### Platforms Must Be small

Regardless of Their Size...

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# What is a Platform?

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FLATFORM

DLATFORM



#### **CNCF** Platform White Paper:

"A platform for cloud-native computing is an integrated collection of capabilities defined and presented according to the needs of the platform's users."

#### Martin Fowler:

"A digital platform is a foundation of self-service APIs, tools, services, knowledge and support which are arranged as a compelling internal product."

## Platforms Provide Abstractions

Platforms <u>abstract away the</u> <u>complexity</u> of underlying systems or processes, allowing its users to interact with a simplified, more accessible interface.



# A Platform Is... AN EASY BUTTON

But, *is it* <u>really</u>?

# Platforms are Disruptive

Platforms are inherently disruptive technologies.

## Understanding Platforms as "Disruptive Technologies" is important

- "Products based on disruptive technologies are typically cheaper, simpler, smaller, and frequently, more convenient to use."
  - Christensen, Clayton M.. The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail (Management of Innovation and Change) (p. 25). Harvard Business Review Press.
- The goal for an enterprise platform is to provide users a "better path" over an alternative product or process
- Our platforms may not be designed to disrupt "AWS" or "Azure", but they are designed to disrupt enterprise processes



Platforms have become disruptive...

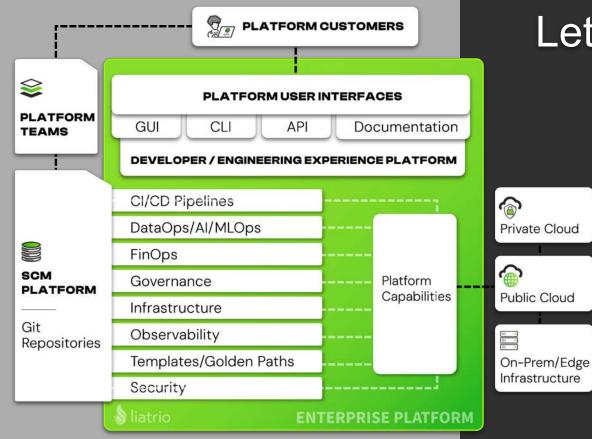
But in the wrong way.

### How did we get here?

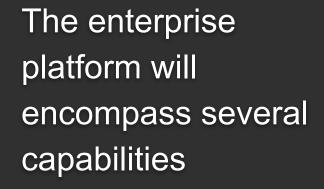
- The current platform was likely built by Conway's Law via a "DevOps team"
- We've spent years trying to improve on automation but this has had a compounding effect
- Enterprise platforms have grown to encompass
   *hundreds* of software delivery tools and services
- **Cognitive load** for supporting all of the tools within all of the platforms is higher than ever



The platform has felt a bit of a snowball effect so far but we have seen this before with other monolithic enterprise applications.



#### Let's Break it Down



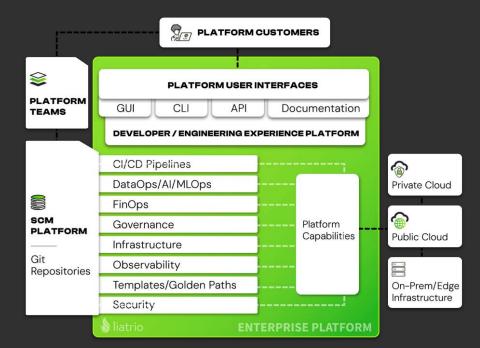


#### That's a lot. The capabilities of the platform are likely too much for one team to support or support well.

### Platforms Must Be "Small"

- We can't look at all of the capabilities as a single platform

   It's a "platform of platforms" and platform teams
- Even though a platform abstracts a lot away from its users, it shouldn't feel cumbersome or difficult to use



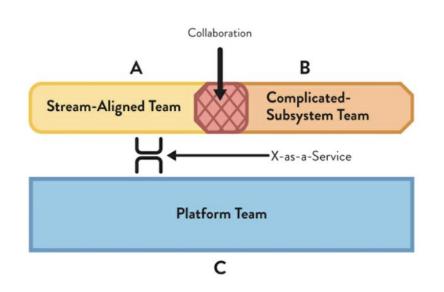


Image taken from the book Team Topologies by Matthew Skelton and Manuel Pais, 2019. Used with permission.

#### The "Thinnest Viable Platform"

"A TVP is a careful balance between keeping the platform small and ensuring that the platform is helping to accelerate and simplify software delivery for teams building on the platform."

(p.101, Team Topologies by Matthew Skelton and Manuel Pais)

## Breaking Up the Monolithic Platform

- Understand the boundaries or domains of each platform's capabilities
  - Each capability may need to be its own platform and platform team
- Treat the "Platform as a Product"
- Provide platform guidance and standards: (for example)
  - Adopt an "everything as code" approach
  - Every platform provides an API (common structure)
  - Every platform is self-service
  - Measure the user experience
  - Open the platform for "InnerSourcing"



#### So that's it? Definitely not!

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