

Team Topologies in action

early results from industry - October 2020

Matthew Skelton

Conflux - co-author of Team Topologies

Manuel Pais

Independent - co-author of Team Topologies

DevOps Enterprise Summit - Las Vegas online - 2020

**DEVOPS
ENTERPRISE
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AN  REVOLUTION EVENT

Team Topologies in action

early results from industry - October 2020

Matthew Skelton & Manuel Pais

co-authors of *Team Topologies*
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DEVOPS
ENTERPRISE
SUMMIT

DOES Las Vegas Virtual - 13 October 2020



Matthew Skelton

Founder at [Conflux](#)

Experience as: software developer,
technical director, change enabler,
conference organizer...

Twitter: [@matthewpskelton](#)
LinkedIn: [matthewskelton](#)



Manuel Pais

Independent IT organizational
consultant and trainer

Ex-dev, ex-build manager,
ex-tester, ex-QA lead

Twitter: [@manupaisable](#)
LinkedIn: [manuelpais](#)

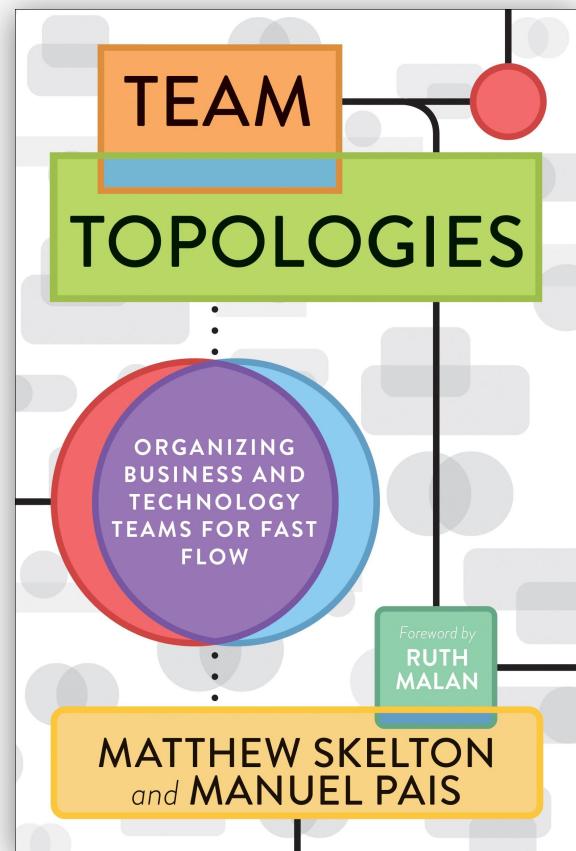
Team Topologies

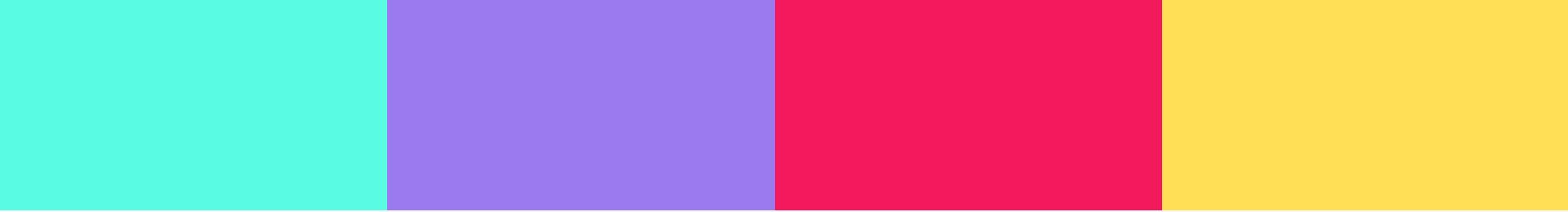
*Organizing business and
technology teams for fast flow*

Matthew Skelton & Manuel Pais

IT Revolution Press, 2019

teamtopologies.com/book





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

Charles T. Betz,
Principal Analyst, Forrester Research

PROBLEMS TO SOLVE with Team Topologies

Why is our transformation not achieving fast flow?

**What's our purpose and
mission as a team within
the wider organization?**

Why are our teams not able to respond quickly to business needs?

How can we safely remove low-level complexity from customer-facing teams?

TODAY Team Topologies in action



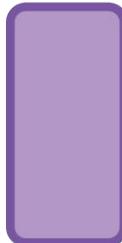
October 2020:
13 months since
publication



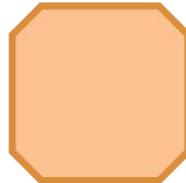
Four Team Types



Stream-aligned
team



Enabling team



Complicated-
subsystem team



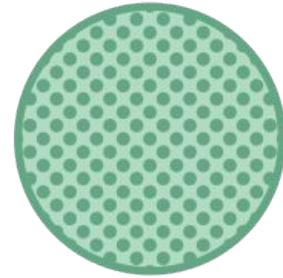
Platform team



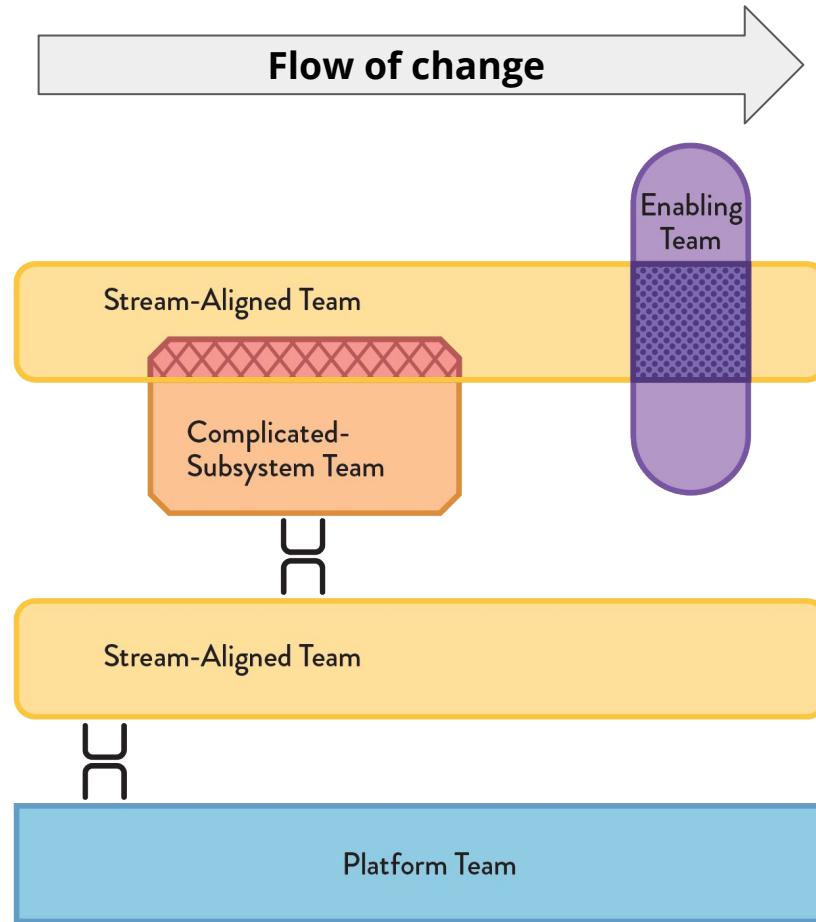
Collaboration



X-as-a-Service



Facilitating



Case Study



FOOTASYJUM





- Founded 2005
- 70 stores in the UK
- £260m revenue
- 2500 employees
- 2019: changes to make IT more responsive

High fragmentation of work and focus

Product Managers Team
(U.K.)

Development Team
(U.K.)

Checkout Team
(Romania)

**EPOS & Business
Applications Team**
(Romania)

R&D Team
(India)

Identify boundaries - business domain

Ecommerce Team

Retail EPOS Team

Customer Experience Team

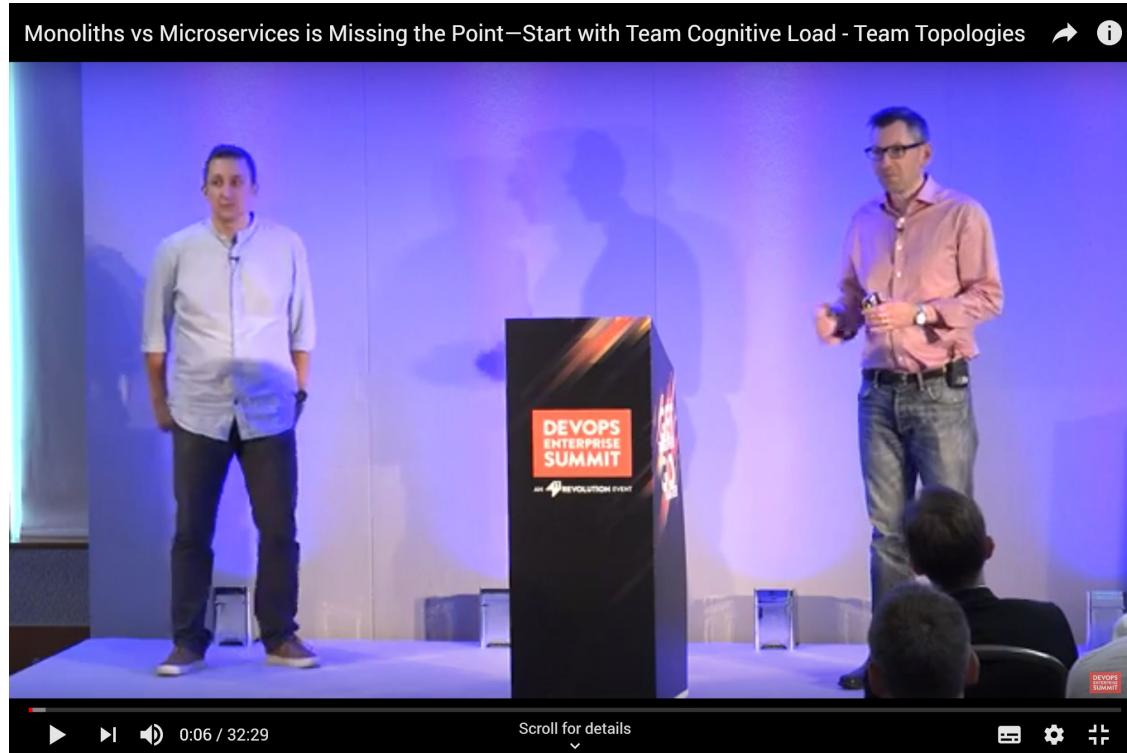
ERP Team

Services Team

Jun 2019

FOOTASYLUM

Team Topologies at DOES London 2019

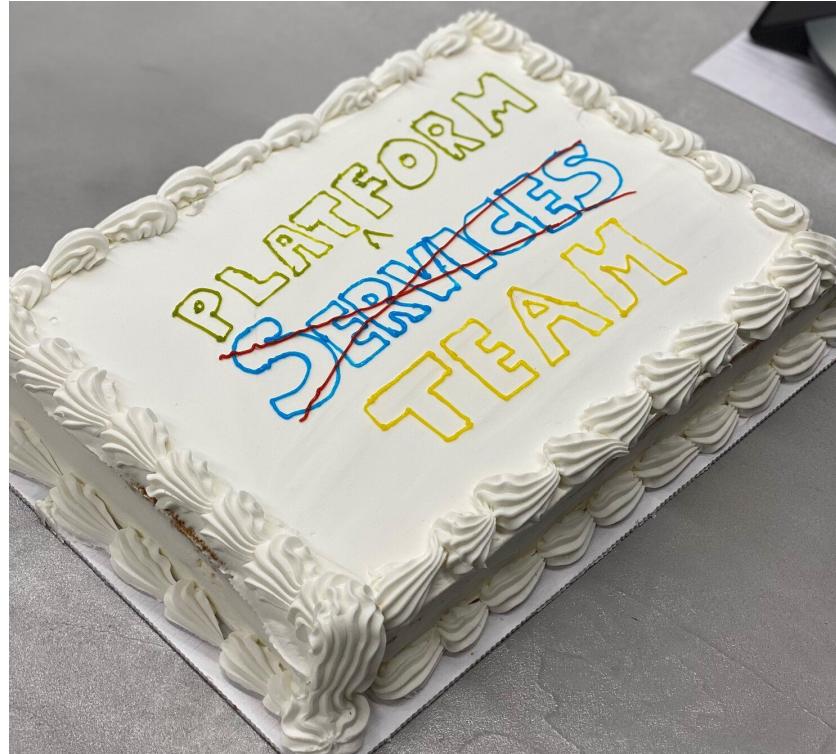


Team Topologies for Product Managers

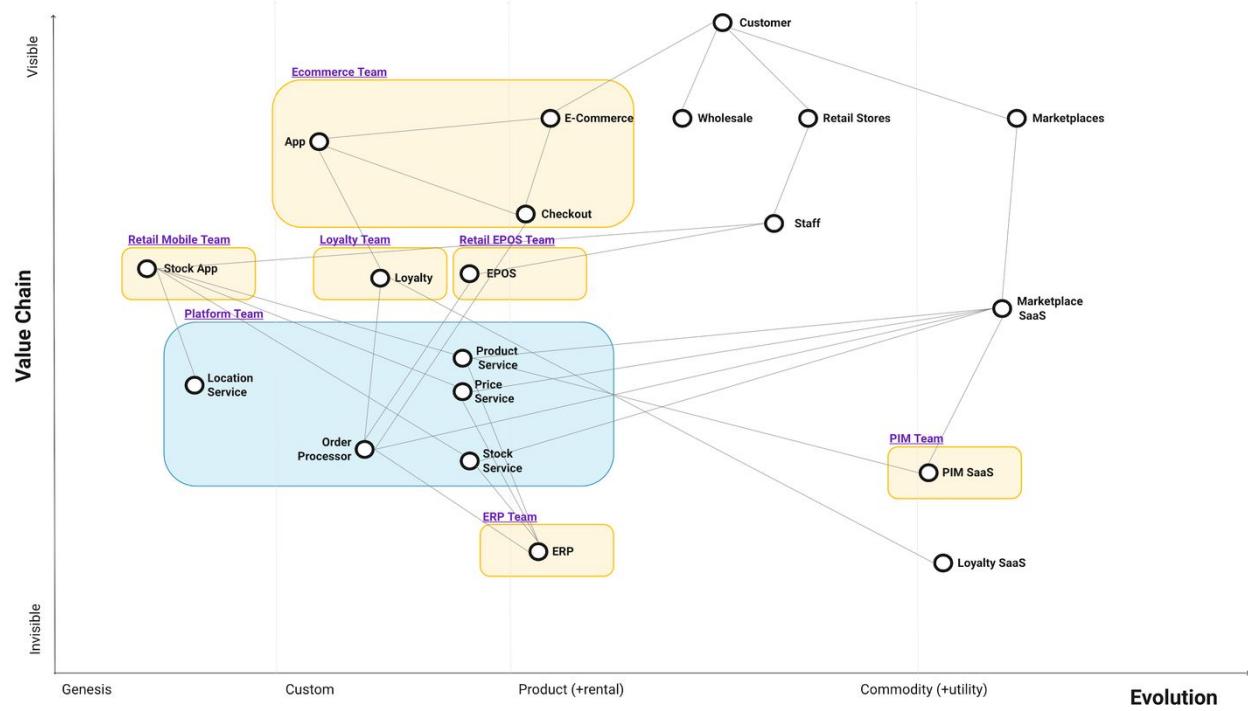
“The Product Managers from each team took special interest in the team interaction types as it helped them to have useful, directed conversations about upcoming work, they could essentially fact-check their different roadmaps and make sure that the interactions required were lined up in advance. ”

-- Andy Norton,
Software Development Manager, Footasylum

Align to Team Topologies concepts



Combine with Wardley Mapping



Focus on bounded contexts in Platform



Adopt the Thinnest Viable Platform

Design Settings Test Revisions Change log

Locations Api > OpenAPI specification JSON

Search operations Filter by tags Group by tag Add operation

All operations

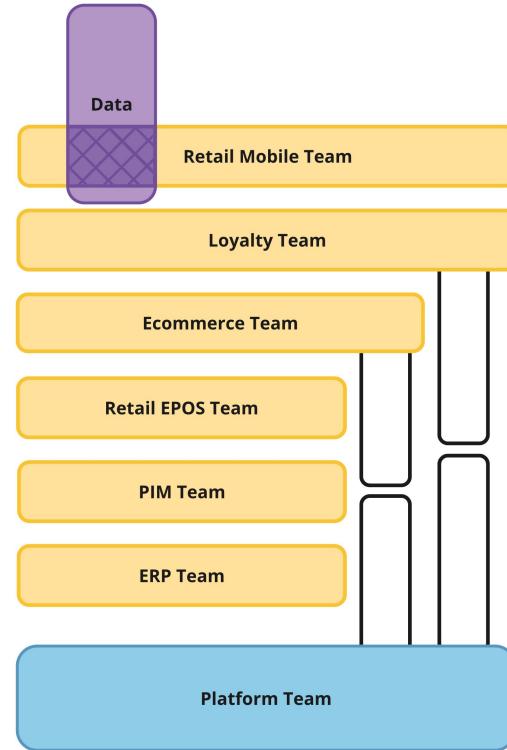
GET Get Locations ...

```
53        "postcode": "PR9 1QH",
54        "telephone": null,
55        "isStore": false,
56        "region": "North",
57        "latitude": 53.326881,
58        "longitude": -2.231057
59 },
60 {
61     "code": "005",
62     "locationId": "S0005",
63     "name": "Preston",
64     "area": "Area 4",
65     "address1": "84-86 Fishergate Walk",
66     "address2": "The Mall St. George's",
67     "city": "PRESTON",
68     "county": "Lancashire",
69     "postcode": "PR1 2NR",
70     "telephone": "01772 250694",
71     "isStore": true,
72     "region": "North",
73     "latitude": 53.758812,
74     "longitude": -2.701517
75 },
76 {
77     "code": "006",
78     "locationId": "S0006",
79     "name": "Middlesbrough",
80     "area": "Area 1",
81     "address1": "5-11 Corporation Road",
82     "address2": "",
83     "city": "MIDDLESBROUGH",
84     "county": "North Yorkshire",
85     "postcode": "TS1 1LJ",
86     "telephone": "01642 230286",
87     "isStore": true,
88     "region": "North",
89     "latitude": 54.57655,
90     "longitude": -1.235477
91 },
92 {
93     "code": "007",
94     "locationId": "S0007",
95     "name": "Sheffield",
96     "area": "Area 2",
97     "address1": "100 London Road",
98     "address2": "Sheffield",
99     "city": "SHEFFIELD",
100     "county": "South Yorkshire",
101     "postcode": "S1 1LA",
102     "telephone": "0114 2720000",
103     "isStore": true,
104     "region": "North",
105     "latitude": 53.454545,
106     "longitude": -1.471825
107 }
```

Operations Definitions Save Discard

Static data fine
to begin with:
shops rarely
move!

Clarity of purpose from team types



Concepts



- Stream-aligned (business domain)
- Thinnest Viable Platform
- Team Interaction Modes
- Combine with Wardley Mapping

Results



- Product Mgt superpowers
- Effective comms during COVID-19
- Responsive, autonomous teams

<https://teamtopologies.com/examples>

<https://teamtopologies.com/industry-examples/team-topologies-at-footasylum-platforms-flow-and-wardley-mapping>

“the interaction modes defined by Team Topologies gave us real insight into how we could maintain effective practices, and also cross-team collaboration.”



*-- Andy Norton,
Software Development Manager,
Footasylum*

Thanks to:



Paul Martin
IT Director, Footasylum



Andy Norton
Software Development
Manager, Footasylum



Case Study

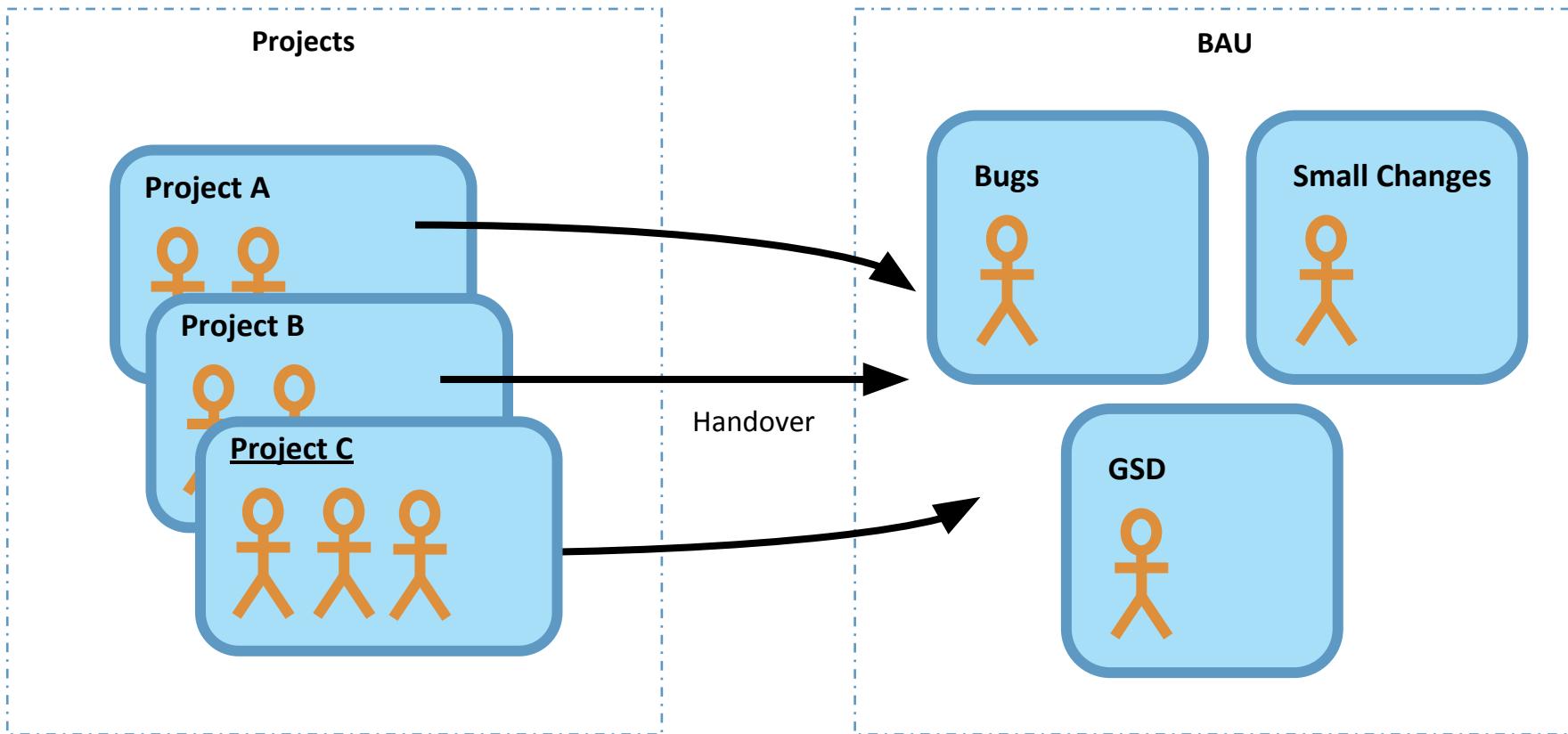




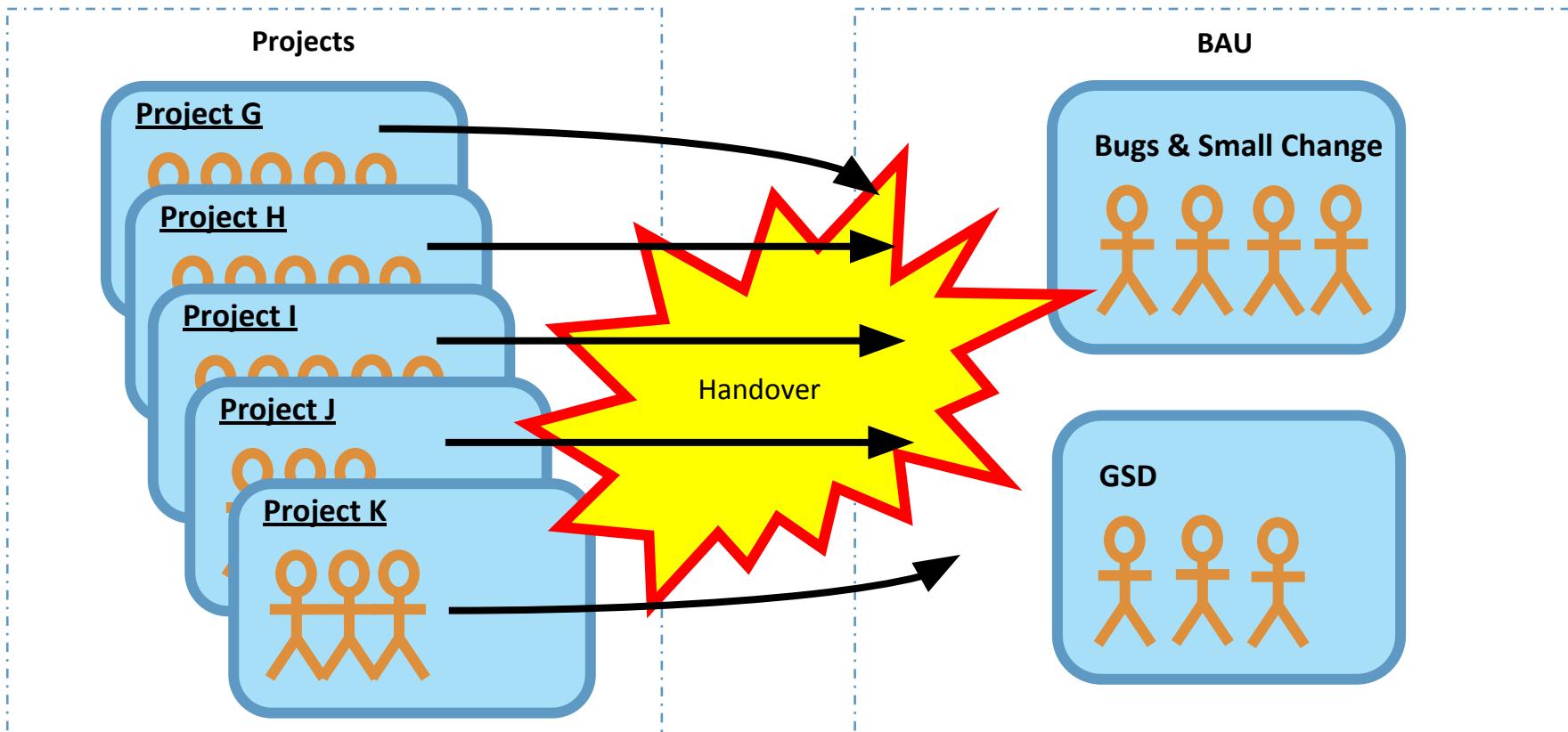
PUREGYM

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

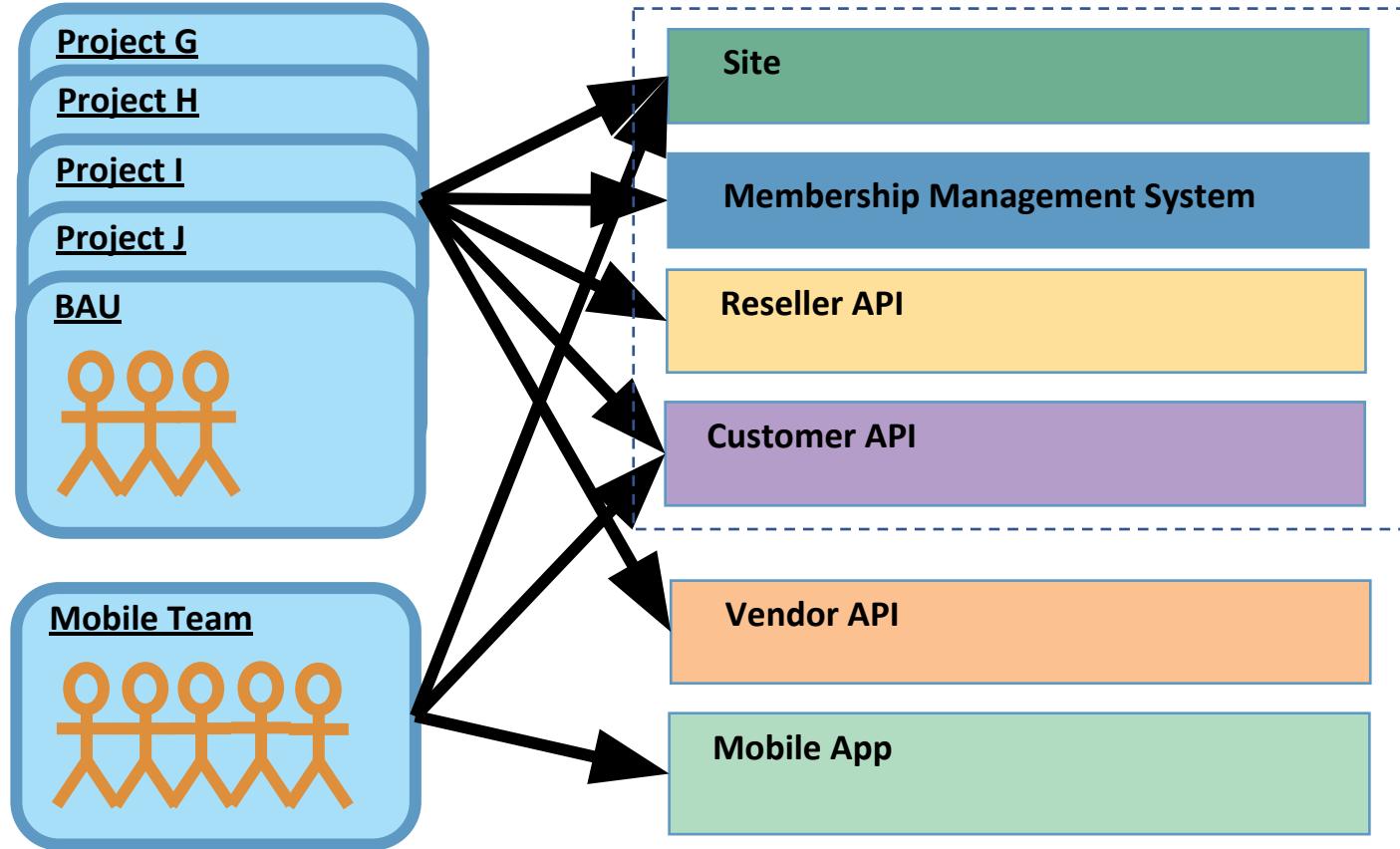
Less Than 10 People



Trigger: Rapid Team Growth to 40



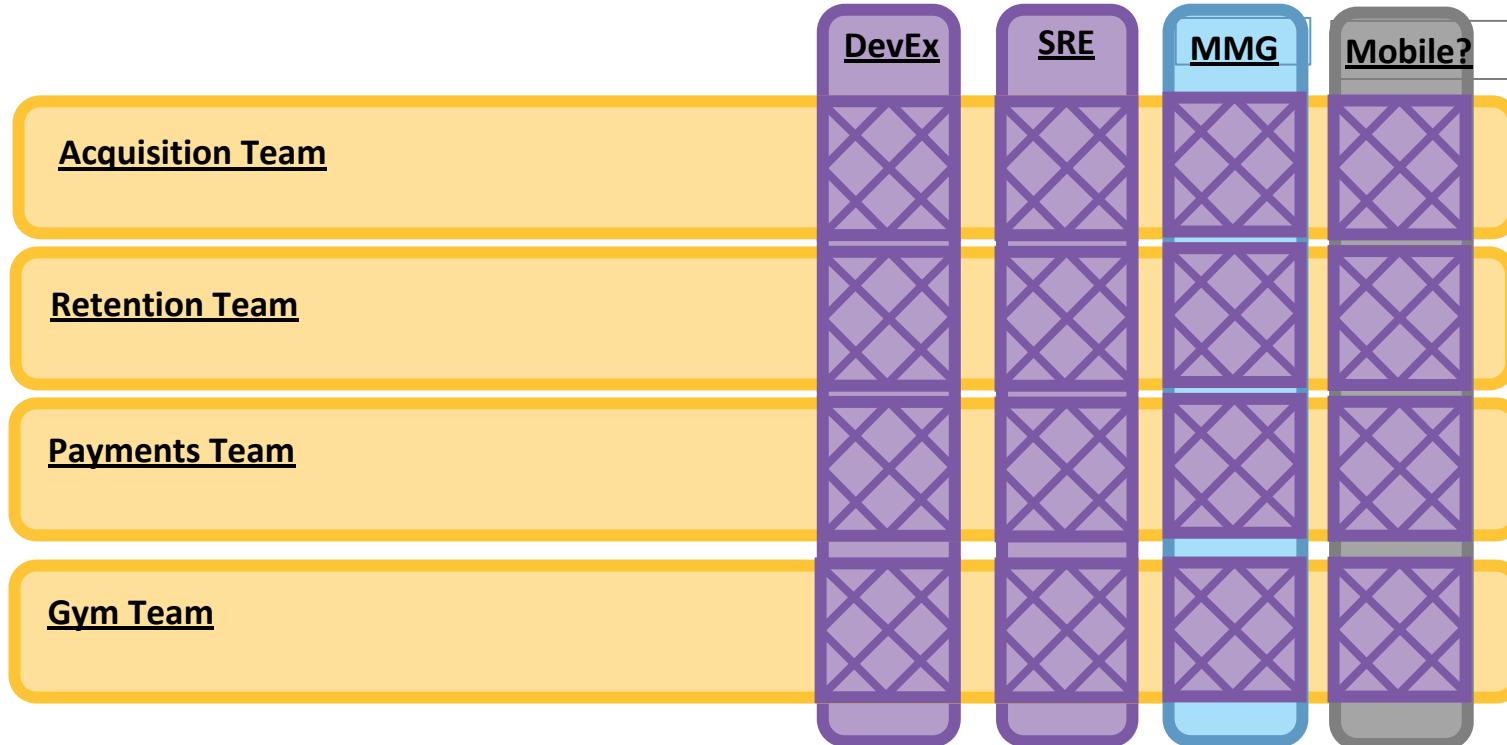
The Monolith



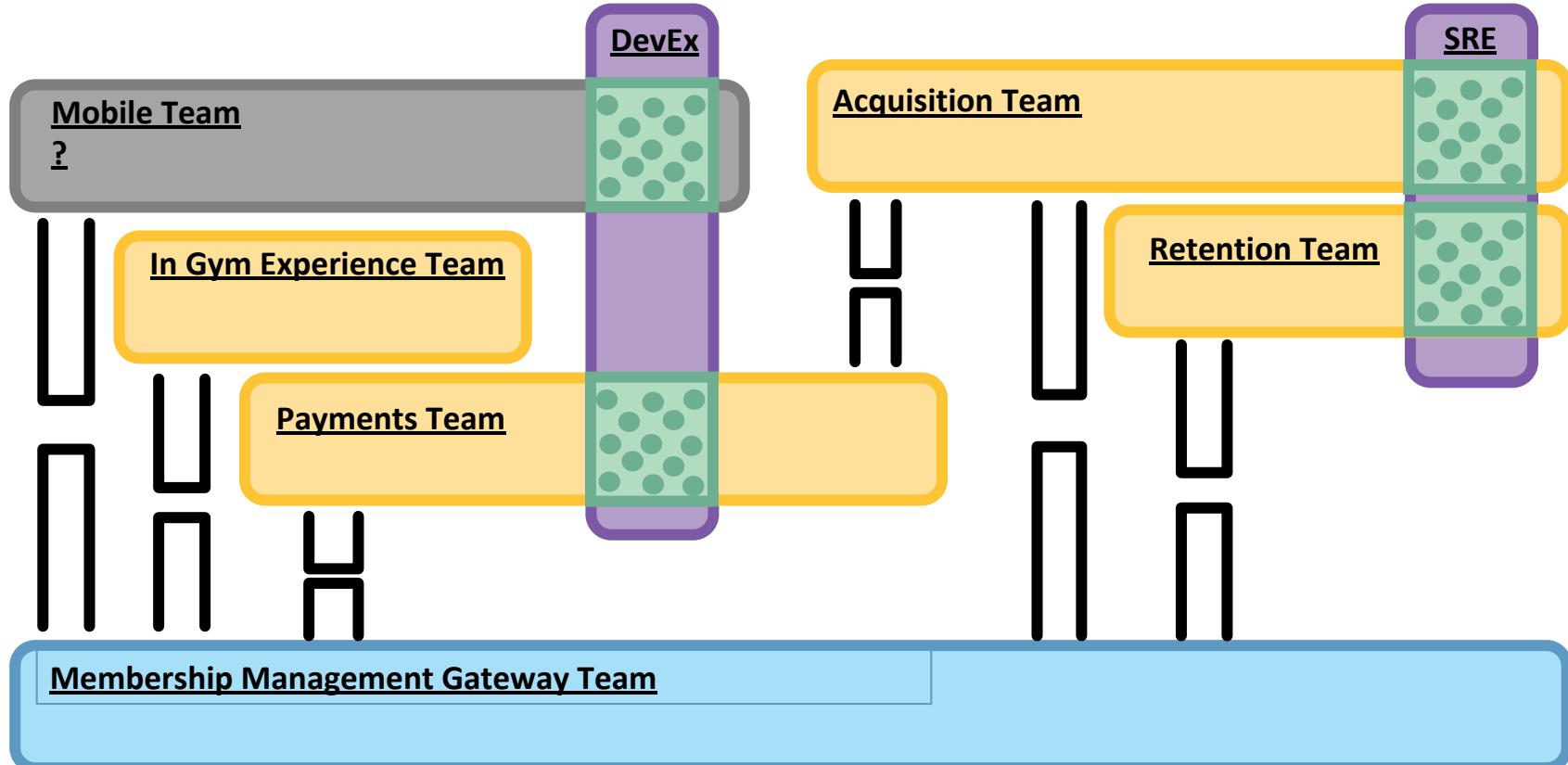
Re-defining Teams



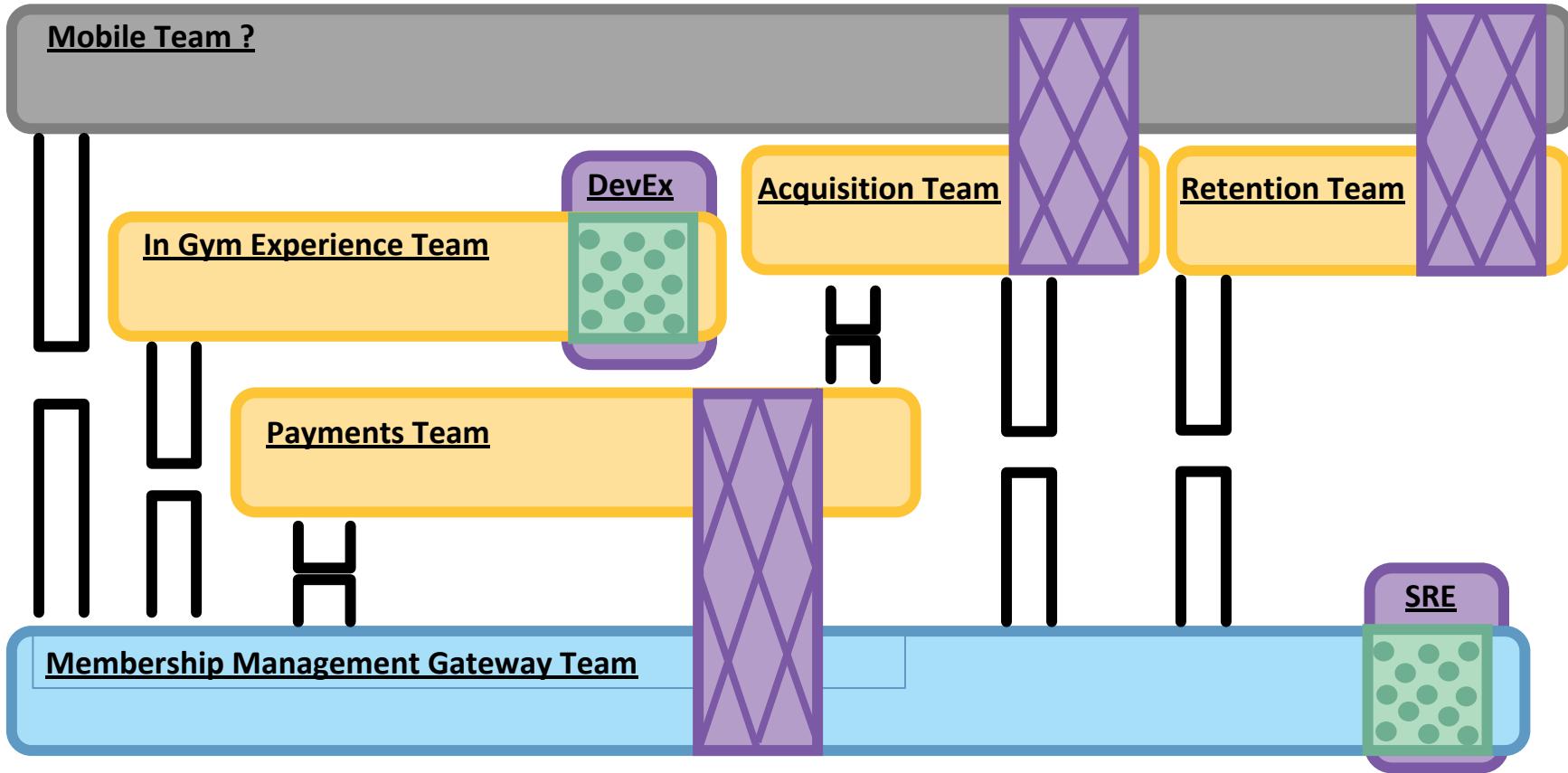
High Collaboration Phase



Using Facilitation and Developing X as a Service



Continuous Collaboration and Facilitation



“Team Topologies helped us at PureGym to evaluate the relationship between our teams and the 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



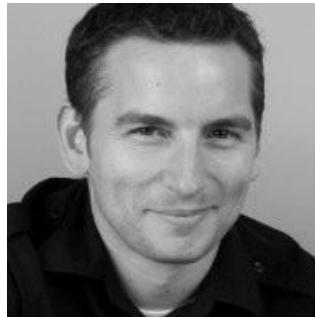
- **Balanced ownership of services**
- **Improved team morale**
- **Better long-term architecture**

<https://teamtopologies.com/examples>

Thanks to:



John Kilmister
Principal Software Architect
PureGym



Rich Allen
Head of Consulting
Conjurer Solutions





U switch



- UK's leading comparison and switching service
- Founded in 2000
- ~250 staff, £140m+ revenue
- > 2010: Autonomous teams
- > 2017: Platformization

Autonomous stream-aligned teams

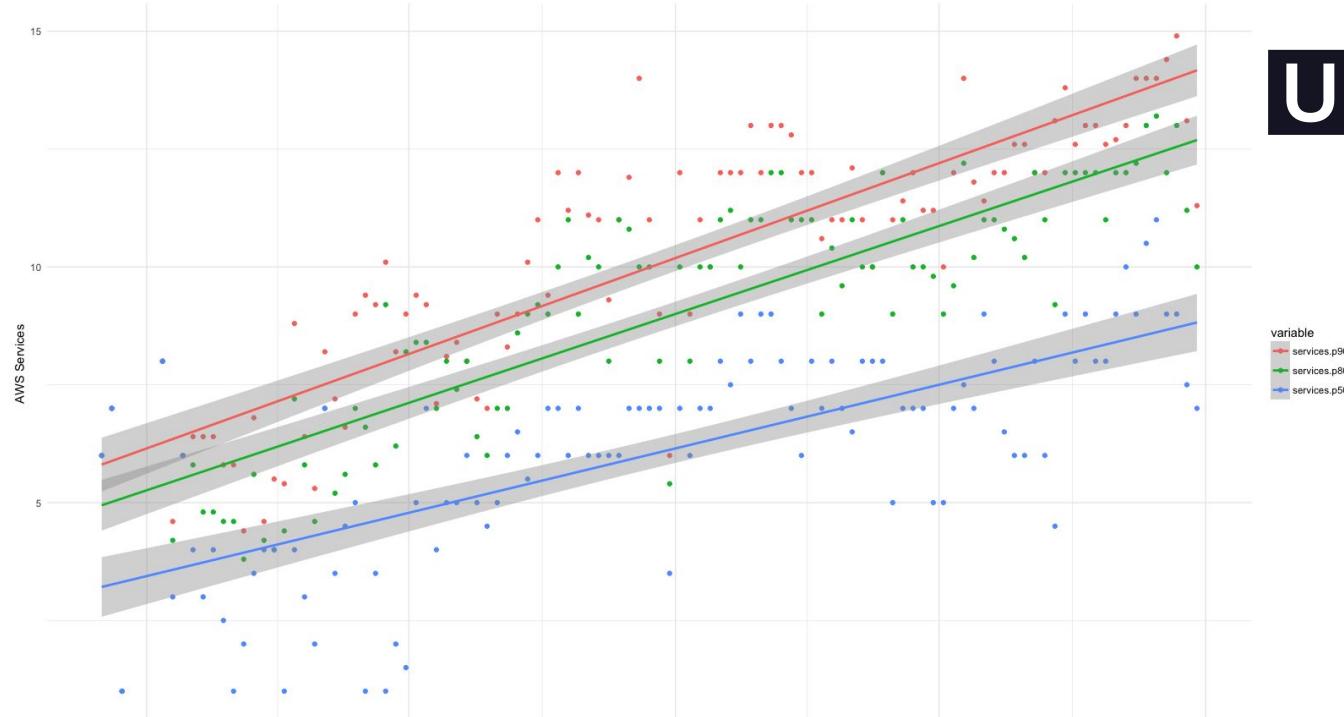


Energy

Broadband

...

2015-2016: direct AWS API calls



U switch

Low-level AWS service calls before platform adoption

“people were spending more time having to interact with relatively low-level services thus spending their time on relatively low-value decisions”



Paul Ingles, CTO at RVU / Uswitch

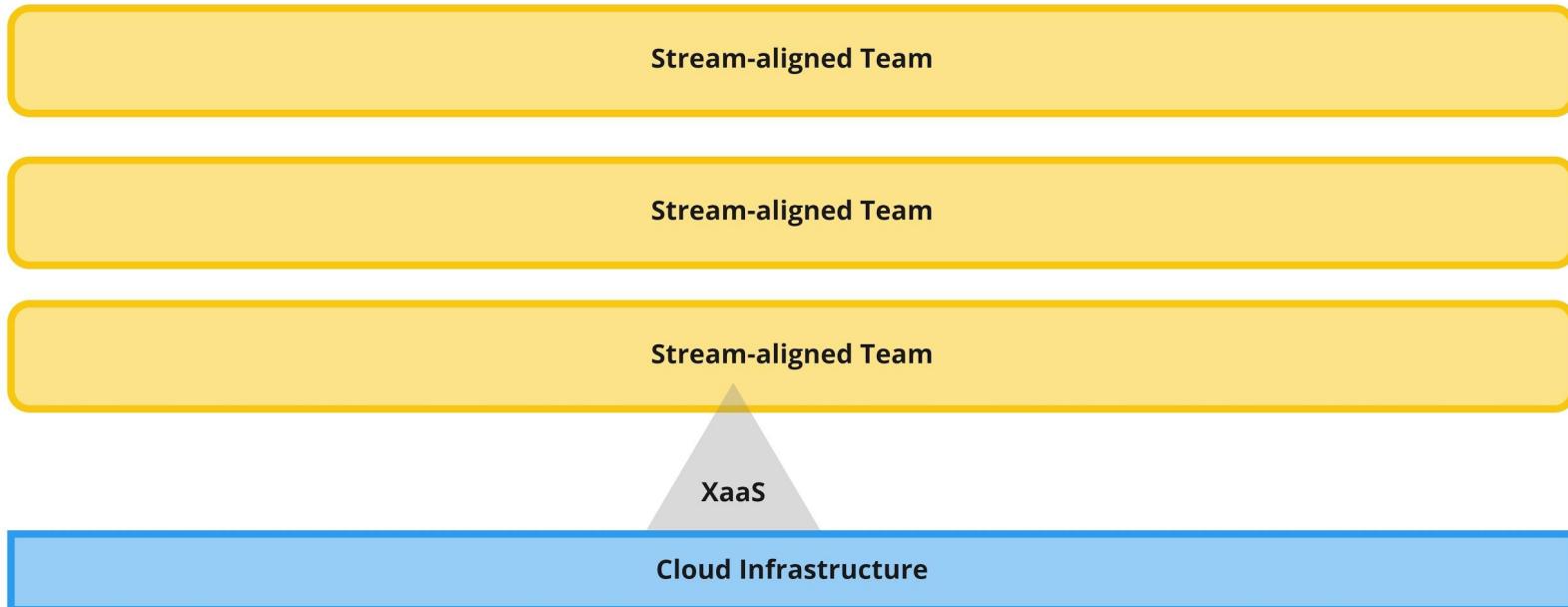
2017

Infra platform
started with few
services

First customer
(centralized
logging, metrics,
auto scaling)



Early platform (first customer)





2017

2018

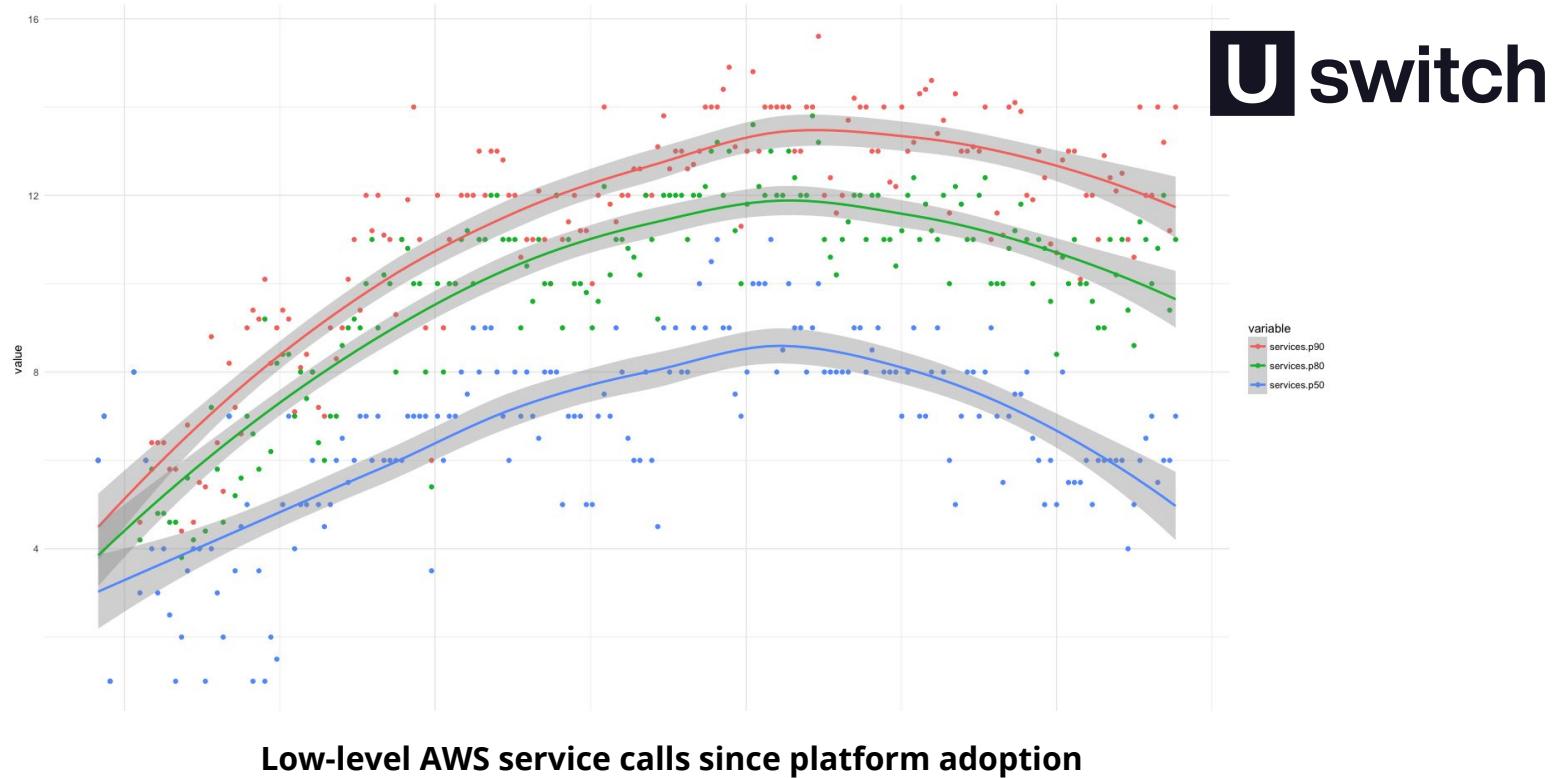
Infra platform
started with few
services

Started using SLAs
and SLOs, clarifying
reliability/latency/etc

First customer
(centralized
logging, metrics,
auto scaling)

**Growing traffic in
platform vs AWS**

2015-2018: direct AWS API calls





2017

Infra platform started with few services

First customer
(centralized logging, metrics, auto scaling)

2018

Started using SLAs and SLOs, clarifying reliability/latency/etc

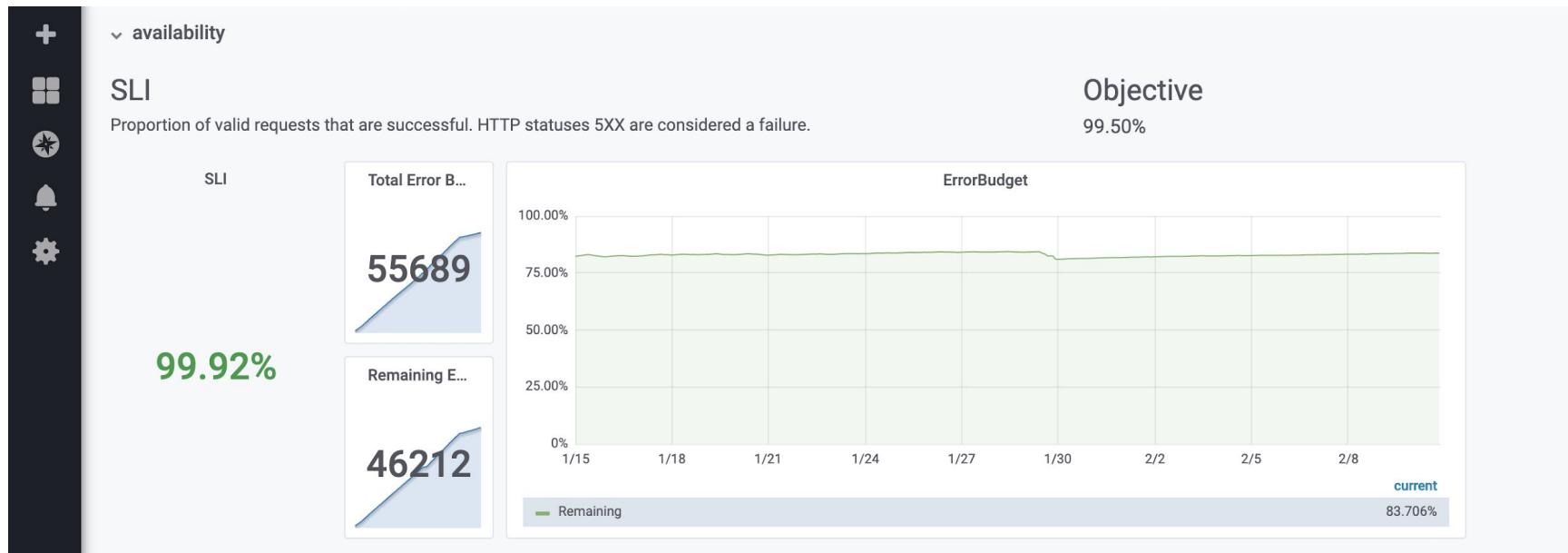
Growing traffic in platform vs AWS

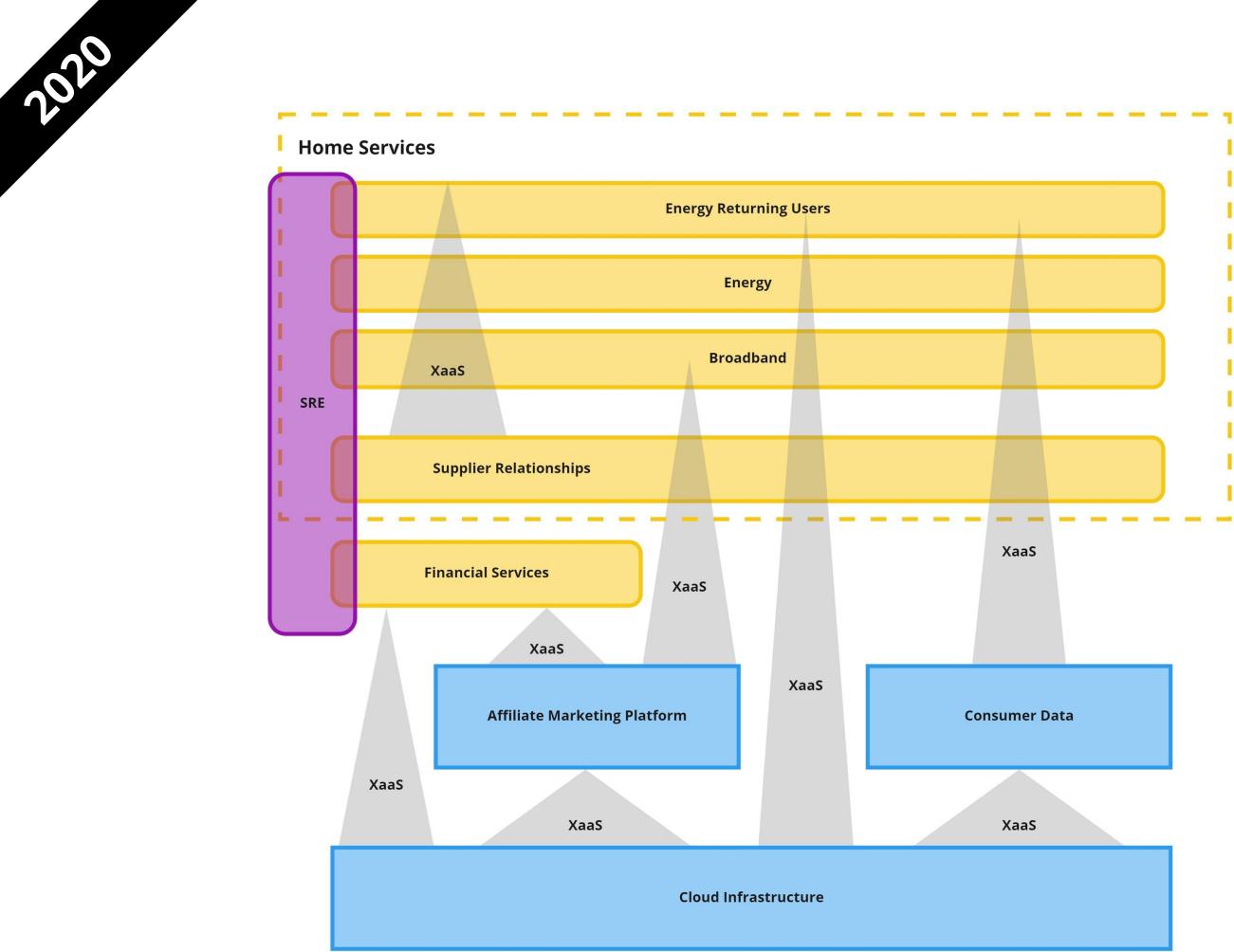
2019

Addressed critical cross-functional needs (GDPR, security, alerts + SLOs as a service)

Adoption by HMRT (Highest Maturity & Revenue Team)

Measure and demonstrate





U switch

“Engineering principles guided the way we organise teams: loosely-coupled and highly cohesive. Team Topologies is great for tying a lot of those ideas together, and most importantly giving it some language.”



Paul Ingles, CTO at RVU / Uswitch

Concepts



- Platforms to reduce cognitive load
- Platform as a product / MVP
- Discover good boundaries & APIs
- Clear team interaction modes

Results



- “Curated” platform experience
- Reduced complexity for teams
- Addressed cross-team needs

Results



- From autonomy to self-sufficiency
- Patterns applied beyond IT
- Balancing fast flow with reliability

teamtopologies.com/examples

Thanks to:



Paul Ingles
Chief Technology Officer
RVU / Uswitch



Tom Booth
Head of Infrastructure & Security
RVU / Uswitch



Case Study



WealthWizards



WealthWizards

- **Financial advice**
- **Founded 2009**
- **Consumers & companies**
- **'Explainable AI'**
- **Increasingly successful**

< 2019: product growth



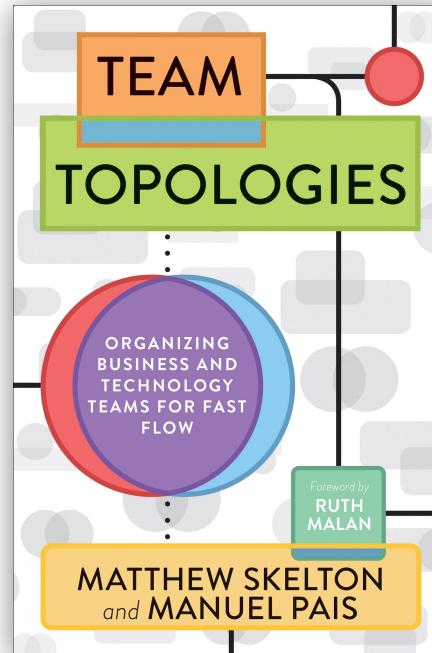
x 6

Mid-2019



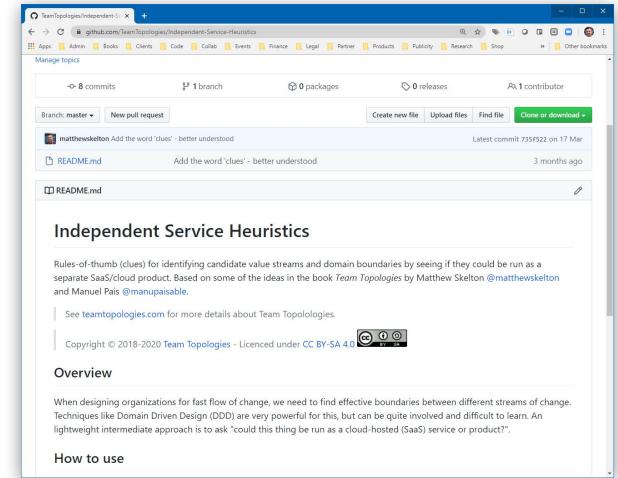
HALT!

September 2019



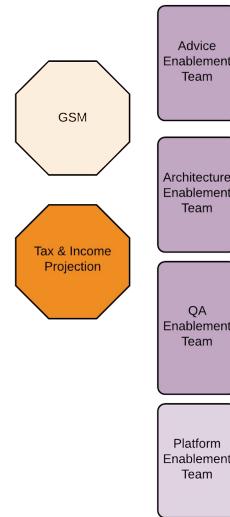
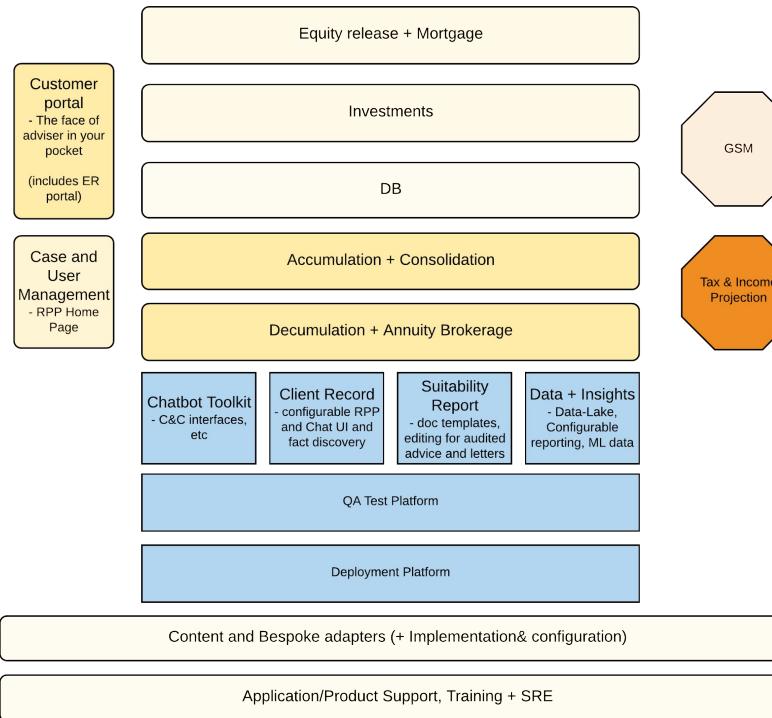
Independent Service Heuristics

Rules-of-thumb for identifying candidate value streams and domain boundaries by seeing if they could be run as a separate SaaS/cloud product.



<https://github.com/TeamTopologies/Independent-Service-Heuristics>

2020: New architecture



“Team Topologies ... has given us the tools we were looking for and have helped us to build a plan and have confidence that we know where we’re going and how to get there.”



Richard Marshall, CTO, Wealth Wizards

Concepts



- Stream-aligned: build & run
- Boundaries that help flow
- Supporting team types: reduce cognitive load on Stream teams

Results



- Clear patterns and language
- Framework for design decisions
- Confidence in scaling approach

<https://medium.com/ww-engineering/to-monolith-or-to-microservice-f8c3f967e63c>

Thanks to:



Richard Marshall
CTO
Wealth Wizards

Summary: Team Topologies in action



**The Stream-aligned team is
the starting point:
fast flow and feedback
from running systems**

**Team Topologies provides
a common language and
set of patterns for the
whole IT organization**

Explicitly design for team cognitive load

**A platform is a curated
experience for engineers
to accelerate and simplify
software delivery**

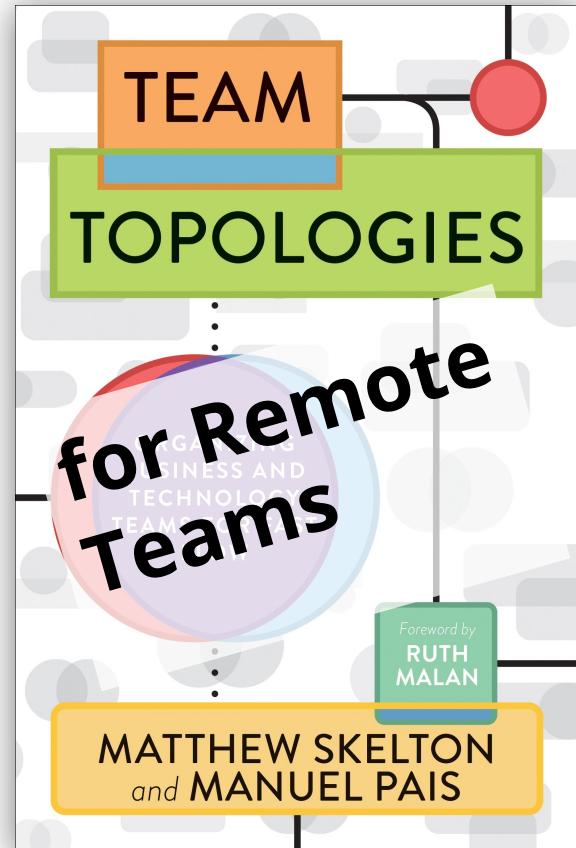
What's next?

*Workbook
coming soon...*



Team Topologies for Remote Teams

Resources: teamtopologies.com/remote-first



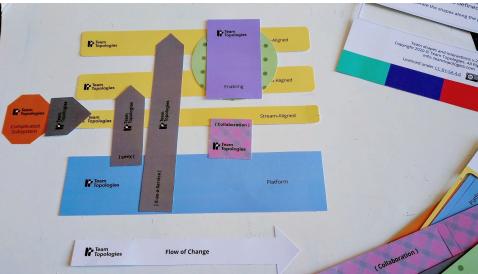
Free Resources

Remote-first interactions

teamtopologies.com/remote-first

Free tools & templates

github.com/teamtopologies



Team Topologies

MODELING SHAPES Team Types & Team Interactions

Use these shapes to model different organisation designs for fast flow using the four Fundamental Team Types and three Team Interaction Modes defined in Team Topologies.

Instructions: separate the shapes along the perforations or use scissors.

Flow of Change

Team shapes and interactions v.2020.07
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Stream-Aligned team

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teamtopologies.com/shop

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[@TeamTopologies](https://twitter.com/TeamTopologies)

Remote-Friendly Training



teamtopologies.com/training



Sign up for news and tips:

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@TeamTopologies

**Q&A: Slack, now
AMA: Oct 15 @ 12.40 Pacific**

Thank you!

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Manuel Pais, Independent
@manupaisable



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