

Five realities.

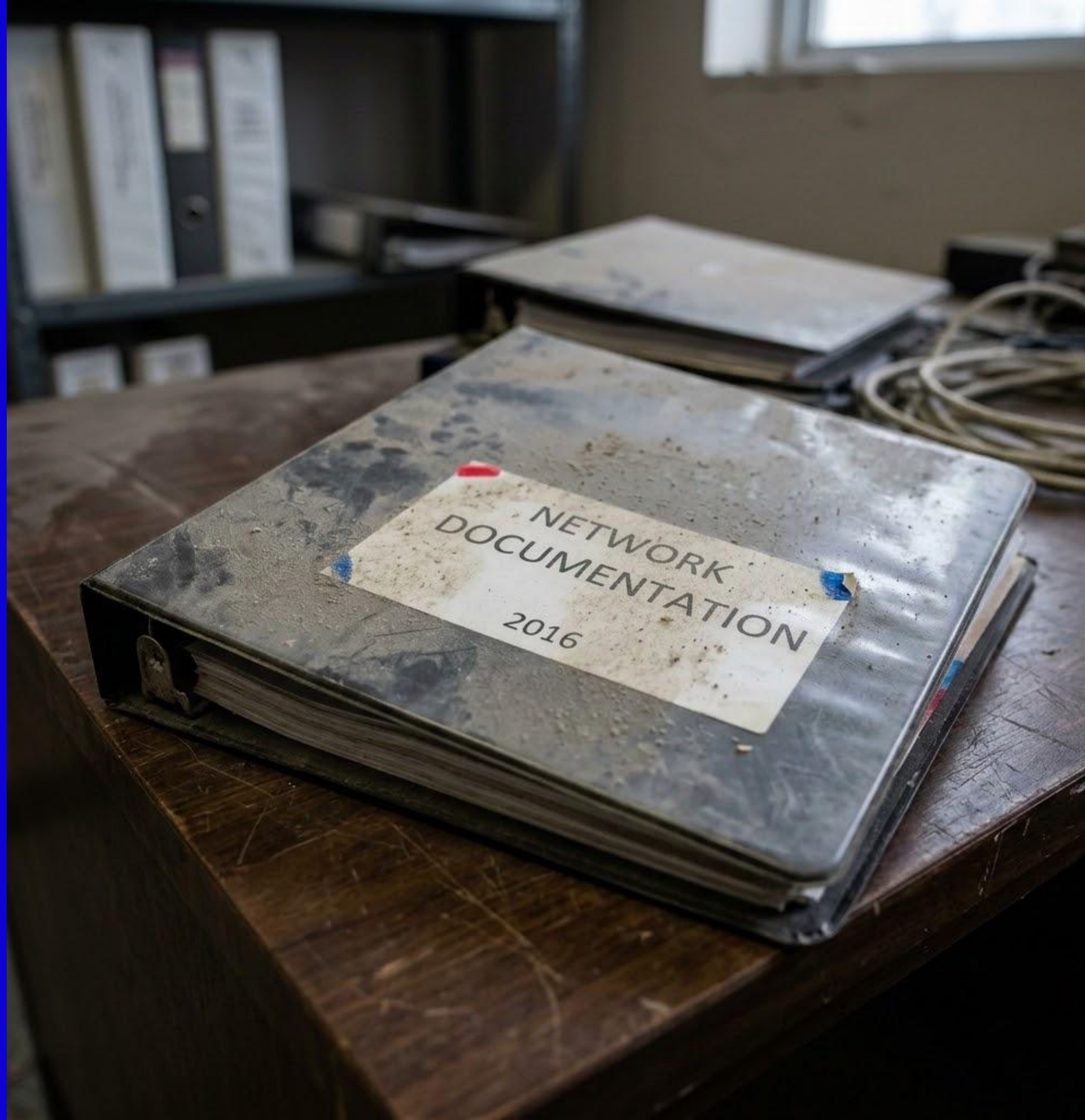


REALITY 1

**You can't automate what
you don't understand**



**SEND ME
YOUR DEVICE
LIST**



IT'S THE LAYERS, NOT THE SCALE

Optical / DWDM
IP/MPLS, BGP, EVPN
Provisioning, OSS
Fiber, rack, power





BILLING OFF. SERVICE ON.

AUTOMATE TO DOCUMENT

Read-only first
Query, don't change



REALITY 2

You can't automate a snowflake



**WHO
CONFIGURES
THE VIRTUAL
NETWORK?**



FOUR DIMENSIONS, NOT ONE

Configuration
Operational
Tooling
Intent



SAME PRODUCT. DIFFERENT CONFIG.

Config is implementation. The design
is what matters.



NEVER DONE

M&A brings other people's conventions
OSS doesn't know you changed
Governance, not a project



REALITY 3

The tool isn't the problem,
the measurement is



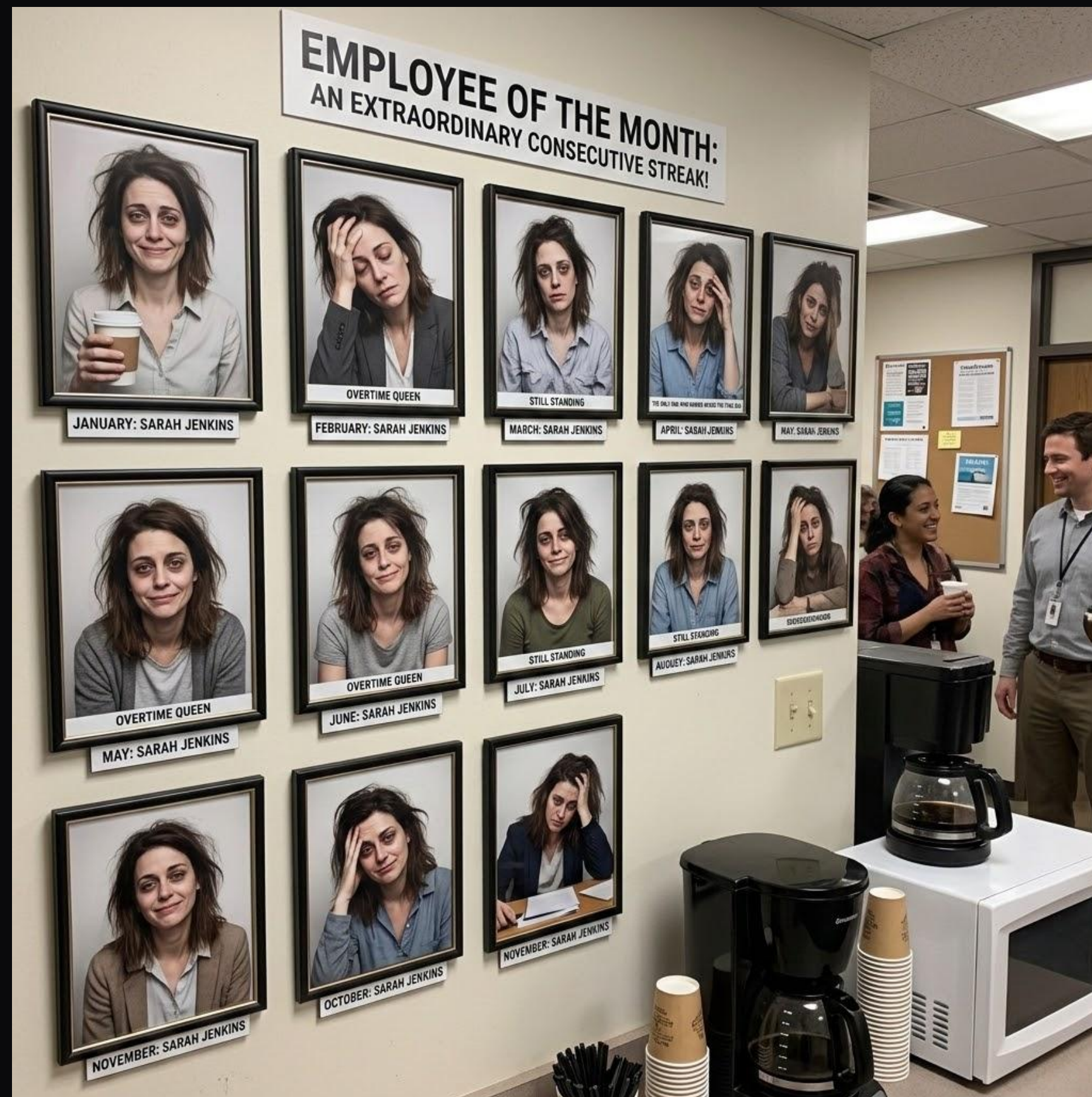
THE NOC IS WORKING AS DESIGNED

MTTR

Tickets closed

Response time





STOP CELEBRATING THE 3AM CALL

THREE METRICS. TWO
LOOK FINE.

300 Green 45

CHANGES / MONTH

UPTIME

DAYS TO
PROVISION



MOST OF IT IS WAITING

Engineering: days.
Process: weeks.



REALITY 4

Culture is a performance variable



CULTURE IS A NUMBER

PATHOLOGICAL / BUREAUCRATIC / GENERATIVE

2.9x +30%

ELITE PERFORMERS

ORG PERFORMANCE





**PROCUREMENT WORKED.
THE ROLLOUT DIDN'T.**

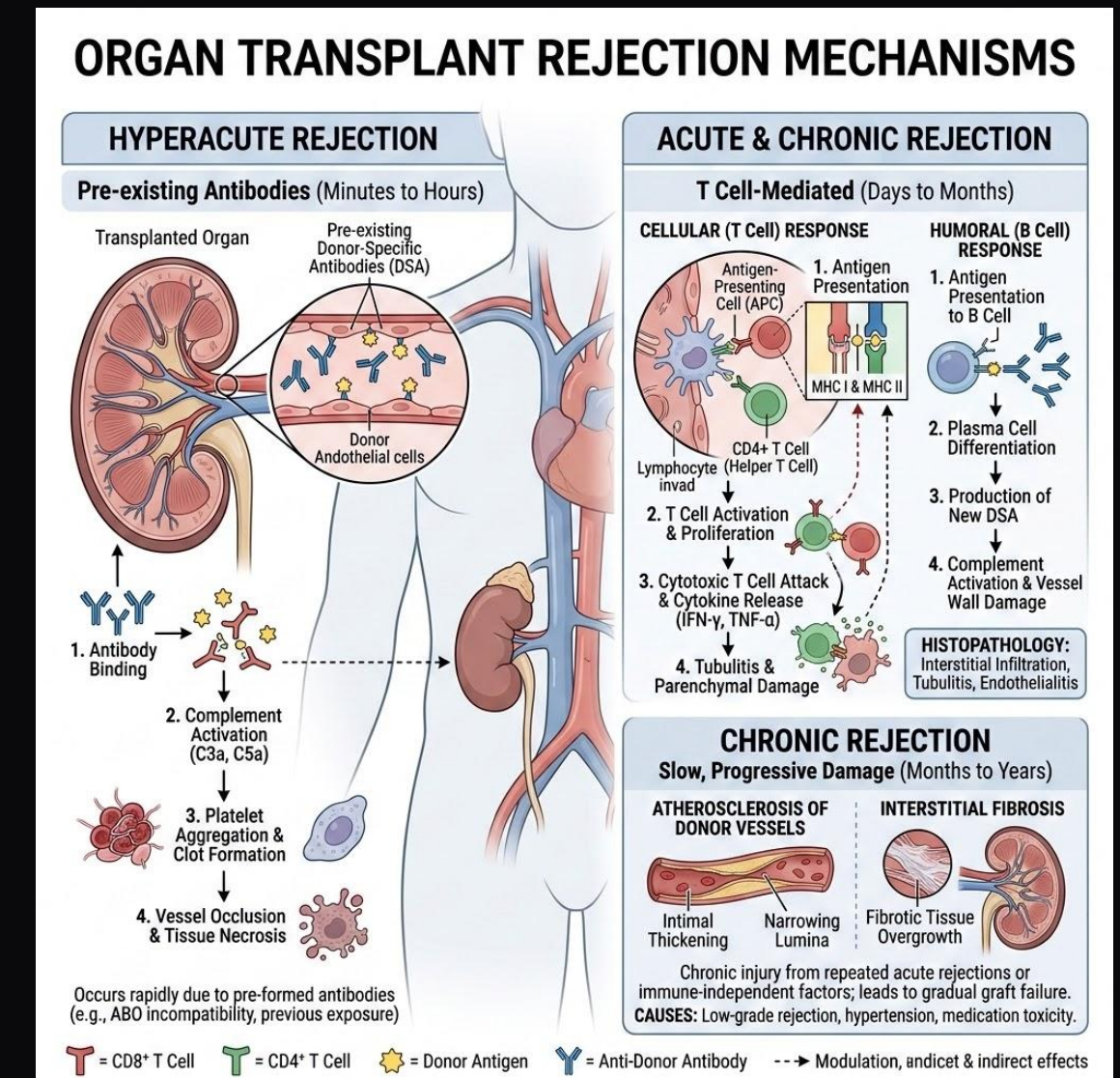


THE TOOL IS THE IDENTITY

I WATCHED THIS HAPPEN

TW Telecom → Level 3 (2014) → CenturyLink (2017)

Still runs as a separate network inside Lumen



REALITY 5

The org chart is the architecture



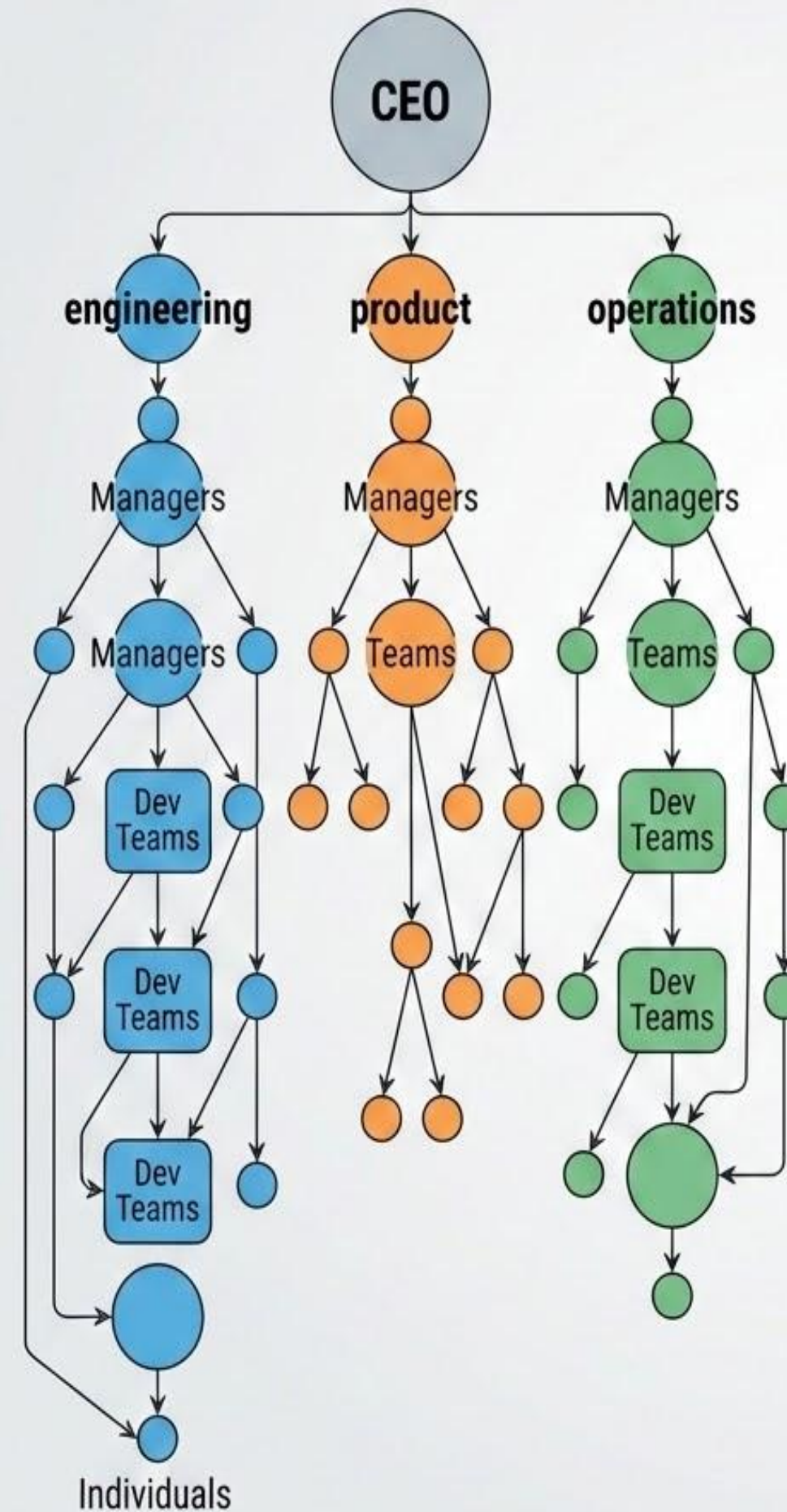
REALITY 05

YOU DIDN'T DESIGN A FRAGILE NETWORK

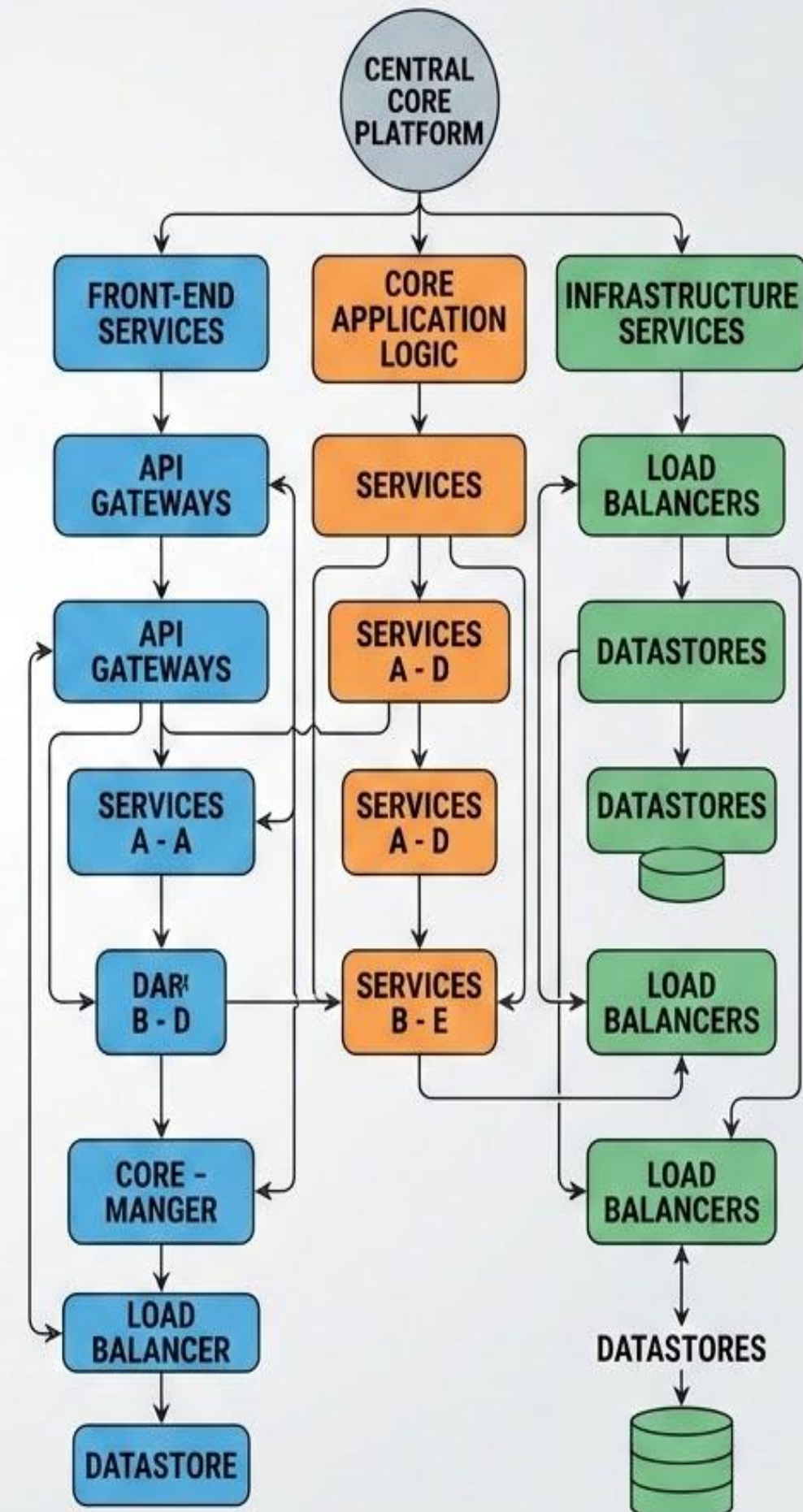
Architecture → Engineering → Operations
Conway, 1968



ORGANIZATIONAL STRUCTURE
(THE ORG CHART)



SYSTEM ARCHITECTURE
(THE NETWORK DIAGRAM)



FOUR TEAM TYPES

Stream-aligned
Platform
Enabling
Complicated-subsystem



FIBER ISN'T CODE

Physical fulfillment as a platform
capability.



RUN IT FORWARD

Red flag: their topology $\neq$ yours
Lever: pick the architecture, structure the
teams



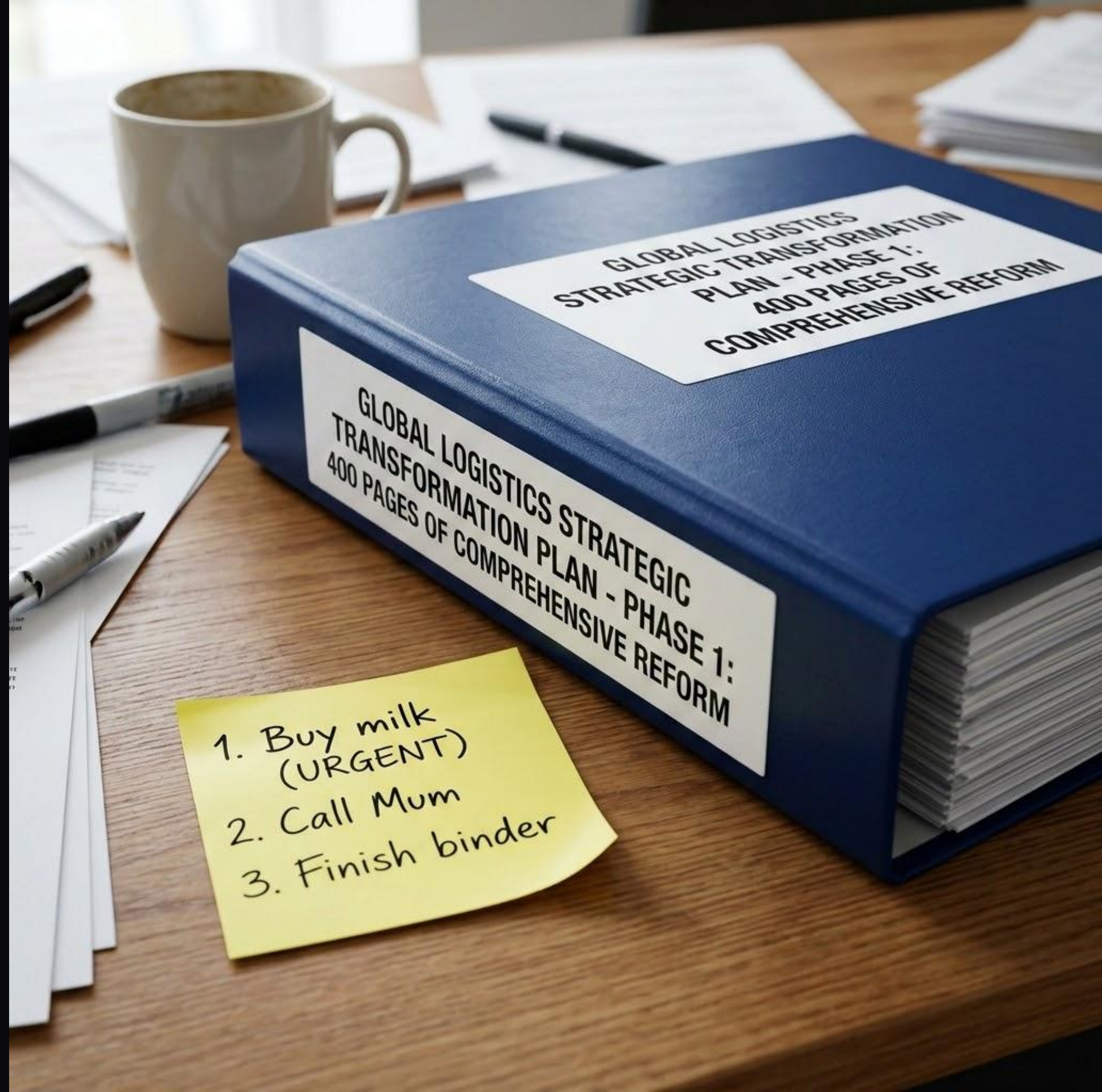
THE WRONG FIRST QUESTION

Build or buy?



MONDAY

1. Point discovery at the network
2. Stop rewarding one thing
3. Name who owns the platform

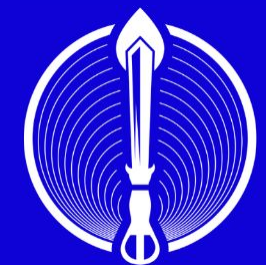


YOUR CALL

**DRIVE THE
TRANSFORMATION, OR
RESPOND TO SOMEONE
ELSE'S.**

CHRIS GRUNDEMANN

KHADGA.CONSULTING



KHADGA
CONSULTING