

Micro-frontends, three years after

@_maxgallo

In 2019 I was on this stage with Luca Mezzalira to introduce DAZN approach to Micro-frontends.

<https://bit.ly/talk-max-luca>

MICROFRONTENDS MANIFESTO



Independent implementation,
avoiding sharing logic



Modelled around
a Business Domain



Own by a single team



Hi I'm Max



Principal Engineer @ DAZN



twitter: @_maxgallo

web: maxgallo.io

Agenda

 **Once Upon a Time**

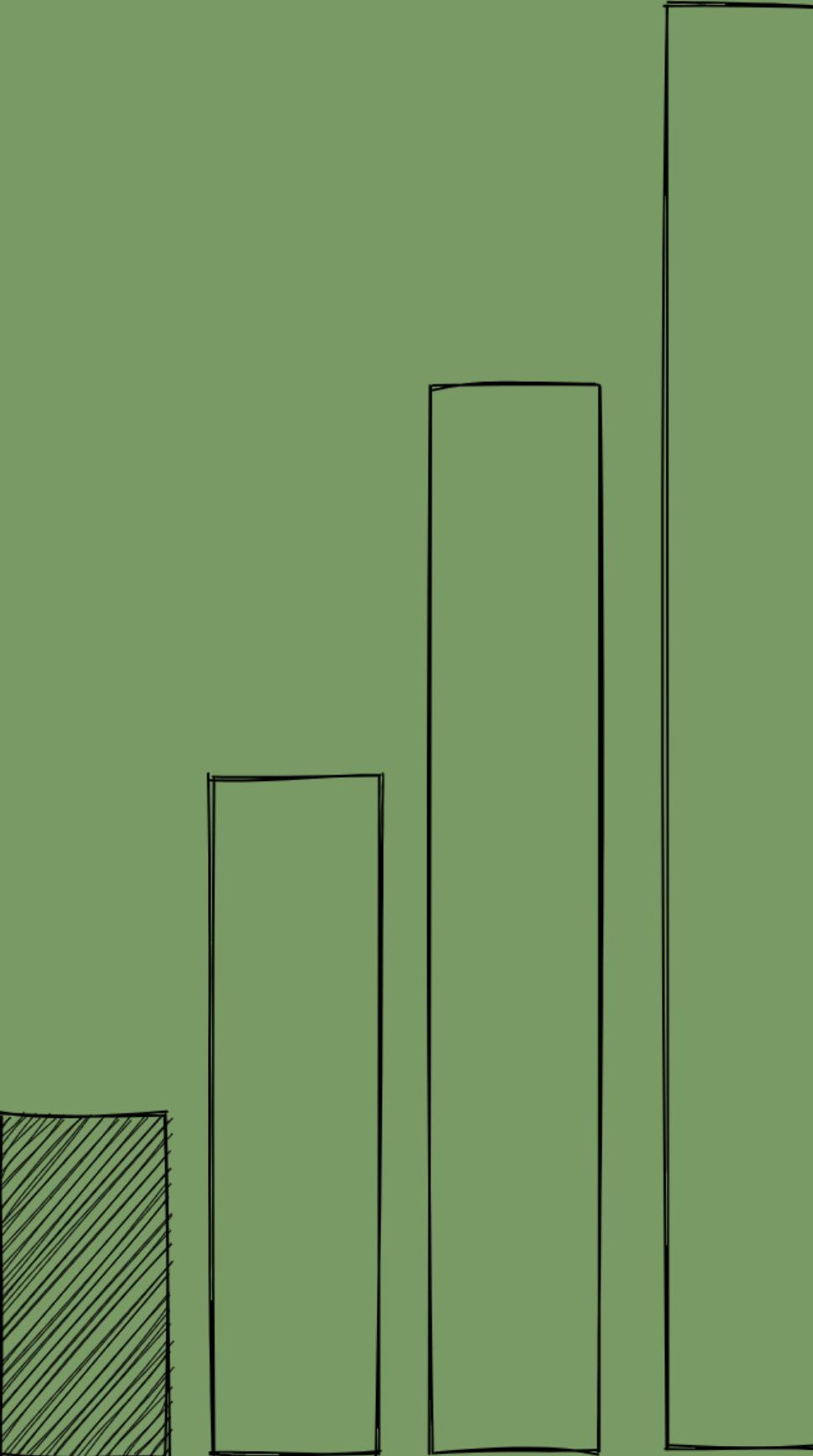
 **Domain Boundaries Evolution**

 **Beyond Team Autonomy**

 **Sharing Code**

Once Upon a Time

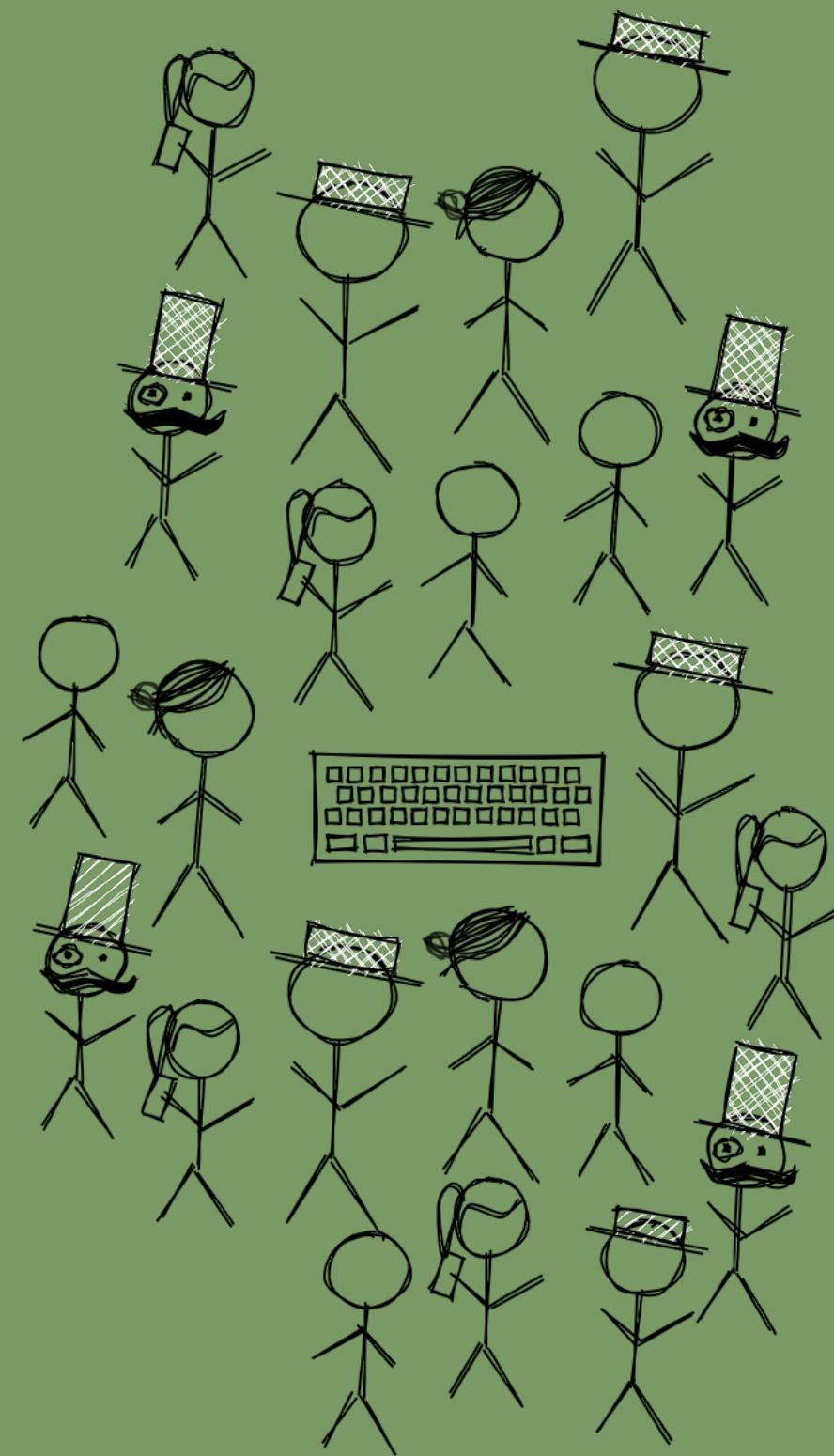
Part 1 of 4



**Once Upon a Time, there
was a Live Sport
Streaming Company,
called DAZN**



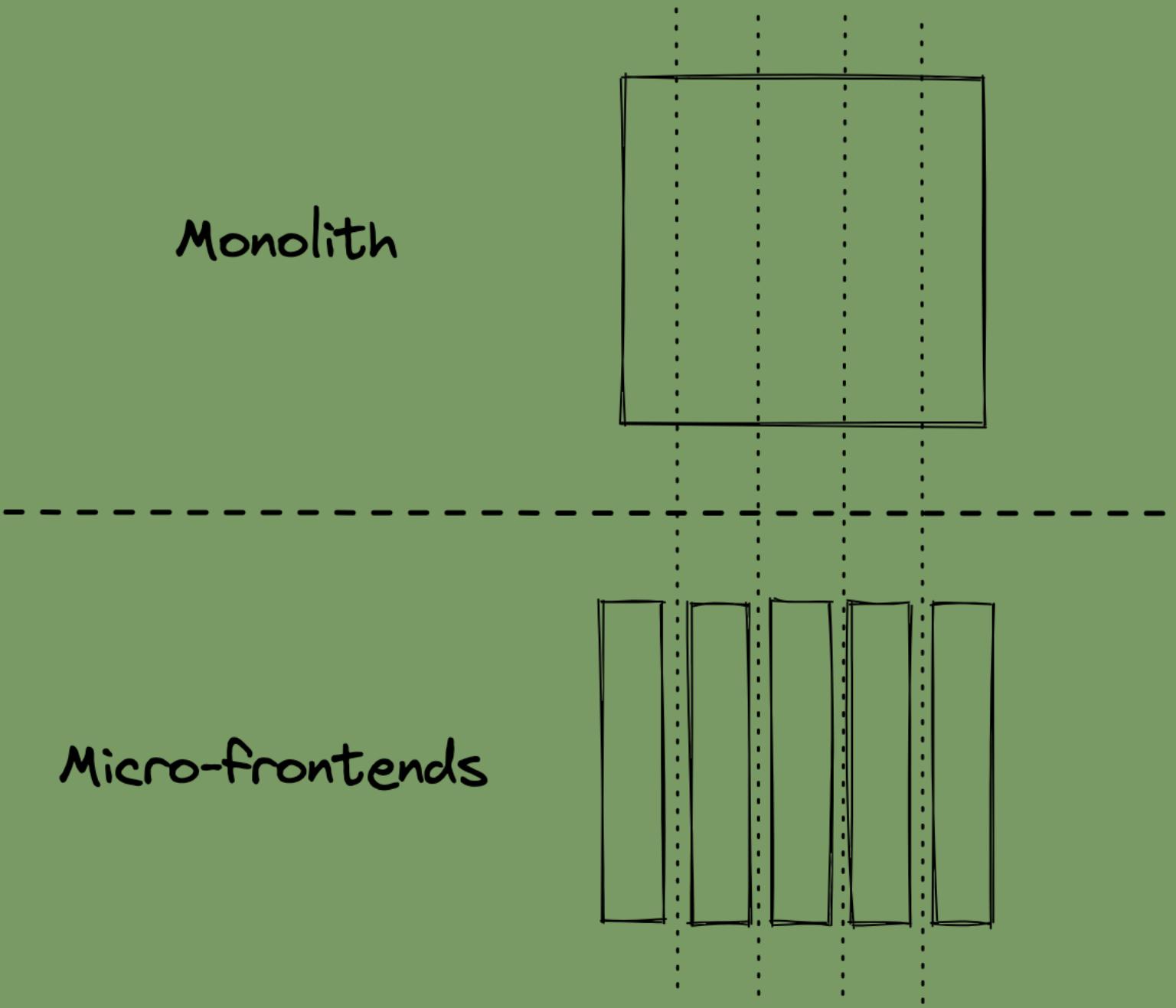
DAZN Engineering department was growing exponentially



We needed a better
solution to sustain our
growth and future plans,
so we introduced **Micro-**
frontends.

Monolith

Micro-frontends



To highlight the pillars of our solution, we created the Micro-frontends Manifesto.

- 👉 **Independent implementation, avoid sharing logic**
- 👉 **Modelled around a Business Domain**
- 👉 **Owned by a single team**

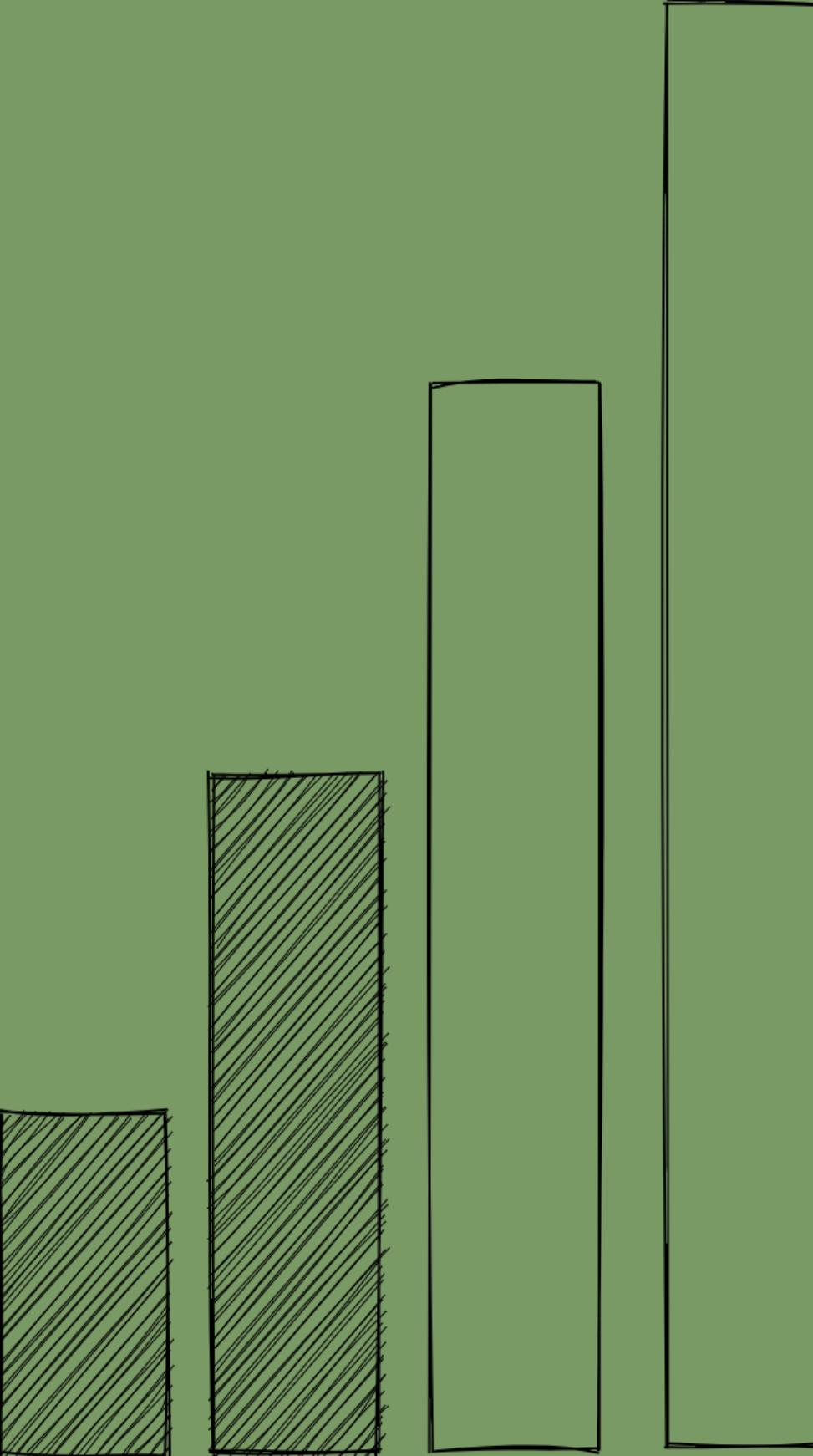
...and they lived happily ever after

...and they lived happily ever after

No more! 

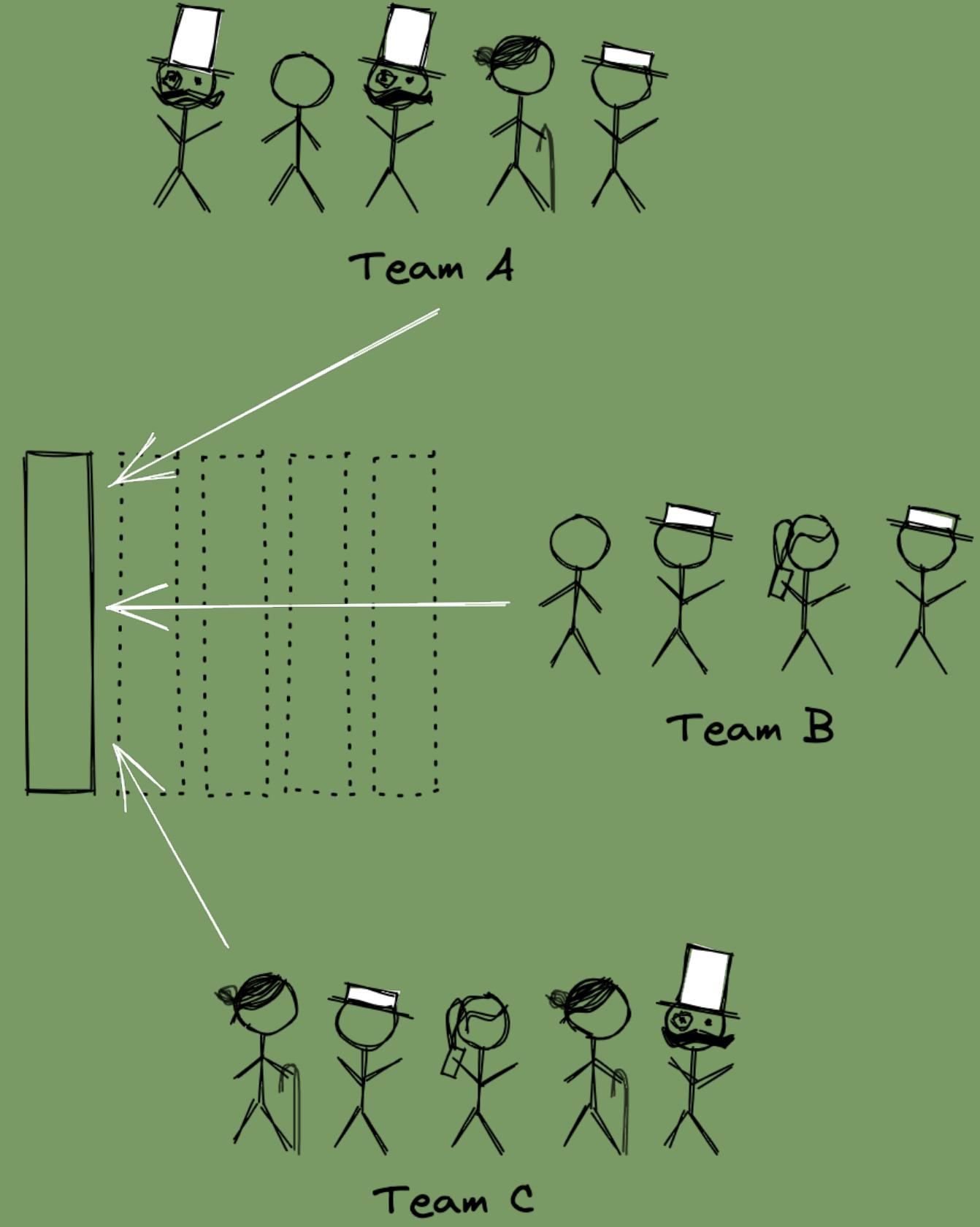
Domain Boundaries Evolution

Part 2 of 4



Some vertical Micro-frontends were too big for a single team.

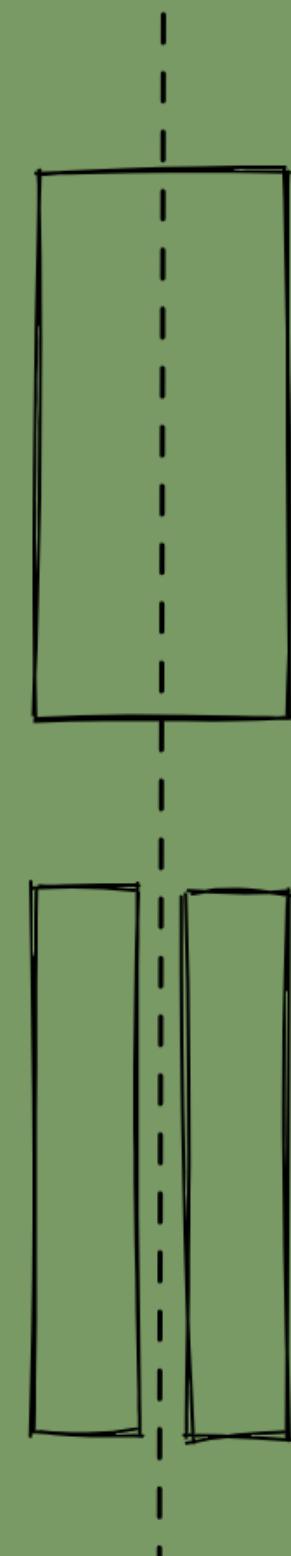
Micro-frontends



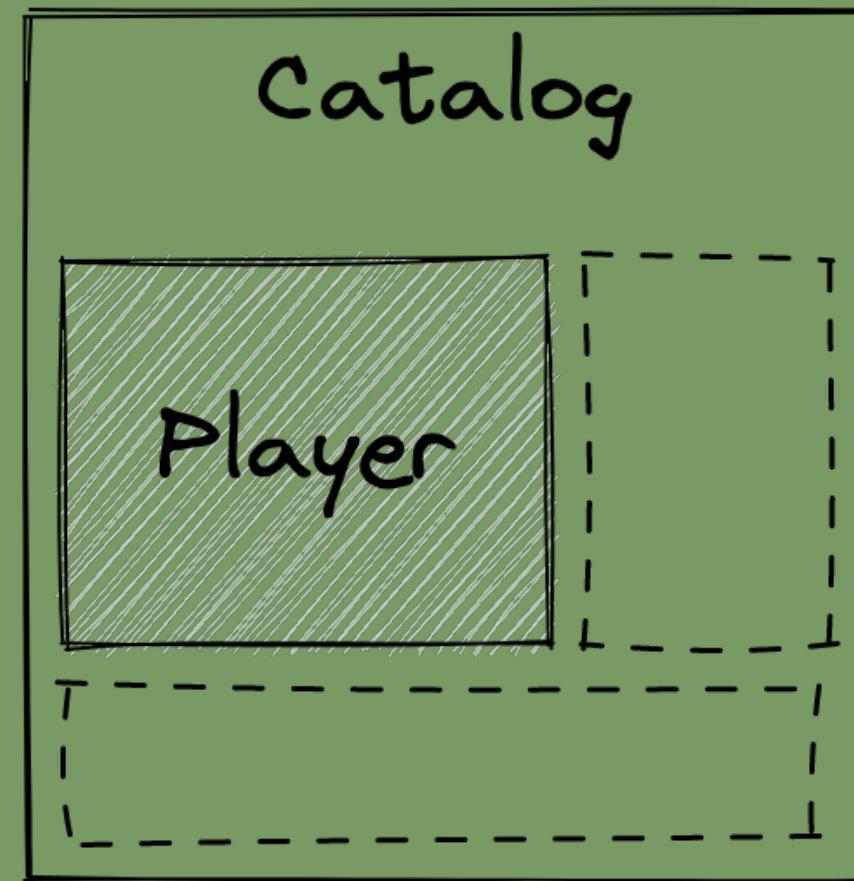
**Our business
subdomains are not
immutable, so we re-
defined their boundaries.**

Micro-frontend

Two
Micro-frontends



**A Subdomain did contain
a complex subsystem¹
that was not considered
a Micro-frontend.**

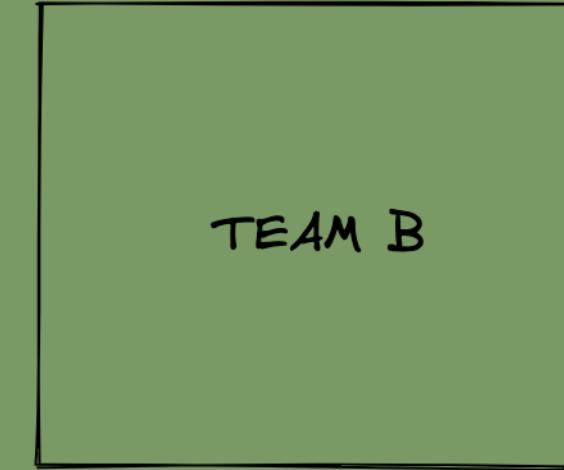


Example of
Micro-frontend

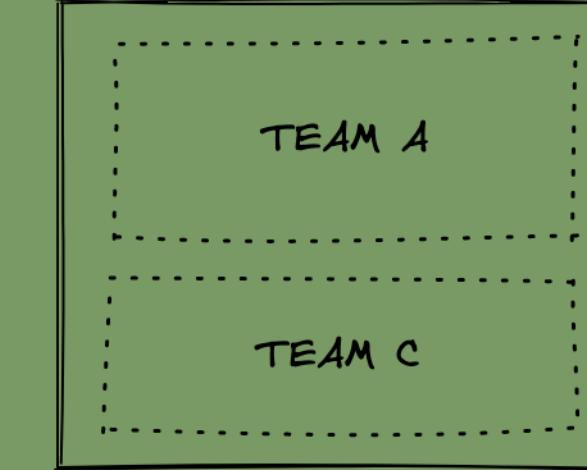
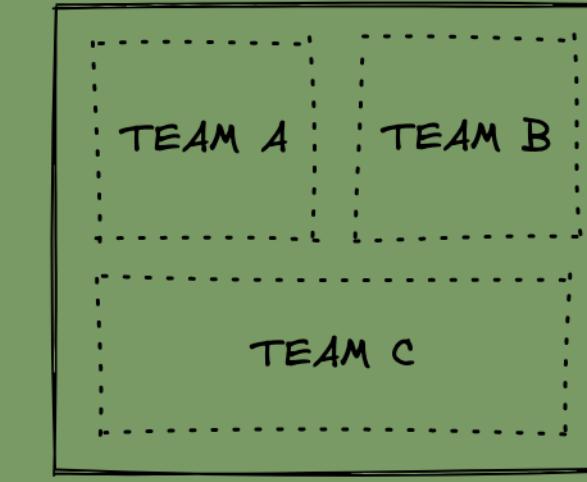
¹From "Team Topologies"

Micro-frontends: Vertical & Horizontal²

Vertical
Micro-frontends



Horizontal
Micro-Frontends

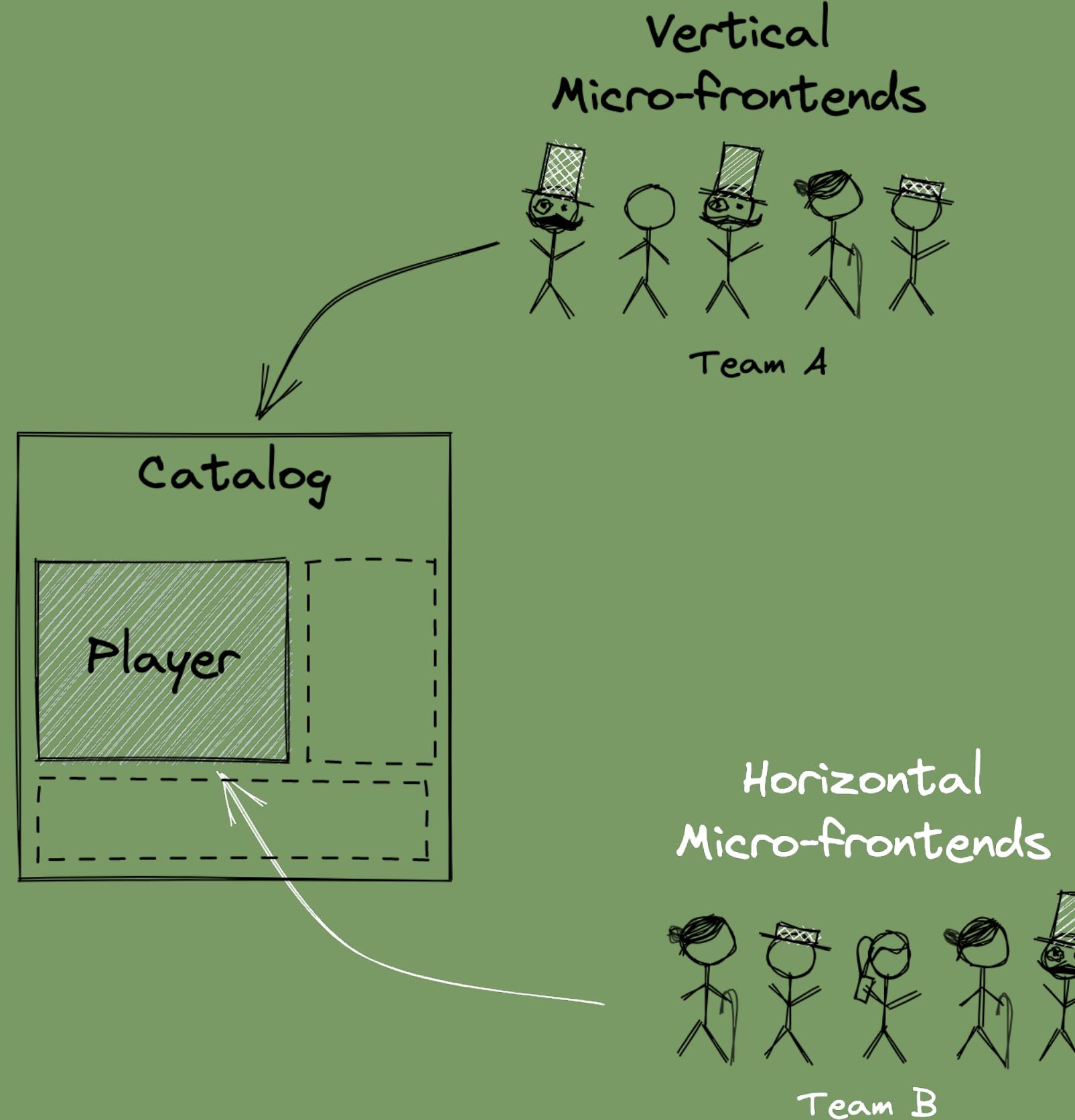


Deep Dive into Horizontal Micro- frontends

- 👉 **Multiple Teams owning parts of the same page**
- 👉 **Coordination needed**
- 👉 **Independent Releases**

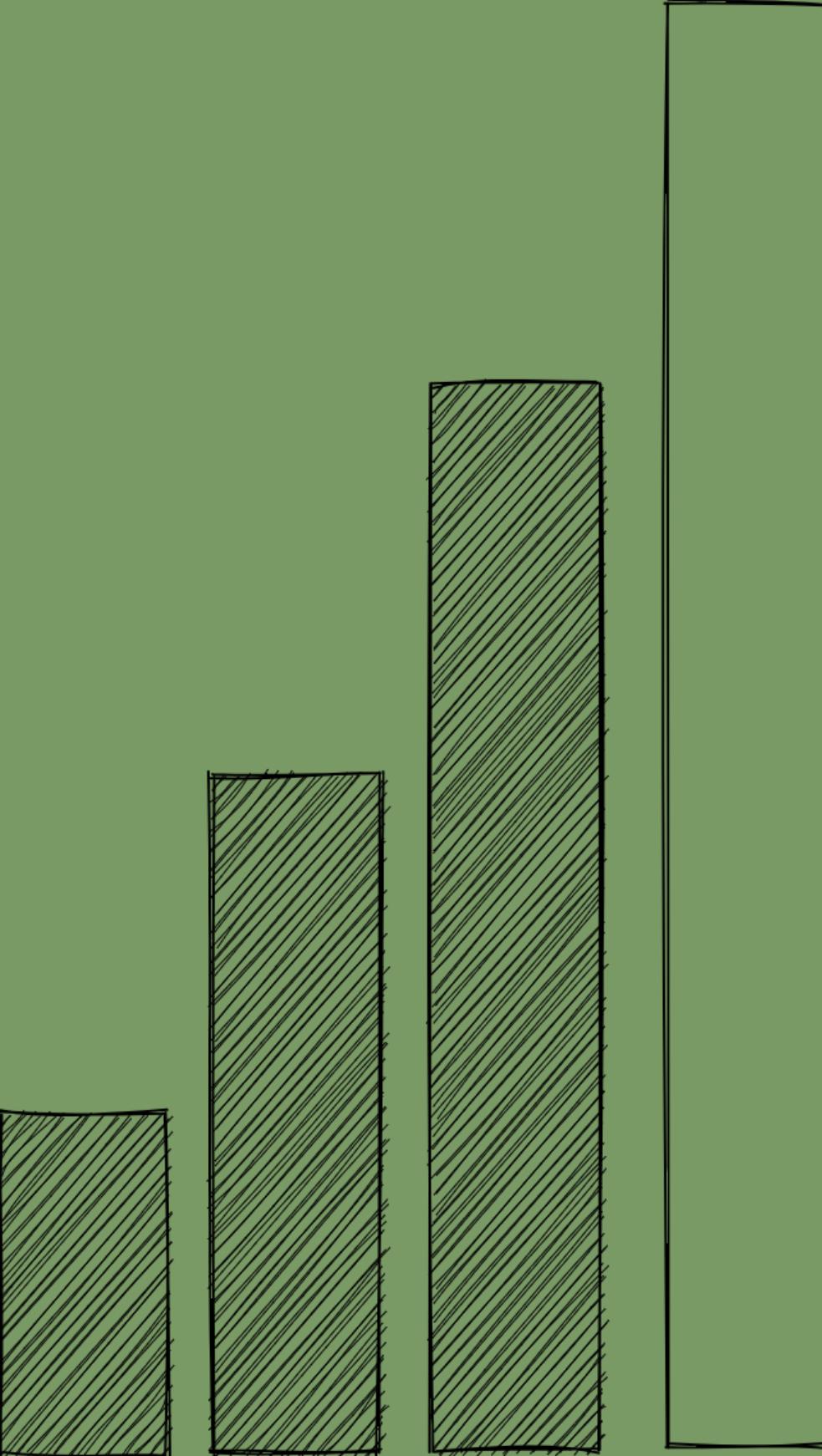
Deep Dive into Horizontal Micro-frontends in DAZN

- 👉 SystemJS
- 👉 Relationship with host
- 👉 Deployment strategy

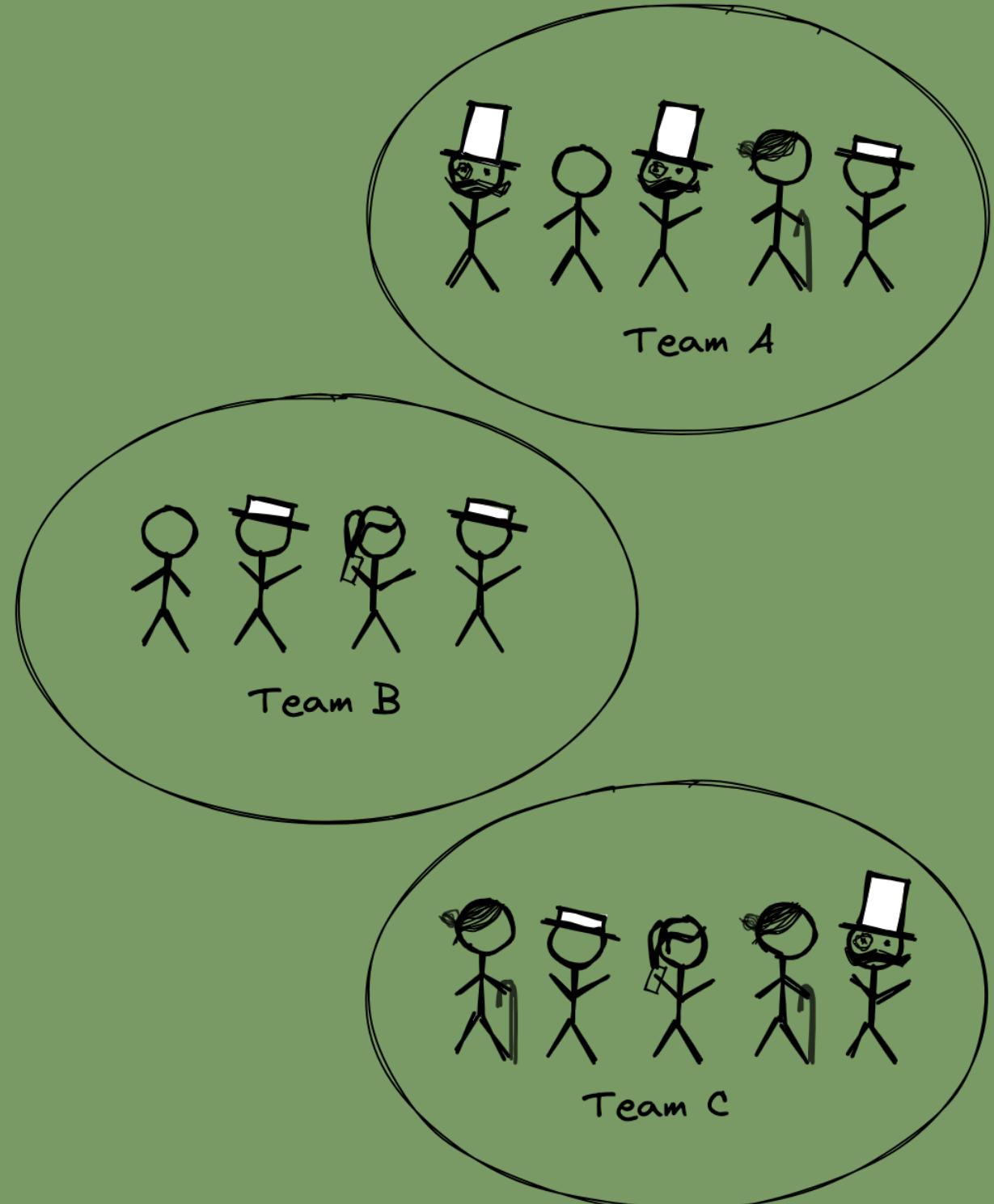


Beyond Team Autonomy

Part 3 of 4



Teams were very autonomous, with the risk of creating silos.



Share Knowledge

👉 **Frontend Guilds**

👉 **Principals & Architects**

Share Knowledge

Decide Together

👉 **Frontend Guilds**

👉 **Principals & Architects**

👉 **Request For Comments
(aka RFC)**

Share Knowledge

Decide Together

Discover More

👉 **Frontend Guilds**

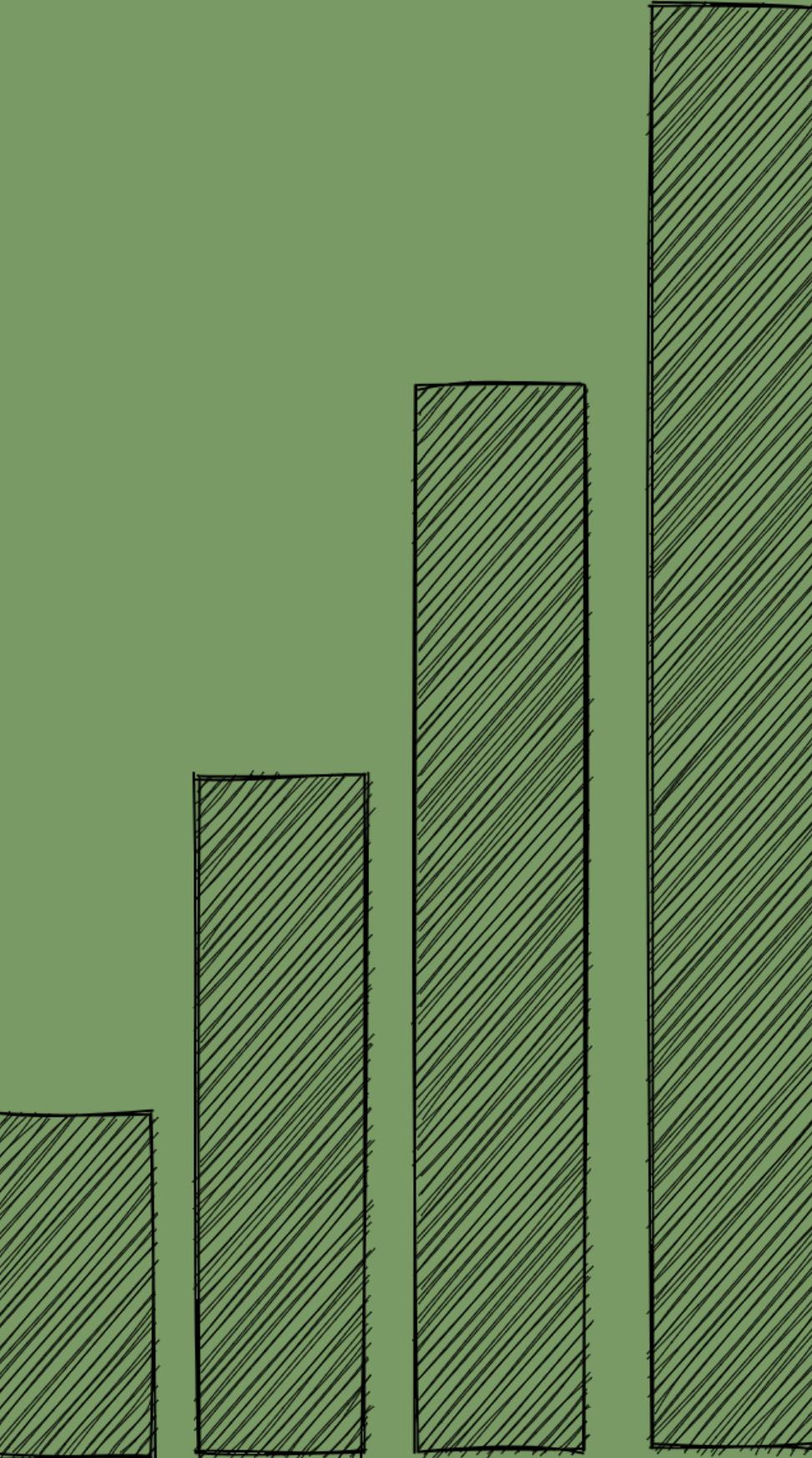
👉 **Principals & Architects**

👉 **Request For Comments
(aka RFC)**

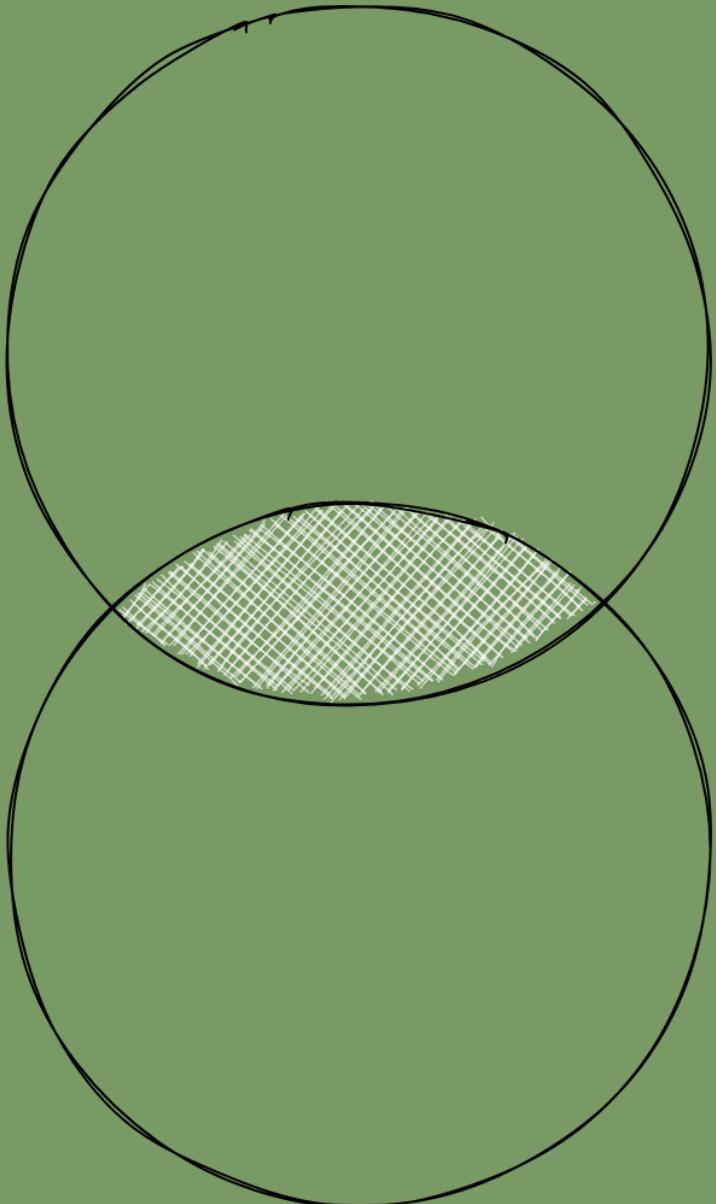
👉 **Backstage (Spotify)**

Sharing Code

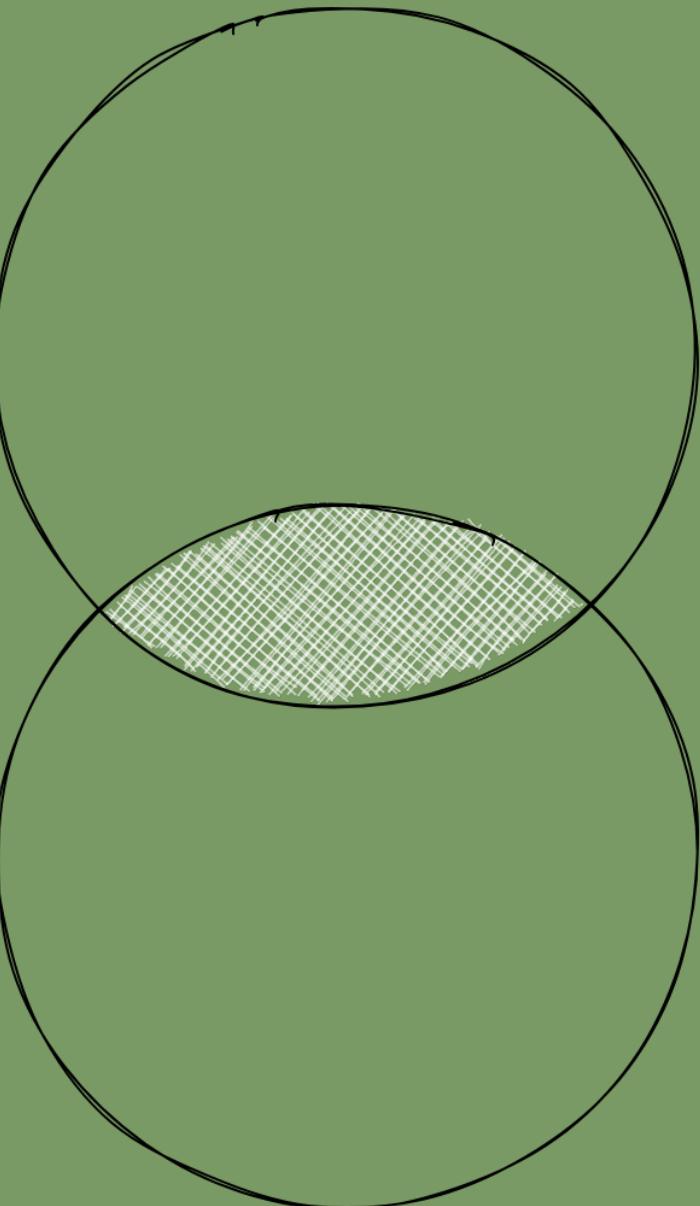
Part 4 of 4



We've got small visual inconsistencies , but not a single visual component has been shared across all the Micro-frontends, yet.



In DAZN, we're starting
to share things
because our priorities
are changing. Share as
solution, not as a goal.



@_maxgallo

Takeaways

- 👉 Your business subdomain ar note immutable
- 👉 Iterate and keep Decision Records
- 👉 Think about sharing, but accept duplication
- 👉 It's always about people

@_maxgallo

thank you

github.com/maxgallo/talk-micro-frontends-three-years-after

@_maxgallo