

Overview of Team Topologies

Organizing business and technology teams for fast flow

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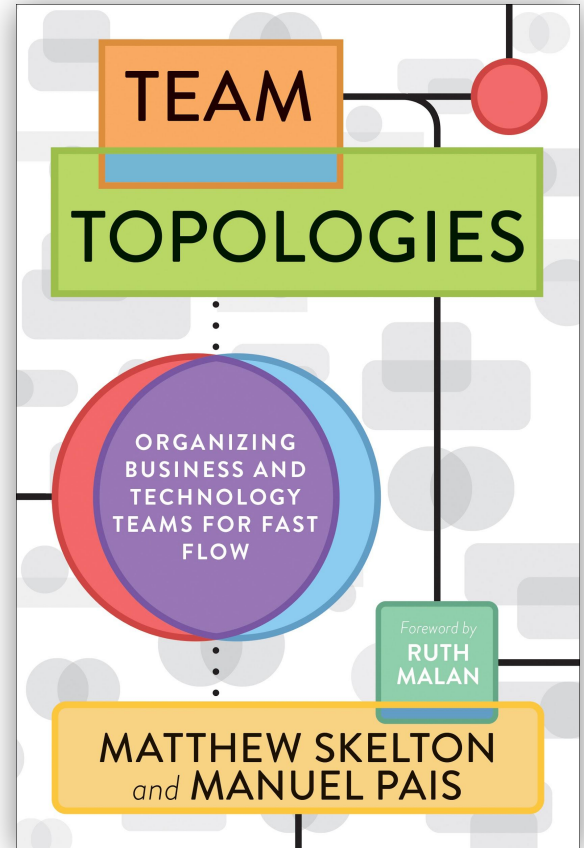
Team Topologies

Organizing business and technology teams for fast flow

Matthew Skelton & Manuel Pais

IT Revolution Press, 2019

teampologies.com/book





Why Team Topologies?

How can Team Topologies help?



Key concepts

Getting started



Why Team Topologies?

**Waiting too
long for
things to
get done?**



Functional silos?



PMO

UX

Dev

Compliance

Ops

QA



**Software
too big for
your teams?**

A photograph of a forest during autumn. The trees are tall and thin, with some showing yellow and orange leaves, while others are still green. The ground is covered in fallen leaves. A black banner with white text is overlaid at the bottom.

Unclear value streams?



**Teams
pulled in
multiple
directions?**

Multiple stakeholders?





Disengaged teams?

Are you observing?

More arguments

More sickness absence

More reports of stress

High staff turnover

More complaints and grievances

Decreased performance

**Everything
feels like an
uphill battle?**



**Confused
about how
to change
things?**



Maybe just one more re-org?

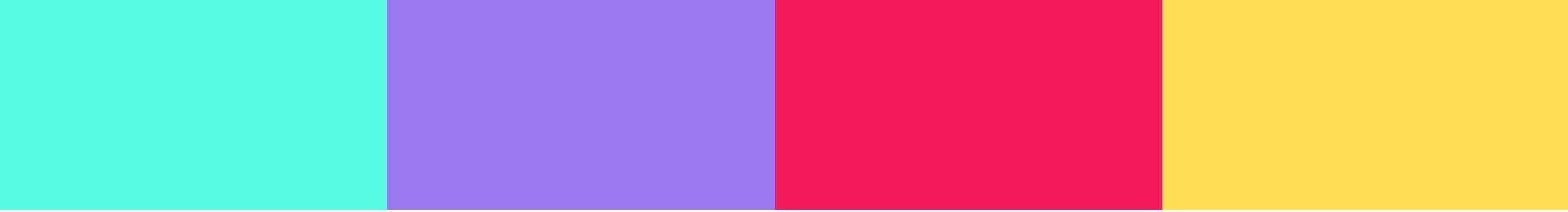


How can Team Topologies help?

topology

the way in which constituent parts are
interrelated or arranged

Greek: *τοπολογία* (τόπος == 'place')



“innovative tools and concepts for structuring the next generation digital operating model”

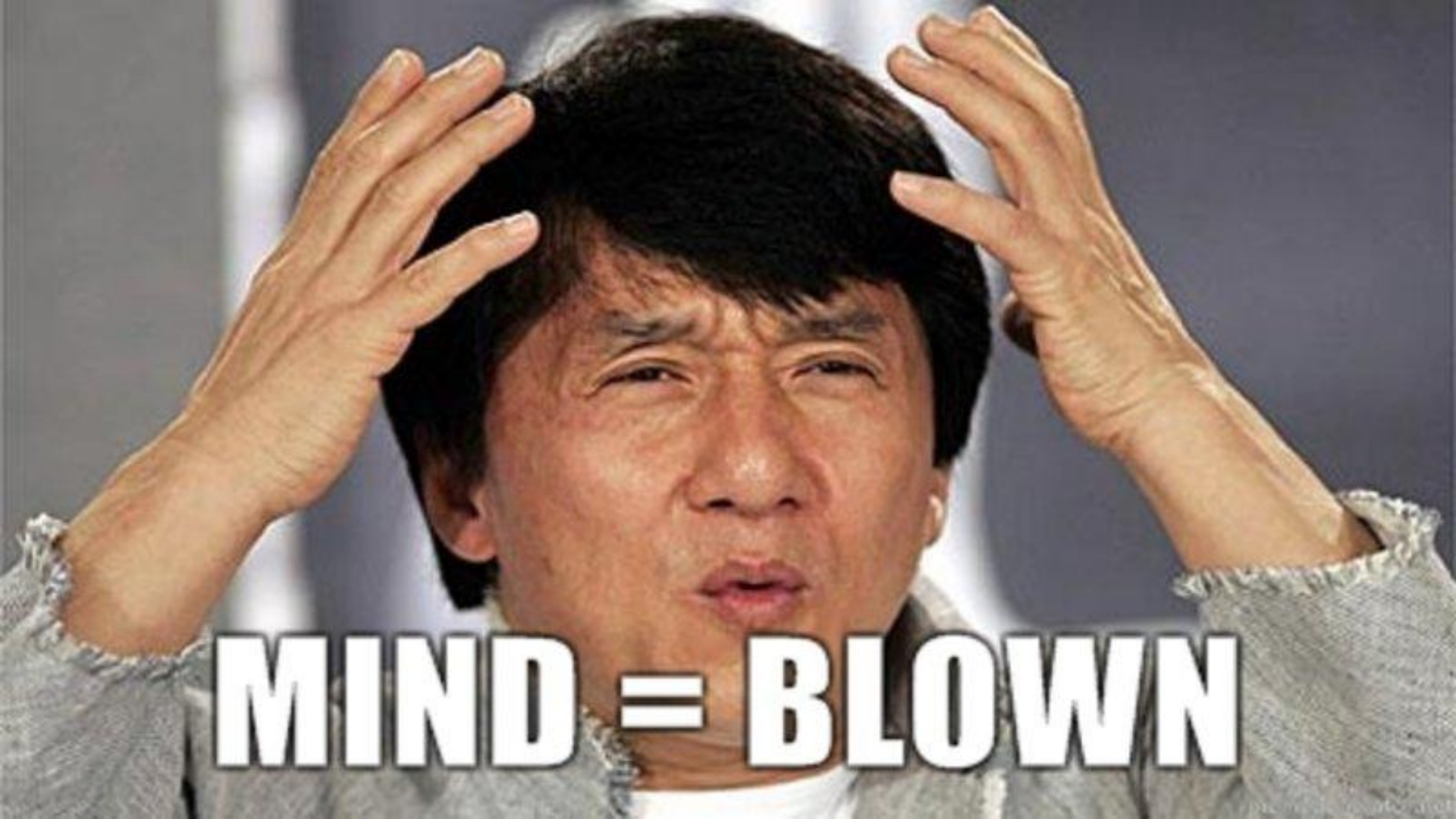
Charles T. Betz,
Principal Analyst, Forrester Research

**Who designs the
architecture of the
software systems?**





**HR department acts
as accidental
architects of the
software system**

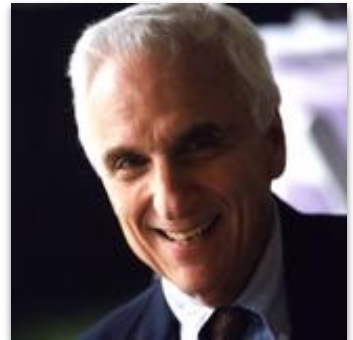


MIND = BLOWN

Conway's Law

“Any organization that designs a system (defined broadly) will produce a design whose structure is a copy of the organization's communication structure.”

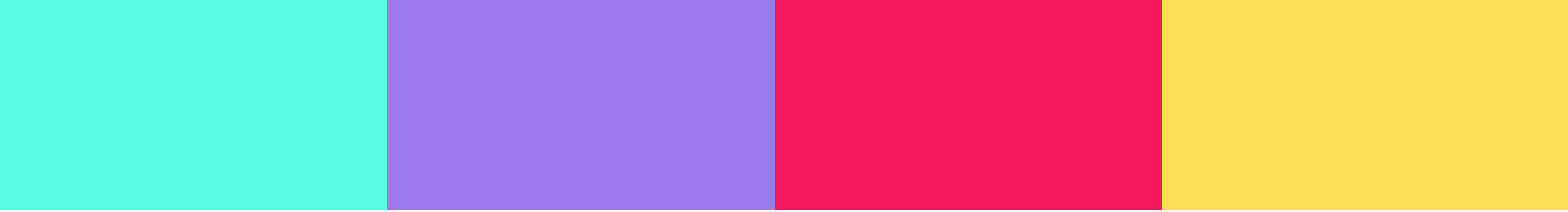
– Mel Conway, 1968



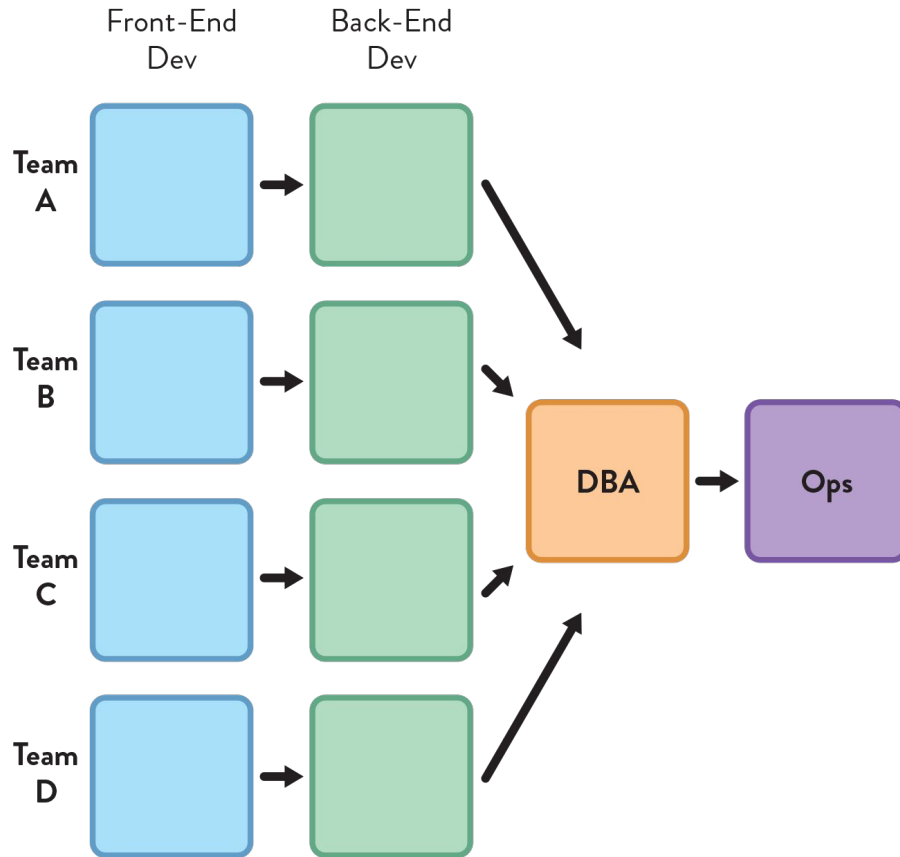


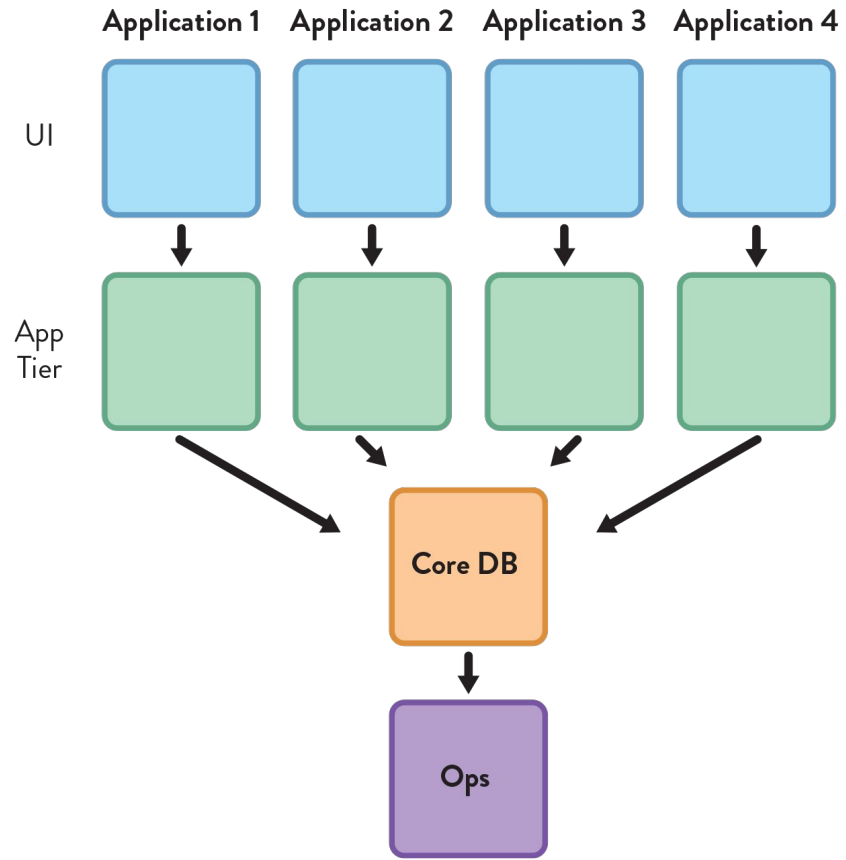


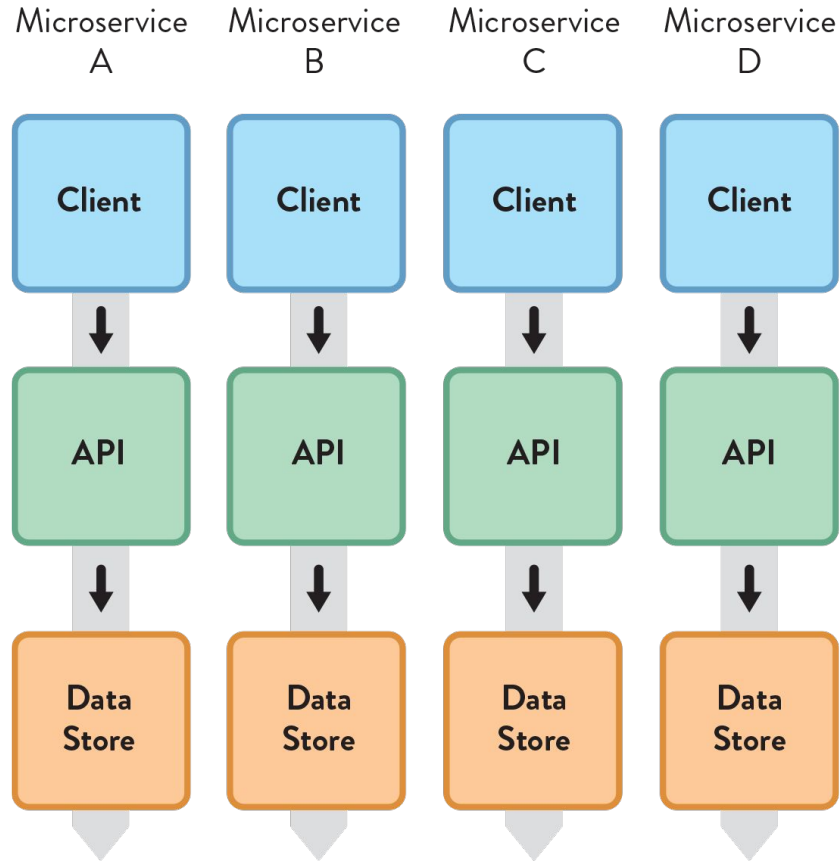
***Take advantage of the
“mirroring” effect of
Conway’s Law***

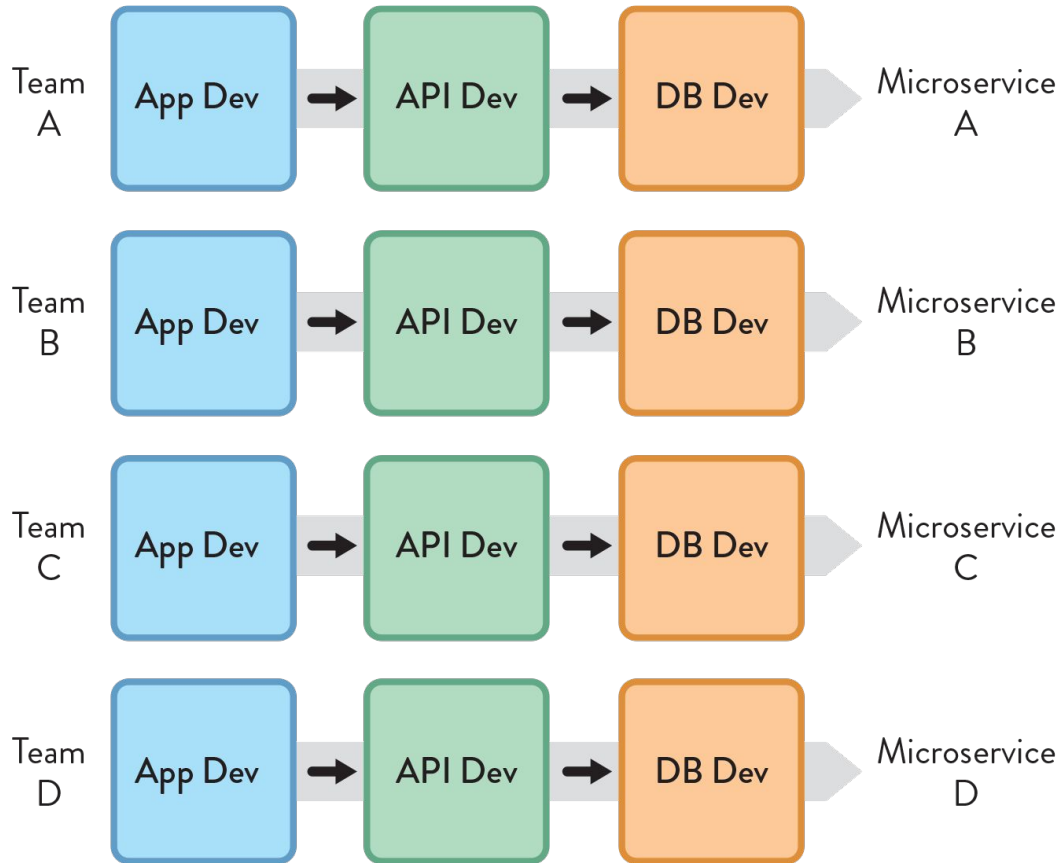


***Design the organisation
to mirror the desired
architecture (value flow)***









“if the architecture of the system and the architecture of the organization are at odds, the architecture of the organization wins”

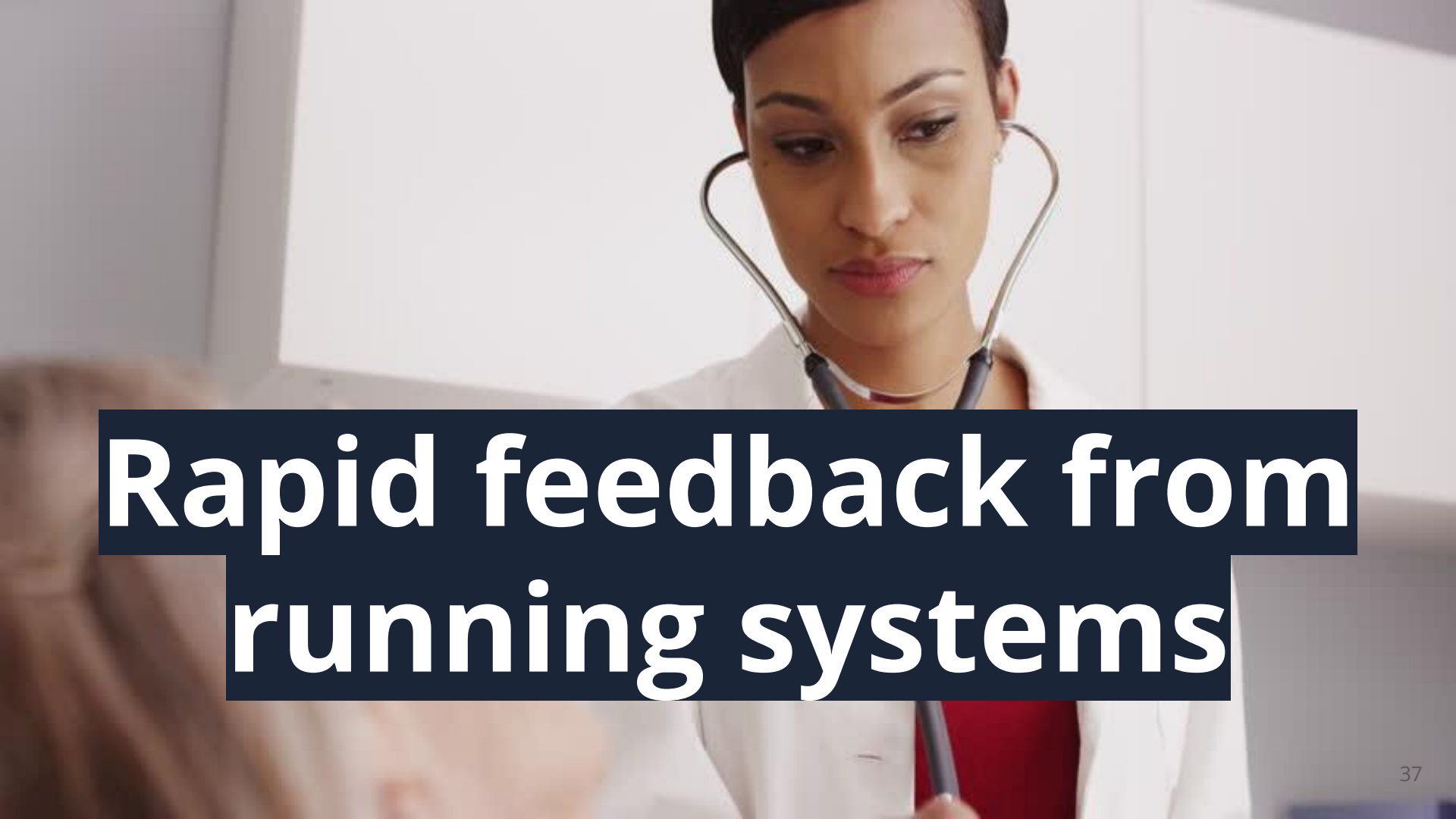
– Ruth Malan, 2008



Key concepts in Team Topologies

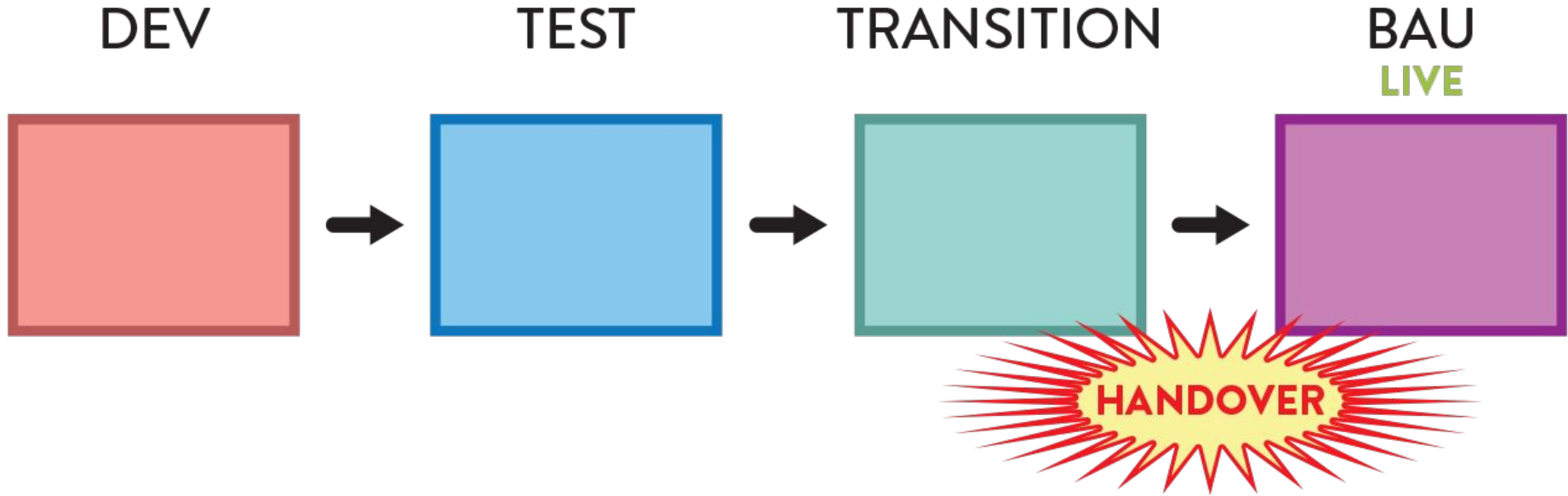
Rapid flow of change





**Rapid feedback from
running systems**

Handovers kill flow

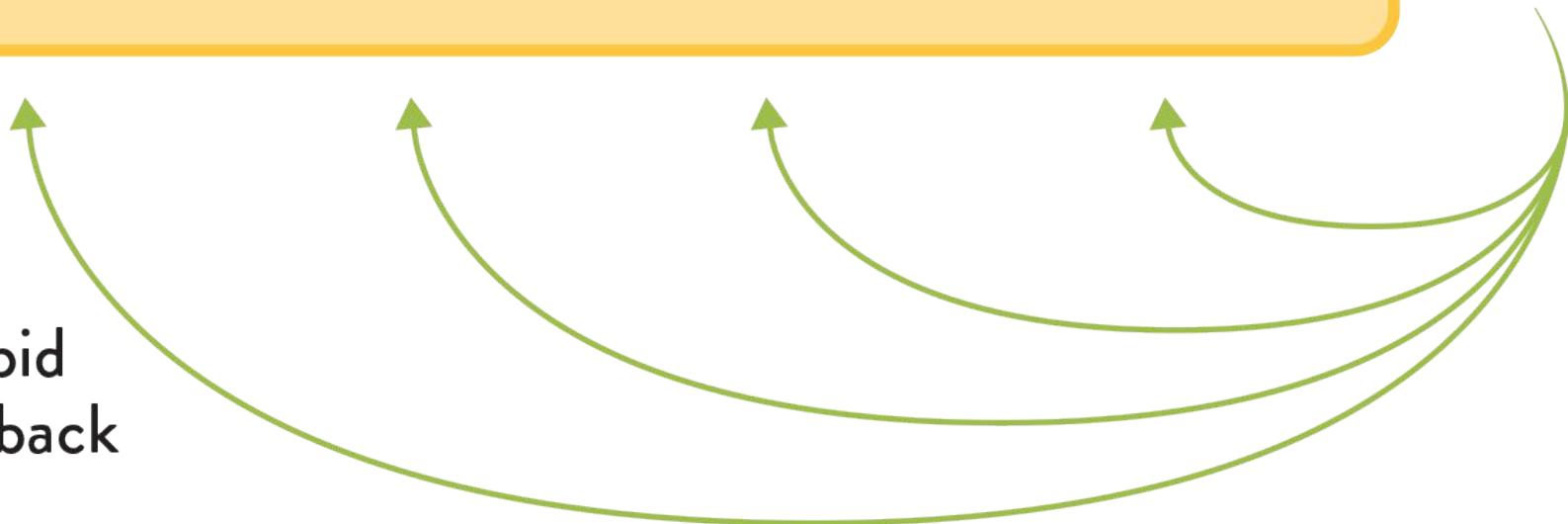




Stream-Aligned Team

LIVE

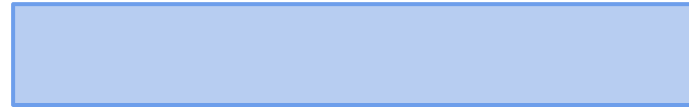
Rapid
Feedback



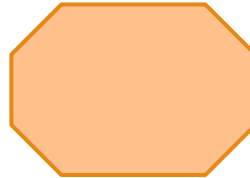
Fundamental team types



Stream-aligned team



Platform team



Complicated subsystem team

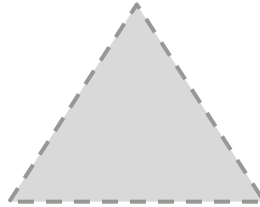


Enabling team

Core Interaction Modes



Collaboration

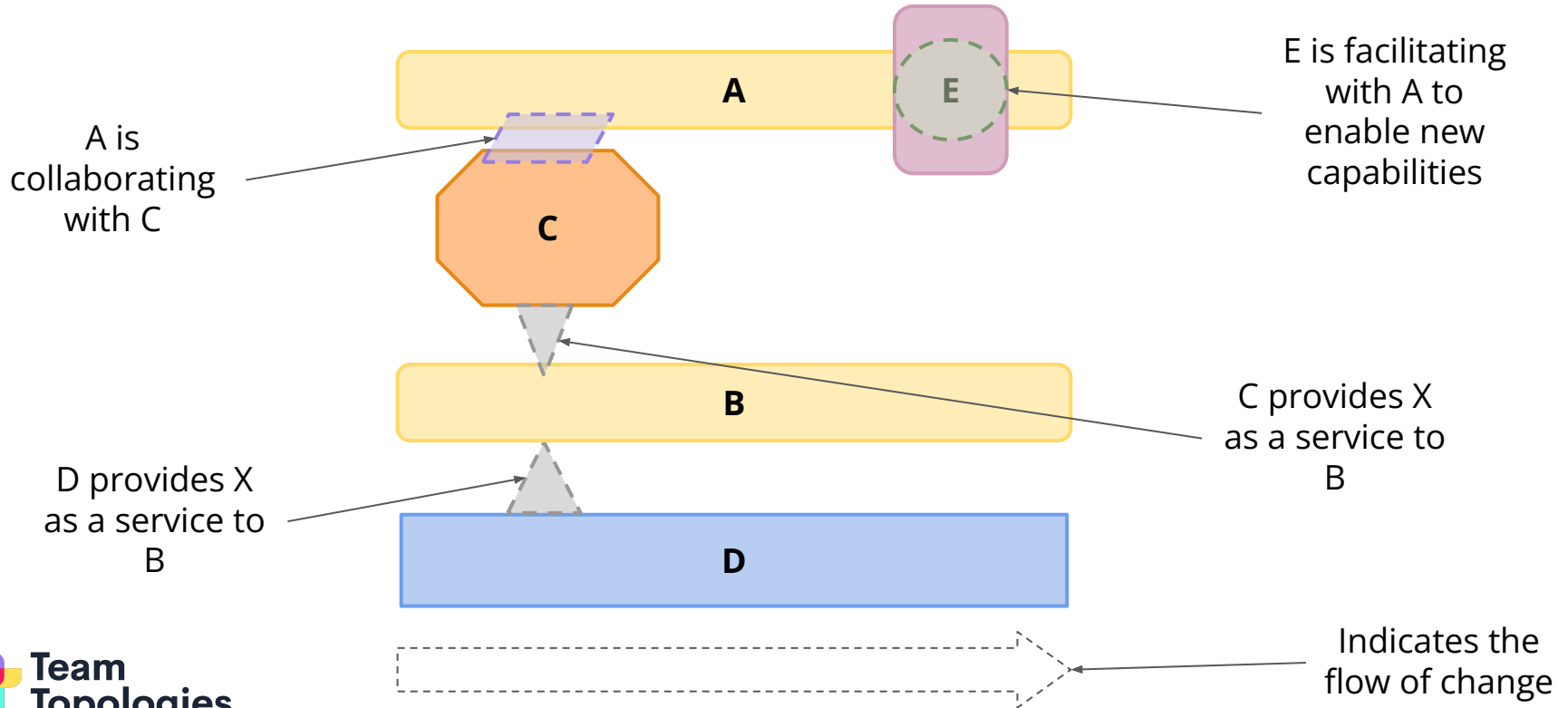


X-as-a-service



Facilitation

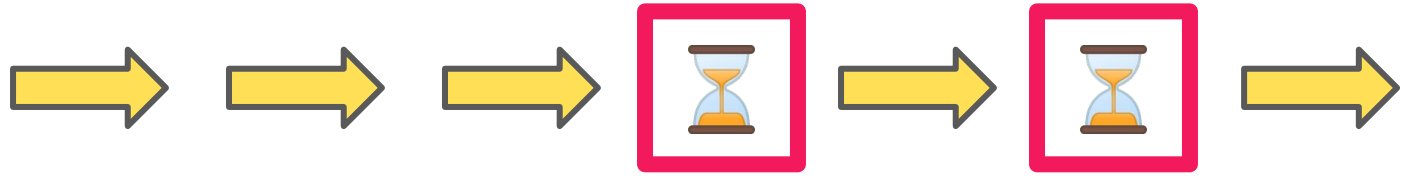
Team Interaction Patterns



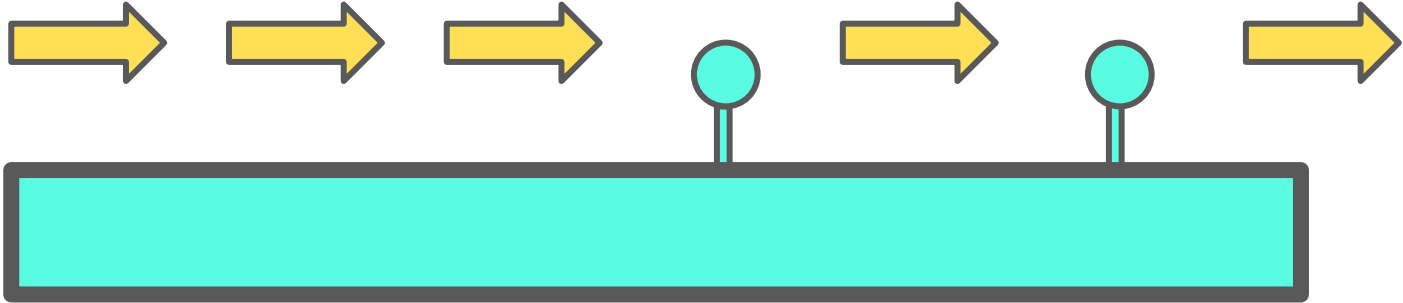


**Track dependencies and
separate as “blocking” vs
“non-blocking”**

Blocking



Non-Blocking





***Remove barriers to flow:
hand-offs, approval gates,
manual inspections***

Replace with self-service APIs



Compliance mindset shift: Permitting to Enabling



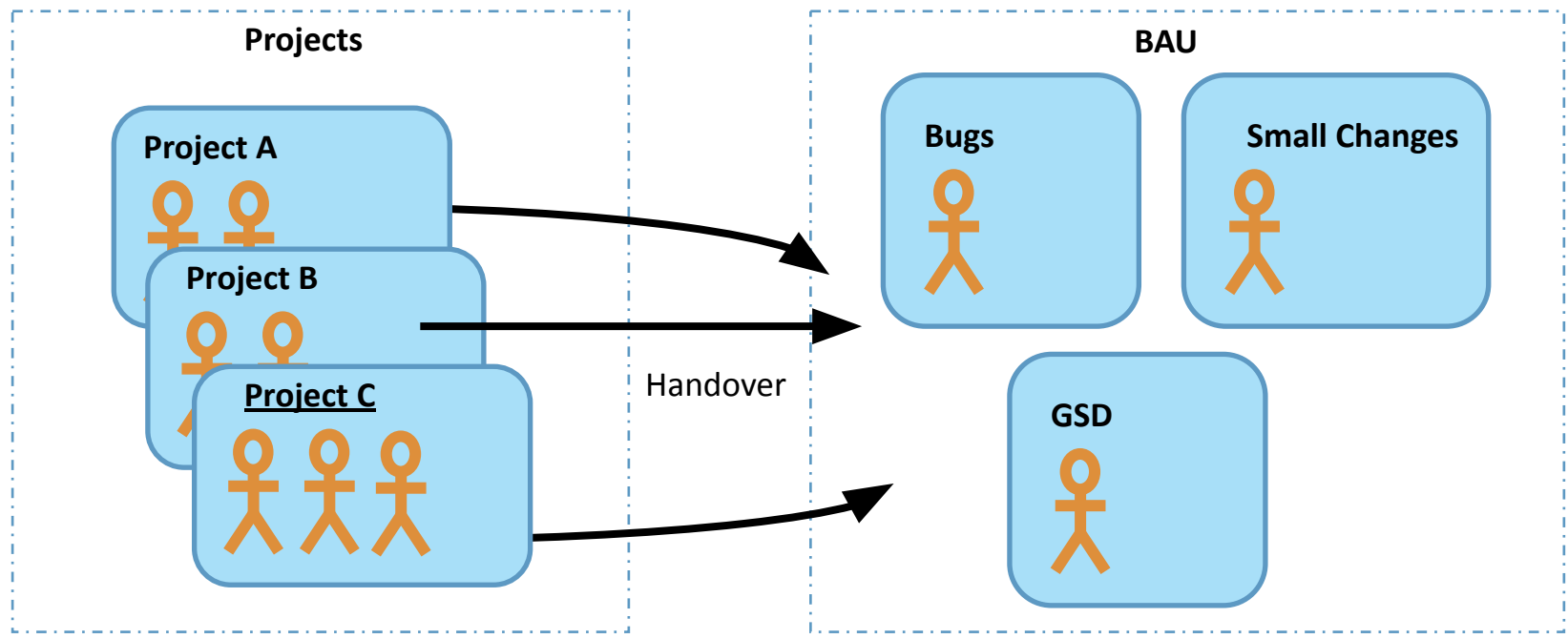


- **Launched in 2009**
- **Now 300 gyms in the UK**
- **> 1 million members**
- **Largest operator in UK**
- **Expanding into Europe, Middle East and USA**

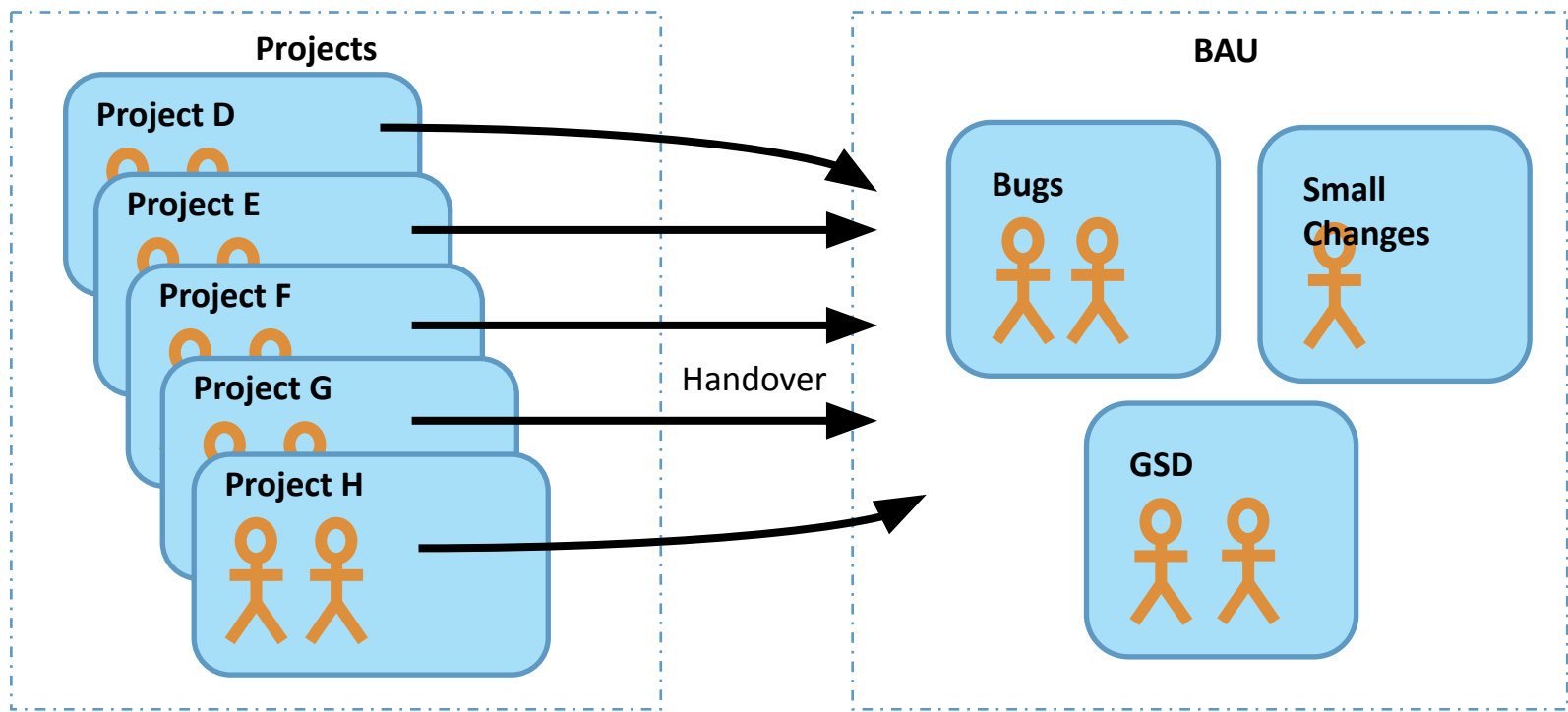


- **2015-2020**
- **Huge growth in members**
- **Joining (mobile app)**
- **Bookings, payments**
- **“Online-first” experience**

Less Than 10 People

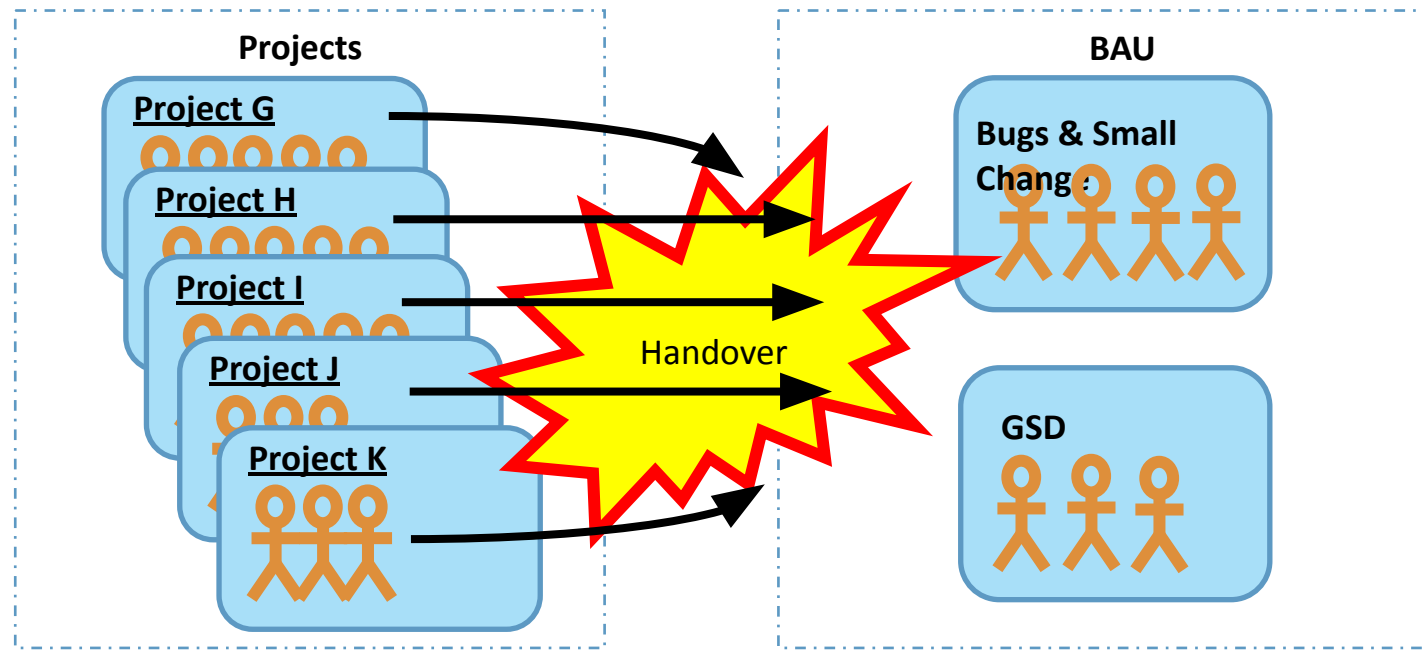


Team Growing Slowly

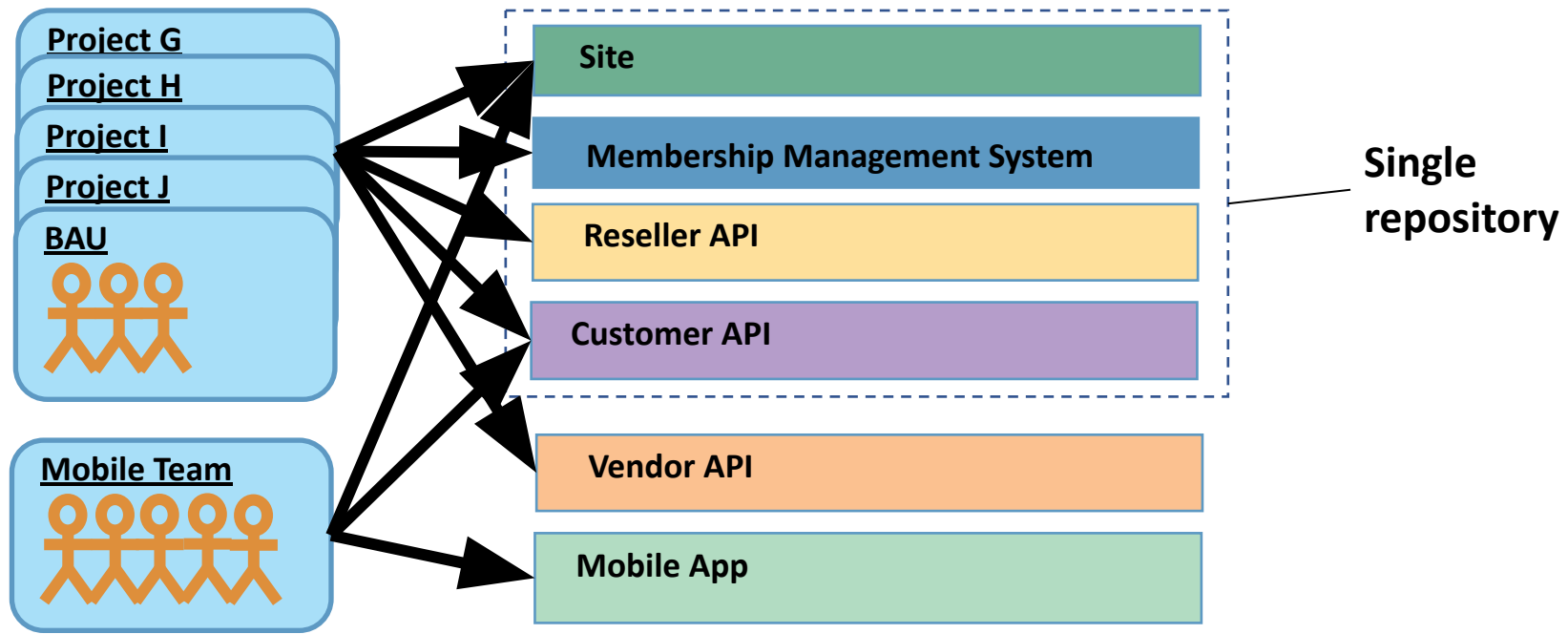




Rapid Team Growth

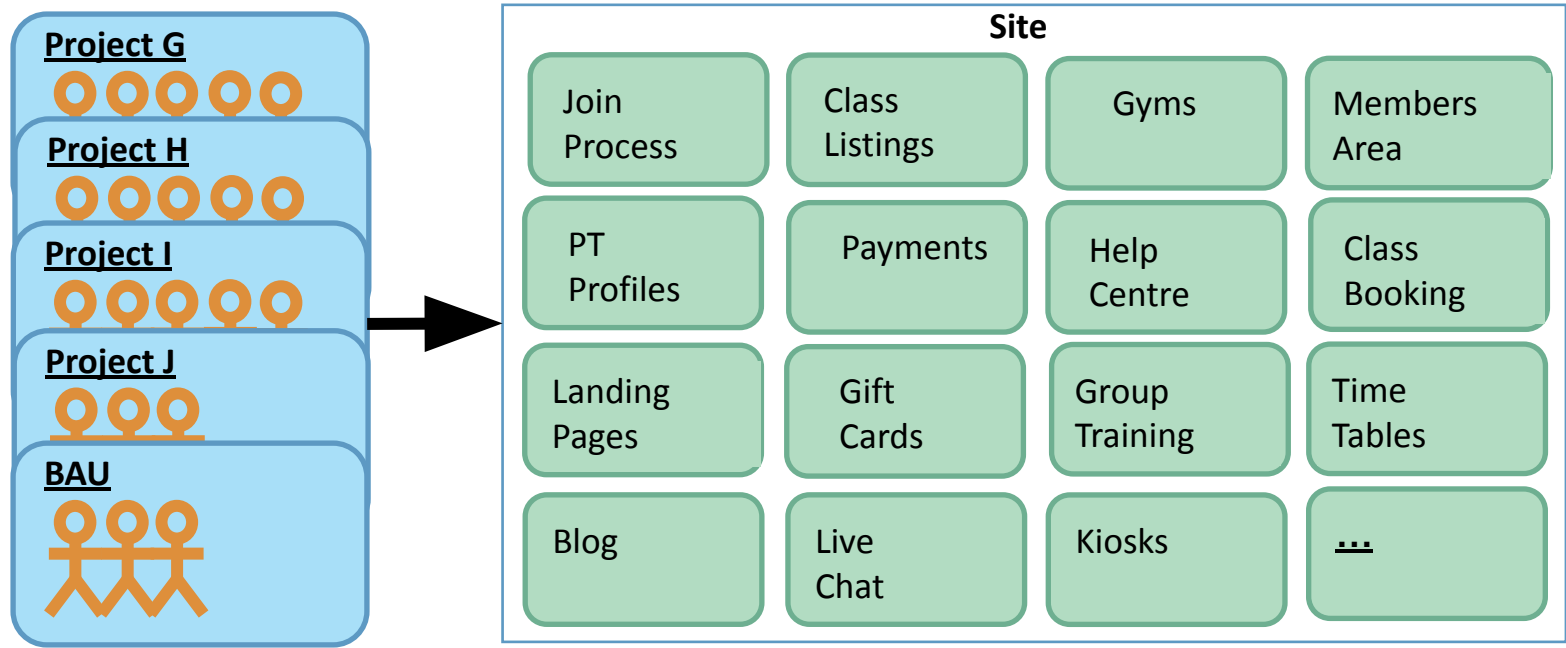


The Monolith

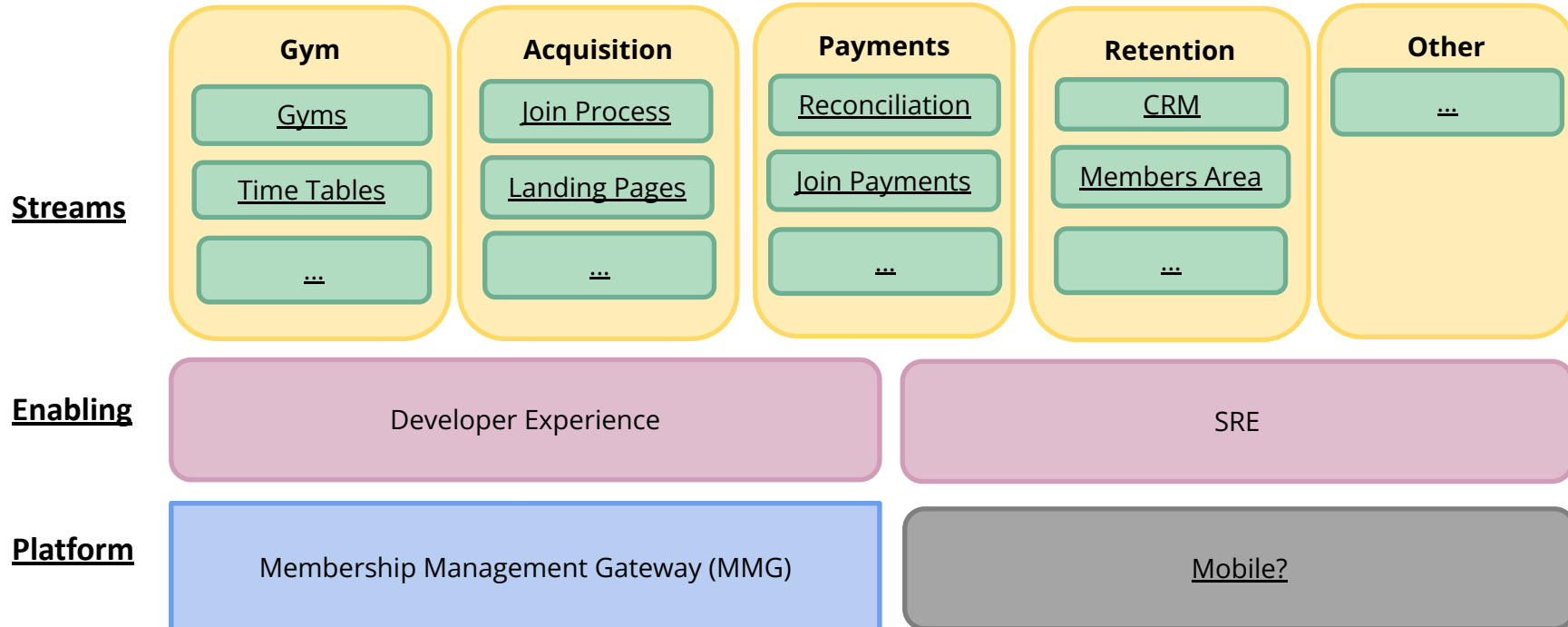


*“Short-lived project teams with handovers to BAU teams is **not scalable**, how can we change this?”*

Breaking the Monolith



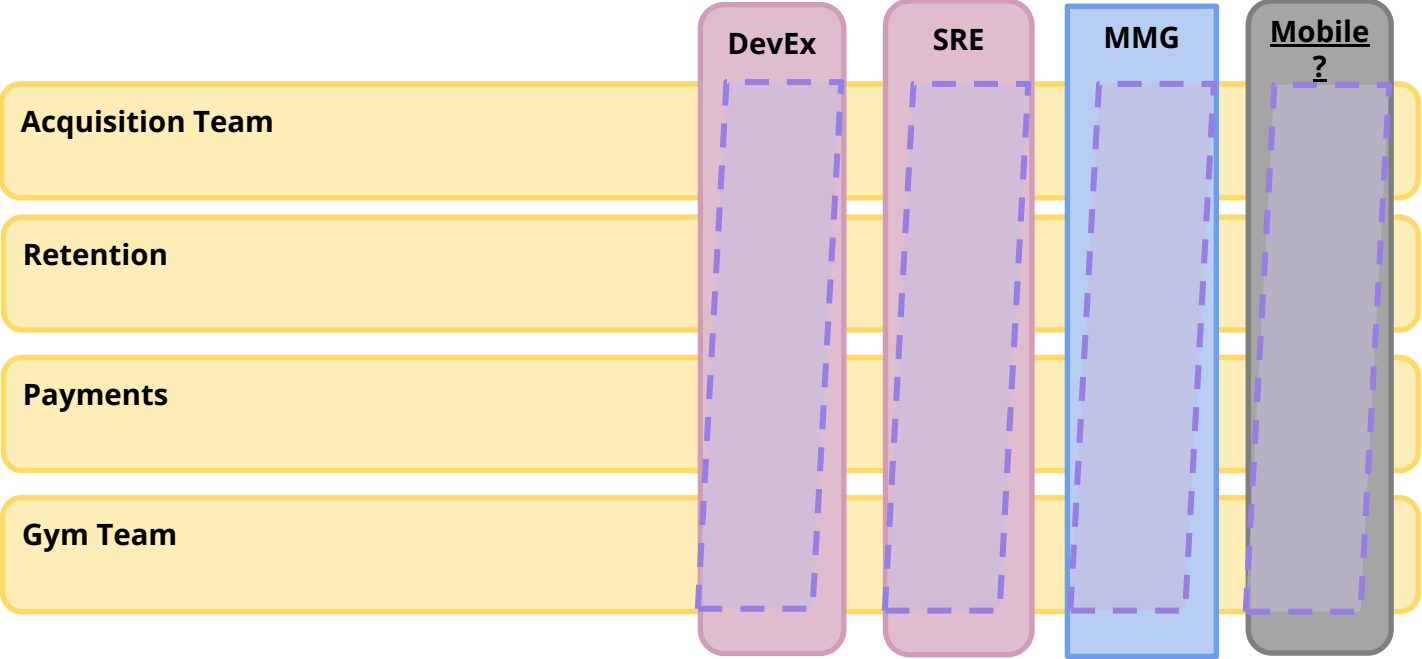
Re-defining Teams



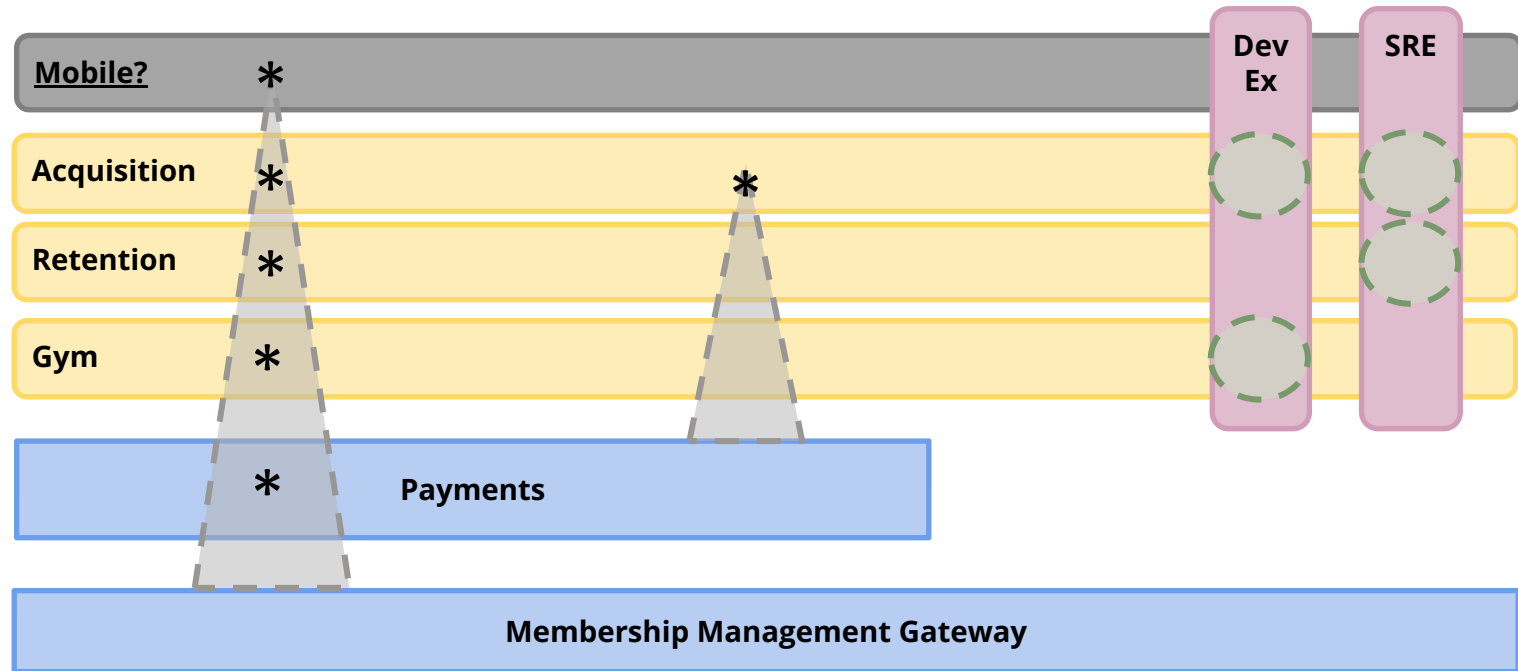


2020

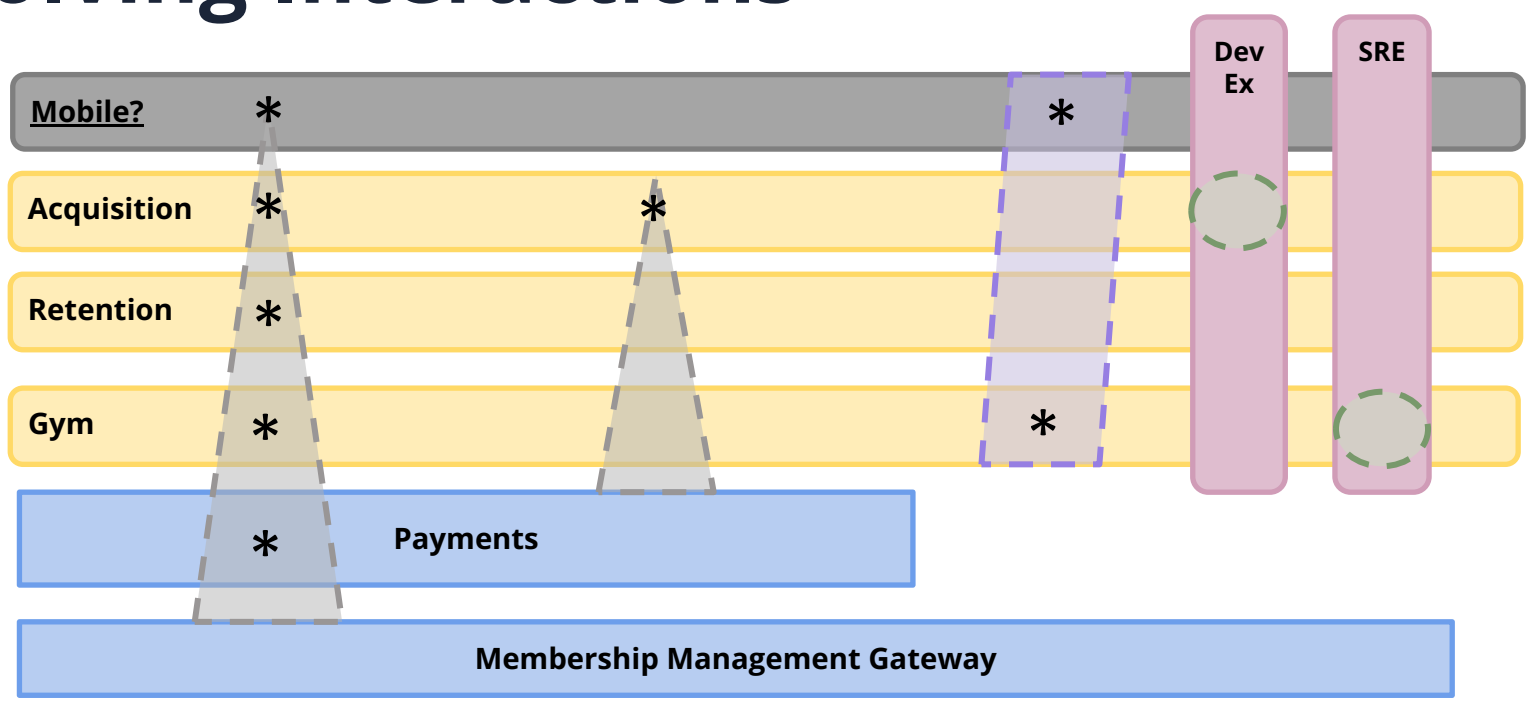
High Collaboration Phase



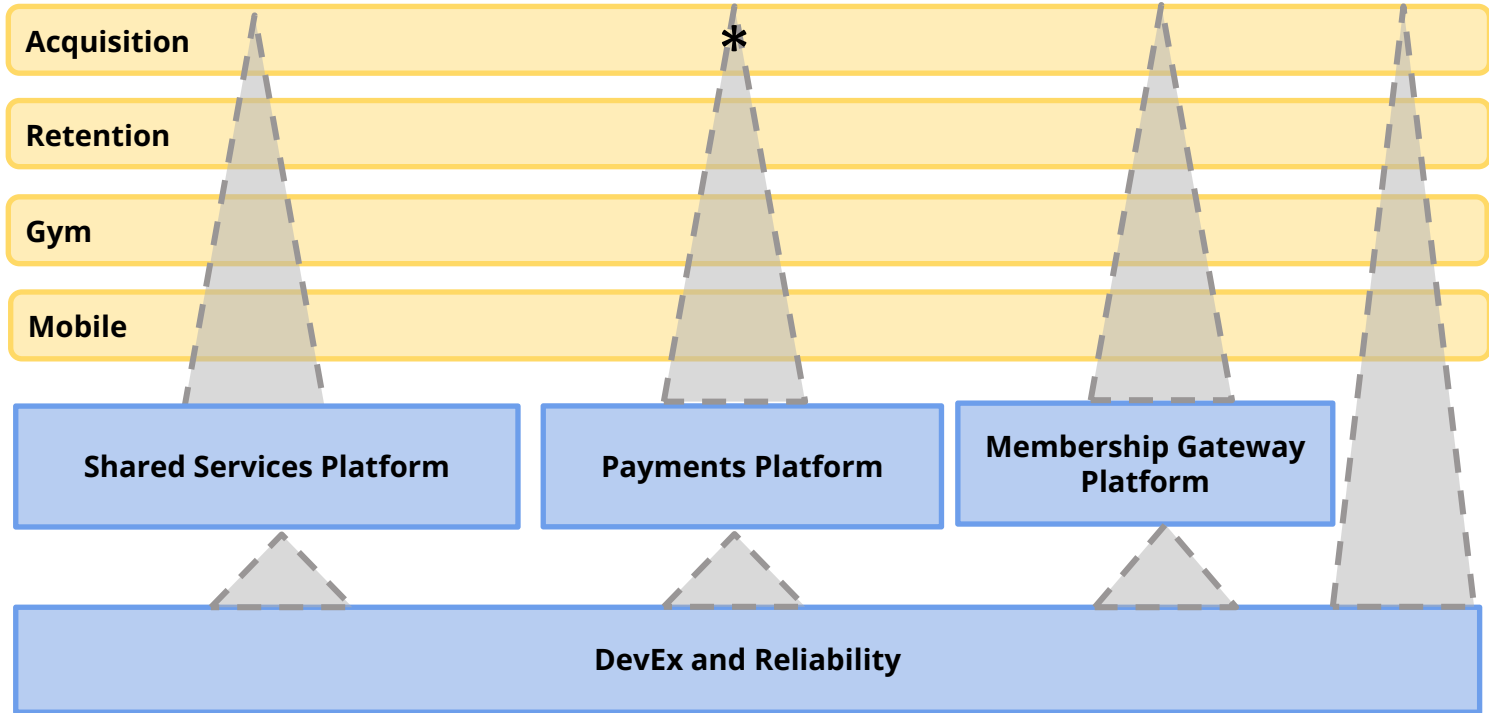
Developing X-as-a-Service



Evolving Interactions



Current Snapshot



“Team Topologies helped us to evaluate the relationships between our teams and business strategy, to increase team efficiency, and evolve away from a monolith”

***John Kilmister
Principal Software Architect, PureGym***

Concepts

- **'Fracture Planes' for splitting code**
- **Cognitive Load for boundaries**
- **Interaction Modes for clarity**
- **Team Types for purpose**

Results

- **More business-responsive**
- **Projects+BAU → Streams**
- **Separate services: Join / Book / ...**

Results

- **Balanced ownership of services**
- **Improved team morale**
- **Better long-term architecture**



Industry Examples

For more examples:

<https://teampologies.com/examples>

Getting started

A hand is holding a magnifying glass, focusing on a circular image of a mountain landscape. The landscape features a lake, green grass, and rocky mountains under a cloudy sky. The magnifying glass is held by a hand, and the background is a blurred outdoor scene.

**Identify the
kind of
teams you
currently
have**



**Map technology teams to
fundamental team types**

Limit cognitive load



Use sociotechnical mirroring



Define purposeful interactions



Explicitly guide (and limit) inter-team collaboration



**Evolve team
structures
explicitly
over time**

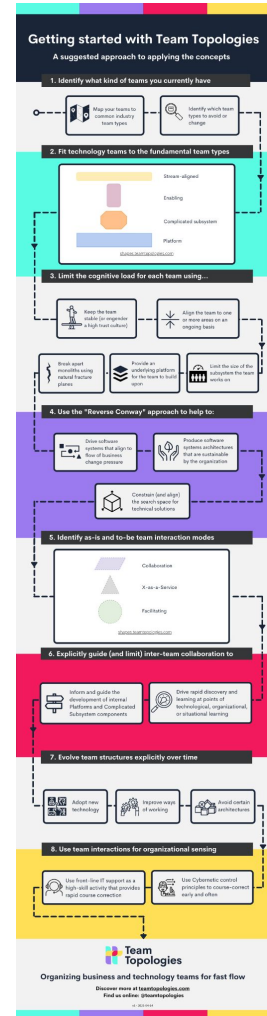




**Use team interactions for
organizational sensing**

Getting started: Team Topologies

Download the infographic:
<https://teampologies.com/getting-started>



**Team Topologies
encourages decoupling of
business concepts to help
make the organization
more responsive**

**Team Topologies patterns
help to turn blocking
compliance checks into
self-service, flow-aligned,
API-driven checks**

Team Topologies is partly a sense-making approach to help organizations gain situational awareness and therefore agility

Team Topologies helps the organization to focus tightly on its core mission via streams and limiting team cognitive load

What's next?

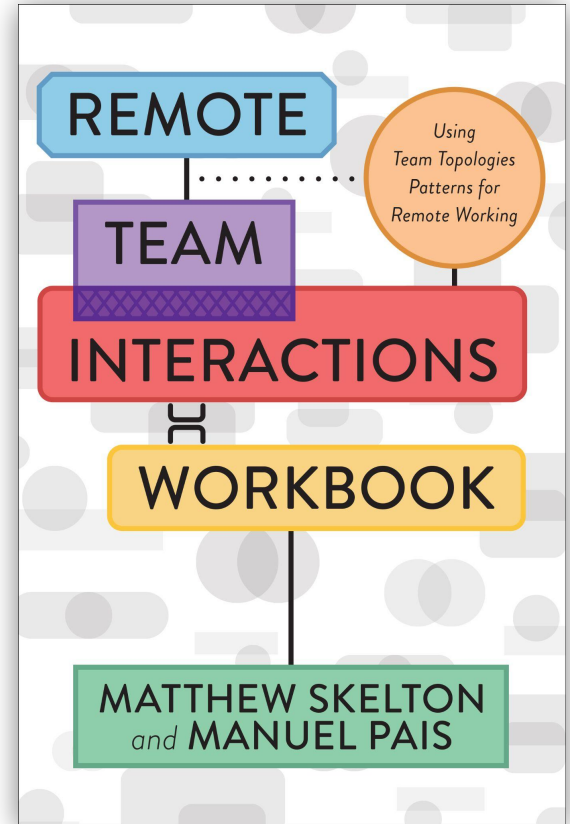
Remote Team Interactions Workbook

Using Team Topologies Patterns for Remote Working

Matthew Skelton and Manuel Pais

IT Revolution, January 2022

Resources: teamtopologies.com/remote-first



Free Resources

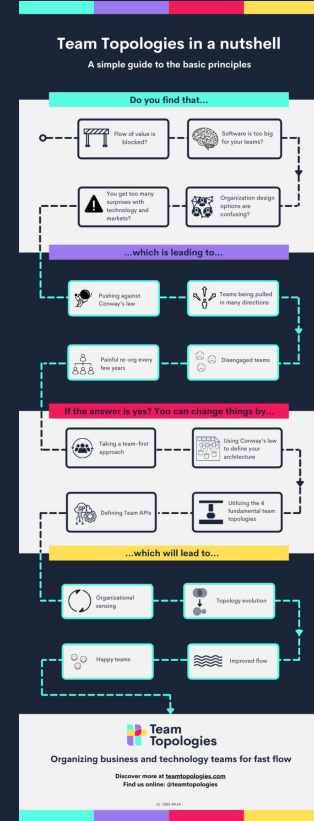
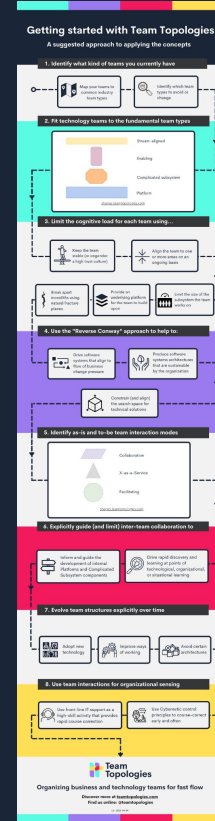
teampologies.com/resources
(links, slides, video)

teampologies.com/tools
(templates, assessments, etc)

Infographics

- Getting Started
- In a Nutshell

teampologies.com/infographics





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