

The Leftovers

How to approach common functions when shifting to product-aligned teams

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The opinions expressed in this presentation are those of the presenter, in their individual capacity, and not necessarily those of Discover.

Corporate Profile

Discover Financial Services (NYSE: DFS) is a digital banking and payment services company with one of the most recognized brands in U.S. financial services.

Since its inception in 1986, the company has become one of the largest card issuers in the United States. The company issues the Discover card, America's cash rewards pioneer, and offers private student loans, personal loans, home loans, checking and savings accounts and certificates of deposit through its banking business. It operates the Discover Global Network comprised of Discover Network, with millions of merchant and cash access locations; PULSE, one of the nation's leading ATM/debit networks; and Diners Club International, a global payments network with acceptance around the world.



Our Foundation

VISION

To be the leading digital bank and payments partner.

MISSION

To help people spend smarter, manage debt better and save more so they achieve a brighter financial future.

VALUES

Doing the right thing
Innovation
Simplicity
Collaboration
Openness
Volunteerism
Enthusiasm
Respect

2021 Awards and Recognition

Customer Satisfaction



Innovation/Technology



Workplace Quality



Discover® is **more** than just a digital bank.

We're a tech playground featuring some of the best engineers around.



Small autonomous teams
tasked with meaningful work



Projects that directly impact
consumers and make a
difference in people's lives

Discover[®] is **more** than just a digital bank.

We're a tech playground featuring some of the best engineers around.



A focus on learning
and innovation



Direct access to senior
leadership at all levels

The Story

The Past

- Teams moved to the work
- 300+ developers
- 200+ applications
- 3 platforms including mainframe
- SAFe with quarterly PI planning



Over 50% of applications were managed by technology without a defined business owner

The Runway

- Better position us for the future by shifting from a project-based mindset to a product-driven structure
- Turning to smaller, autonomous, product-focused engineering teams
- Deliver new products and enhancements to our customers faster and more reliably while simplifying how we work

A portrait of Amir Arooni, a middle-aged man with a receding hairline, smiling. He is wearing a blue blazer over a light blue button-down shirt. The background is a blurred green foliage.

Amir **Arooni**
CIO @ **Discover**

The Shift

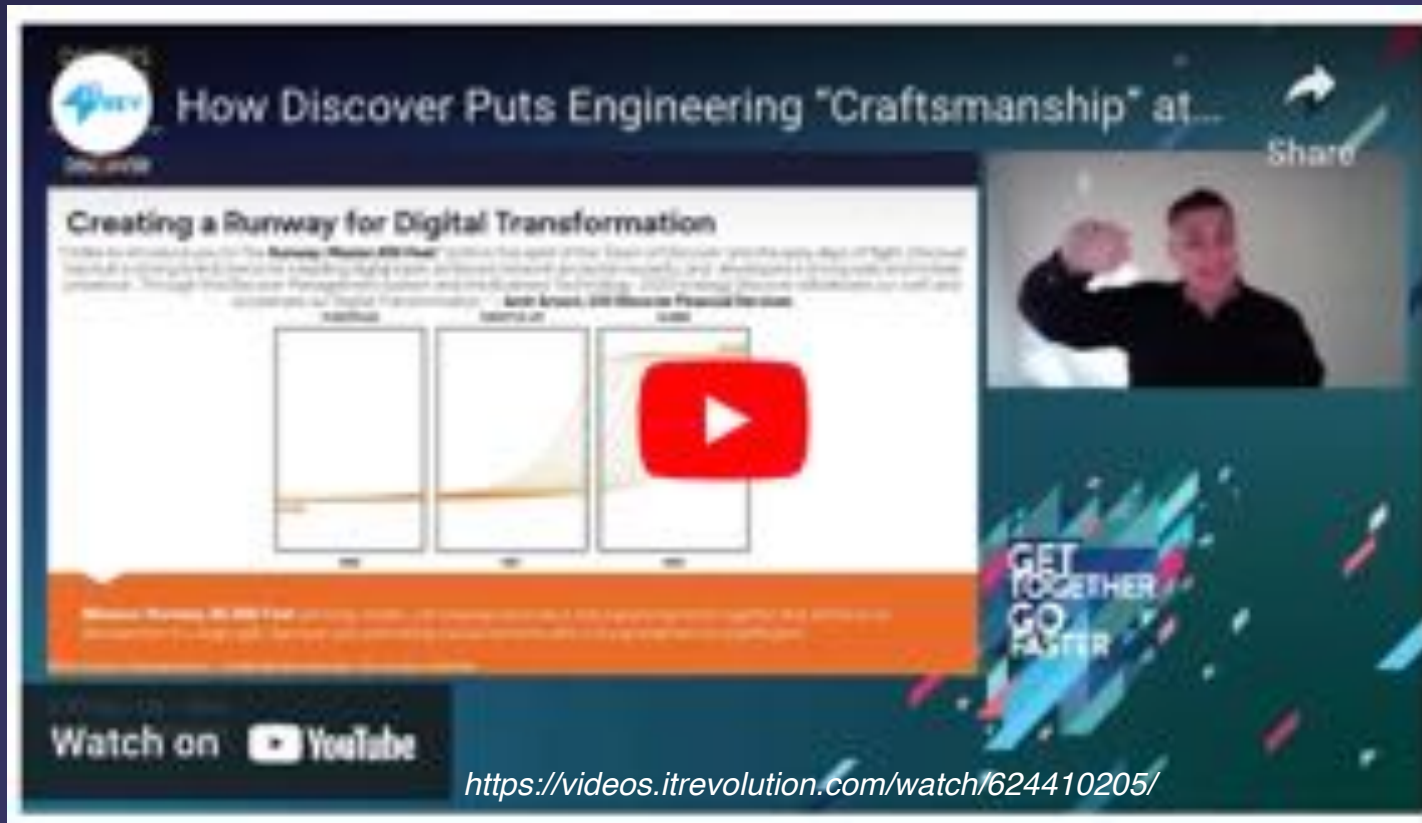
“

“The journey we’re on isn’t a technology journey. It’s a company-wide one.”

Amir Arooni ”

Dev Ops Enterprise Summit 2021

How Discover Financial Services Puts Engineering “Craftsmanship” at the Center of Our Digital Transformation



The New Landscape

The New Landscape



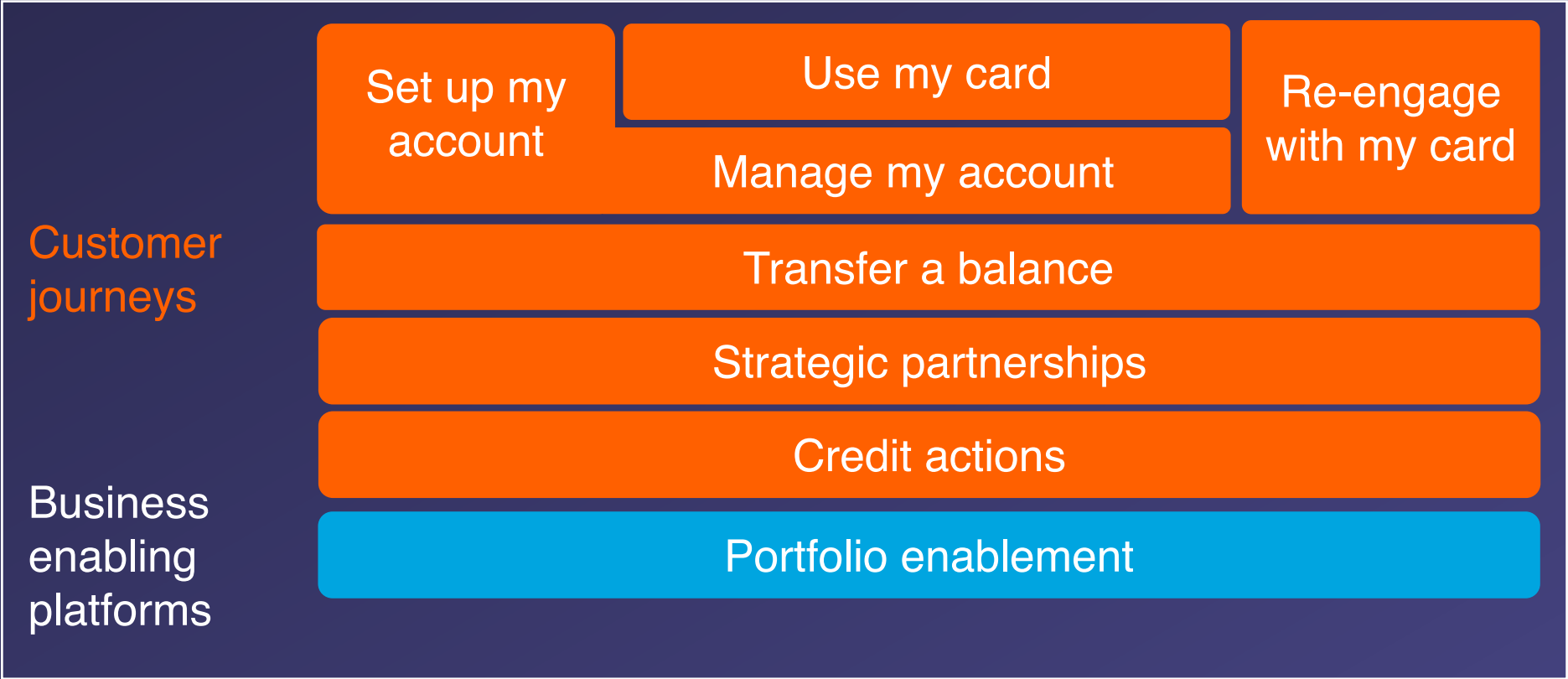
The New Landscape

- Dedicated and persistent teams
- End-to-end ownership
- Continuous planning



The New Landscape

Created Product Families, a logical grouping of products




The Leftovers

A photograph of a refrigerator's interior shelf. A piece of torn, light-brown cardboard is hanging from the shelf with two thin white strings. The cardboard has the words "EAT ME FIRST" written in black, hand-drawn capital letters. To the left of the sign is a clear plastic container with a red lid, filled with a mixture of yellow and orange vegetables. Below it is a clear plastic container with a green lid, filled with a light-colored, textured substance. To the right of the sign is a red bell pepper, a blue plastic container filled with green leafy vegetables, and a bunch of fresh green leafy vegetables. Further right is a clear plastic container with a purple lid, filled with yellow fruit. Below the shelf, the refrigerator's crisper drawer is visible, containing several small, round, colorful objects (white, green, purple, black) that look like small appliances or containers.

EAT
ME
FIRST

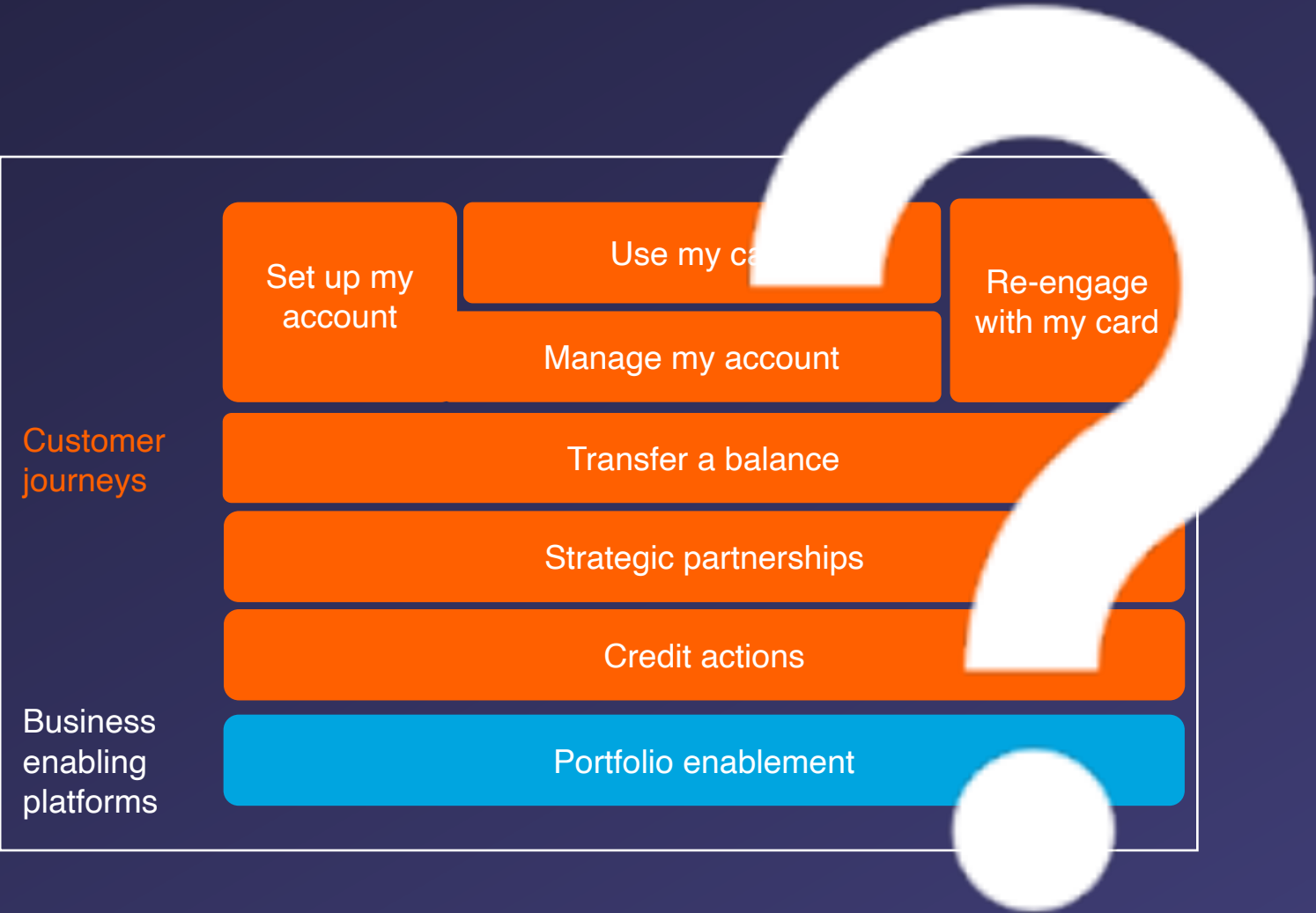




Allows you to
log into web or
mobile app

Send servicing
push/text
notifications

Allows you to
change your
card



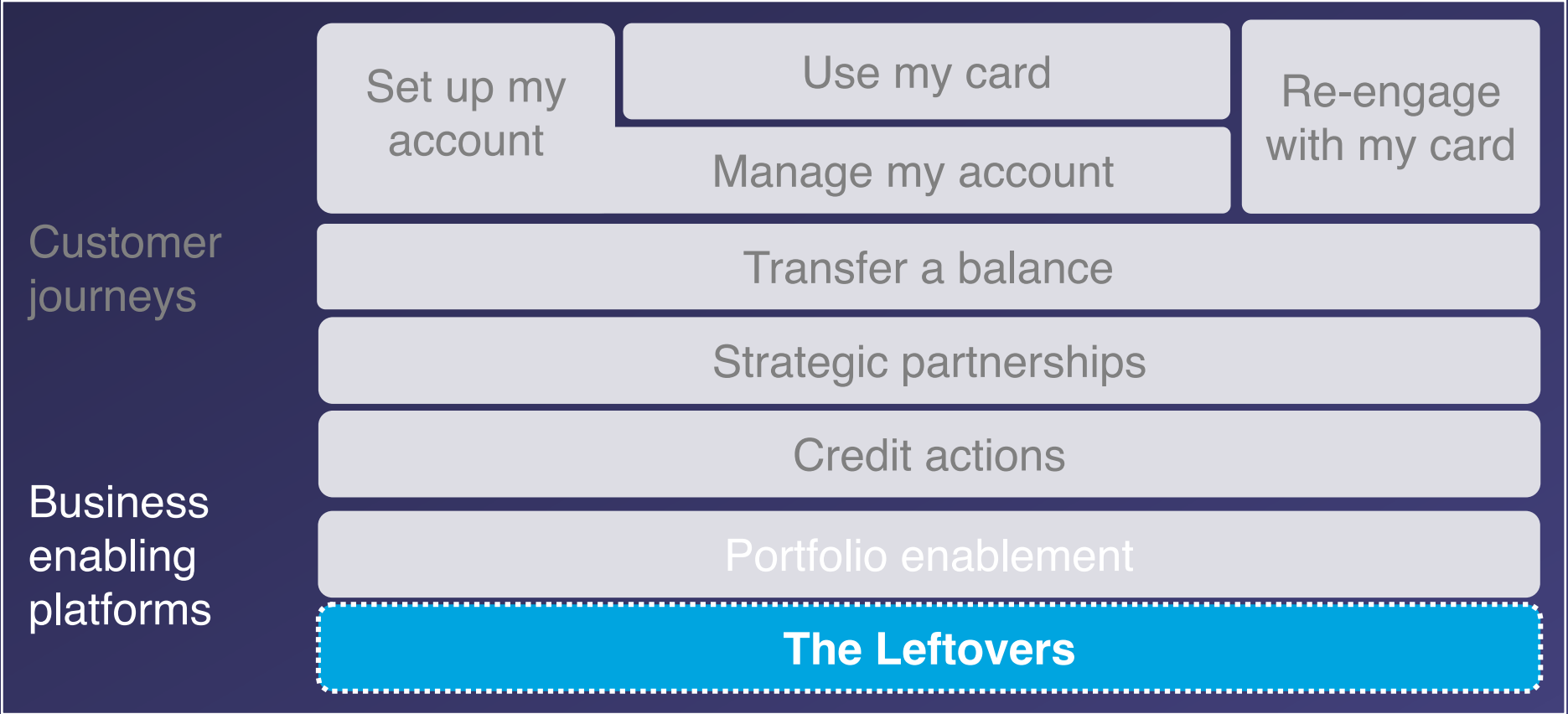
130+ people
7 teams
No Product Family



Responsibilities

Monolith data aggregator APIs
Lightweight front end development
Legacy batch job processing
Card device management
Legacy system production support

The New (Temporary) Product Family



The Approach

The Approach

Centralize



Shift



The Approach

Centralize



Shift



Centralize

- Bring together into one group
- Support with strong leadership
- Overview sessions
 - What do they do
 - Who do they support
 - How do they measure success
- Define preliminary objectives and key results



The Approach

Centralize



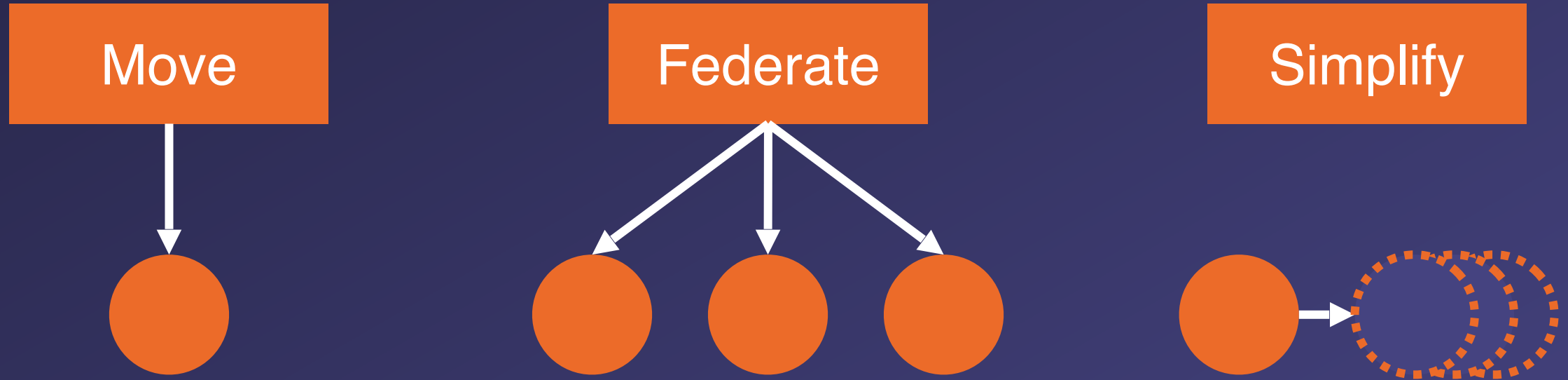
Shift





Giphy

The Approach



Shift

- Start with something small
- Try to link to broader business efforts
- Be transparent with business and technology stakeholders along the way



Shift: One Page Business Case

- So what?
- Why is it important?
- What if we didn't do anything?

Summary/Title

1	Meeting Objective/ RACI	Decision Making Meeting
	R:	A: C: I:
2	Problem Statement and Solution	
	Objective:	
	Background:	
	Solution:	
3	Expected Value	
4	Critical Milestones to Reach Value	
5	Dependencies and Extreme Risks	
6	Next Steps	

The Results (so far)

The Results (so far)

- Reduced product family size by 59%, reallocating capacity
- Achieved 99% reduction in false positive alerting for a previously unowned app
- Uncovered several resiliency gaps due to deficient architecture



The problems that remain



Simplification is easier said than done

- Why: Reverse engineering legacy code and gaining product team buy-in
- How: Find interested team, start small, then showcase



What is good enough?

- Why: Last 20% is typically the most difficult to shift
- How: Move leftovers to teams with most at stake

The Takeaways

- When shifting to a product operating model, you'll have areas that don't “**fit**”
- Leftovers are those bits that everyone cares about but **no one wants to own**
- Define your **hypothesis** – what needs to be true to shift these functions?
- Centralize, then **start small** with the shift



Thank you!

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