ORDERS OF MAGNITUDE

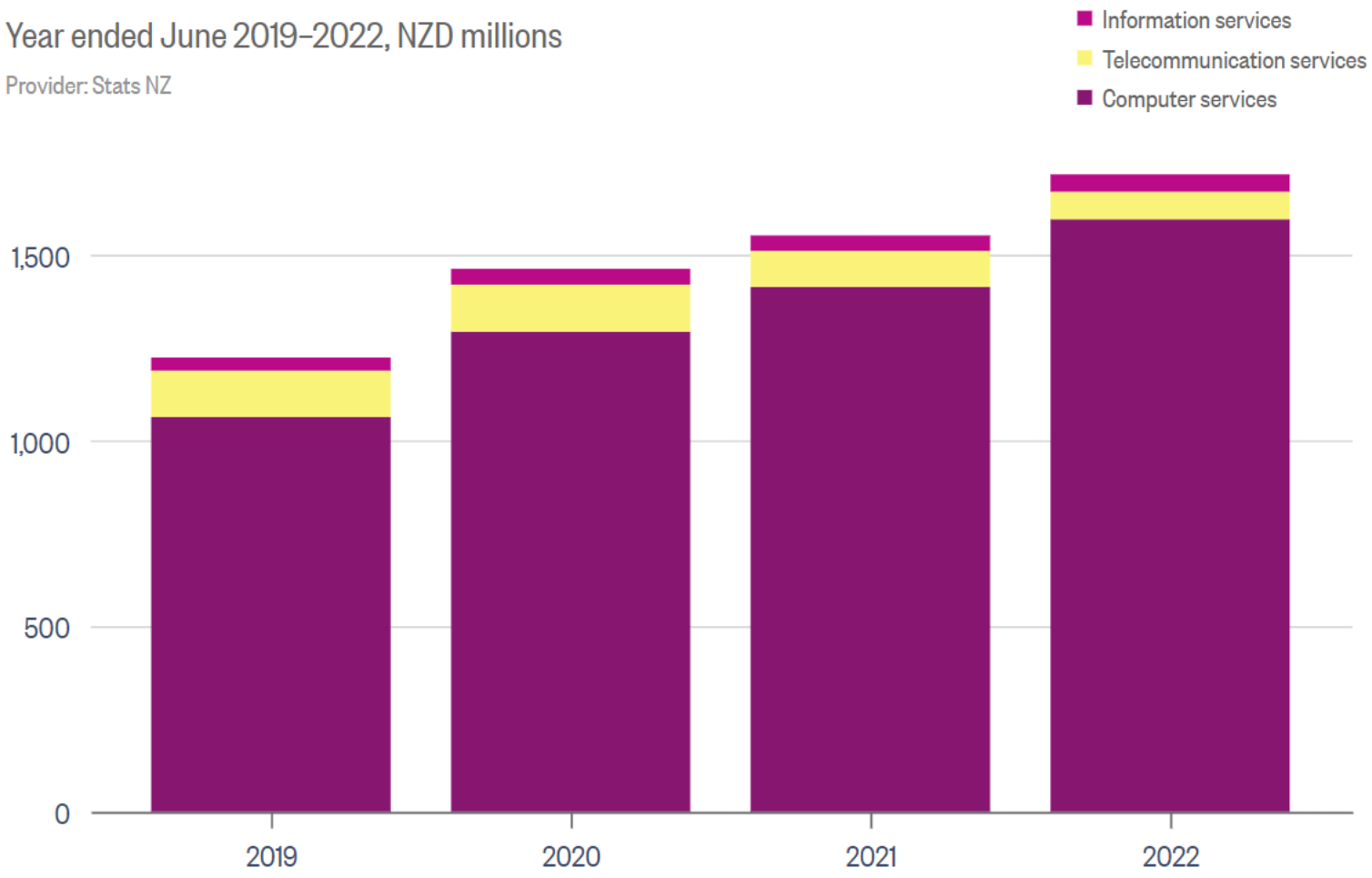
Cloud-native technology strategies for global scale.

Value of telecommunication, computer, and information services exported from New Zealand

Year ended June 2019–2022, NZD millions

Provider: Stats NZ

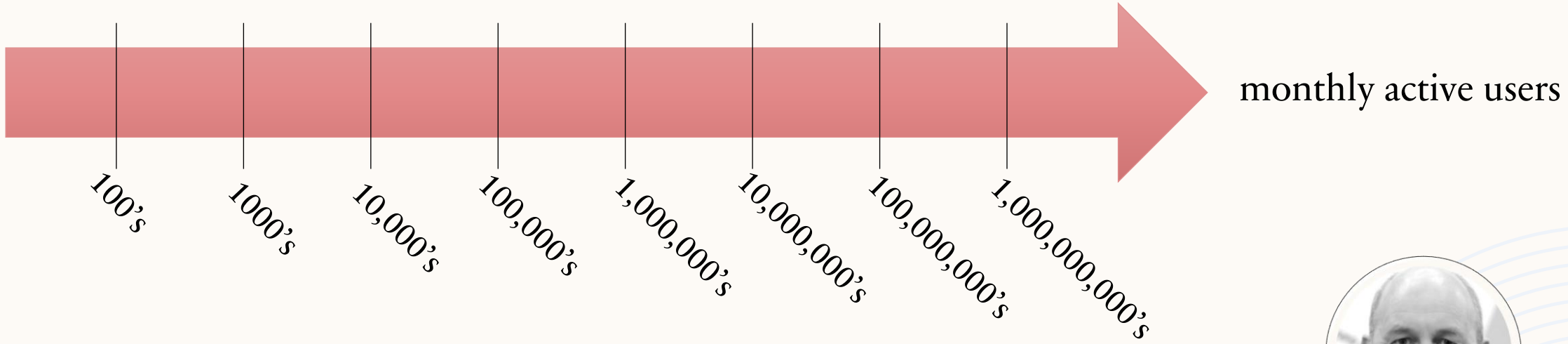
figure.nz



“…WITH EVERY ORDER OF MAGNITUDE OF GROWTH, … REVISIT YOUR ARCHITECTURE…”

Werner Vogels – Amazon CTO

ORDERS OF MAGNITUDE

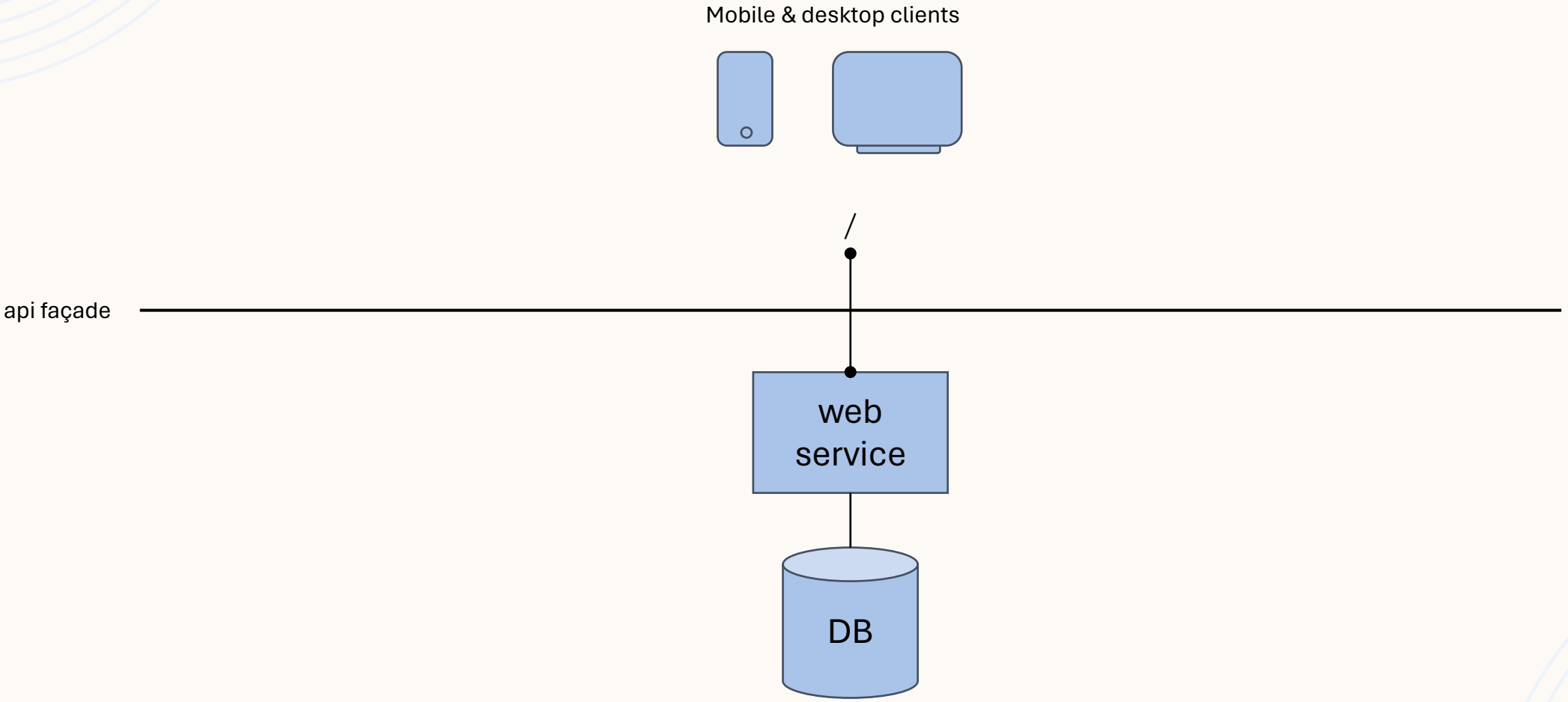


Werner Vogels

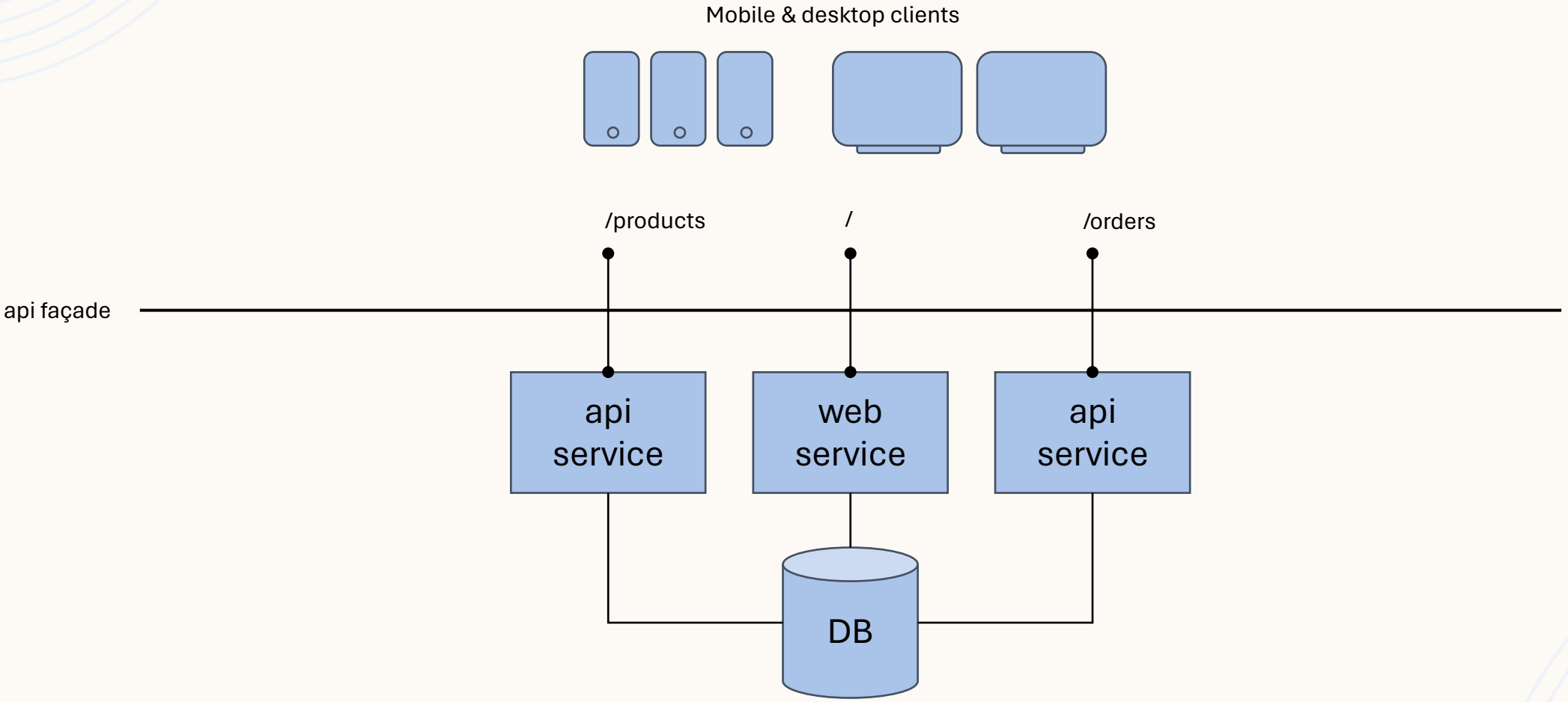
SYSTEMS WILL MIMIC THE COMMUNICATION STRUCTURES OF THE ORGANISATIONS THAT DESIGN THEM.

Conway's Law

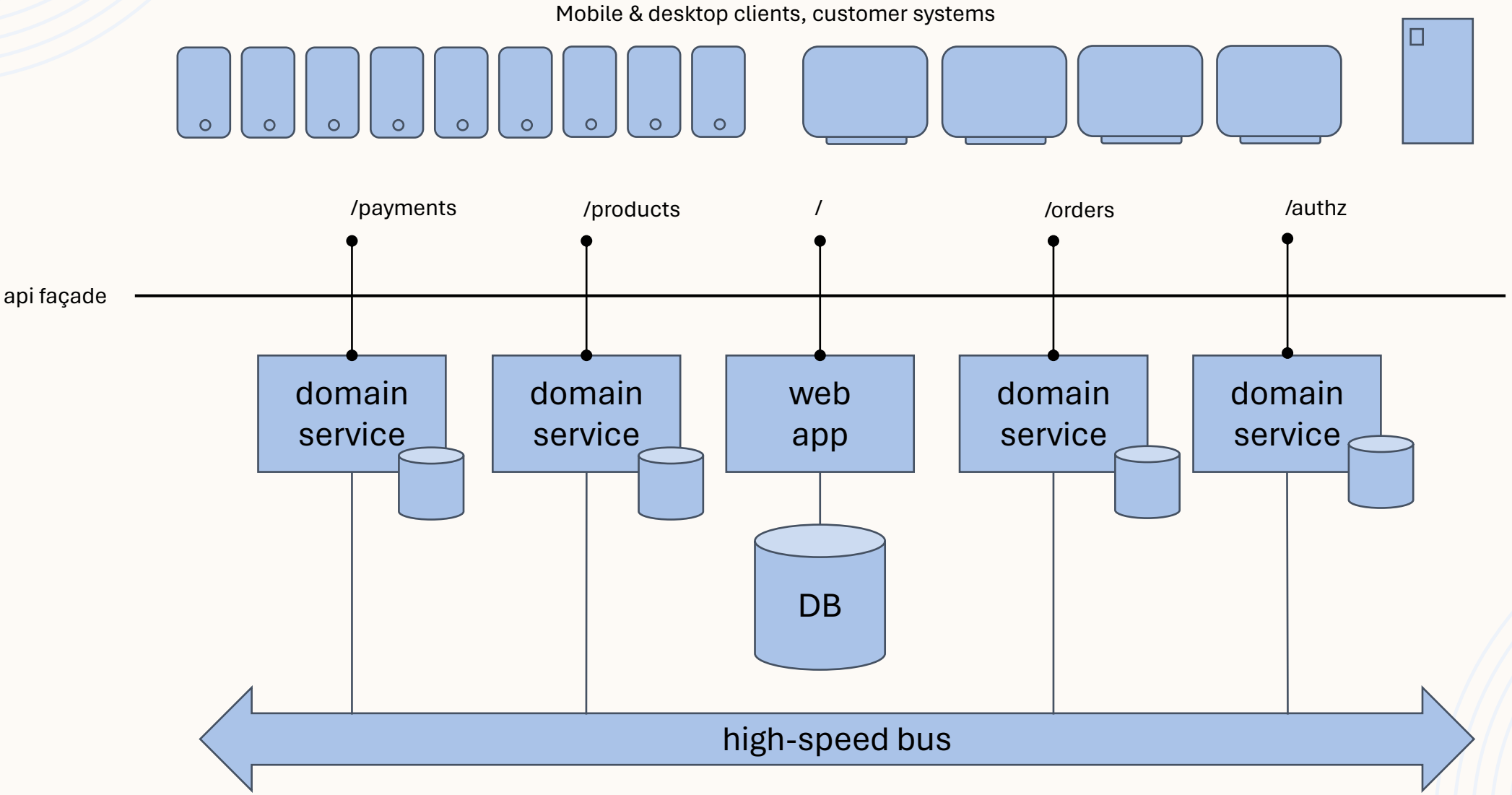
MONOLITH



API SERVICES

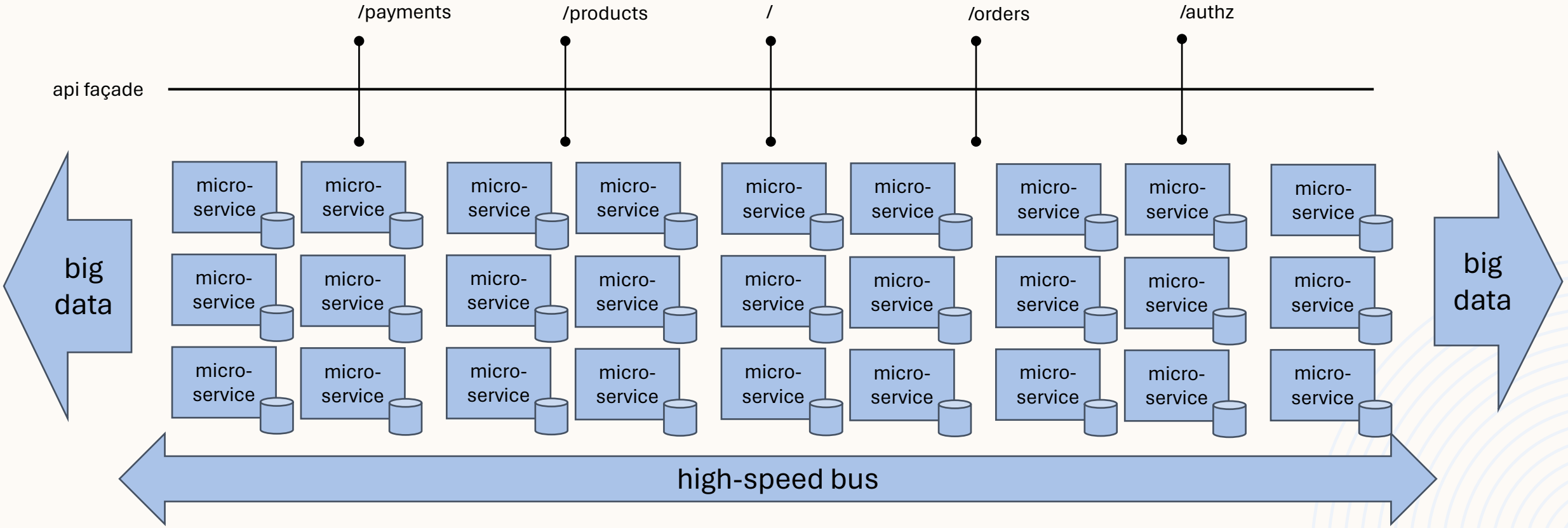


DOMAIN SERVICES



MICRO SERVICES

Mobile & desktop clients, customer systems



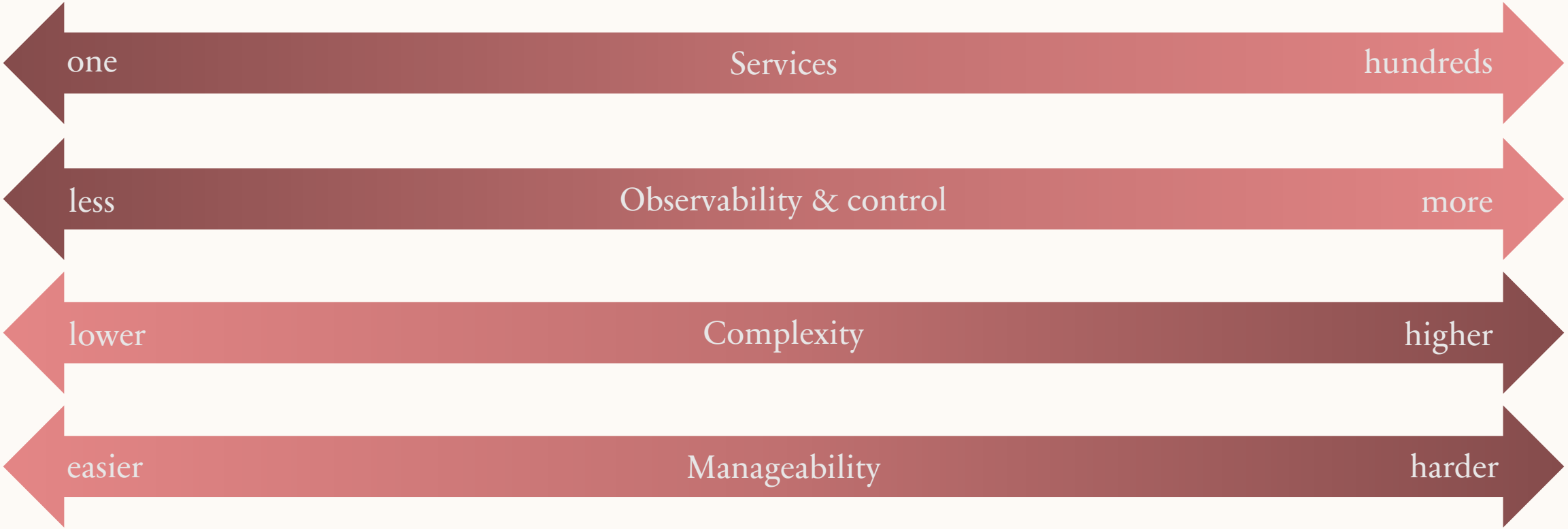
CLOUD COMPUTE CHOICE FACTORS

Azure App
Service Plans

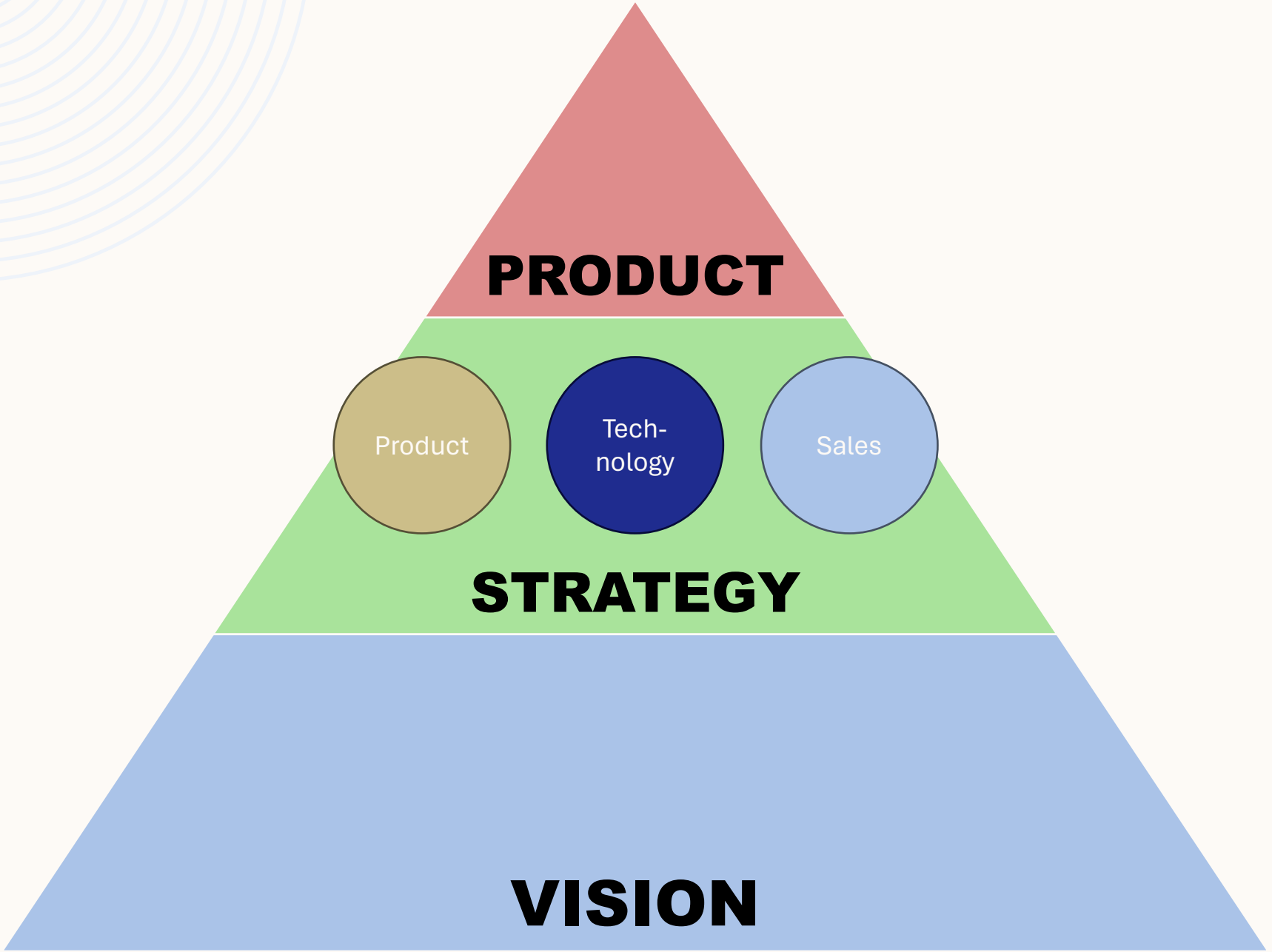
Azure Container
Apps

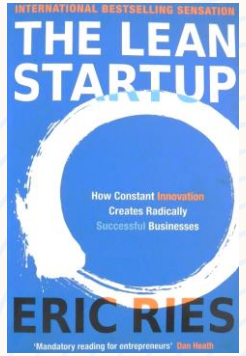
Managed Kubernetes
AKS / EKS / ARO

VM
scale sets



MAKING A PLAN


PRODUCT
Product
Tech-
nology
Sales
STRATEGY
VISION


INTERNATIONAL BESTSELLING SENSATION
THE LEAN STARTUP
How Constant Innovation Creates Radically Successful Businesses
ERIC RIES
'Mandatory reading for entrepreneurs' Dan Heath

1. “Use a managed Open AI service

2. “Use GitHub co-pilot

PRODUCT

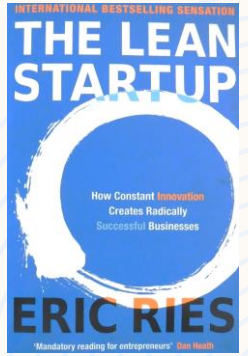
1. “Reduce time to market by building on third-party AI API’s”

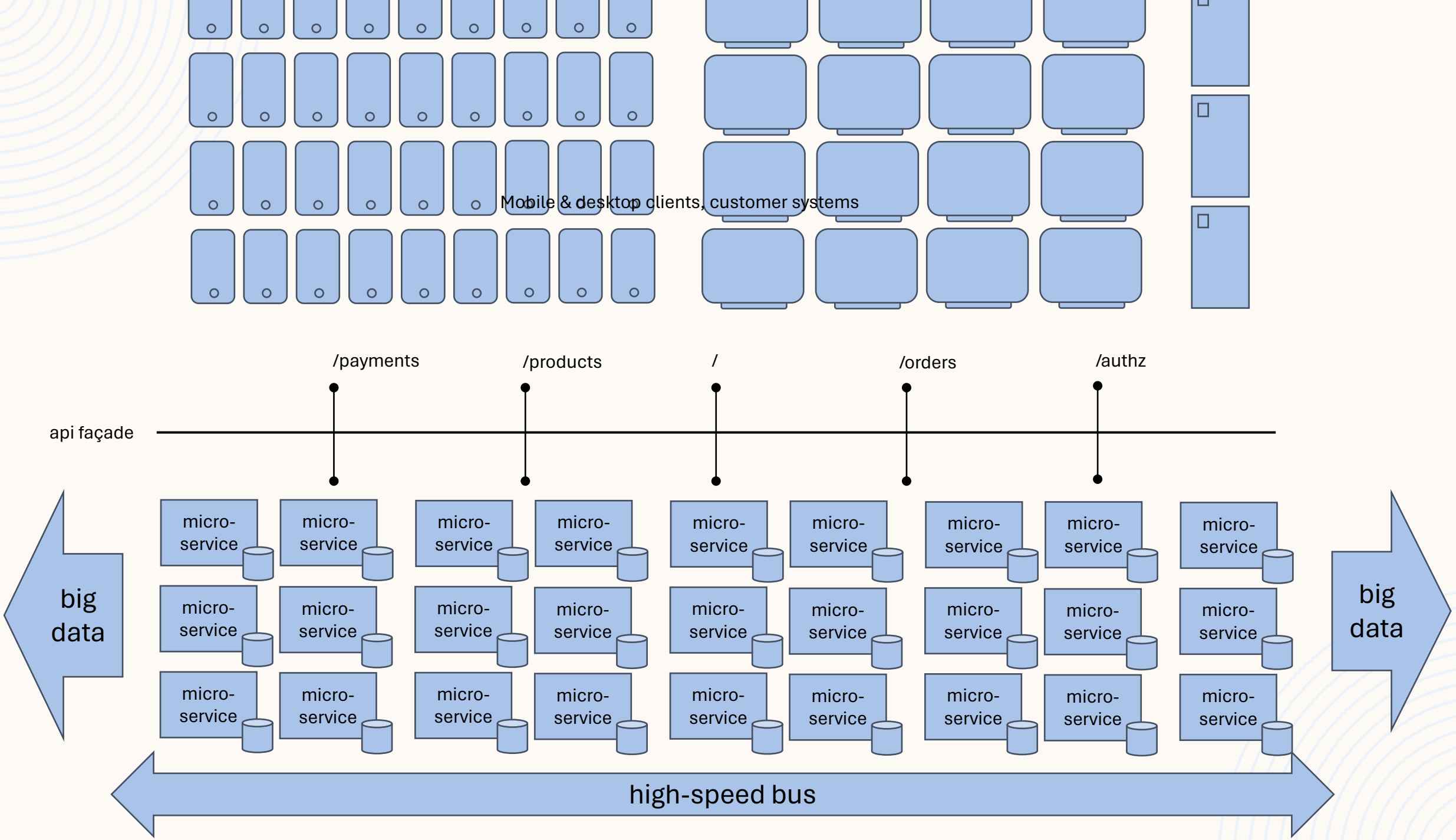
2. “Improve developer productivity with AI code tools”

STRATEGY

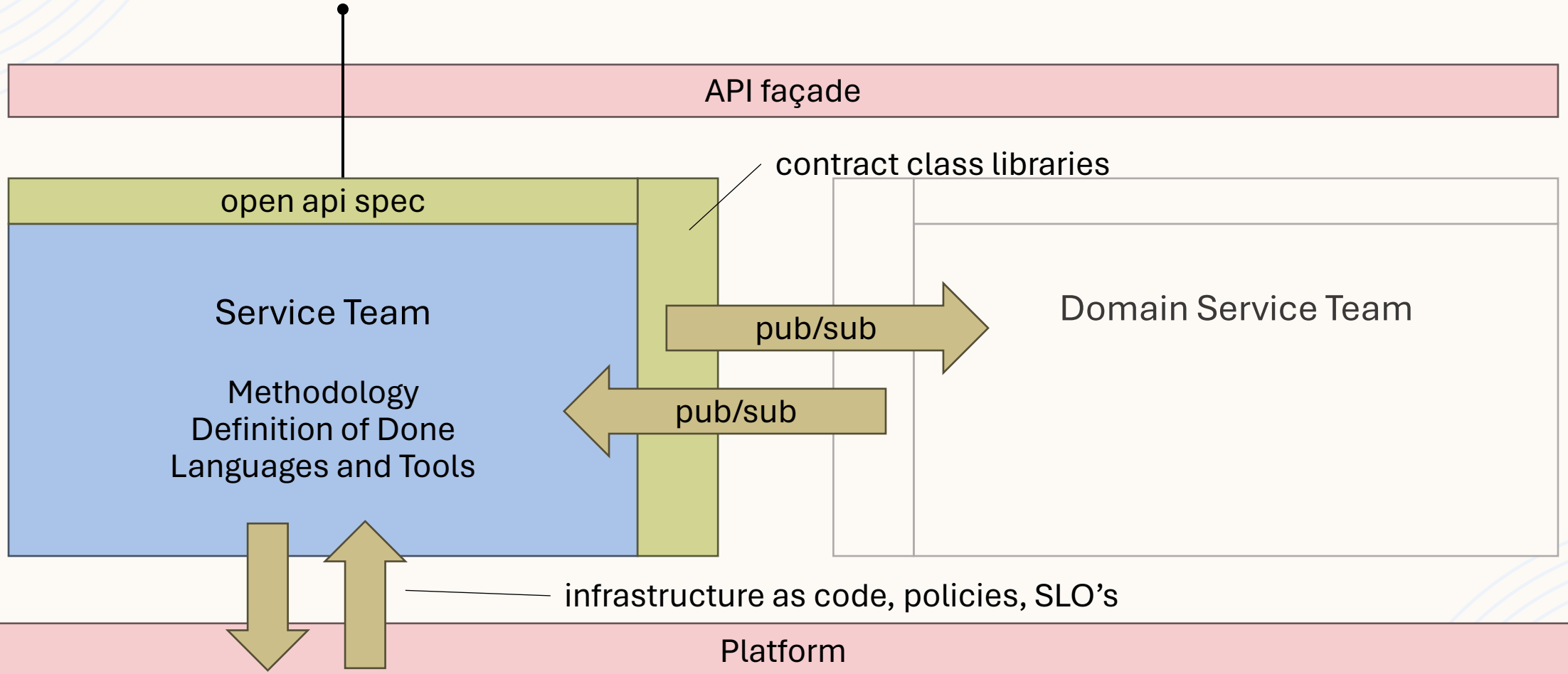
“To empower every person on the planet with a truly useful AI personal assistant

VISION

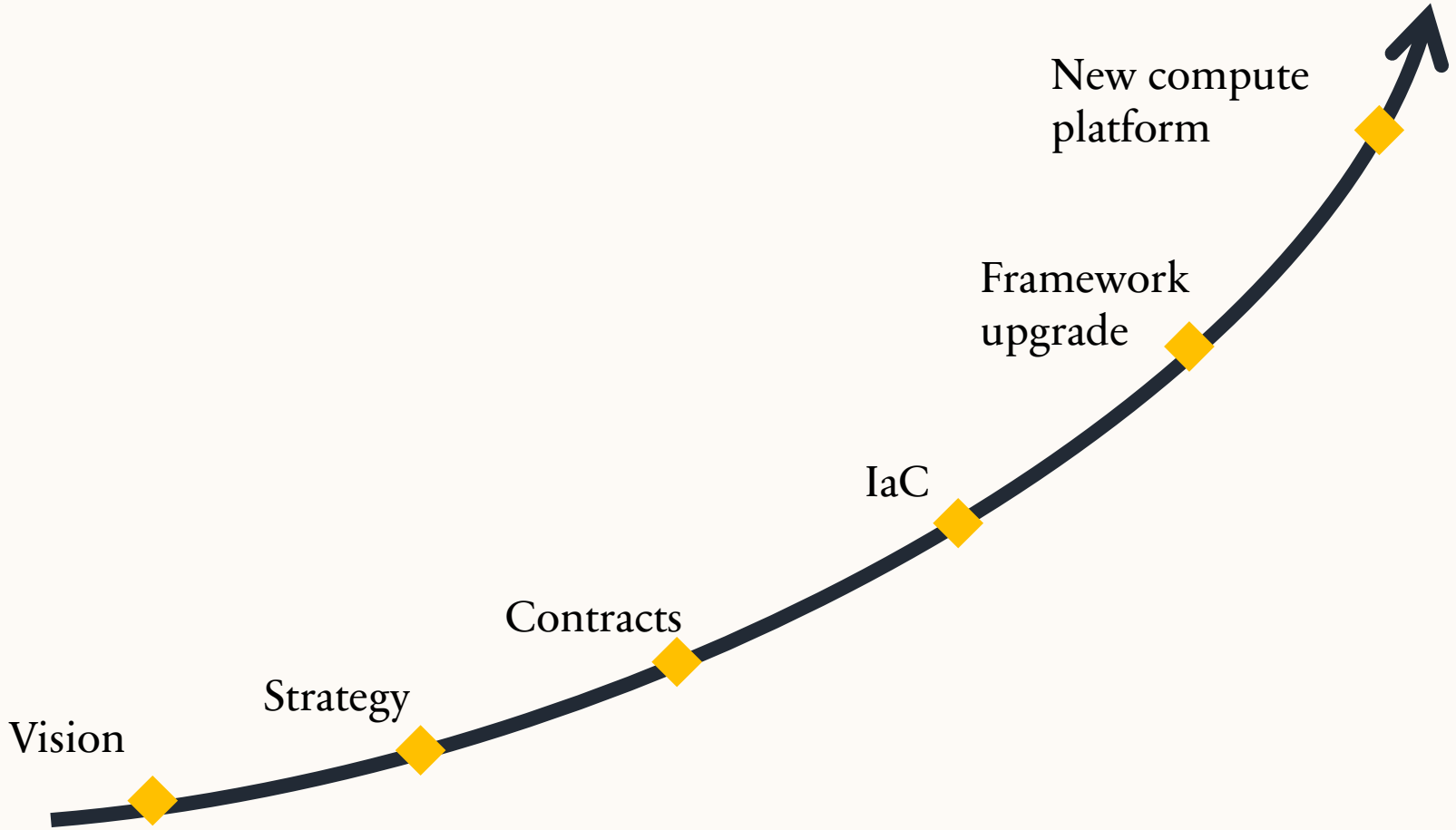



Mobile & desktop clients, customer systems
/payments
/products
/
/orders
/authz
api façade
micro-service
big data
big data
high-speed bus

CONTRACTS


API façade
contract class libraries
open api spec
Service Team
Methodology
Definition of Done
Languages and Tools
pub/sub
pub/sub
Domain Service Team
infrastructure as code, policies, SLO's
Platform
Identity
CI/CD
Metrics, Logging
Deployment, Hosting
Shared services

ROADMAP


Vision
Strategy
Contracts
IaC
Framework upgrade
New compute platform

IN CLOSING

Conway's law explains why Service oriented architectures change as our organisation grows.

Observing these effects helps is to plan for the next order of magnitude.

Technology strategy and contracts are ways to inform product teams what is important to the business.

THANK YOU!

http://bit.ly/dlnztalks