



DevOps

Approaching cruising altitude

October 2020

At what point can we just start using 2020 as a swear word? As in:

“That’s a load of 2020.”

“What in the 2020?”

“Absa-2020-lutely!”

Our DevOps journey has grown out of a series of questions...

1

Umm...What is DevOps?

So we...



We stopped making excuses...

NETFLIX



Google

amazon



TARGET



NORDSTROM

NIKE®



STARBUCKS®

CapitalOne®

And we got started...



Concrete goal setting



Formalized our toolchain



Coaches and mentors



Experimenting and automating



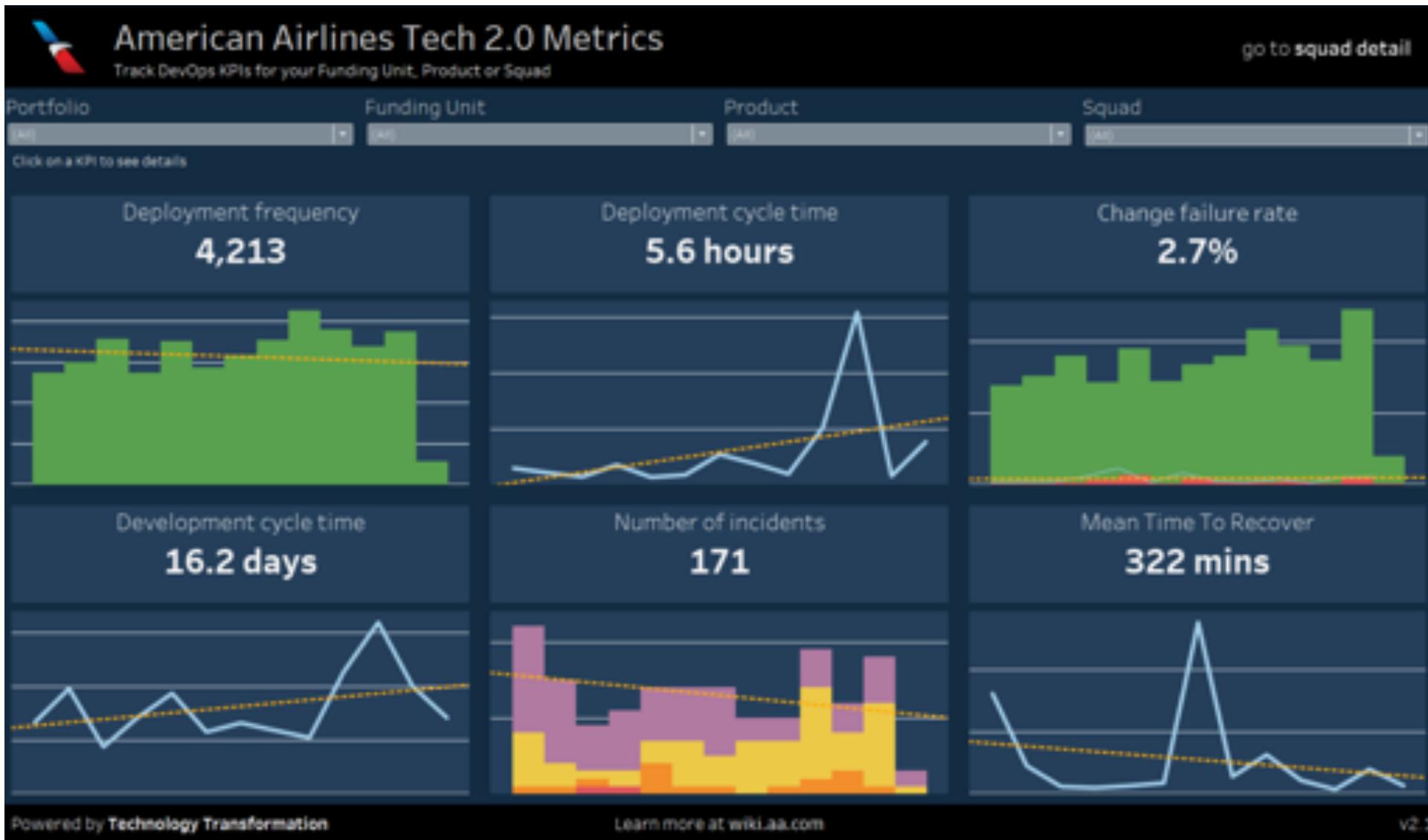
Immersive practical training



Our goal

DELIVER VALUE FASTER

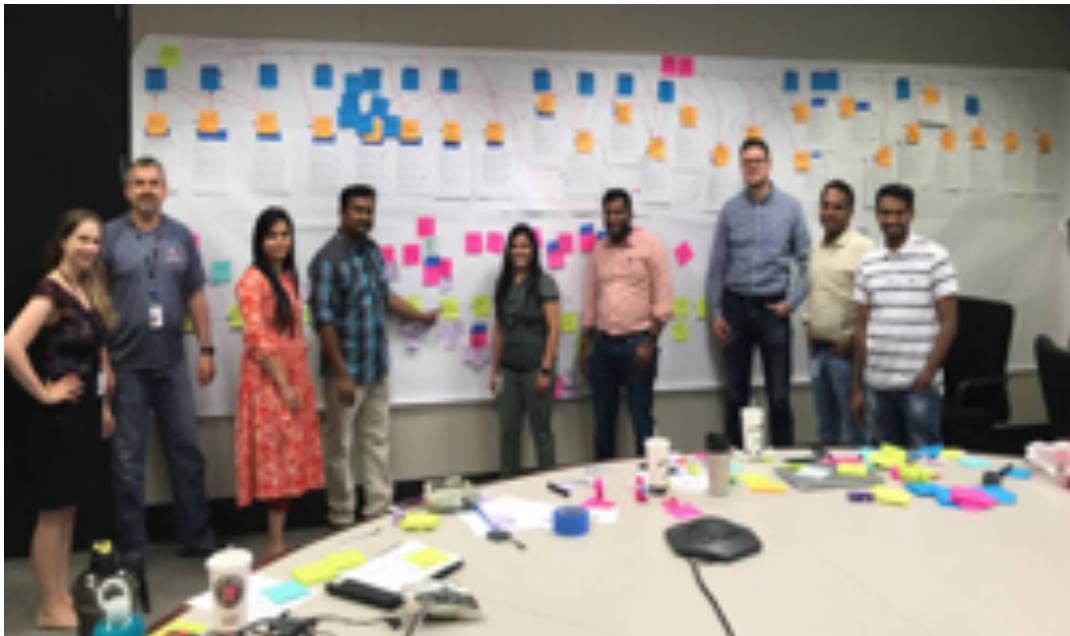
What outputs will we measure?



Successes

... And setbacks

Value Stream Mapping

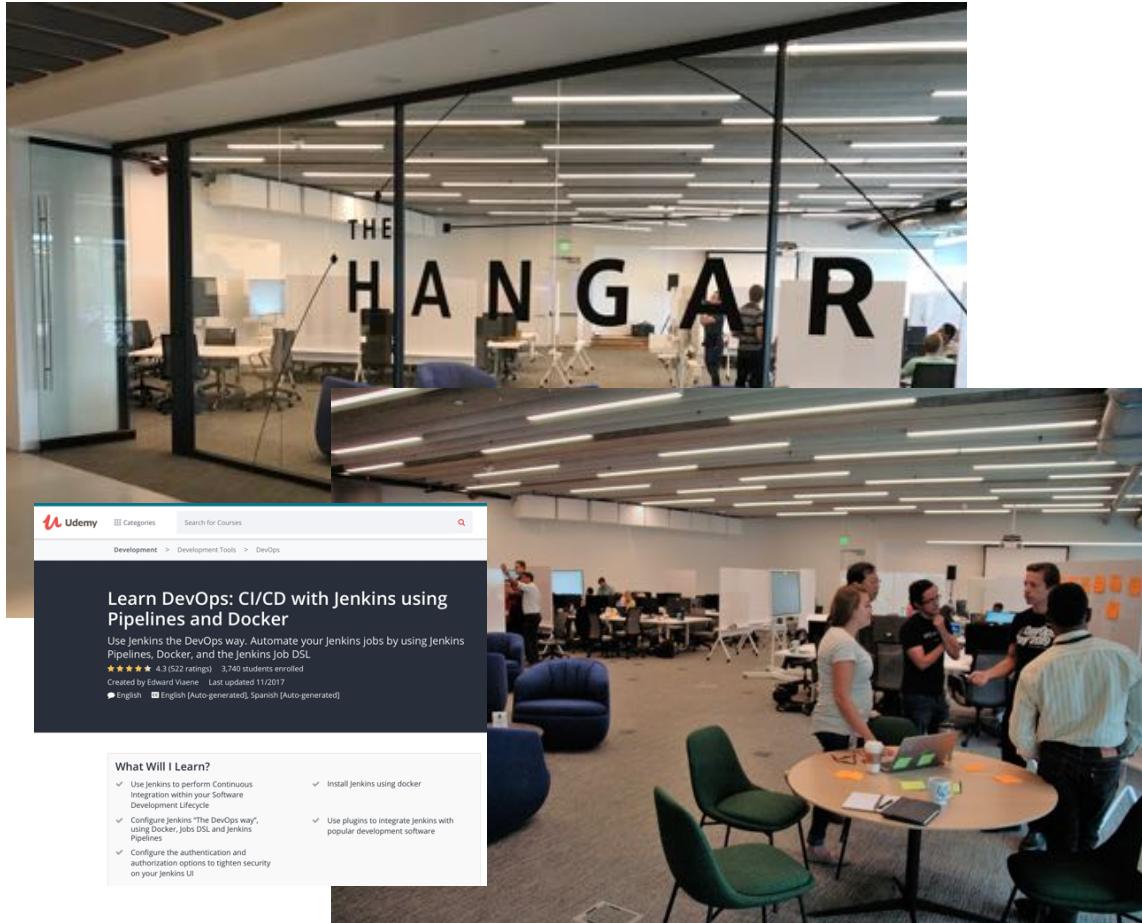


Not only helped identify waste, but it was a real eye-opener for teams and a great bonding experience.

Maximum
Minimum
Viable
Product

Successes

Self-paced and immersive learning in IT



... And setbacks

Our “Business Advocates” kickoff

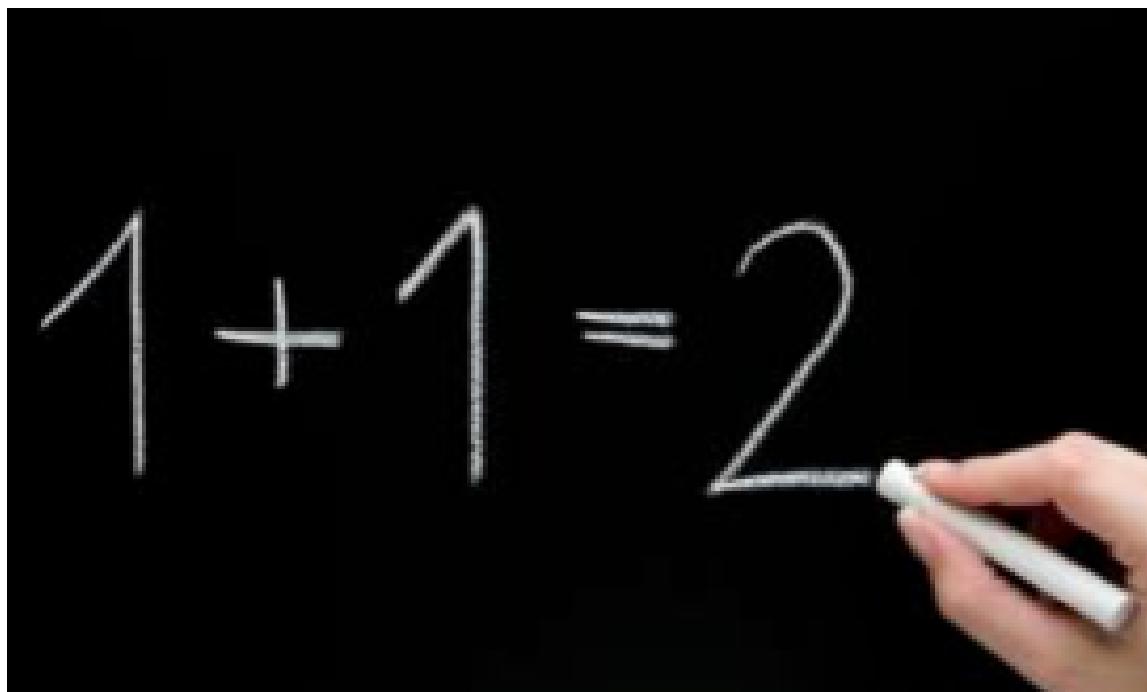


- 25 were invited
- 6 attended
- 3 were from IT

2

Finance: Friend or Foe?

Finance thought the process was...



But it looked like this, with months of approval cycles

A screenshot of a computer monitor displaying a software application with a grid-based interface. The grid consists of numerous rows and columns, each containing small, illegible text entries. The top row of the grid is highlighted in yellow, while the rest of the rows are in white. The application has a standard Windows-style menu bar at the top, including "FILE", "EDIT", "VIEW", "INSERT", "FORMAT", "TOOLS", "DATA", "WINDOW", and "HELP". The status bar at the bottom right shows the date and time as "TUE 12/12 PM 7:46".

The financial approval process:



No projects approved without finance involvement



Projects were approved but not the headcount to do them



Requests were given the same scrutiny regardless of size and risk



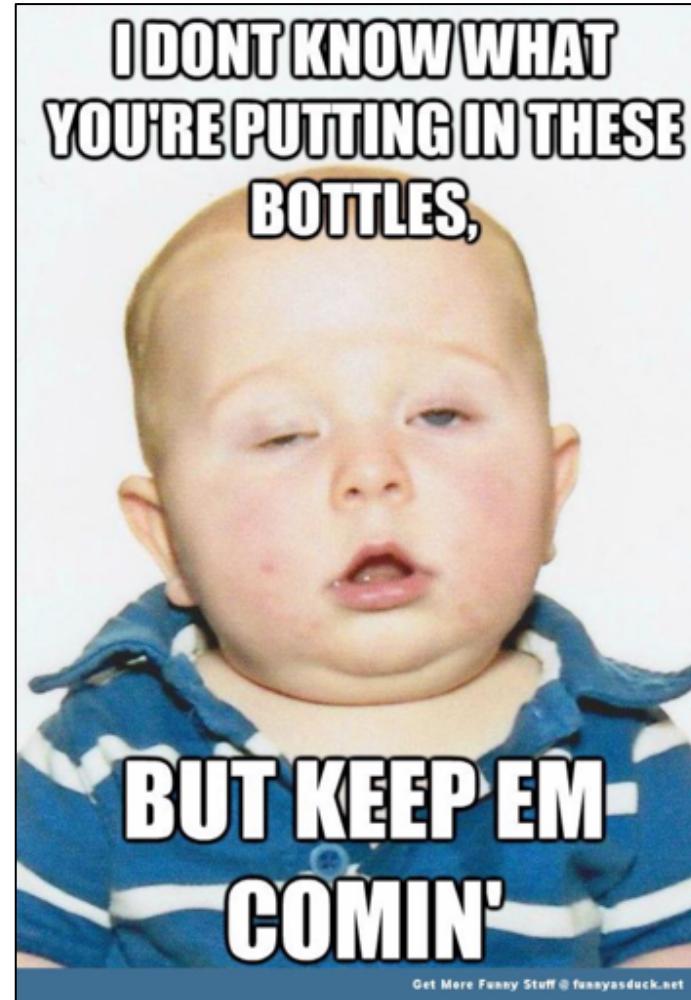
Requests were given the same scrutiny even when they were top corporate priorities



Projects were completed before they were approved

Even finance knew this model had to change.

From their perspective...



In year 1, finance piloted the product funding model

The pilot

- 4 product teams were given a set budget for the year
- Teams defined OKRs
- Teams used the budget for the top priorities they felt met the OKRs



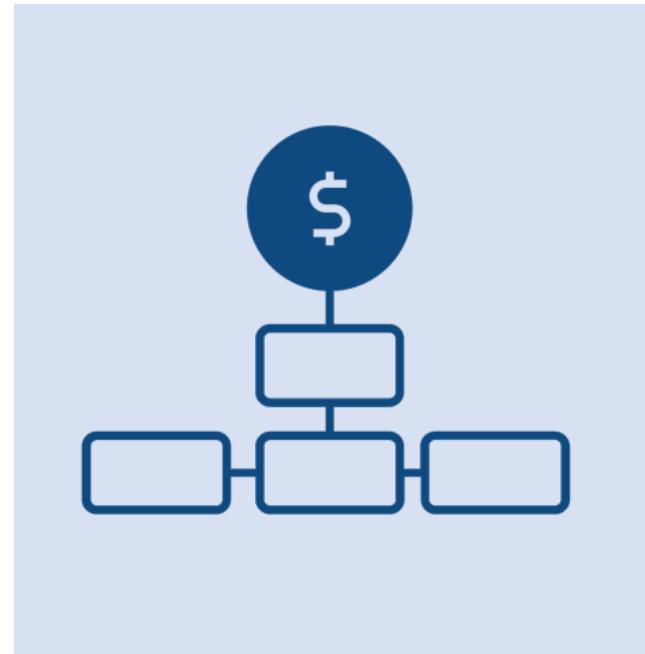
Pilot objectives

- Test before rolling out broadly
- Increase accountability and focus on outcomes
- Finance could see what IT was working on

In year 2, we scaled the new model



**Product definitions,
taxonomy & alignment**



**Cost mapping &
transparency**



New funding process

End result?

You mean I don't have
to fill out a 5-point for
this new priority?

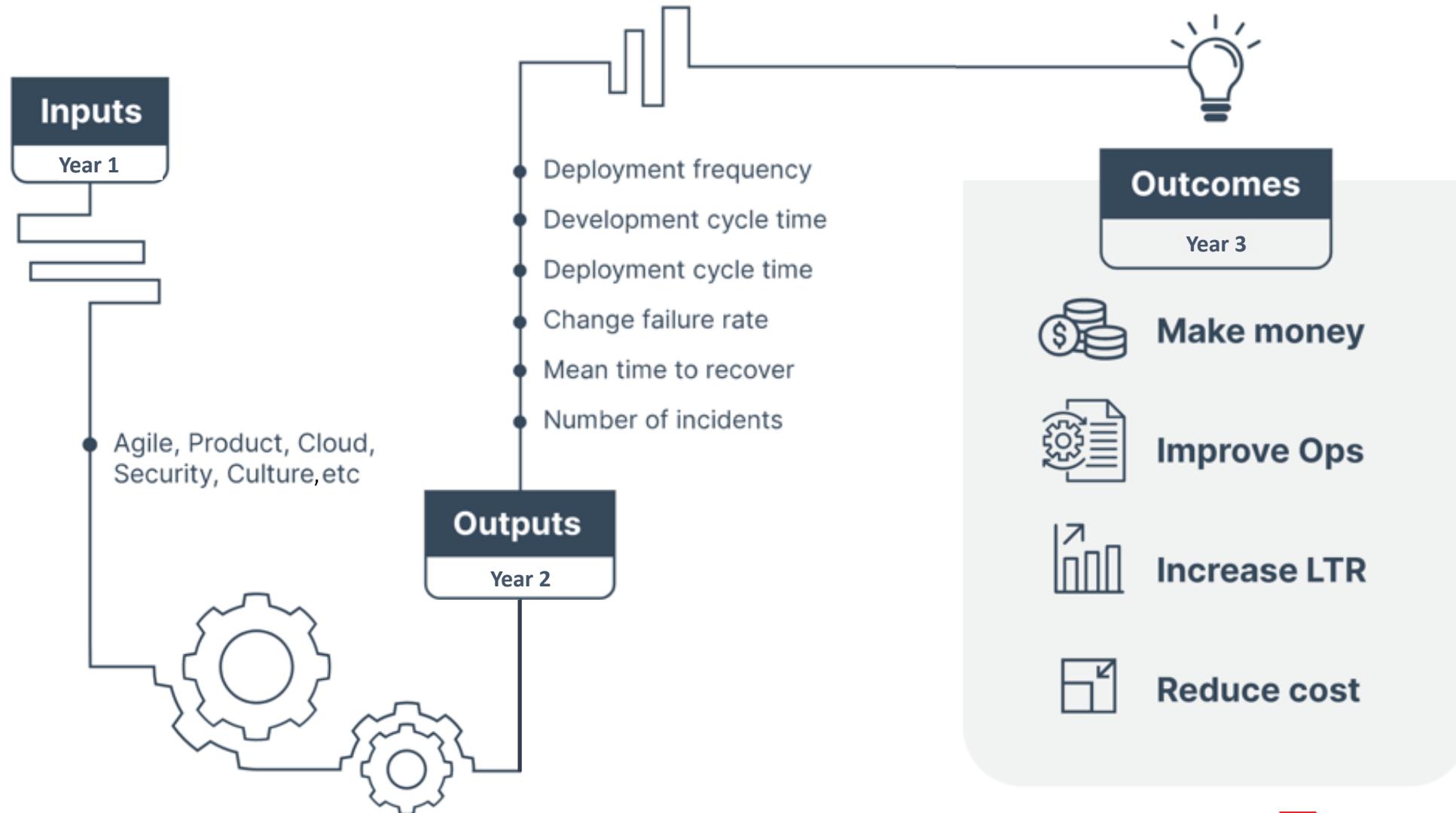


3

How do we know what
the score is?

TIME	BALL	STRIKE	OUT	H / E
• 56		2	1	HE3
	1 2 3 4 5 6 7 8 9 10			RUNS HITS ERR
GUEST	4 3	1 0	0 2	1 1 20 6
HOME	1 6	1 4	2 3 0	1 7 3 1 5

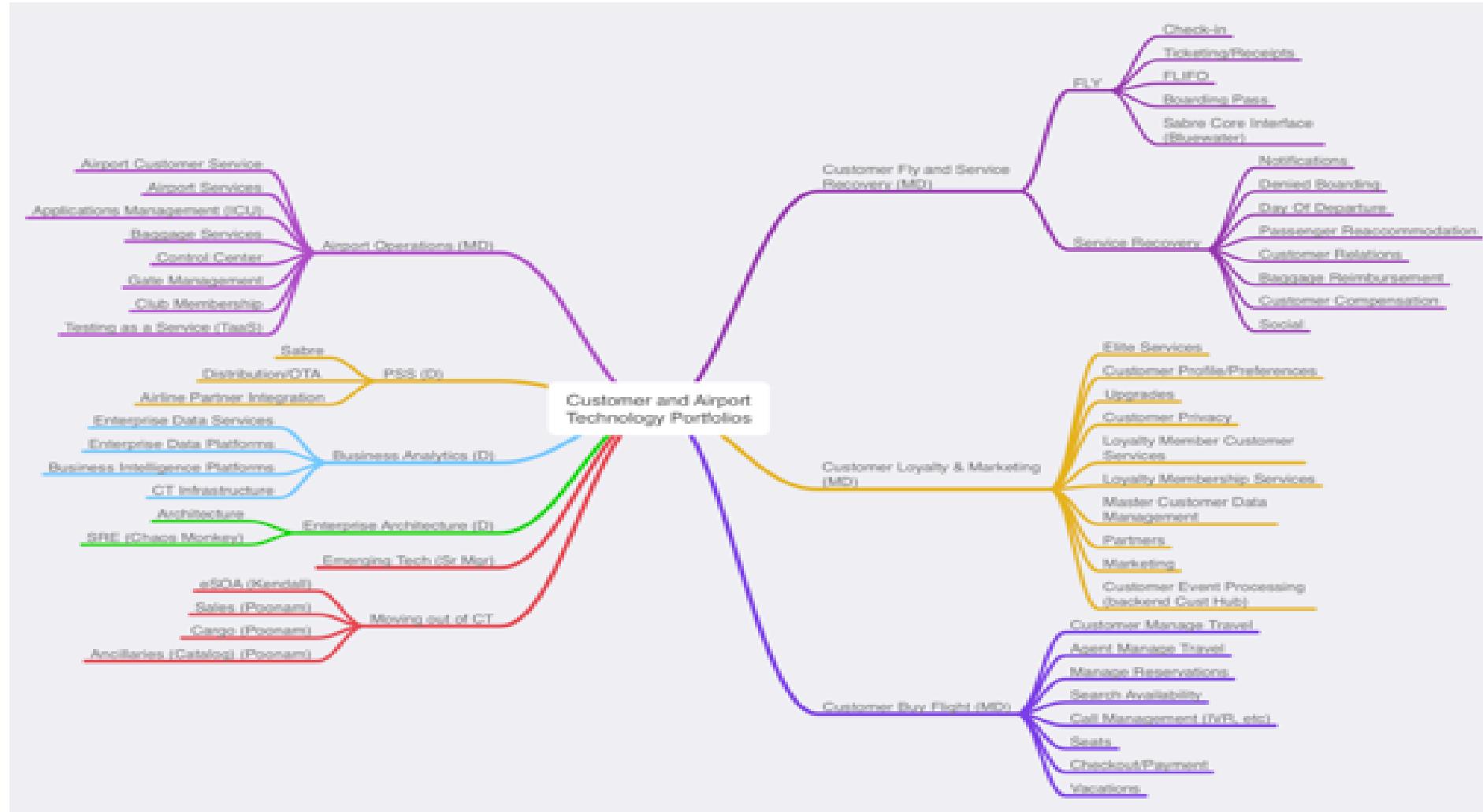
Inputs, outputs and outcomes



4

Umm... What's a product?

Aligning on our capabilities as products was not easy



Successes

... And setbacks

We defined our taxonomy

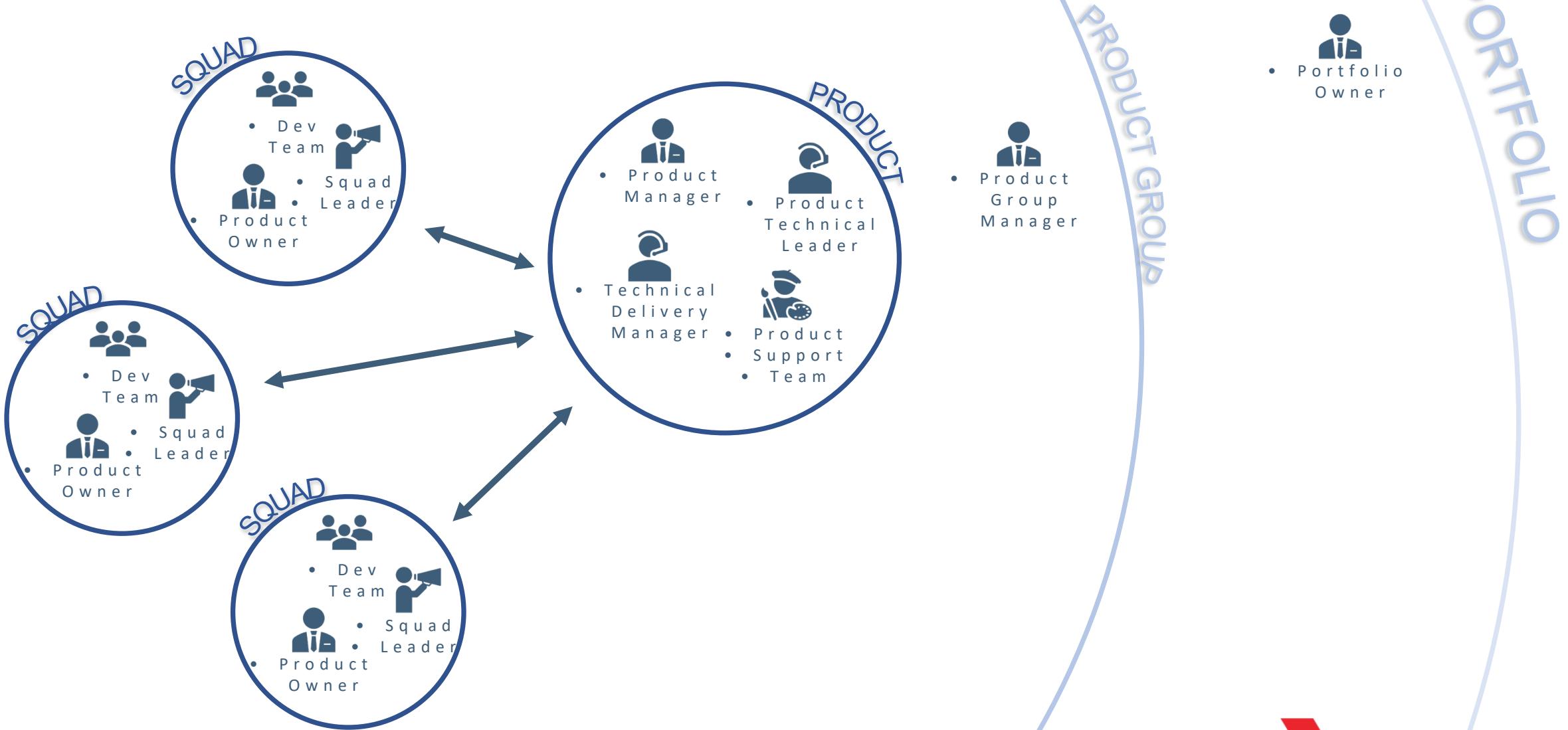


So much for 1 PO per product

Product Group	Product	Subproduct(s)	Product Mgr	Product Owner
Business Analytics	Enterprise Data & Privacy	AirPortal AirPortal - SDT	John Mulrooney	Renee Smith Ruth Graves Leah Moreno Bryan Chance
Contact Center Technology	Contact Center Technology	Call Recording & Analytics IVR Workforce Management	Martha Rosade	Janet Jones Rey Machado Alex Thomas Jennifer James
Pilots	DOTC/RAS (Pilot Crew Scheduling)	Pilot Crew Scheduling 1 Pilot Crew Scheduling 2	Linda Block	Carmen Brown Julio Bustamante Chris Callison Chrsitina Furber John Mark Todd Chris Russo
B2C Channels	Airport Agent	NextGen Single Agent GUI QIK CHK YADA	Ron Li	Richard Albini Camella Strong Emily Boler



Ideal product team roles



Successes

... And setbacks

We re-organized around products

Shop & Buy

Squad 1

Squad 2

Crew Comp

Squad 1

Squad 2

Squad 3

Loyalty

Squad 1

Squad 2

At our first 2-pizza team meeting...



...we ate 12 pizzas

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Does this feel way bigger
than just DevOps?

Brought on a celebrity...



Delivery Transformation



**Delivery
Excellence**
How we work



**Operating
Excellence**
How we're
structured



**People
Excellence**
Growing talent and
culture



**Technology
Excellence**
Modernization

Deliver value faster

Culture attributes

Passionate
Bring it



Selfless
Share it



Accountable
Own it



6

How do we get everyone to act
and think this way?

In this world, we must value...



Action and doing
over analysis and
meetings



Collaboration
over silos



Clarity of mission
over trying to do
everything



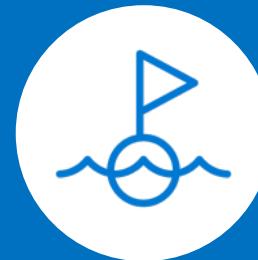
Empowerment over
putting our personal
stamp on every effort



Getting something out
over getting it perfect



“Who can do this” over
hierarchy



Finishing things over
starting them

The only sustainable competitive advantage
is an organization's ability to learn and adapt faster
than the competition.

Mark Schwartz, *A Seat at the Table*

There are no requirements – Just a team of people working together to figure out how to maximize business value.

Mark Schwartz, *A Seat at the Table*

How we'll work now

Planning



Define OKRs and figure out what to test first

Doing



Small tasks that add value incrementally

Enabling



Leaders are there to serve

Delivered touchless kiosks in 6 weeks

2,100 kiosks in 230 airports

- Leaders provided clear OKRs
- Design thinking explored 3 possible solutions
- Team decided HOW and leaders attended playbacks to help
- Simple MVP



Outcomes:

- 145% increase in boarding pass scans to start kiosk session
- 57% increase use of pre-paid bags functionality
- Reduced average session time by 17 seconds

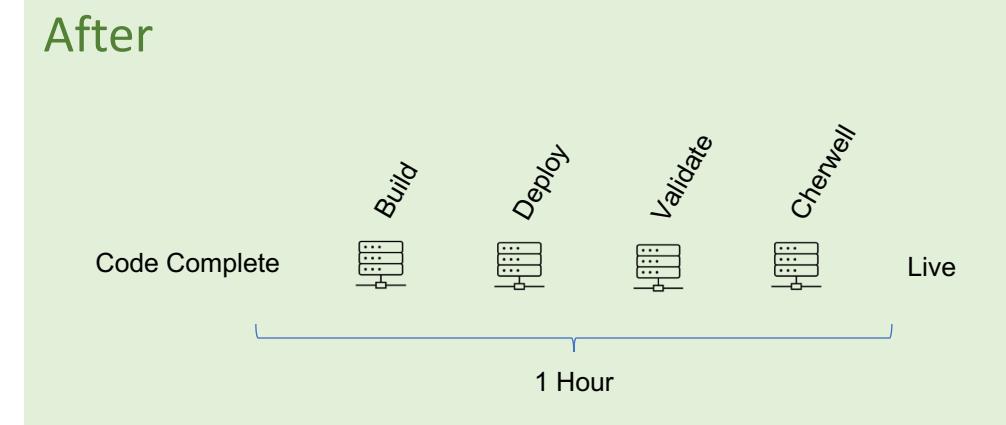
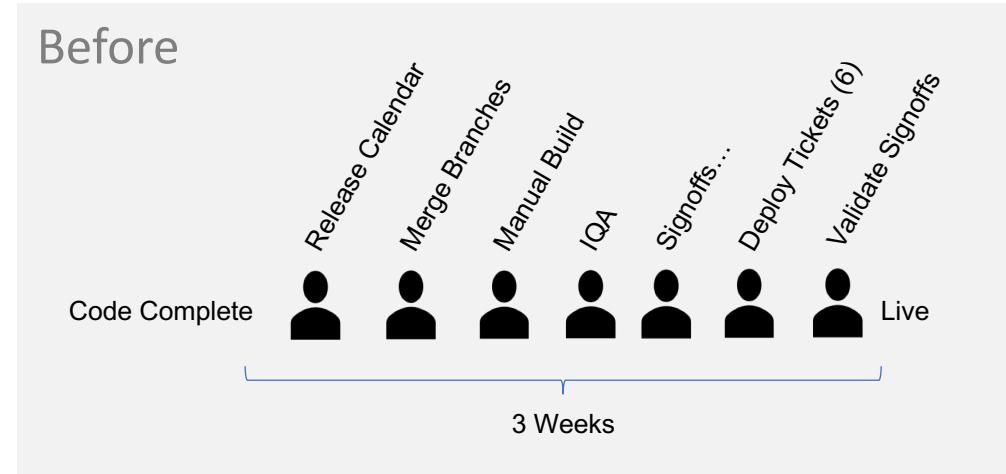
aa.com “deploy when ready”

40+ deployments in last 3 weeks

- Moved from IaaS to CaaS / PaaS
 - Managed Services to Kubernetes
- Smaller, more frequent deployments
- 100% automated deployments

Outcomes:

- Saved \$2M
- Ditched the release calendar
- Saved almost 3 weeks in process time



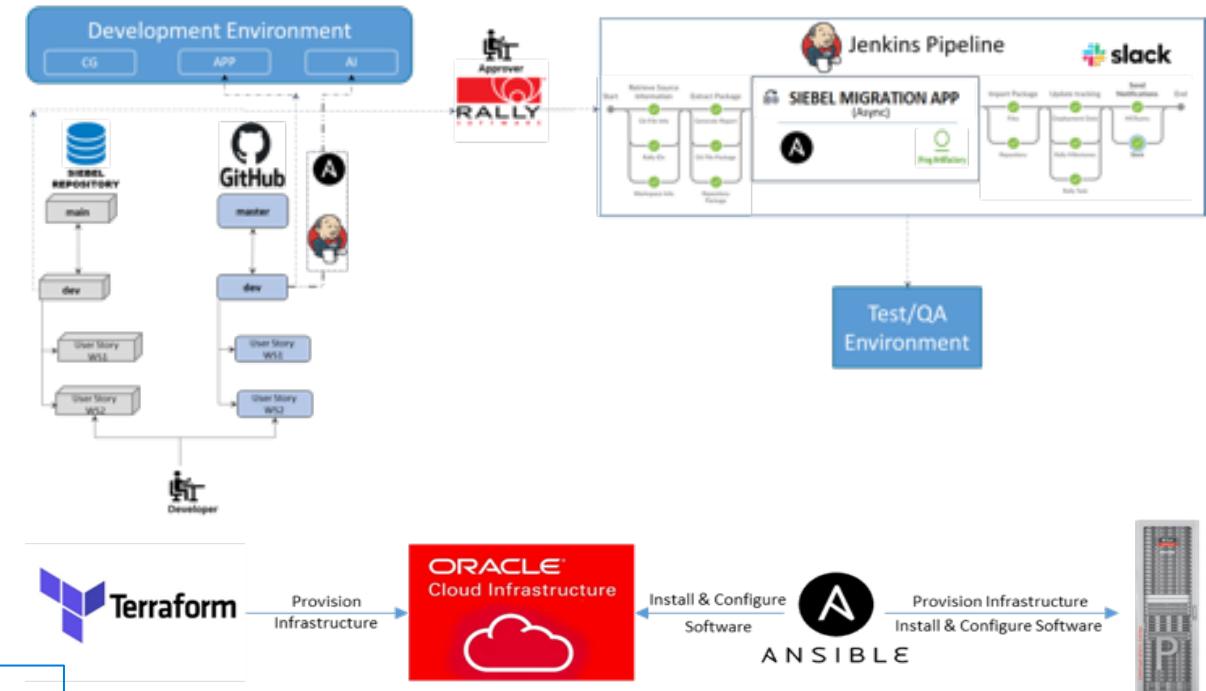
Yes! Legacy COTS automation and optimization is possible

Siebel PaaS Migration

- Automated software delivery and infrastructure provisioning (hours vs. days)
- Zero-downtime with automated pipeline
- Hybrid cloud infrastructure model

Outcomes:

- 50+ automated CI/CD pipeline deliveries
- 2x faster loyalty web service response times
- 32% cost optimization in the cloud



“Leader talk”

Before

I want to create a pop-up to incentivize people to download the mobile app

What did our competitors do?

When will this project be done?

What went wrong?

I want a completely new website

What is delivery transformation?

After

We need to shorten lines at the airport

What do our customers value?

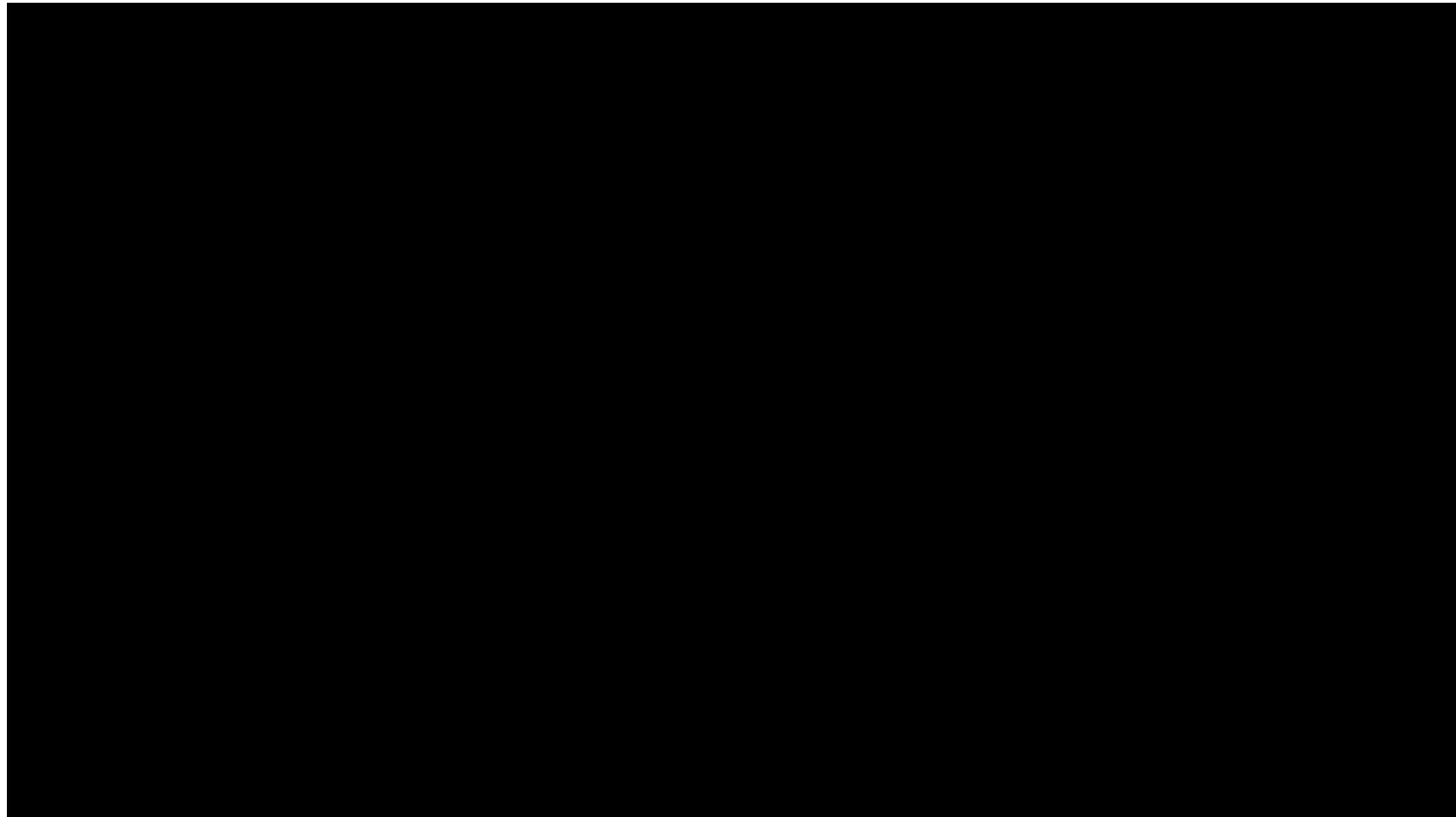
When do we start seeing value?

What did we learn and how can I help?

What's the first thing we can try to experiment with this idea?

Where are my pom-poms?





d

Collaboration with this community.

During networking, come connect with us.

American Airlines IT

Thank you

I CAN'T WAIT TO
WALK DOWN THE AISLE
SOMEDAY AND HEAR
THOSE MAGICAL WORDS!
'THIS IS YOUR PILOT SPEAKING'