Building A Career In The Cloud

TLDR – It's more than tech

Lessons from the trenches

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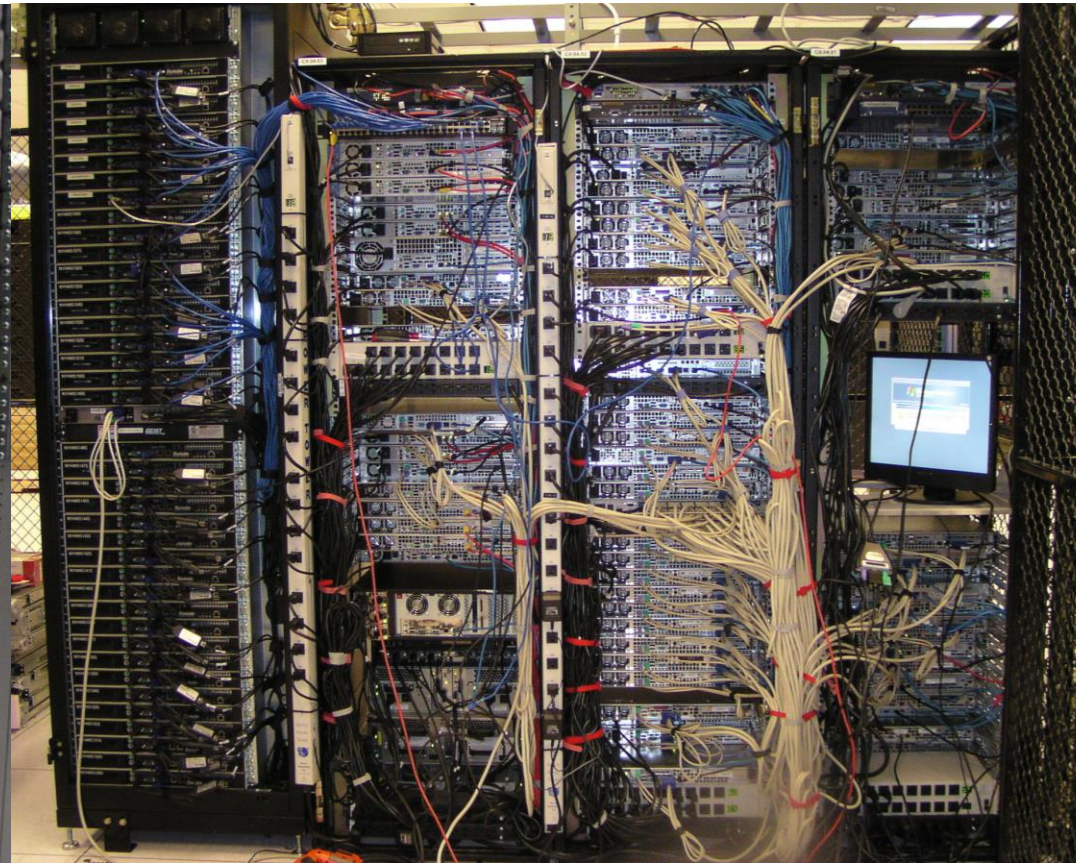
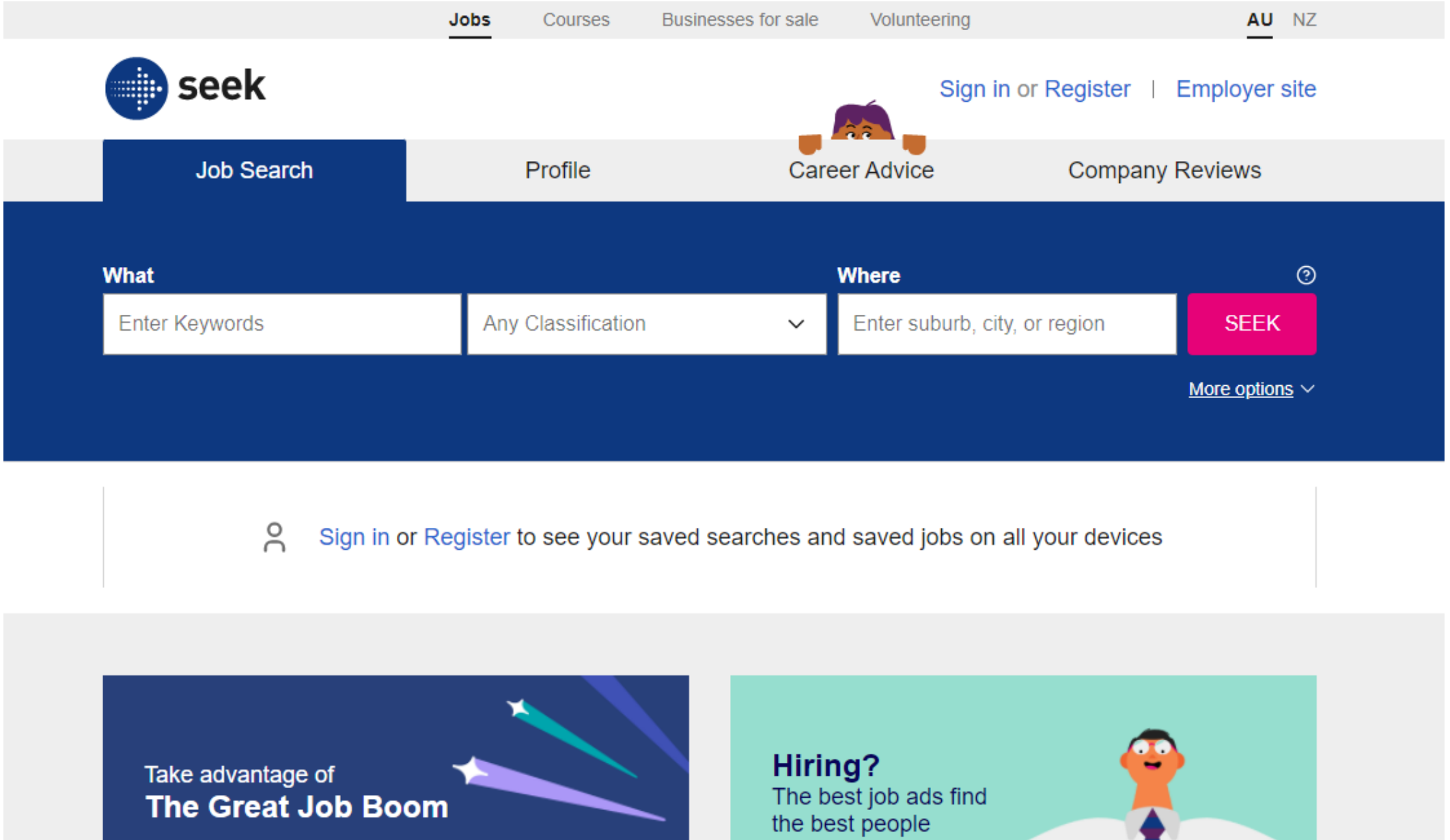
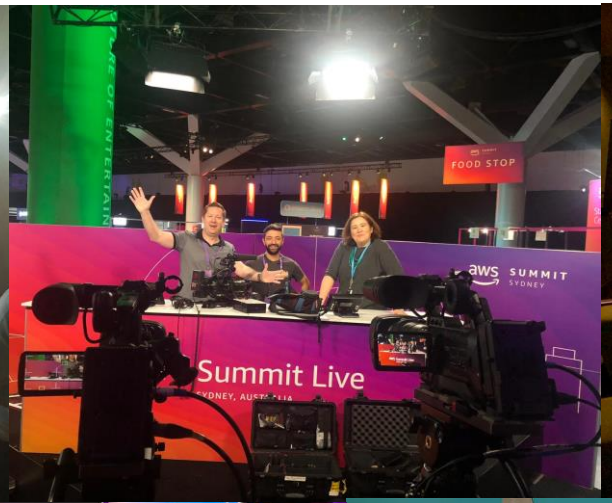
Start-Up

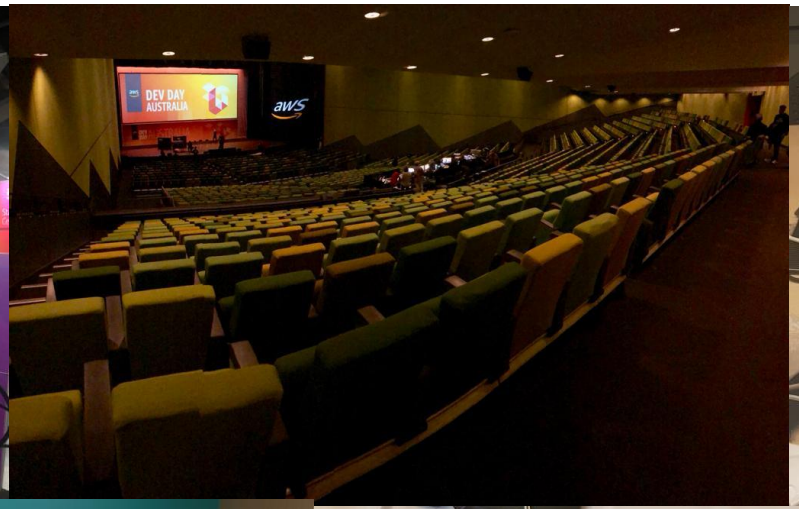


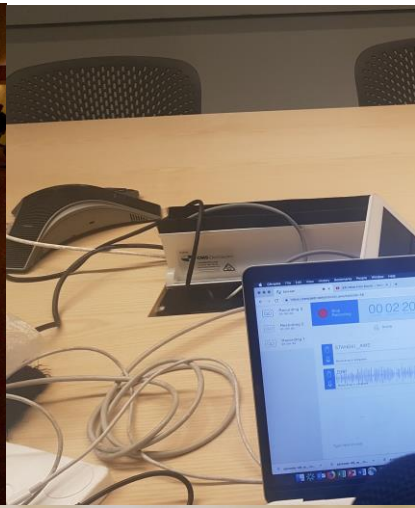
Scale Up

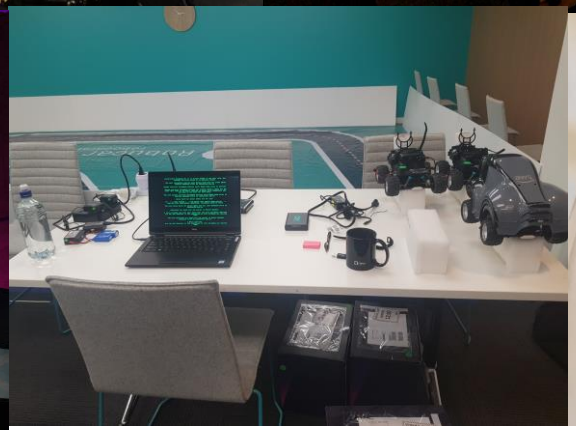

Jobs
Courses
Businesses for sale
Volunteering
AU
NZ
seek
Sign in or Register | Employer site
Job Search
Profile
Career Advice
Company Reviews
What
Where
Enter Keywords
Any Classification
Enter suburb, city, or region
SEEK
More options
Sign in or Register to see your saved searches and saved jobs on all your devices
Take advantage of
The Great Job Boom
Hiring?
The best job ads find
the best people

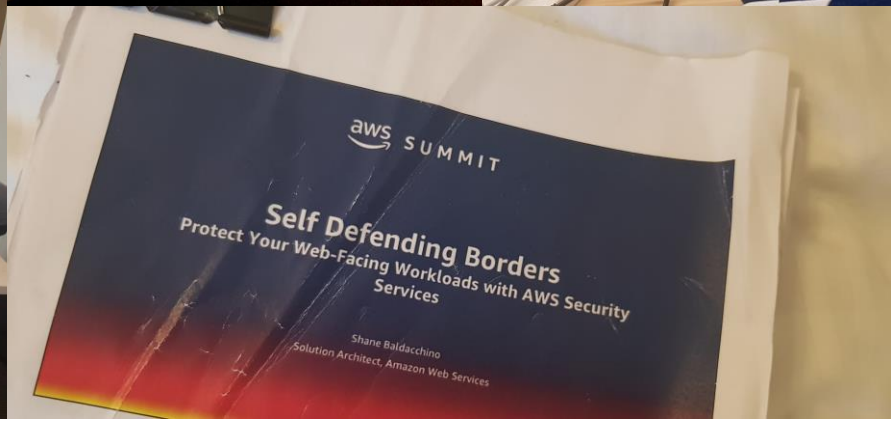
Time Warp









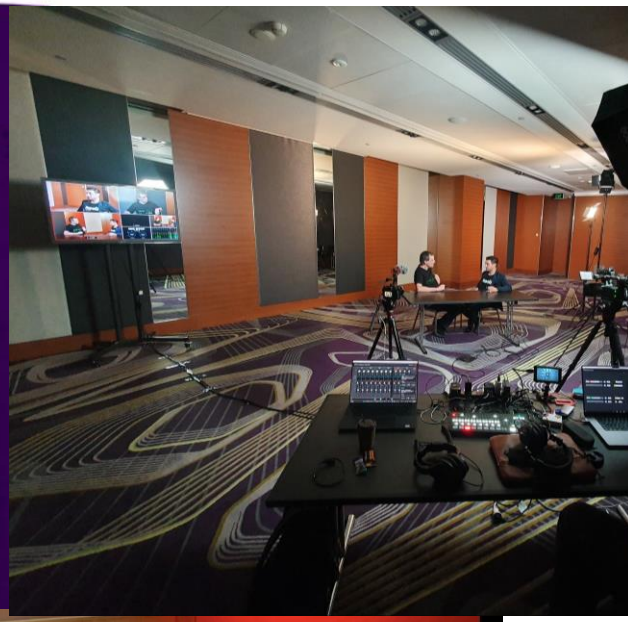


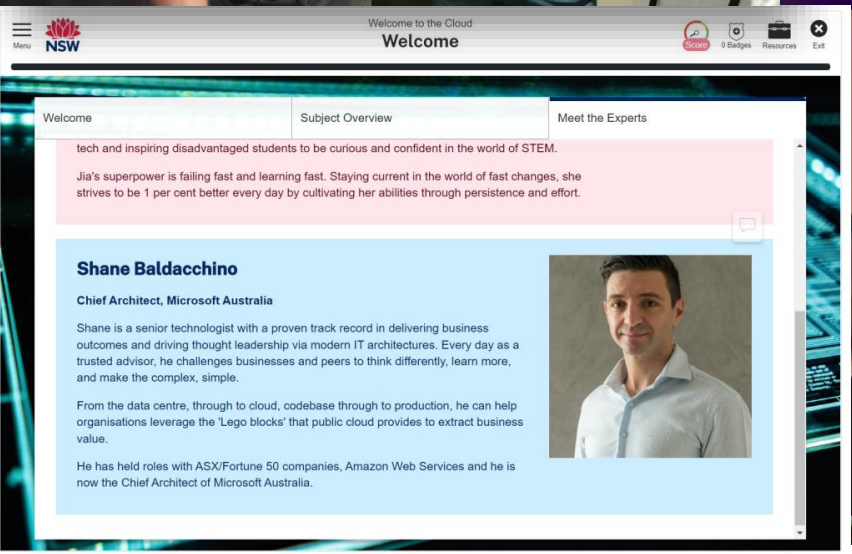
PS5

amazon cloudfront

NETFLIX

The Future





Microsoft

Define
Cloud Native

Cloud-native architecture and technologies are an approach to designing, constructing, and operating workloads that are built in the cloud and take full advantage of the cloud computing model.

https://docs.microsoft.com/en-us/dotnet/architecture/cloud-native/definition

Attributes Of Cloud Natives

They Move Fast

Empowered decentralised teams

Fail Fast

Challenger vs Champion

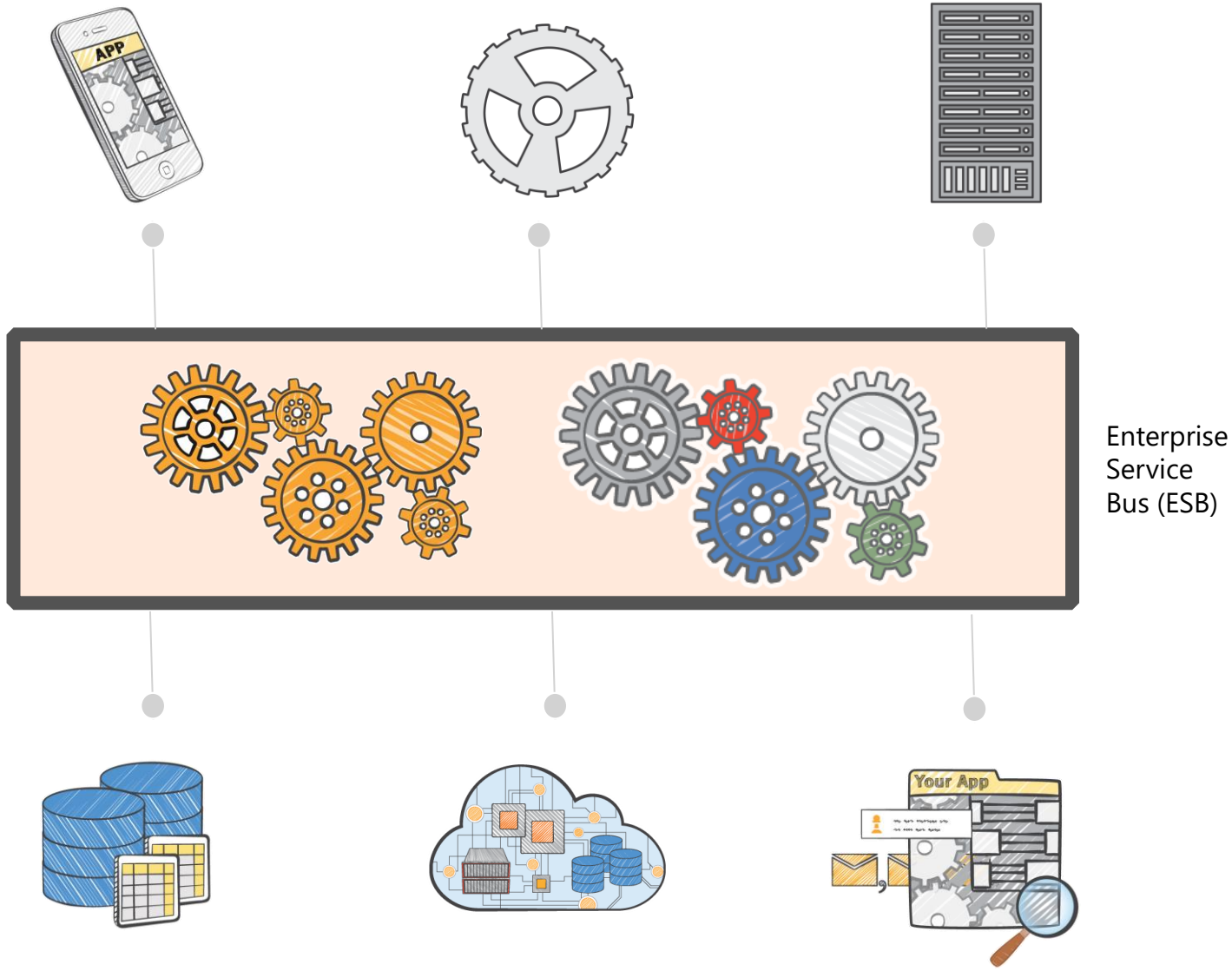
They know their stuff

This is more than a ‘marketecture’ call

Architectures
They are changing

Monolith (< 1990's)

Service Orientated Architecture - > 1990 < 2010



Microservices - > 2010

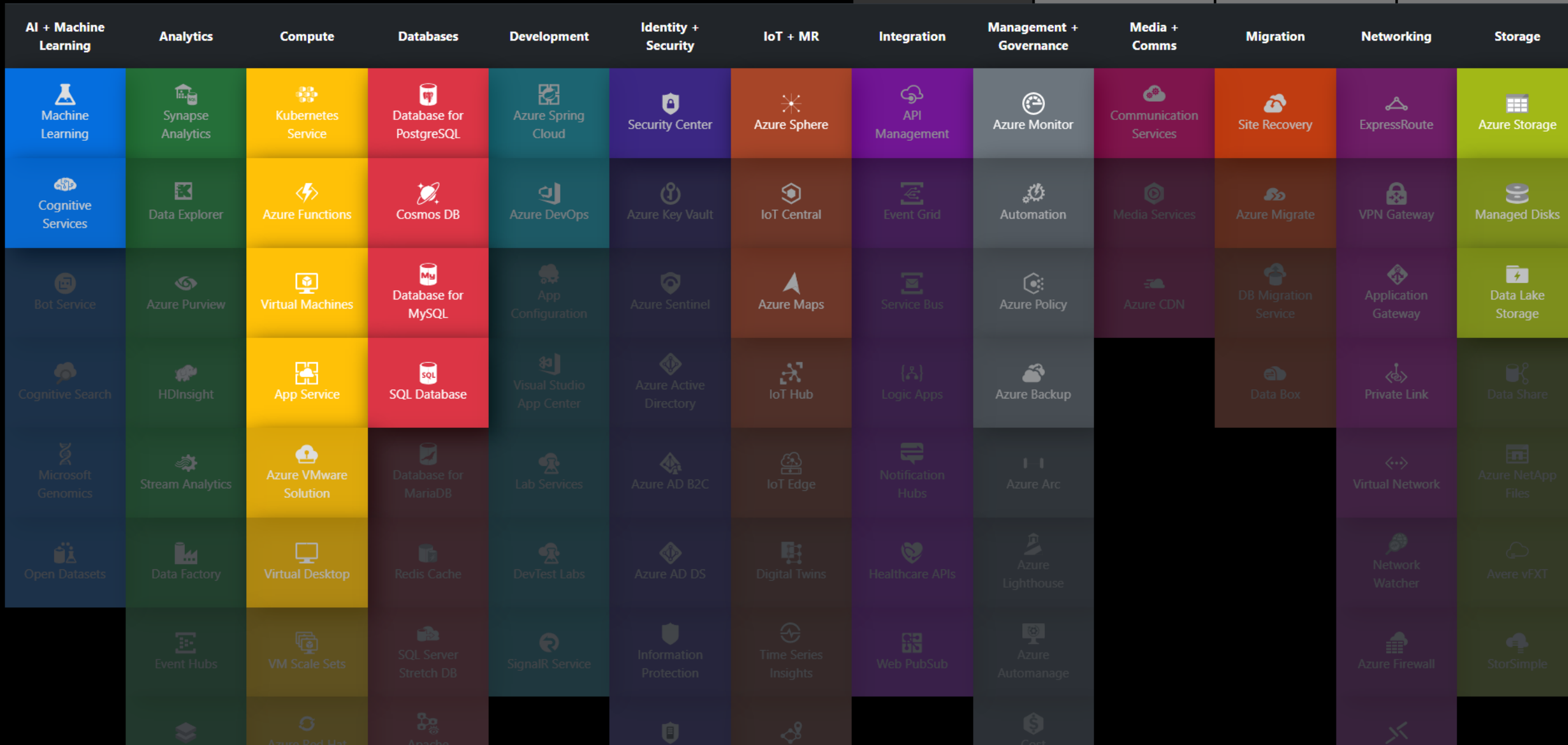
Image: https://en.wikipedia.org/wiki/Swarm_behaviour

Microservices

Azure Heat Map

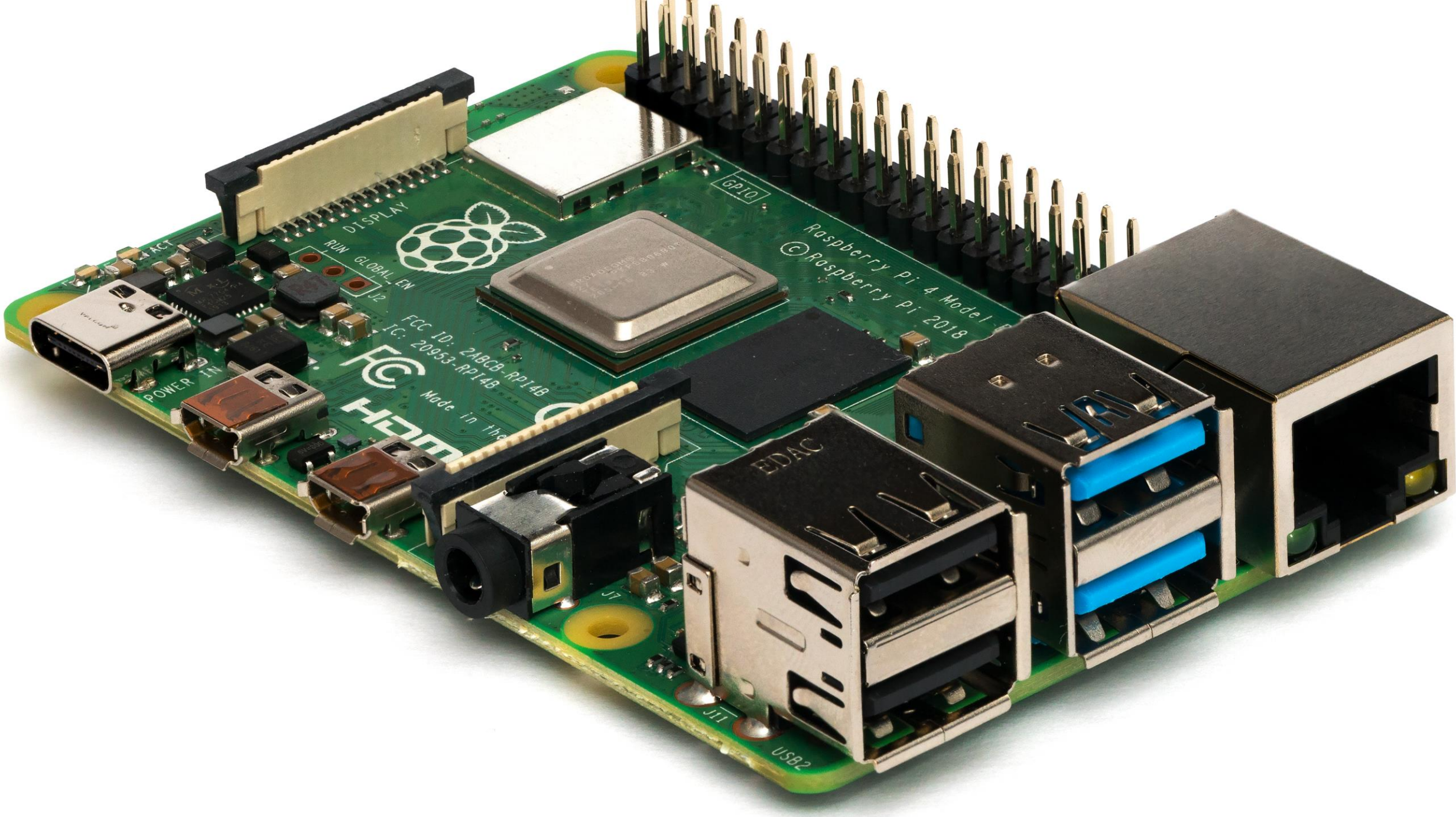
Azure Updates data for last 6 months visualized. Rebuilt 51 minutes 34 seconds ago.

ALL UPDATES EQUAL | LATEST MORE IMPORTANT | ONLY LAST 7 DAYS | ALL MENTIONS



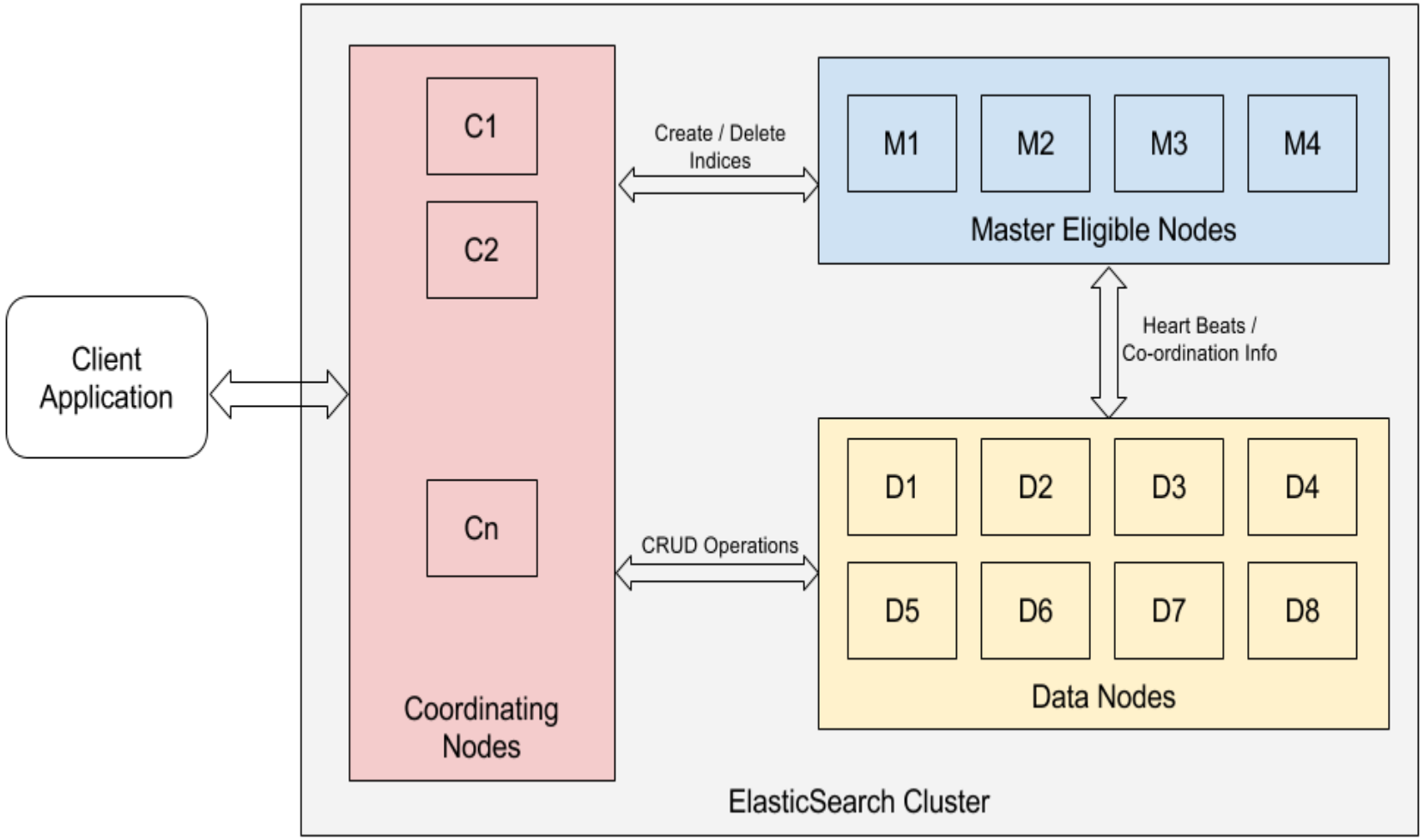
2022
Developer
Survey
In May 2022 over 70,000 developers told us how they learn and level up, which tools they're using, and what they want.
Read the overview →
Methodology →

Engineering Economics

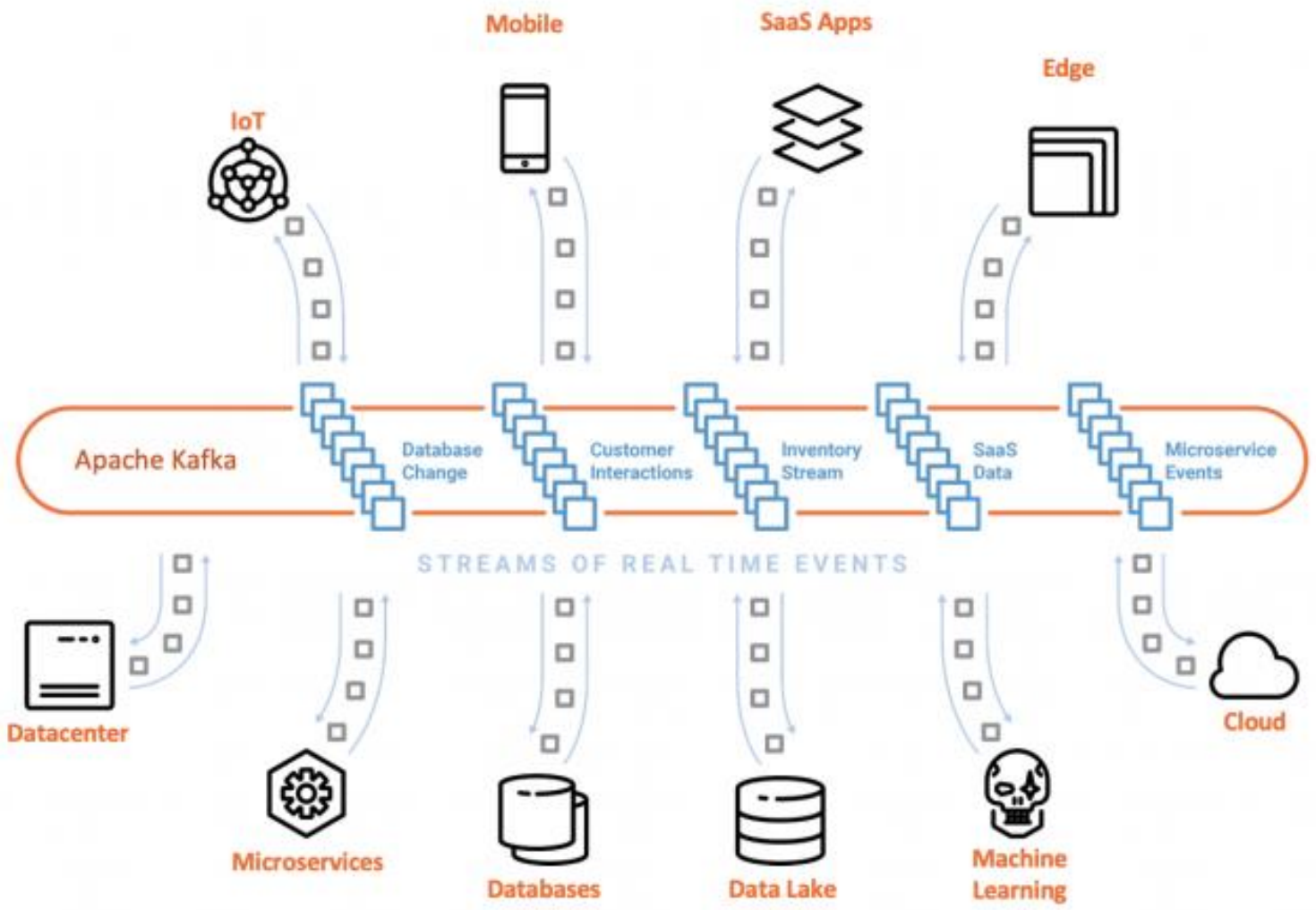

DISPLAY
GPIO
RUN
GLOBAL_EN
J2
ACT
POWER IN
FCC ID: 2ABCB-RPI4B
IC: 20953-RPI4B
Made in the
Raspberry Pi 4 Model
© Raspberry Pi 2018
EDAC
J7
J11
USB2

Software Stacks & Concepts
You should be aware of

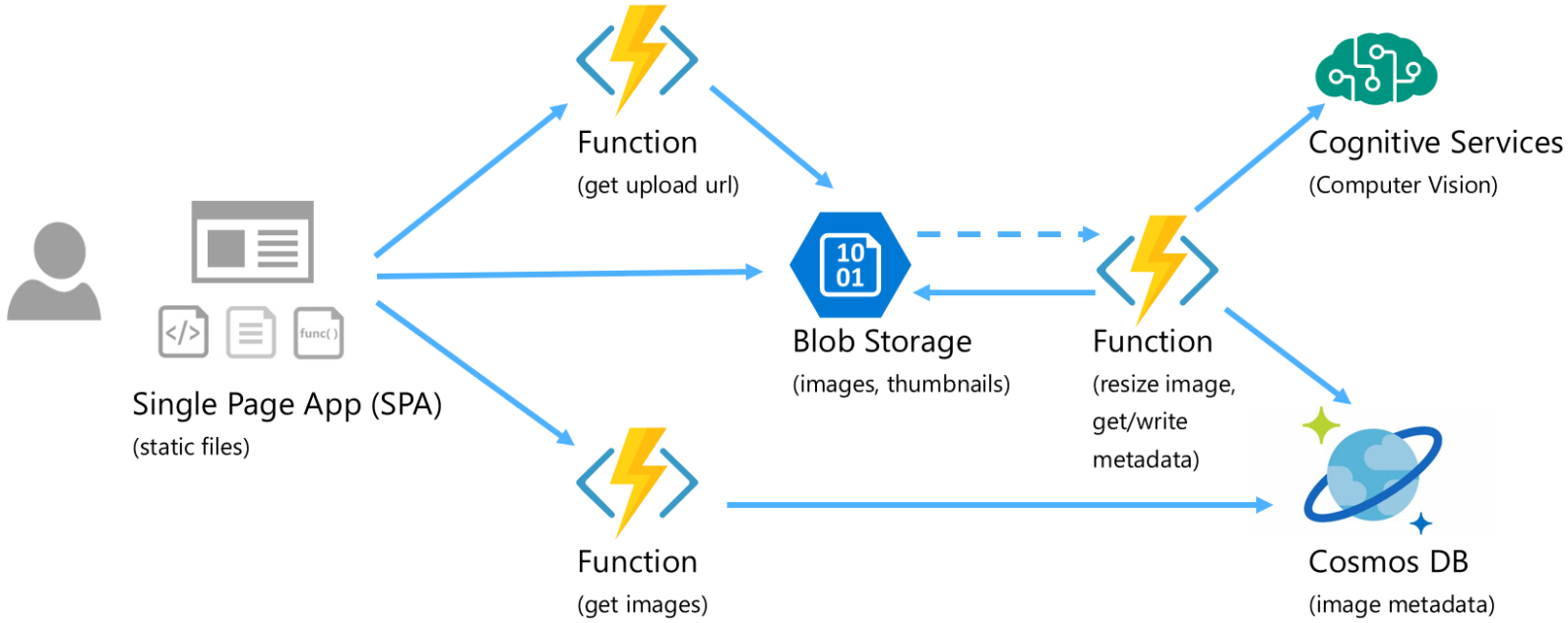
Apache Lucene Based Search



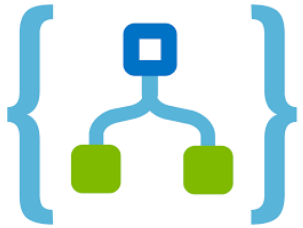
Event Streaming

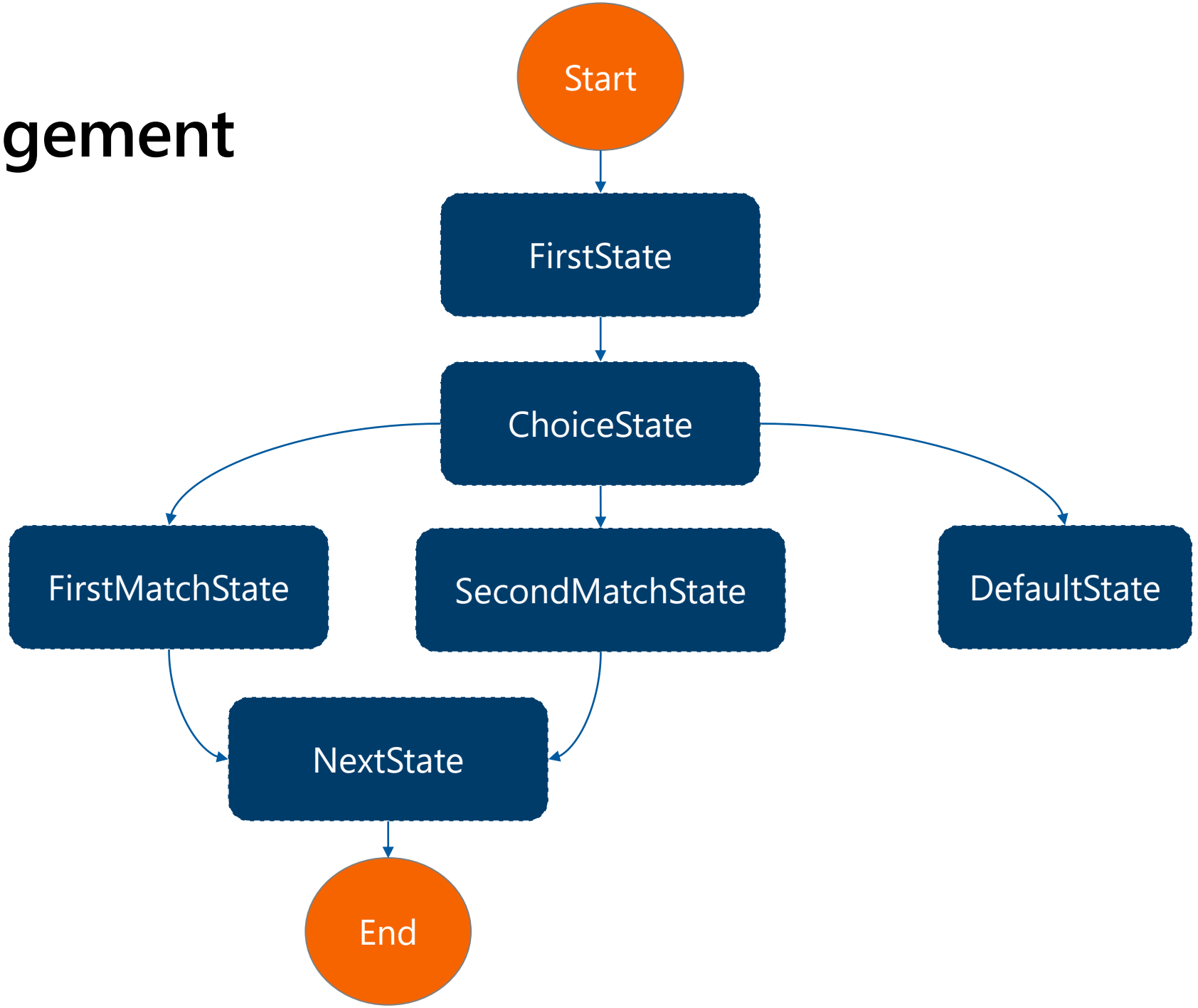


Event Driven Architectures

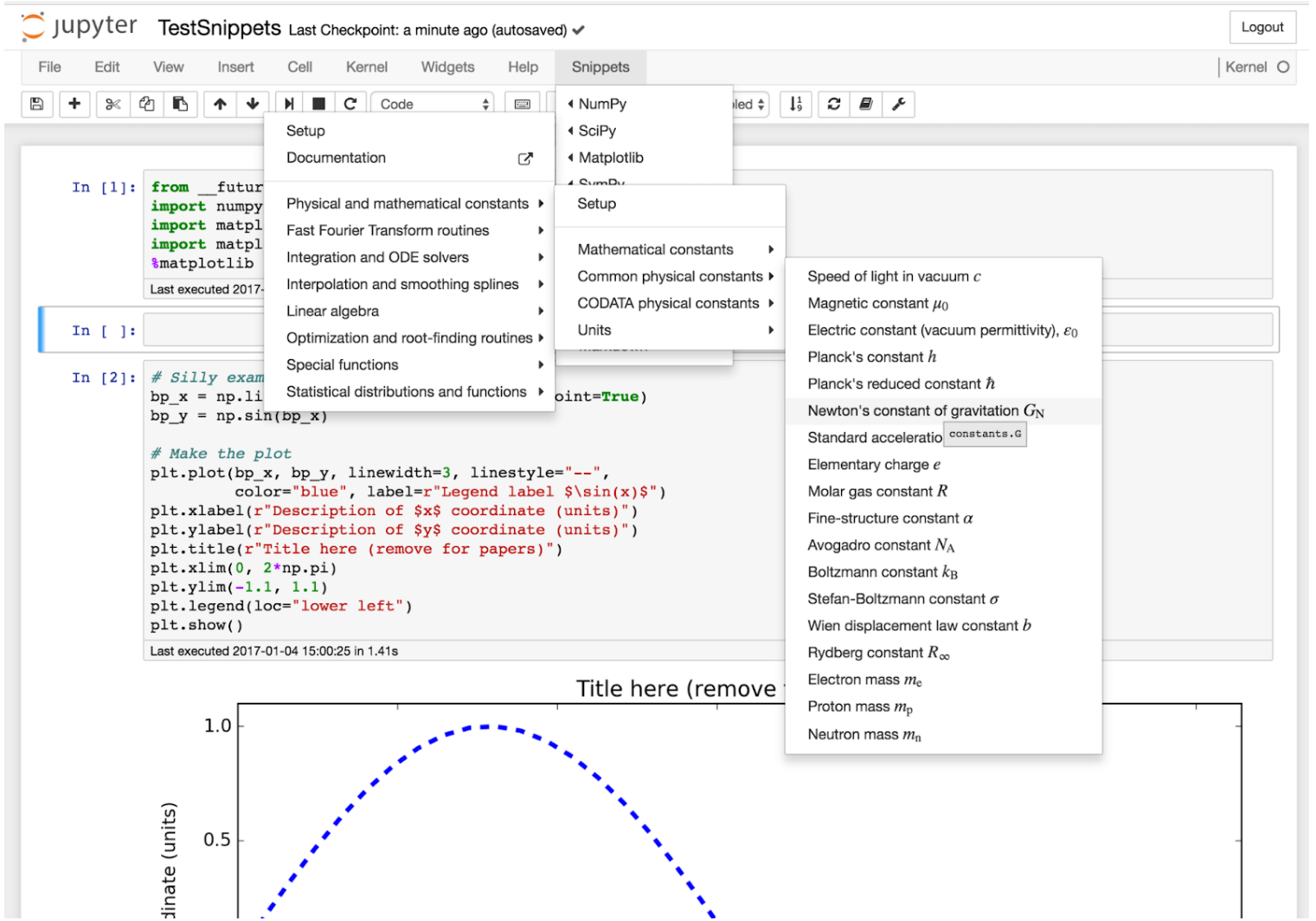


Workflow Management

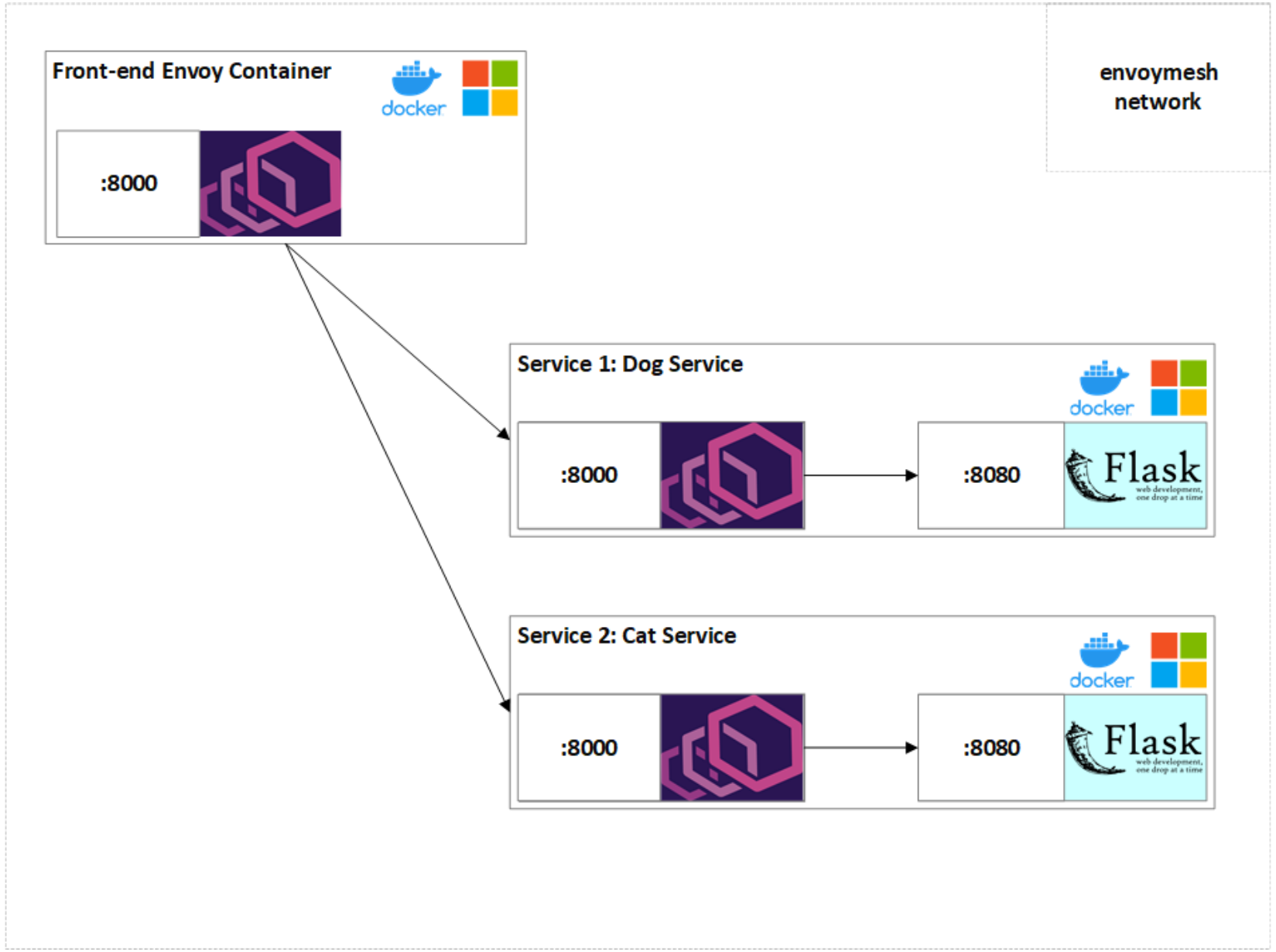




Machine Learning



L7 Routing


envoymesh network
Front-end Envoy Container
docker
:8000
Service 1: Dog Service
docker
:8000
:8080
Flask
web development, one drop at a time
Service 2: Cat Service
docker
:8000
:8080
Flask
web development, one drop at a time

Culture

Eats Tech For Breakfast

Conway's Law

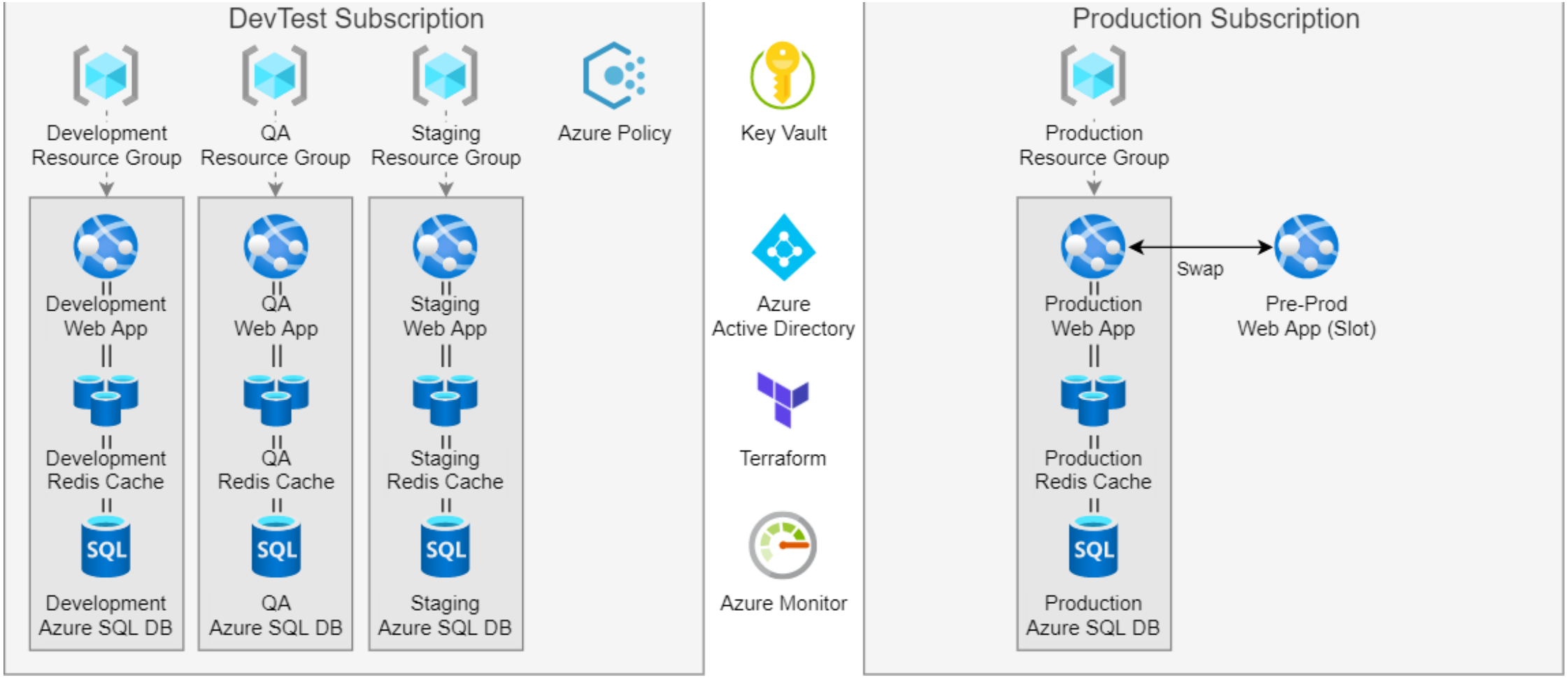
organizations which design systems (in the broad sense used here) are constrained to **produce designs which are copies of the communication structures**

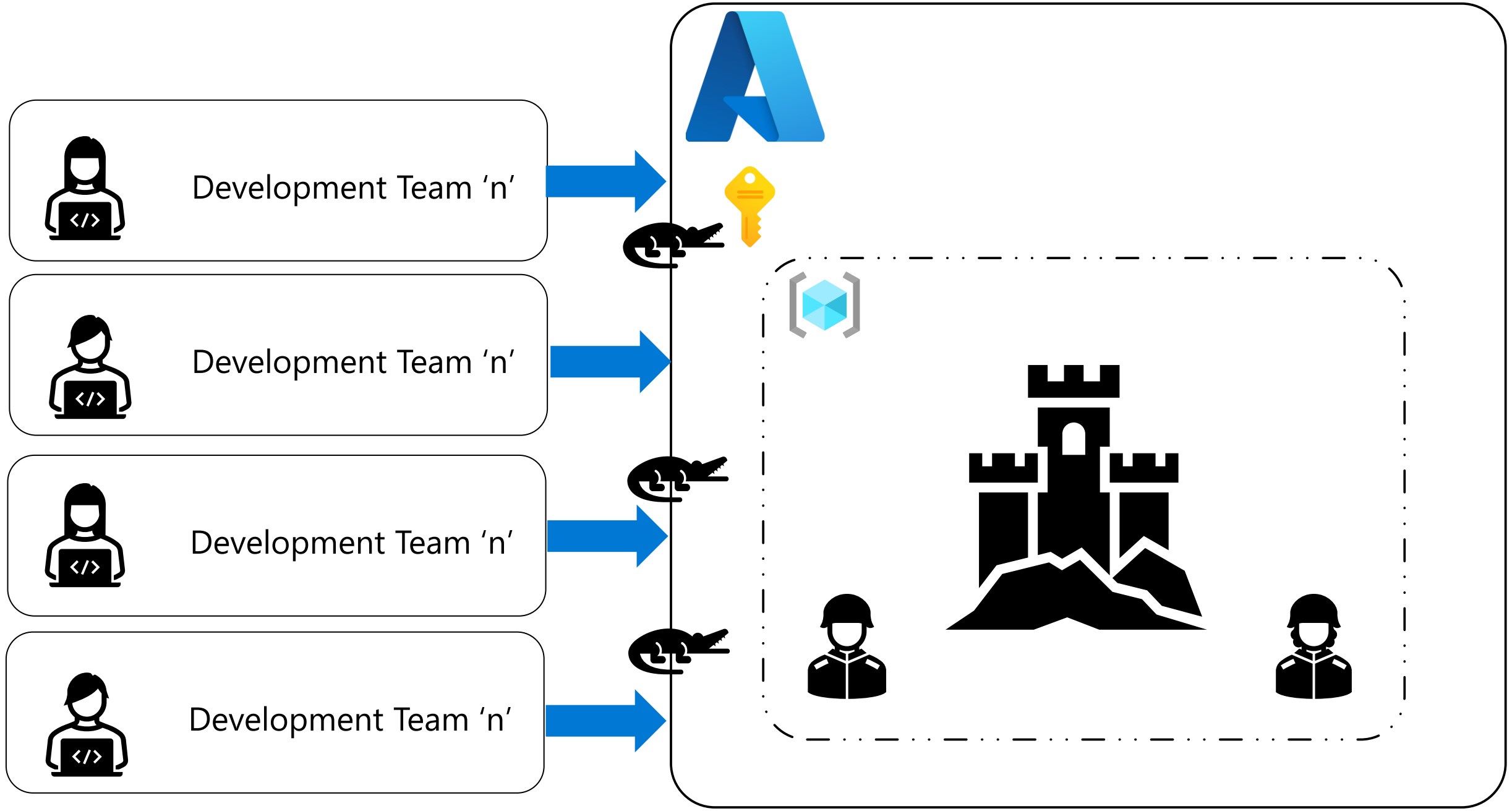
of these organizations

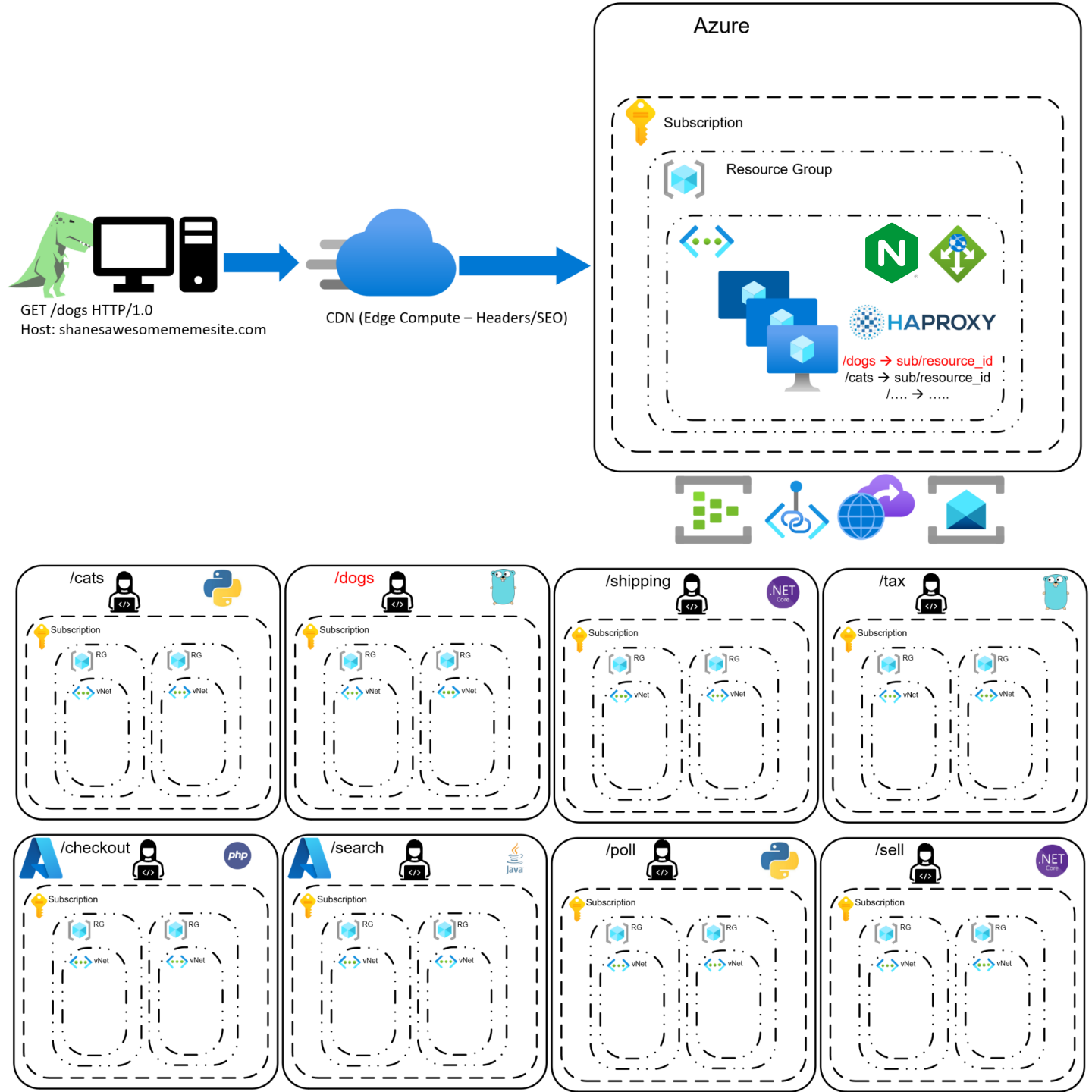
Melvin Conway, Datamation, **1968**

http://www.melconway.com/Home/Conways_Law.html

Classic Account Structure




Development Team ‘n’
Development Team ‘n’
Development Team ‘n’
Development Team ‘n’


Azure
Subscription
Resource Group
HAPROXY
/dogs → sub/resource_id
/cats → sub/resource_id
/.... → .....
GET /dogs HTTP/1.0
Host: shanesawesomememesite.com
CDN (Edge Compute – Headers/SEO)
/cats
/dogs
/shipping
/tax
/checkout
/search
/poll
/sell
Subscription
RG
vNet

Hundreds of teams

× Microservice architecture

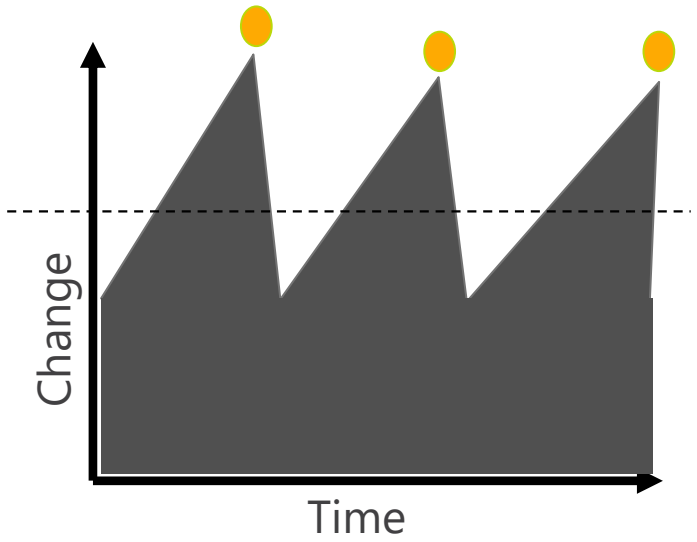
× Continuous delivery

× Multiple environments

= IT no longer a business blocker

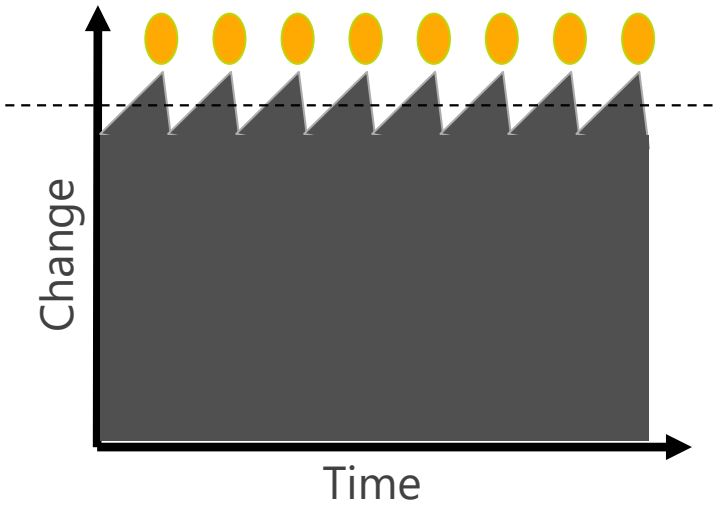
Deploying More Frequently Lowers Risk

Waterfall

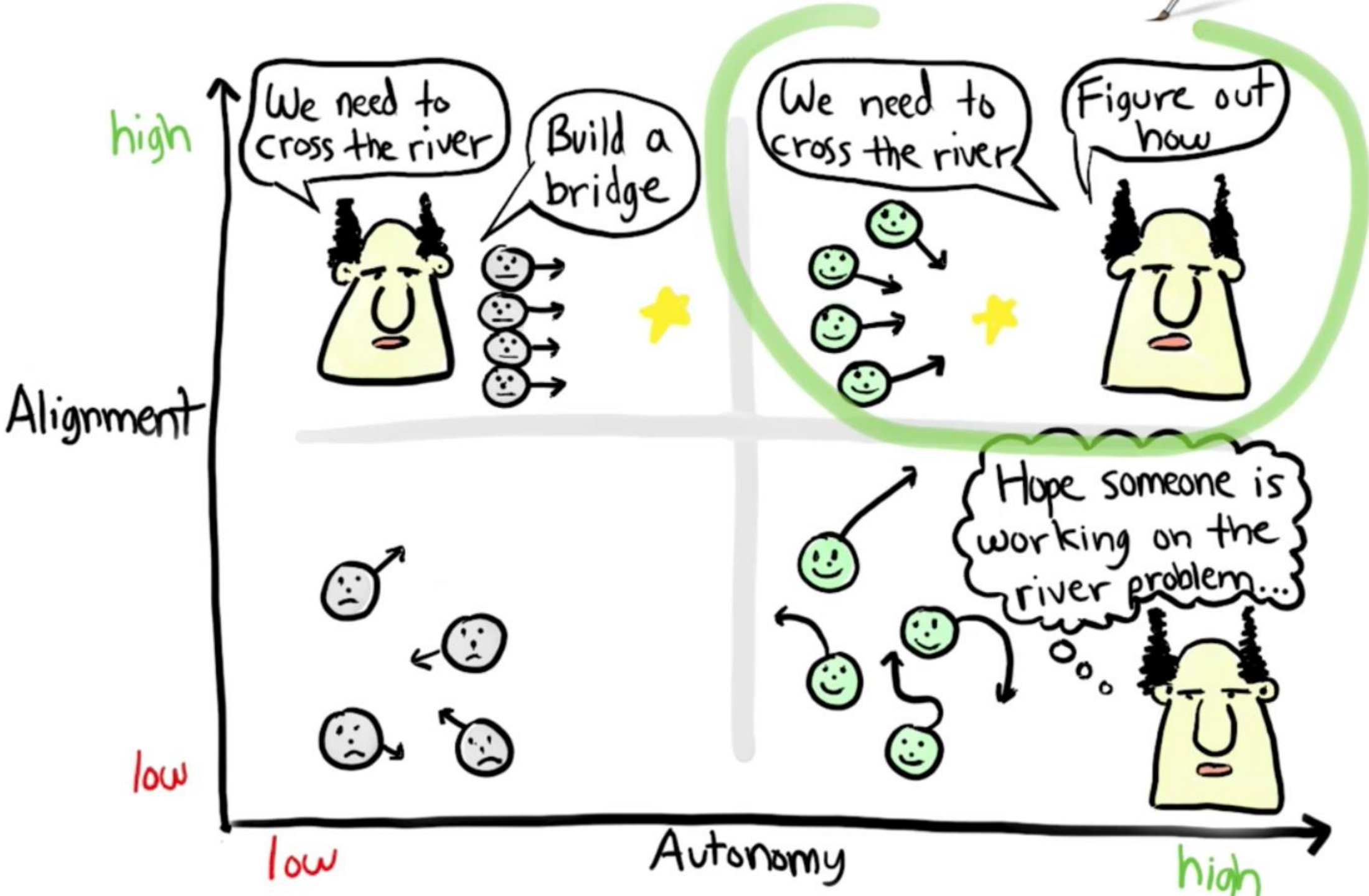


Larger Effort – Increased Risk

Agile



Smaller Effort – Reduced Risk


high
Alignment
low
low
Autonomy
high
We need to cross the river
Build a bridge
We need to cross the river
Figure out how
Hope someone is working on the river problem...

How I got started

Call To Action

Be A Learn It All

How are you sharpening your saw

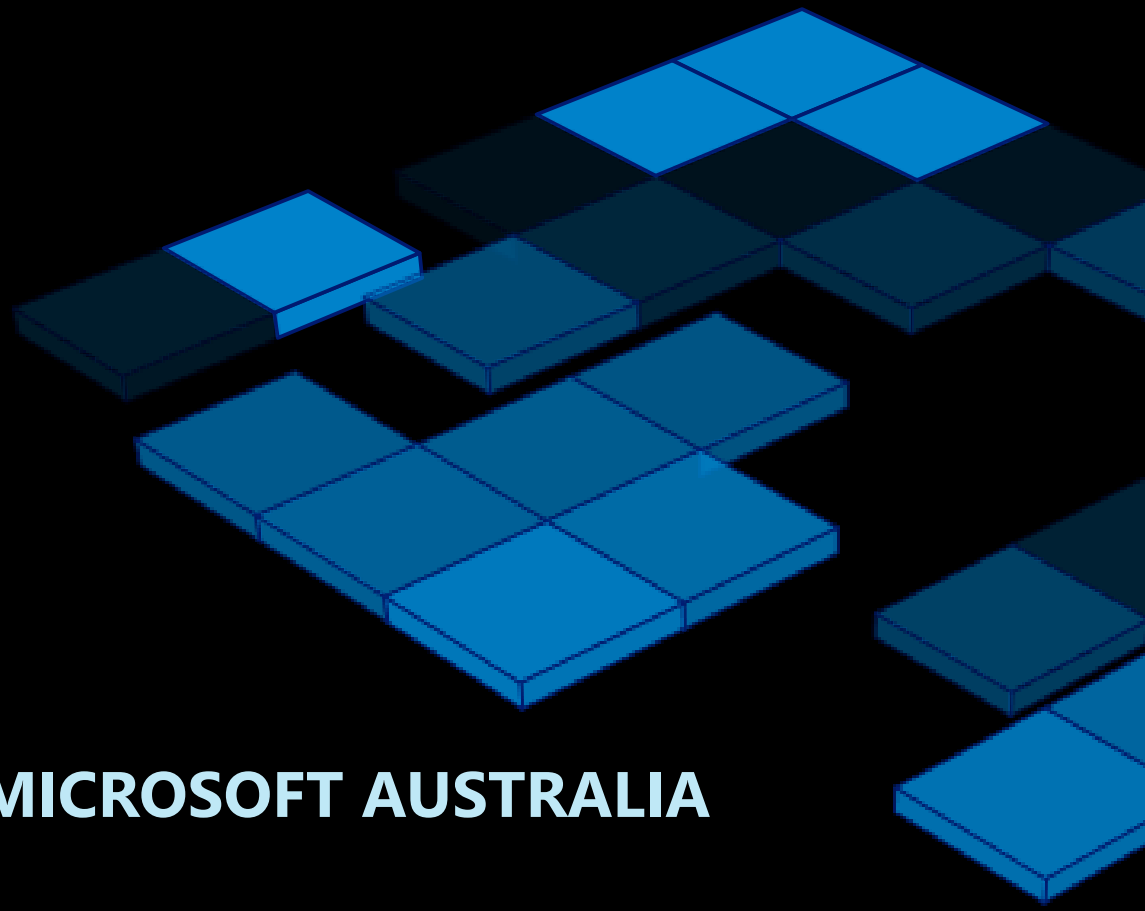
Culture

Is your engagement approach on point?

Want to know more?

Drop me a message (details next).

Let’s Be Friends.....



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