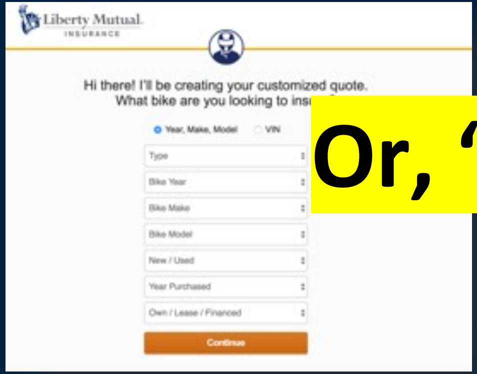
Creating and Sustaining a Culture of Innovation

Or, “DevSecOps Culture“: Whatever That Means

@cote



Liberty Mutual INSURANCE

Hi there! I'll be creating your customized quote. What bike are you looking to ins

● Year, Make, Model ○ VIN

Type

Bike Year

Bike Make

Bike Model

New / Used

Year Purchased

Own / Lease / Financed

Continue

●●●●● Orange F 9:41 AM 100%

Votre contrat

FÉVRIER 2017 214,00 € HT

MARS 2017 234,00 € HT

VOS OPTIONS & SERVICES

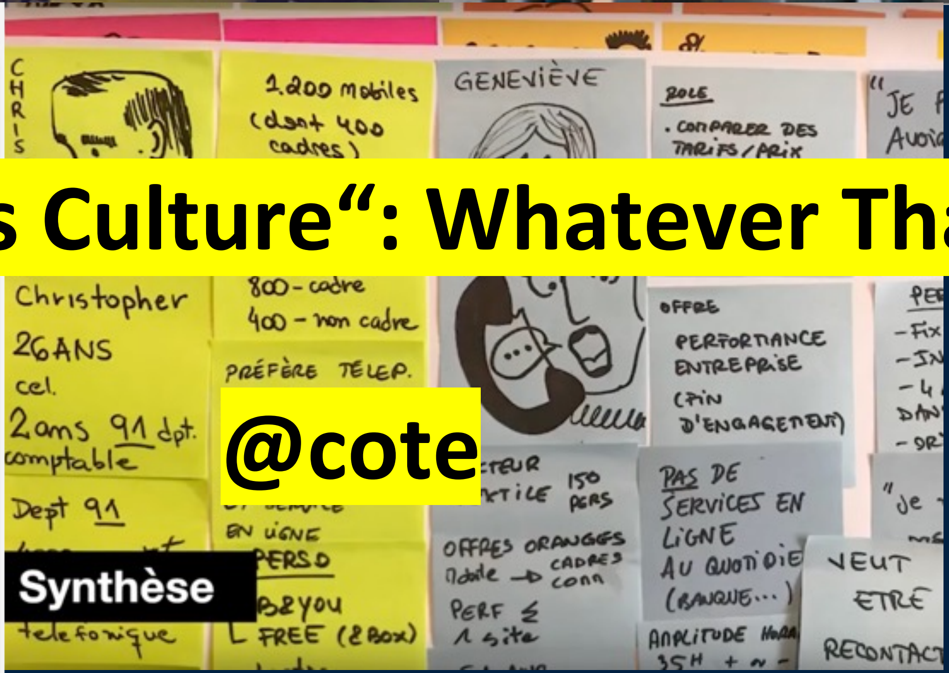
Gérez les options & services de vos lignes.

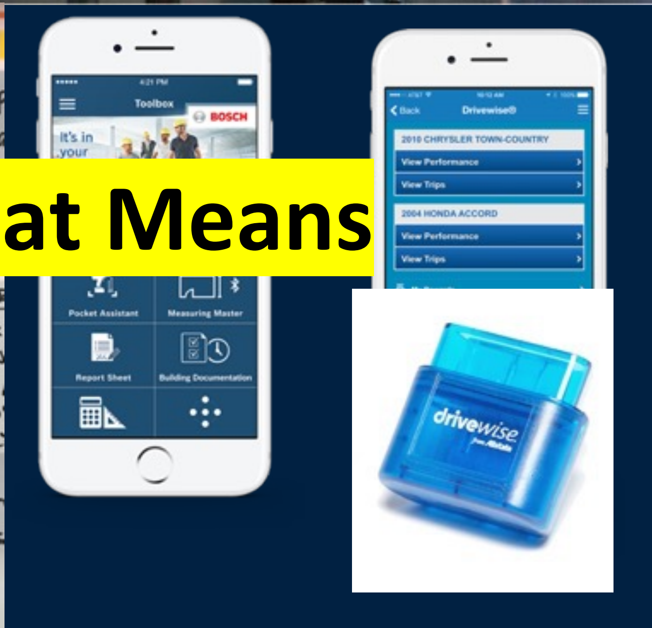
VOTRE CONSOMMATION

06 00 00 00 01 6,50 €

02 00 00 00 03 3,50 €

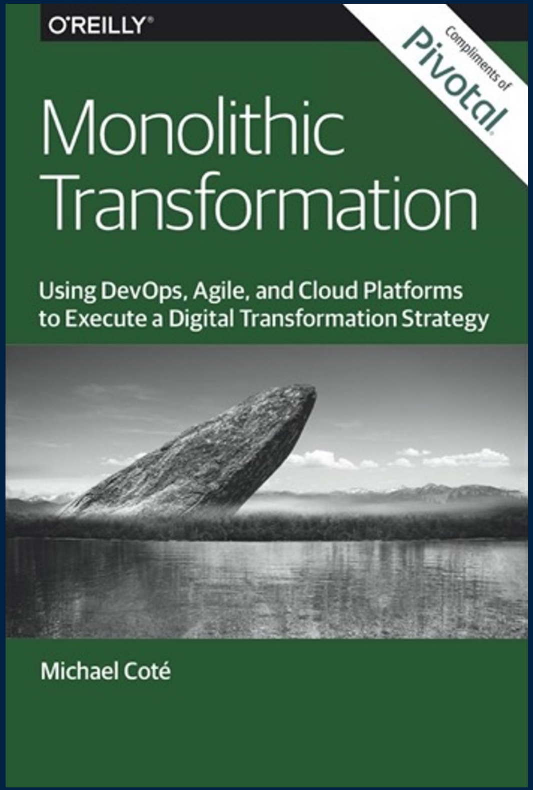
09 00 00 00 04





Coté

@cote | http://cote.io



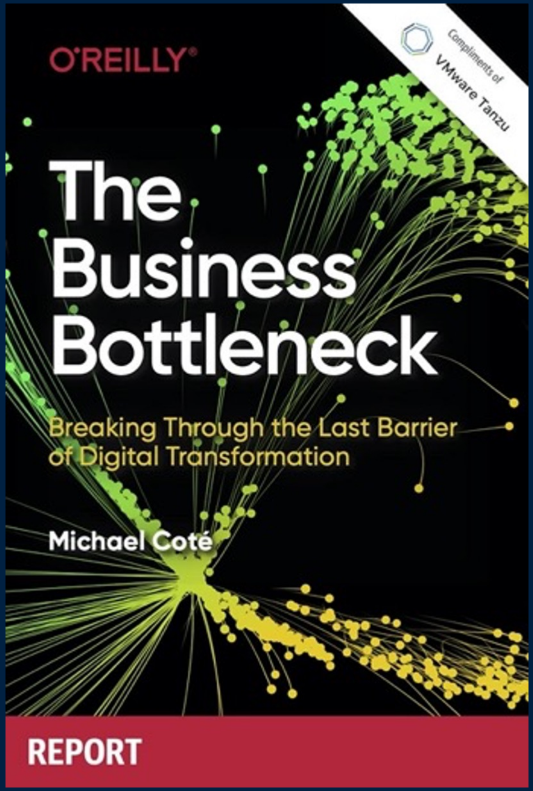
O'REILLY®

Compliments of Pivotal

Monolithic Transformation

Using DevOps, Agile, and Cloud Platforms to Execute a Digital Transformation Strategy

Michael Coté



O'REILLY®

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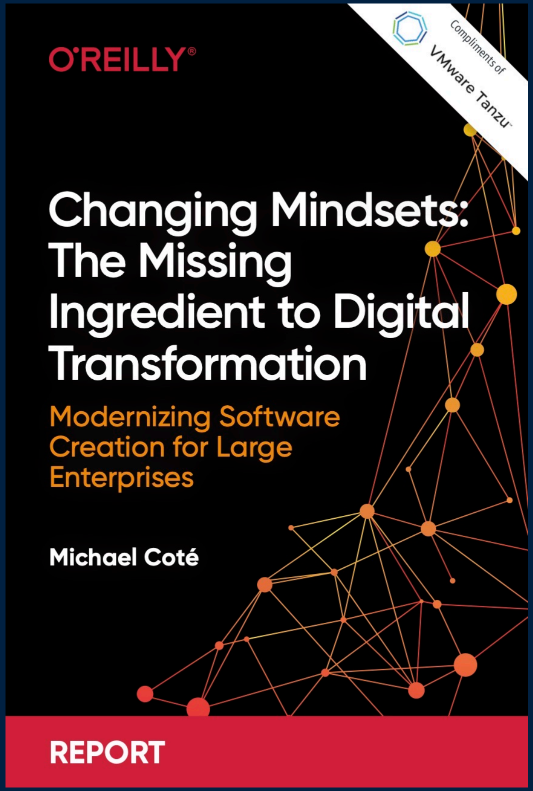
The Business Bottleneck

Breaking Through the Last Barrier of Digital Transformation

Michael Coté

REPORT



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Compliments of VMware Tanzu

Changing Mindsets: The Missing Ingredient to Digital Transformation

Modernizing Software Creation for Large Enterprises

Michael Coté

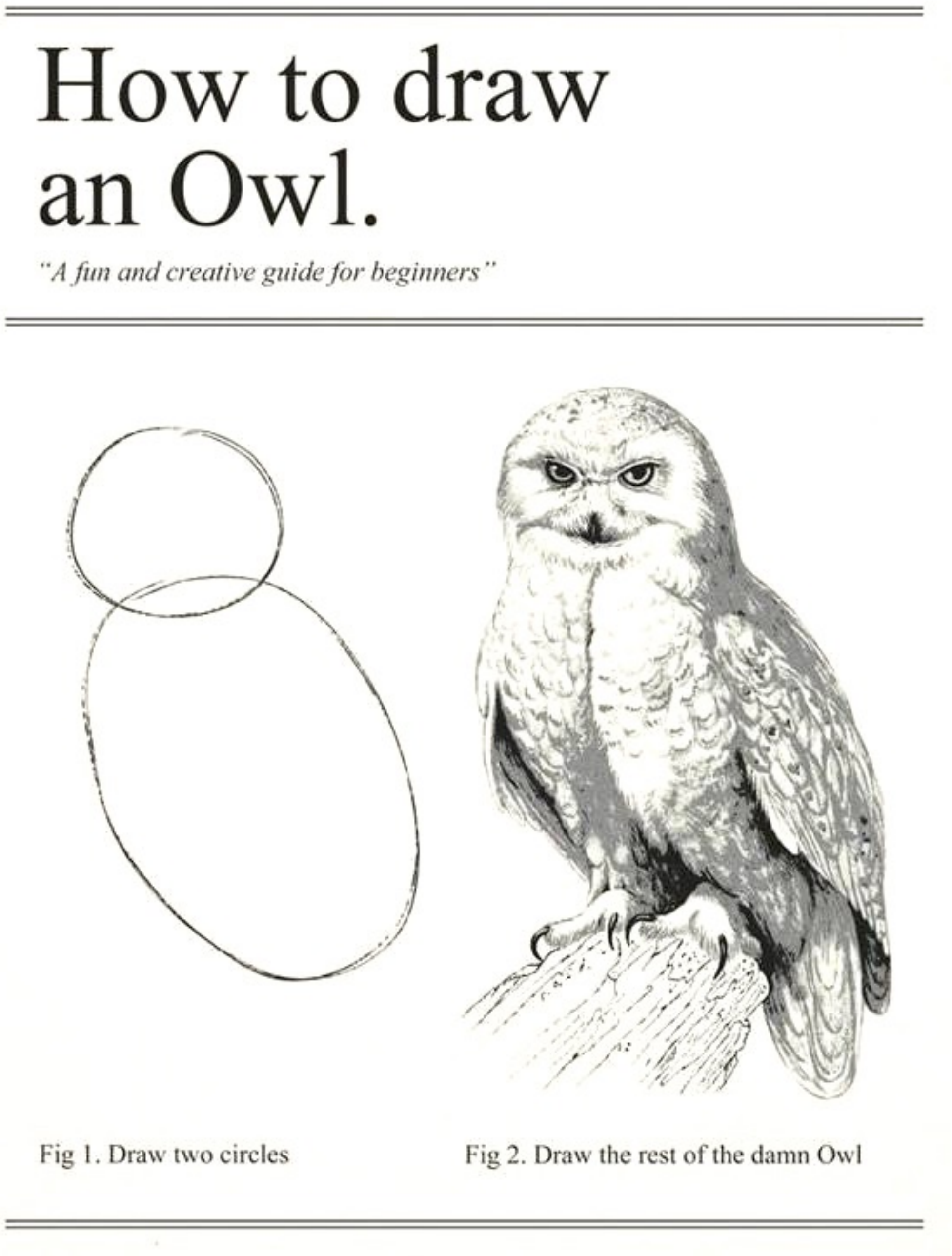
REPORT

Tanzu Talk

SOFTWARE DEFINED TALK

Special Guests!

(Potentially)



How to draw an Owl.

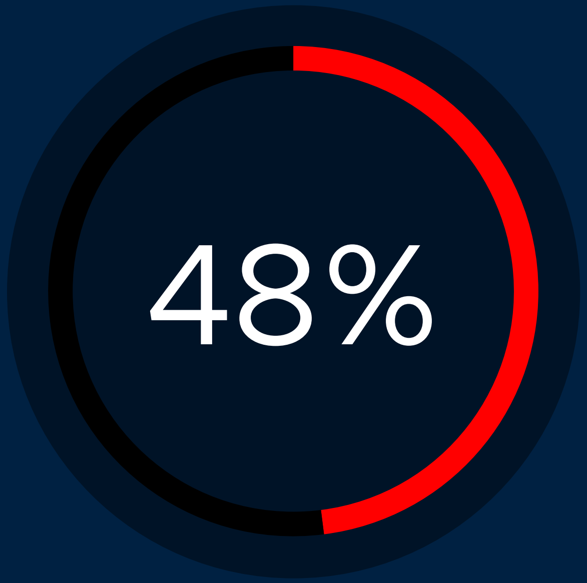
"A fun and creative guide for beginners"

Fig 1. Draw two circles

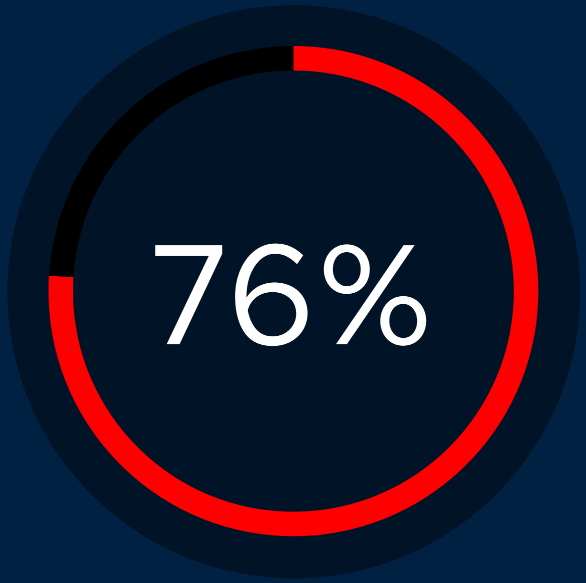
Fig 2. Draw the rest of the damn Owl

How do I focus on building apps that improve customer experience and improve how we do business?

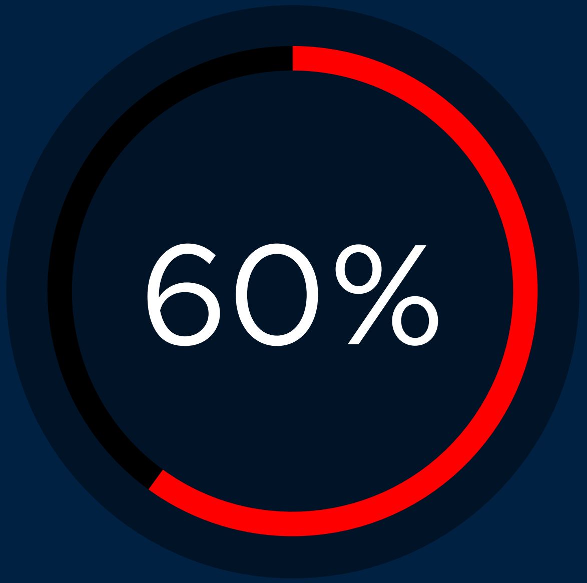
30% of software projects are successful, 70% challenged or failing



Have not made app improvements in 1+ years



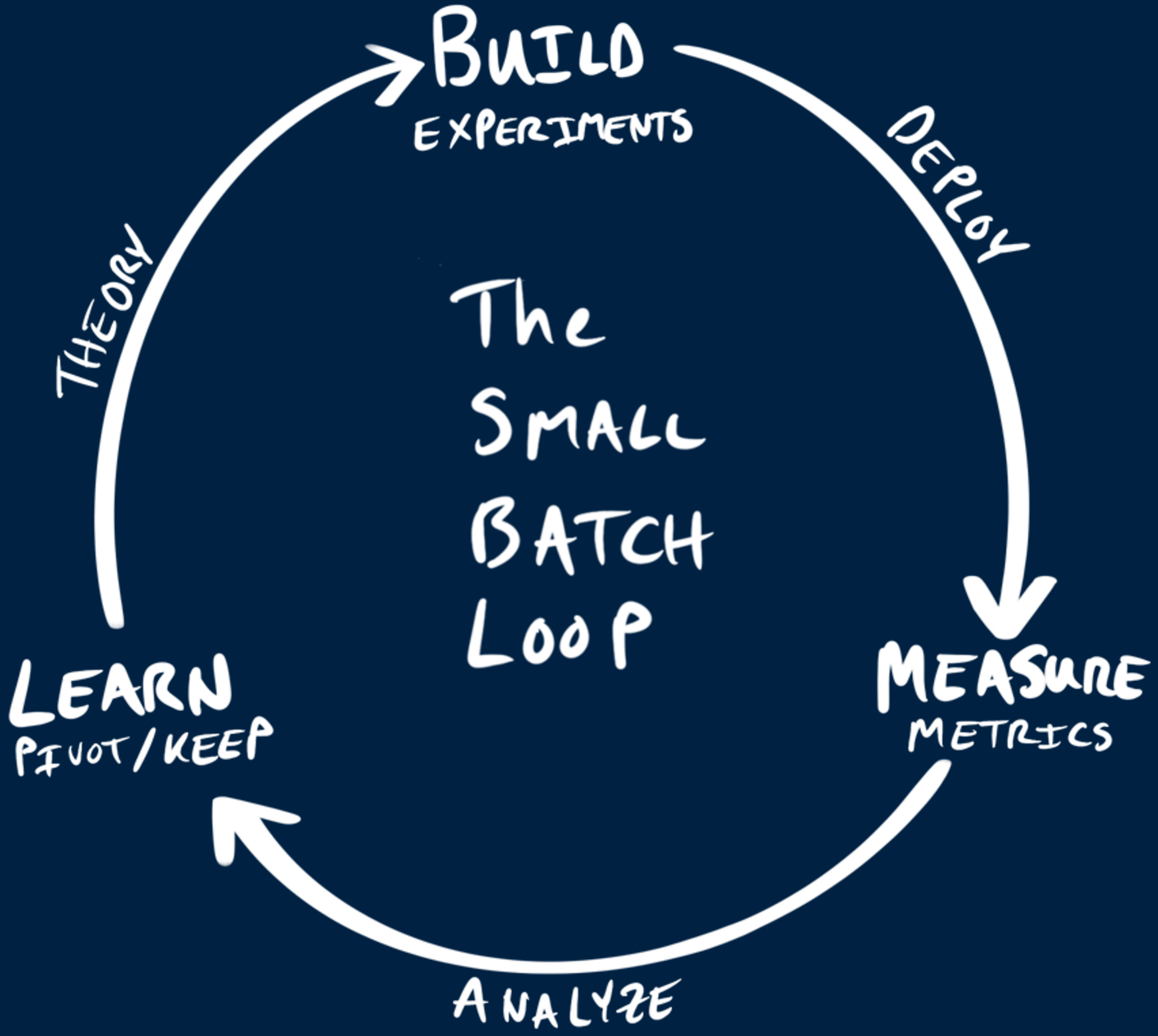
Too invested in legacy apps to change



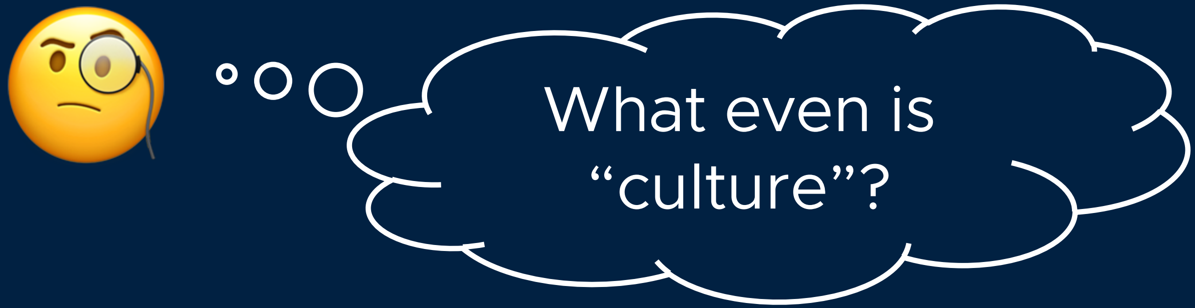
Release apps twice a year or less

Sources: 30% success rate based on 13 years of Standish Group studies, 2009 study and 2015 study; "Improving Customer Experience And Revenue Starts With The App Portfolio," Forrester Consulting, commissioned by VMware, March, 2020; CI estimate based on Forrester survey (2019), DZone CD reports (2014, 2015, 2016, 2017, 2019); release frequency from commissioned 2019 Forrester TEI study, "CEOs and Software," Rymer & Hammond, Forrester, Jan 2019. Cf. State of Agile 2020.

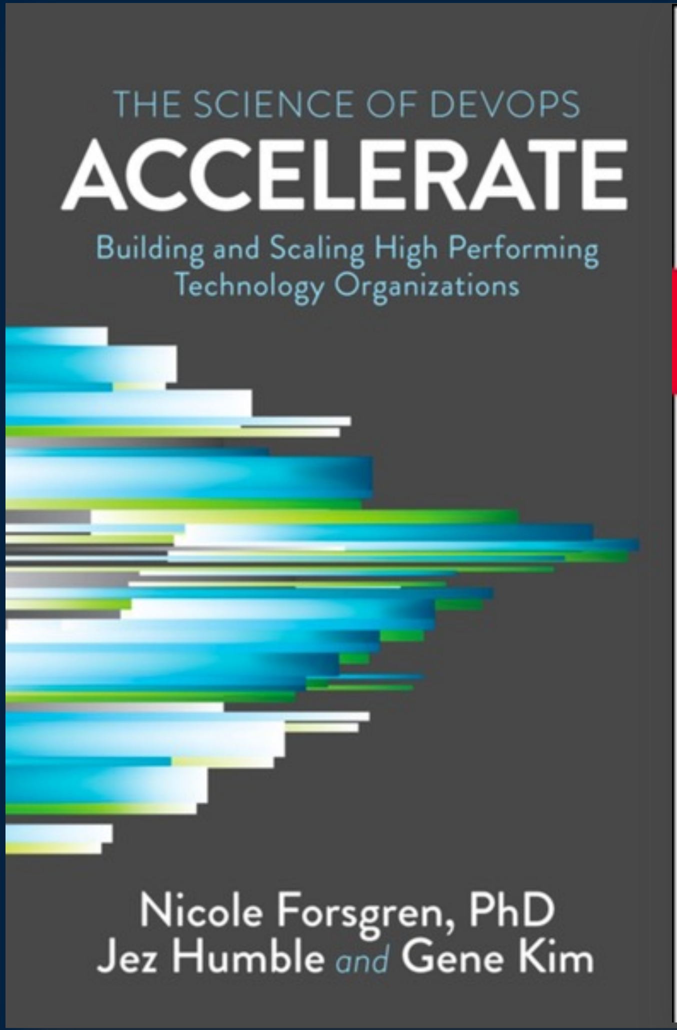
Sources: Sophie Seiwald, Daimler, case study in *The Business Bottleneck*. Pic: pictavio.


The Small Batch Loop
Build
Experiments
Deploy
Measure
Metrics
Analyze
Learn
Pivot / Keep
Theory

Sources: Sophie Seiwald, Daimler, case study in *The Business Bottleneck*. Pics: Luke Kanies.



What even is “culture”?

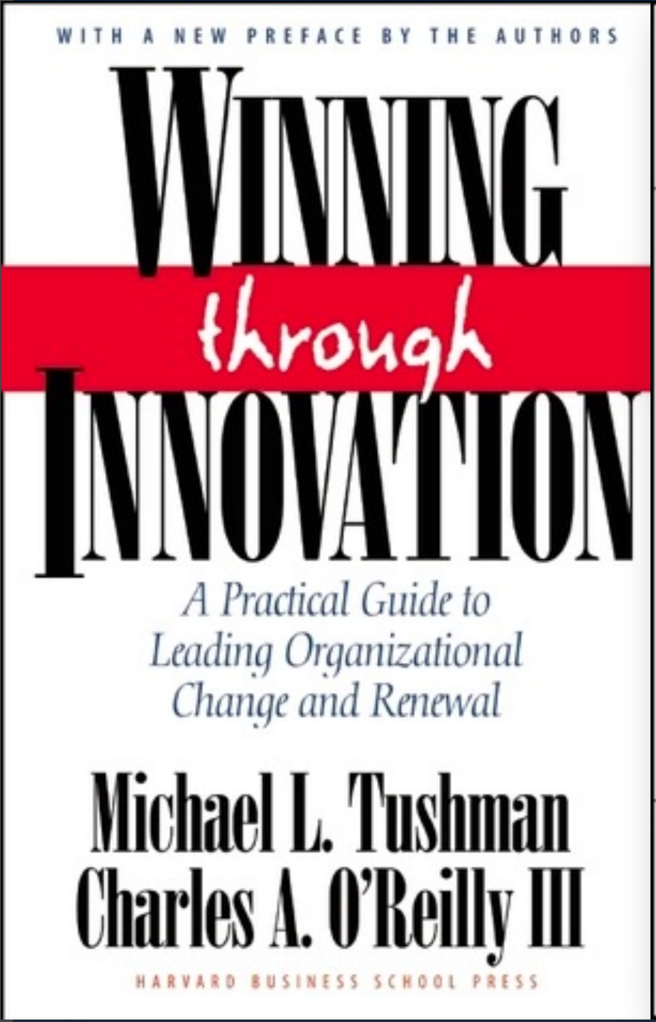


THE SCIENCE OF DEVOPS

ACCELERATE

Building and Scaling High Performing Technology Organizations

Nicole Forsgren, PhD
Jez Humble *and* Gene Kim



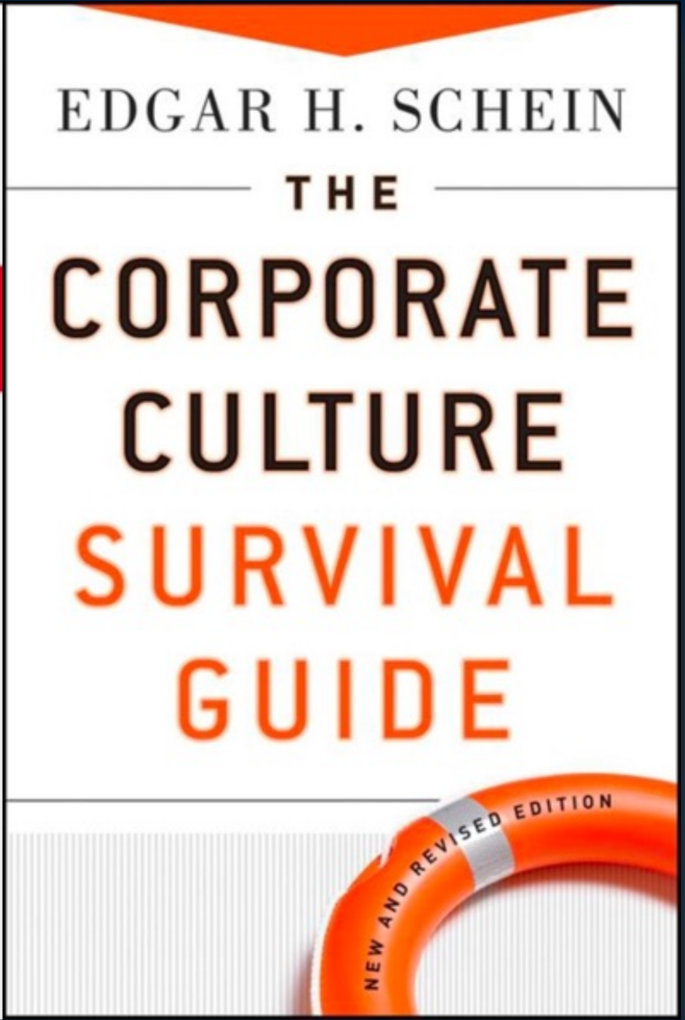
WITH A NEW PREFACE BY THE AUTHORS

WINNING *through* INNOVATION

A Practical Guide to Leading Organizational Change and Renewal

Michael L. Tushman
Charles A. O'Reilly III

HARVARD BUSINESS SCHOOL PRESS



EDGAR H. SCHEIN

THE CORPORATE CULTURE SURVIVAL GUIDE

NEW AND REVISED EDITION

PERSPECTIVES

DONE

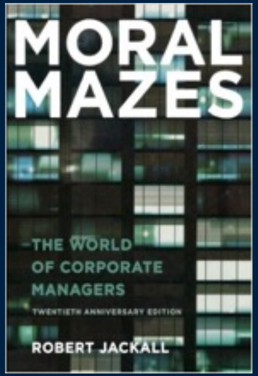
Digital transformation at scale: why the strategy is delivery

Andrew Greenway, Ben Terrett, Mike Bracken, Tom Loosemore
Foreword by Francis Maude

THE WOLF IN CIO'S CLOTHING

A MACHIAVELLIAN STRATEGY *for* SUCCESSFUL IT LEADERSHIP

TINA NUNNO

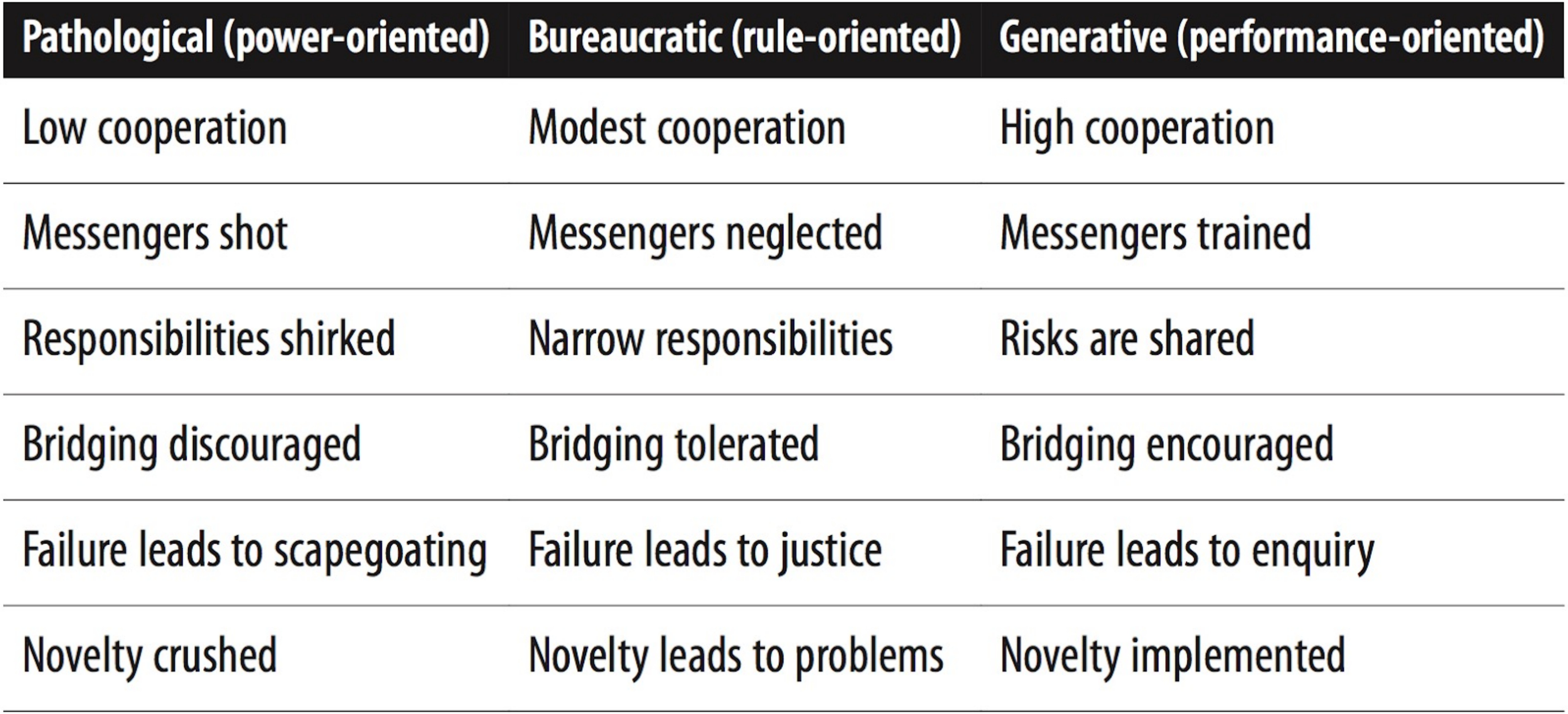


MORAL MAZES

THE WORLD OF CORPORATE MANAGERS

TWENTIETH ANNIVERSARY EDITION

ROBERT JACKALL



Pathological (power-oriented)	Bureaucratic (rule-oriented)	Generative (performance-oriented)
Low cooperation	Modest cooperation	High cooperation
Messengers shot	Messengers neglected	Messengers trained
Responsibilities shirked	Narrow responsibilities	Risks are shared
Bridging discouraged	Bridging tolerated	Bridging encouraged
Failure leads to scapegoating	Failure leads to justice	Failure leads to enquiry
Novelty crushed	Novelty leads to problems	Novelty implemented

Source: *Accelerate*, Forsgren, Humble, Kim, 2018.

> “Culture can be seen in the norms and values that characterize a group or organization that is, organizational culture is a system of shared values and norms that define appropriate attitudes and behaviors for its members.”

> “[Culture is] a pattern of shared tacit assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.”

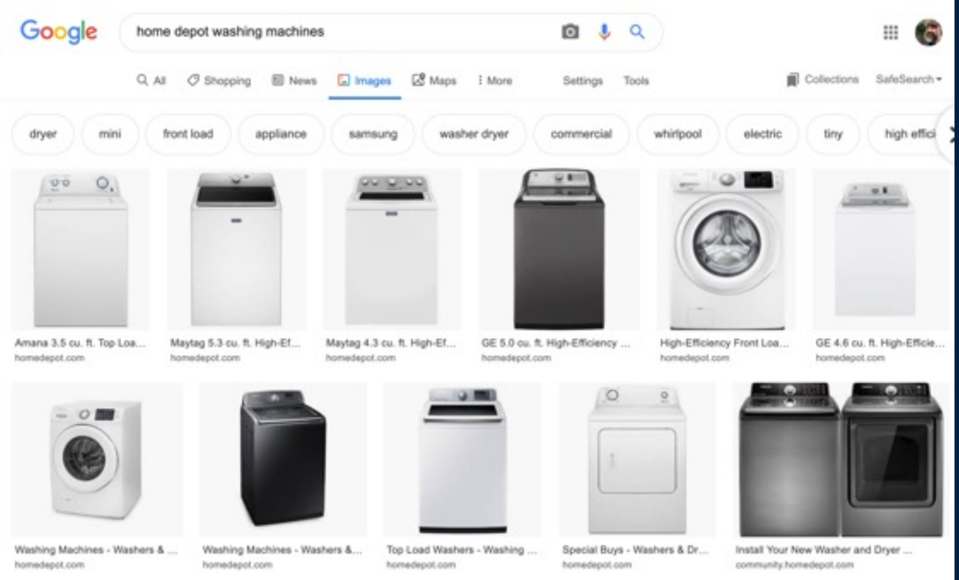
Sources: *Winning Through Innovation*, O'Reilly and Tushman, 2002; *The Corporate Culture Survival Guide*, Edgar Schein, 1999.

How we do things around here.

People are:

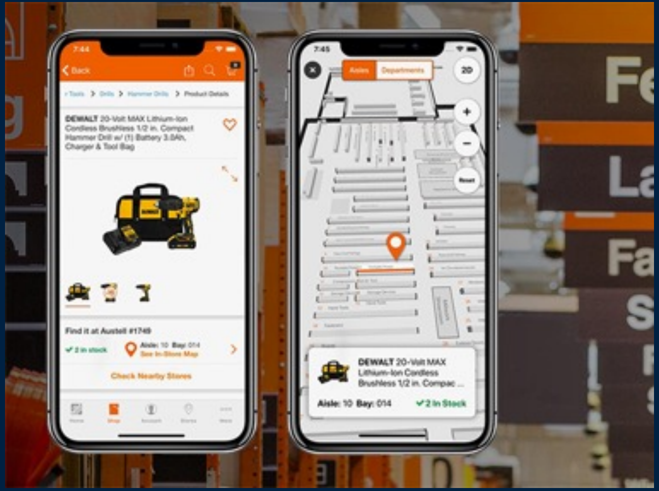
- Innovative
- Risk takers
- People-centric

Touching washing machines, finding toilets



home depot washing machines

Google
All
Shopping
News
Images
Maps
More
Settings
Tools
Collections
SafeSearch
dryer
mini
front load
appliance
samsung
washer dryer
commercial
whirlpool
electric
tiny
high effici
Amana 3.5 cu. ft. Top Loa...
homedepot.com
Maytag 5.3 cu. ft. High-Ef...
homedepot.com
Maytag 4.3 cu. ft. High-Ef...
homedepot.com
GE 5.0 cu. ft. High-Efficiency ...
homedepot.com
High-Efficiency Front Loa...
homedepot.com
GE 4.6 cu. ft. High-Efficie...
homedepot.com
Washing Machines - Washers & ...
homedepot.com
Washing Machines - Washers &...
homedepot.com
Top Load Washers - Washing ...
homedepot.com
Special Buys - Washers & Dr...
homedepot.com
Install Your New Washer and Dryer ...
community.homedepot.com



DEWALT 20-Volt MAX Lithium-Ion Cordless Brushless 1/2 in. Compact Hammer Drill w/ (1) Battery 3.0Ah, Charger & Tool Bag

Find it at Austell #1749

✓ 2 in stock   Aisle: 10 Bay: 014 See In-Store Map

DEWALT 20-Volt MAX Lithium-Ion Cordless Brushless 1/2 in. Compac ...

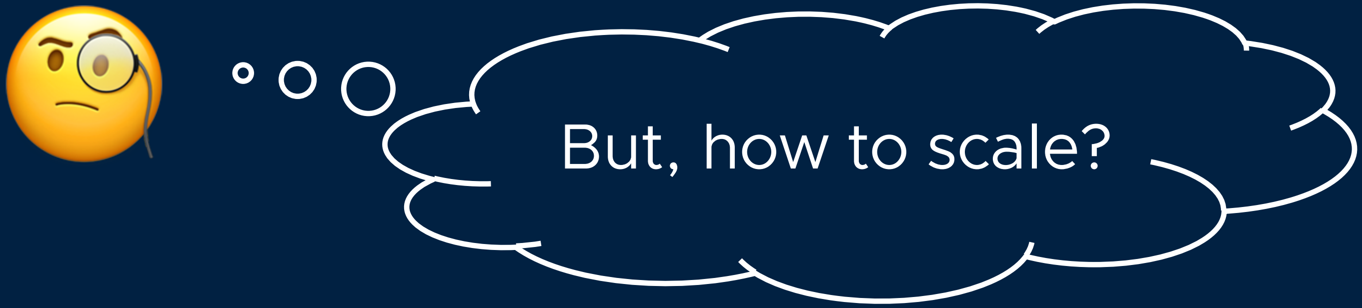
Aisle: 10 Bay: 014 ✓2 In Stock

Source: case study and further references in *The Business Bottleneck*.

Leaders give them:

- Autonomy
- Trust
- Voice

Source: Pivotal Conversations #113, Sep 2018. Pic: Tyler Olson.

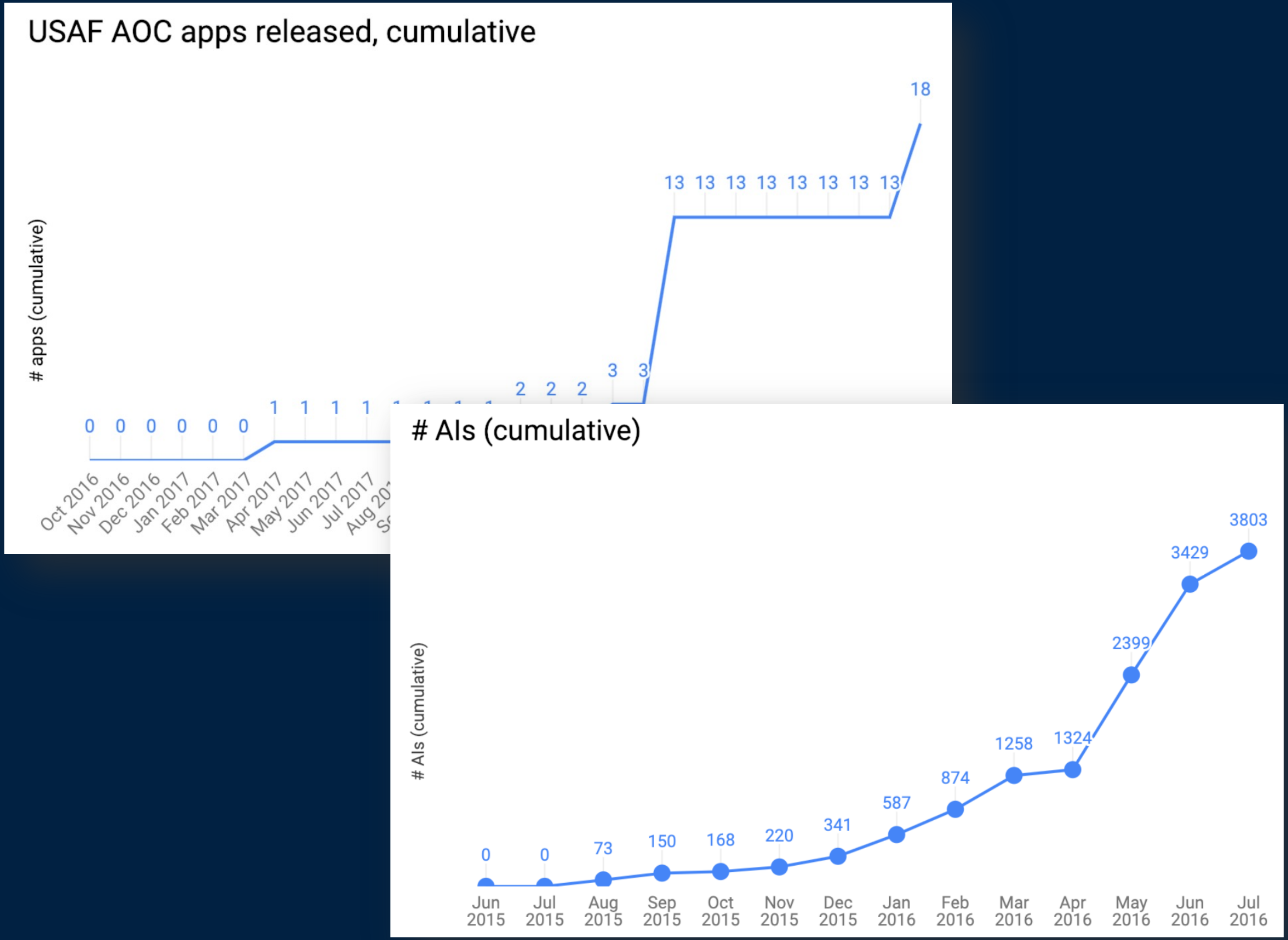


But, how to scale?

“We believe that we need to reimagine banking to make banking simple, seamless, as well as invisible to allow our customers to **live more bank less.**”

Siew Choo Soh, DBS Bank

Start small & steady, expand by seeding & winning trust



Further analysis of just high and elite performers shows the following use profiles:

- 46% - Communities of Practice, Grassroots, and PoCs
- 23% - Grassroots efforts and Communities of Practice
- 22% - all by Big Bang and DOJOs, but inc. PoC but stall
- 9% Centers of Excellence, Communities of Practice, and Training Centers

Sources: "Accelerate State of DevOps 2019," DORA, August 2019; "From 0 to 1000 Apps: The First Year of Cloud Foundry at The Home Depot," Anthony McCulley, The Home Depot, Aug 2016; "Cloud Native at The Home Depot, with Tony McCulley," Pivotal Conversations #45; USAF presentations and write-ups.

> “Most of our software development is supporting legacy capabilities that are in-house and don’t provide a competitive advantage, which is opposite of what I would want to have.”
>
> *CIO at US Retail Company*

- **76%** of executives said they are too invested in legacy applications to change.
- **69%** of executives say high technical debt is very or extremely important to overcome to improve apps.
- **48%** say it has been more than a year since they made improvements to their application portfolios.

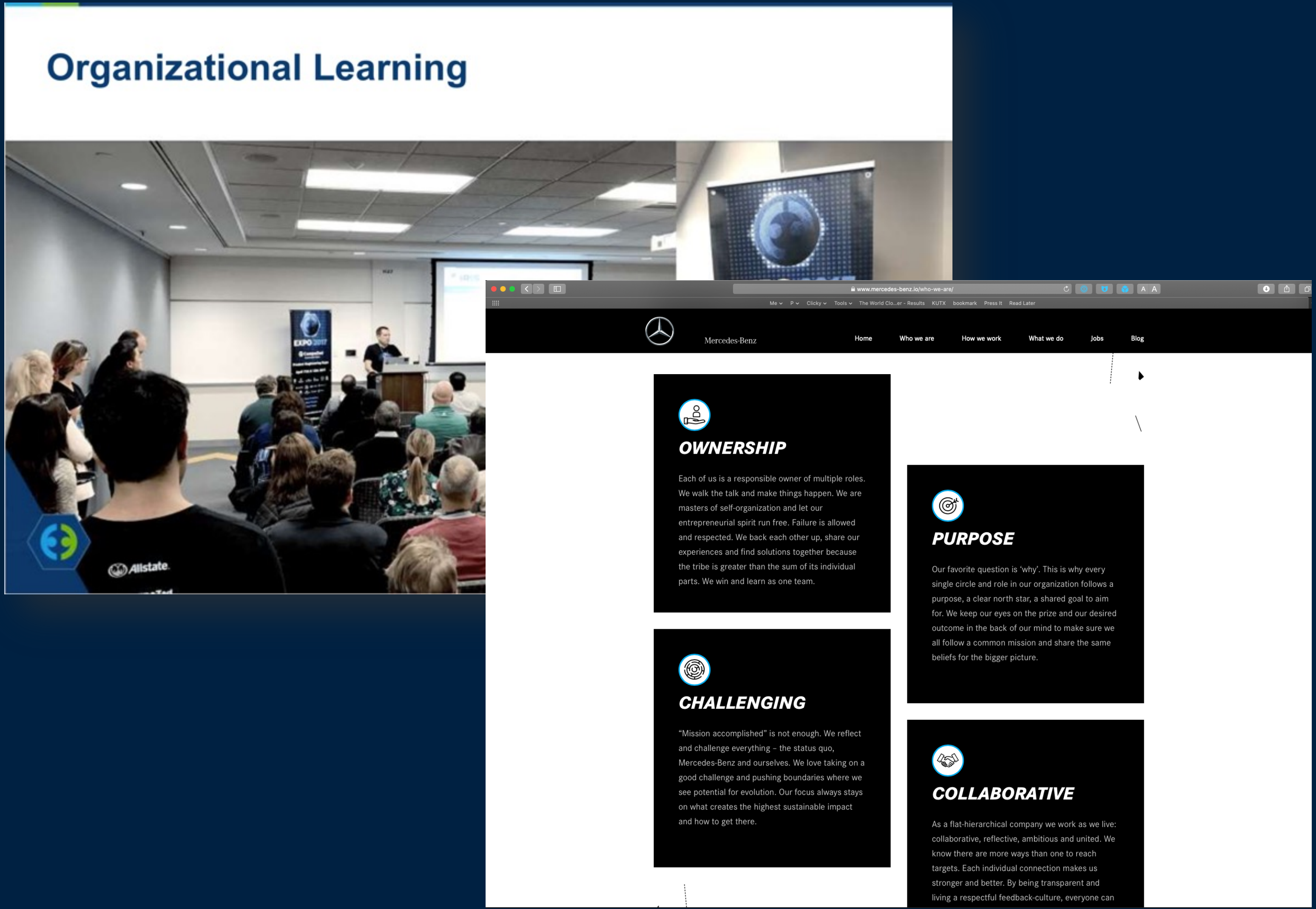
Sources: “Improving Customer Experience And Revenue Starts With The App Portfolio,” Forrester Consulting, commissioned by VMware, March, 2020. Survey conducted July to Oct. 2019 with 614 respondents and six CIO/SVP interviews.

Motivation: “If that crusty, old .Net developer can do it, anyone can.”

1. Money, gold stars, equity
2. Quality work
3. Flow
4. Quality of life
5. Open source contributions
6. Autonomy
7. Moving pixels on the screen (business outcomes)

Source: “Navigating the Sea of ’No’s,’” John Osborn, GAIC, Dec 2017; Dealing with Grumps, Coté, May 2018.

Consulting, internal marketing, branding, etc.



Organizational Learning

www.mercedes-benz.io/who-we-are/

OWNERSHIP

Each of us is a responsible owner of multiple roles. We walk the talk and make things happen. We are masters of self-organization and let our entrepreneurial spirit run free. Failure is allowed and respected. We back each other up, share our experiences and find solutions together because the tribe is greater than the sum of its individual parts. We win and learn as one team.

PURPOSE

Our favorite question is 'why'. This is why every single circle and role in our organization follows a purpose, a clear north star, a shared goal to aim for. We keep our eyes on the prize and our desired outcome in the back of our mind to make sure we all follow a common mission and share the same beliefs for the bigger picture.

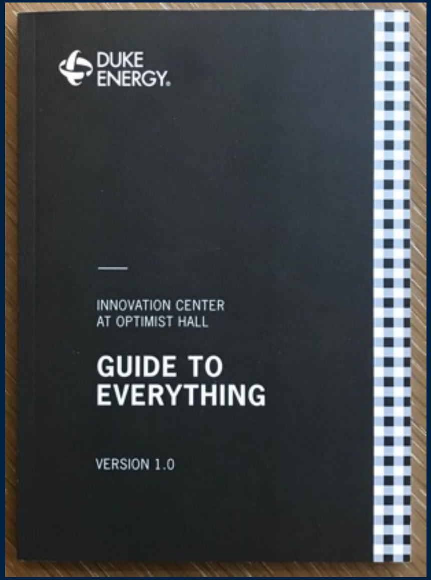
CHALLENGING

"Mission accomplished" is not enough. We reflect and challenge everything – the status quo, Mercedes-Benz and ourselves. We love taking on a good challenge and pushing boundaries where we see potential for evolution. Our focus always stays on what creates the highest sustainable impact and how to get there.

COLLABORATIVE

As a flat-hierarchical company we work as we live: collaborative, reflective, ambitious and united. We know there are more ways than one to reach targets. Each individual connection makes us stronger and better. By being transparent and living a respectful feedback-culture, everyone can

Focus on ways of working…..



DUKE ENERGY.

INNOVATION CENTER AT OPTIMIST HALL

GUIDE TO EVERYTHING

VERSION 1.0

Sources: BT Canvas team; MB.io; Talanx; Duke Energy; Allstate; "Take DevOps to 11 and Sprinkle Cloud on it with Rainbows and Unicorns," Matt Curry, s1p 2017; customer discussions.

Use metrics to manage and build trust, focus

DevOps/Technical

Are we doing it right? Does the software work? Can we troubleshoot & restore?

1. Deployment frequency
2. Lead time for changes
3. Time to restore service
4. Change failure rate

Also, SRE: latency, traffic, errors, saturation.

Business

Are we achieving the non-IT goals we're here for? (What even are those goals?)

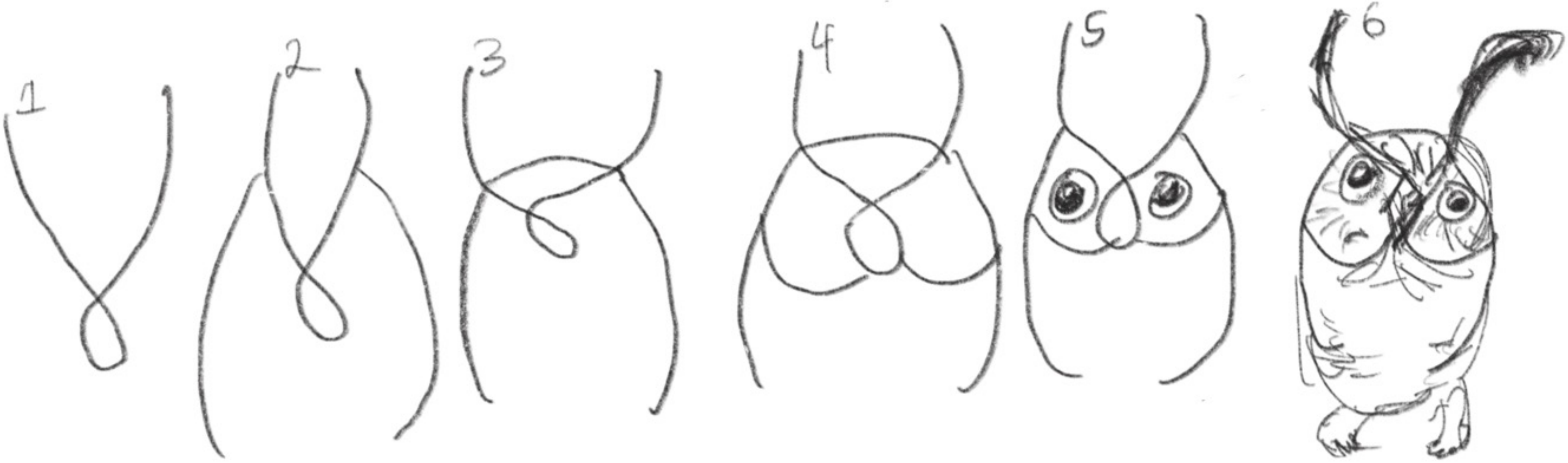
1. Sales/workflow completion
2. Use
3. Costs – time, money
4. Cost per transaction
5. Customer experience and satisfaction

Culture

Are the executives building the right system?

1. Employee NPS (eNPS)
2. Staff belief in leaders, mission, and strategy
3. # of experiments, learning
4. Staff retention and churn rate

Source: see three part series on metrics for more and for sources.



Thanks!

http://cote.io | cotem@vmware.com | @cote

Q&A Starters: all too common blockers

People

- Skills, hiring
- Reluctance to change
- Scaling new roles
- Org. structure

Corporate

- Budgeting
- Misaligned executives
- IT is still in the basement
- Compliance

Technical

- Stalled, incomplete platforms
- Overwhelming legacy portfolio
- Local optimization, no CI/CD
- ”We already do agile.”