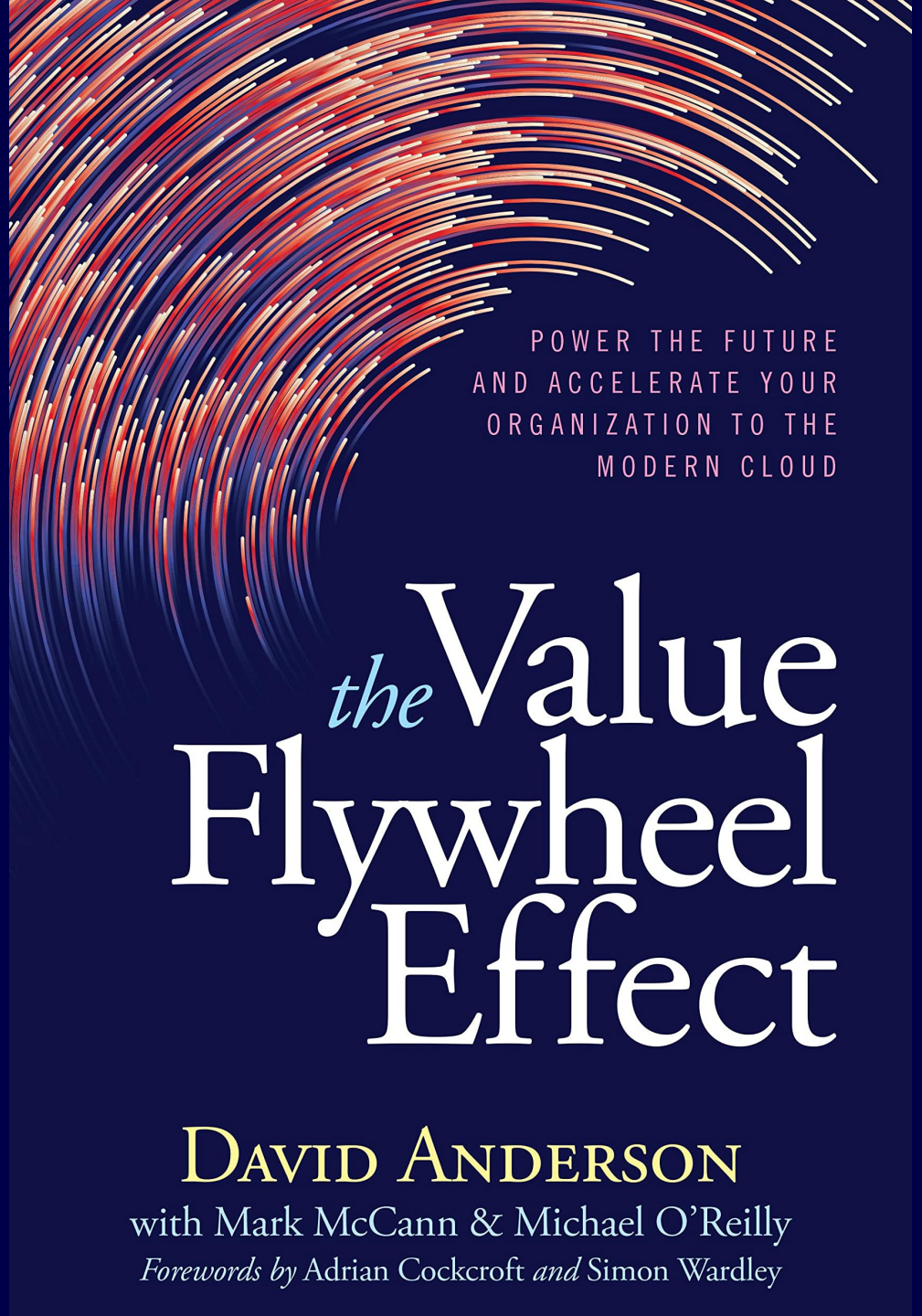
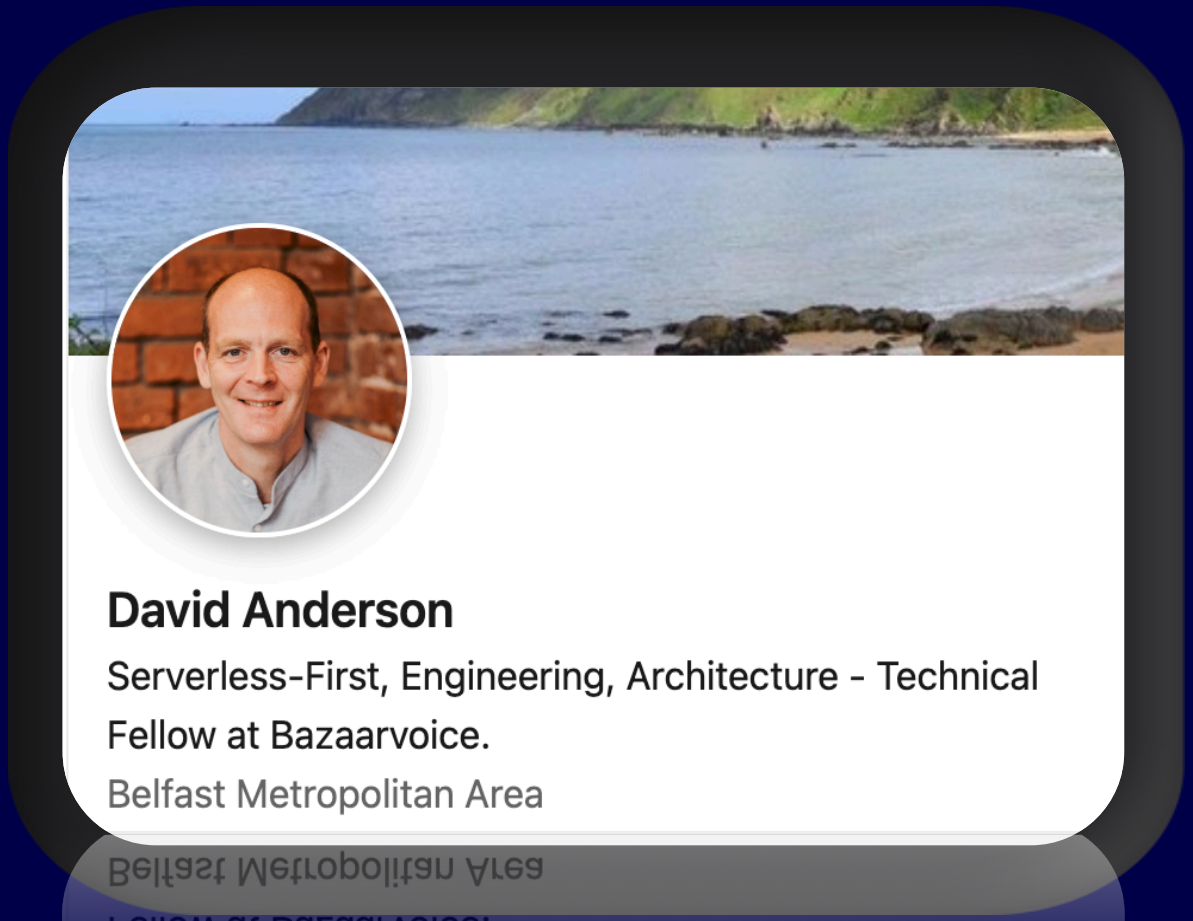
Creating the Value Flywheel Effect.


POWER THE FUTURE
AND ACCELERATE YOUR
ORGANIZATION TO THE
MODERN CLOUD
the Value Flywheel Effect
DAVID ANDERSON
with Mark McCann & Michael O'Reilly
Forewords by Adrian Cockcroft and Simon Wardley


David Anderson
Serverless-First, Engineering, Architecture - Technical Fellow at Bazaarvoice.
Belfast Metropolitan Area

To achieve its goal of becoming a global digital company, insurance giant Liberty Mutual focused digital transformation on:

- Customer centricity.
- Cloud-native development.
- Agility.

They made a strategic business decision to pursue a serverless-first approach
— a move designed to give it an edge in a competitive, global, and increasingly digital market.

Liberty Mutual used Amazon Web Services (AWS) to migrate the company's on-premises systems
to the cloud to modernize and drive company wide transformation.

https://aws.amazon.com/solutions/case-studies/liberty-mutual-

Struggles

Slow

Takes months to release software.

Predictability

Hard to predict if we will hit a date.

Cost

Costs are increasing month on month.

Scalability

Taking more traffic takes lots of effort.

Engineer Confidence

Poor Developer Experience causes frustrations.

Serverless

Speed to market

Increase speed to market from three months to 24 hours.

Build better applications by default

Reimagine how you scale.

Lower your total cost of ownership

Reduce dev costs and lower your TCO.

Improve scalability

Lean on the Cloud Vendors for scale.

Run applications anywhere

Reduces deployment time by 90%.

Modernization

Speed to market

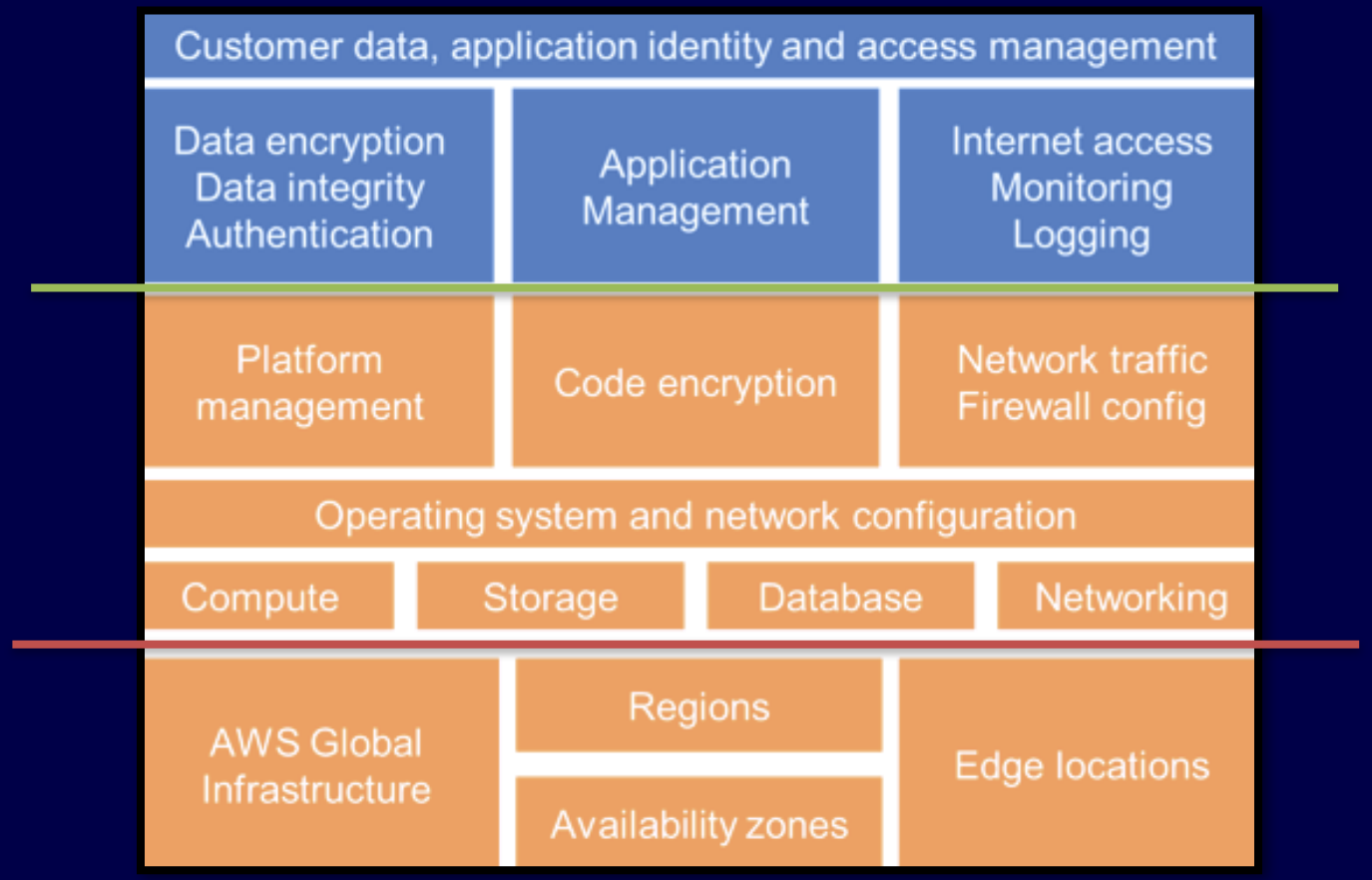
Build better applications by defau

Lower your total cost of ownershi

Improve scalability

Run applications anywhere

The Shared Responsibility Model - where do you draw the line?



Modern Cloud Applications – pushing low-value work to the Cloud.

Migrated to the Cloud – Treating the Cloud like a data centre

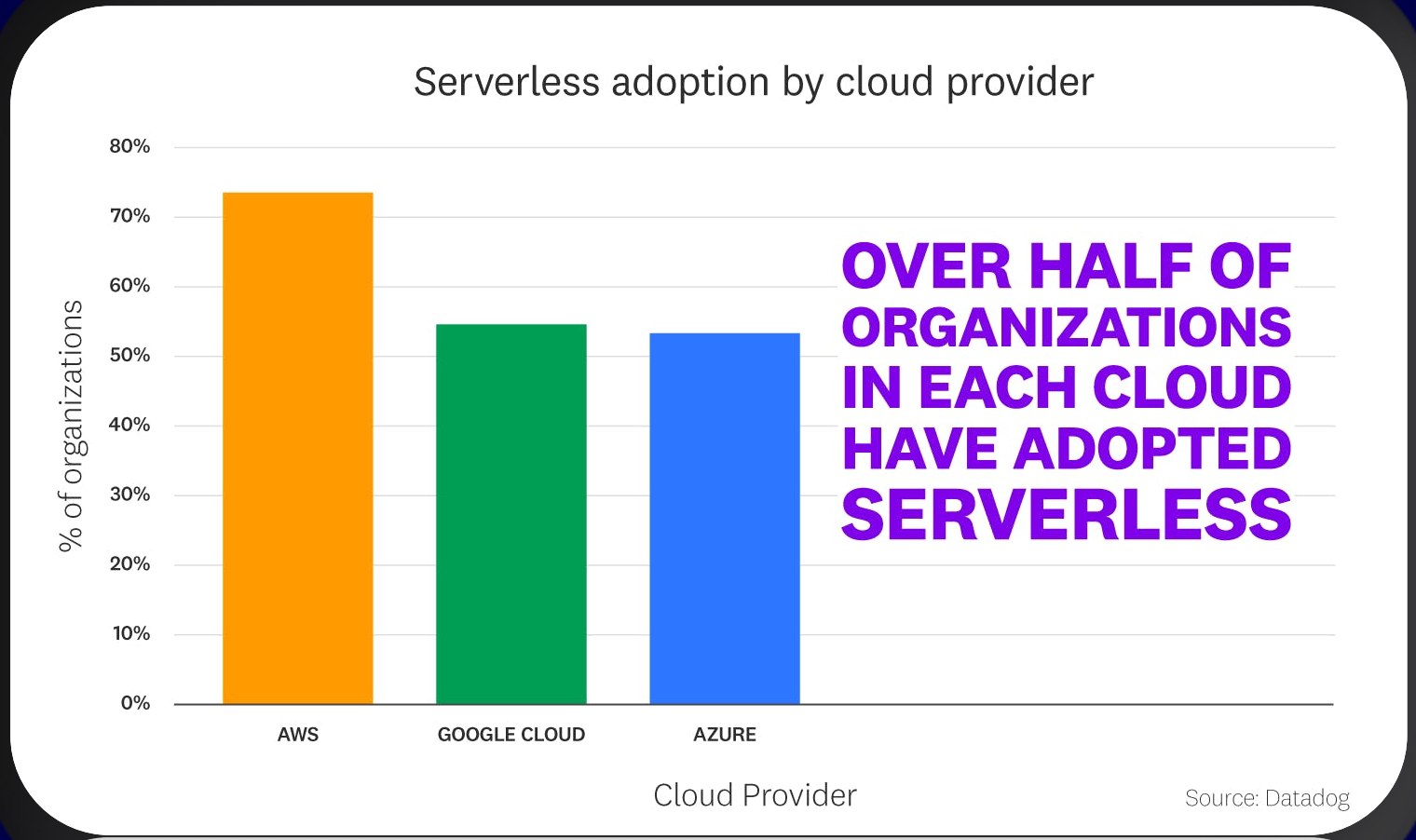
https://aws.amazon.com/modern-apps/

Adoption

- AWS: AWS Lambda, AWS App Runner, ECS Fargate, EKS Fargate

- Azure: Azure Functions, AKS running on Azure Container Instances

- Google Cloud: Google Cloud Functions, Google App Engine, Google Cloud Run



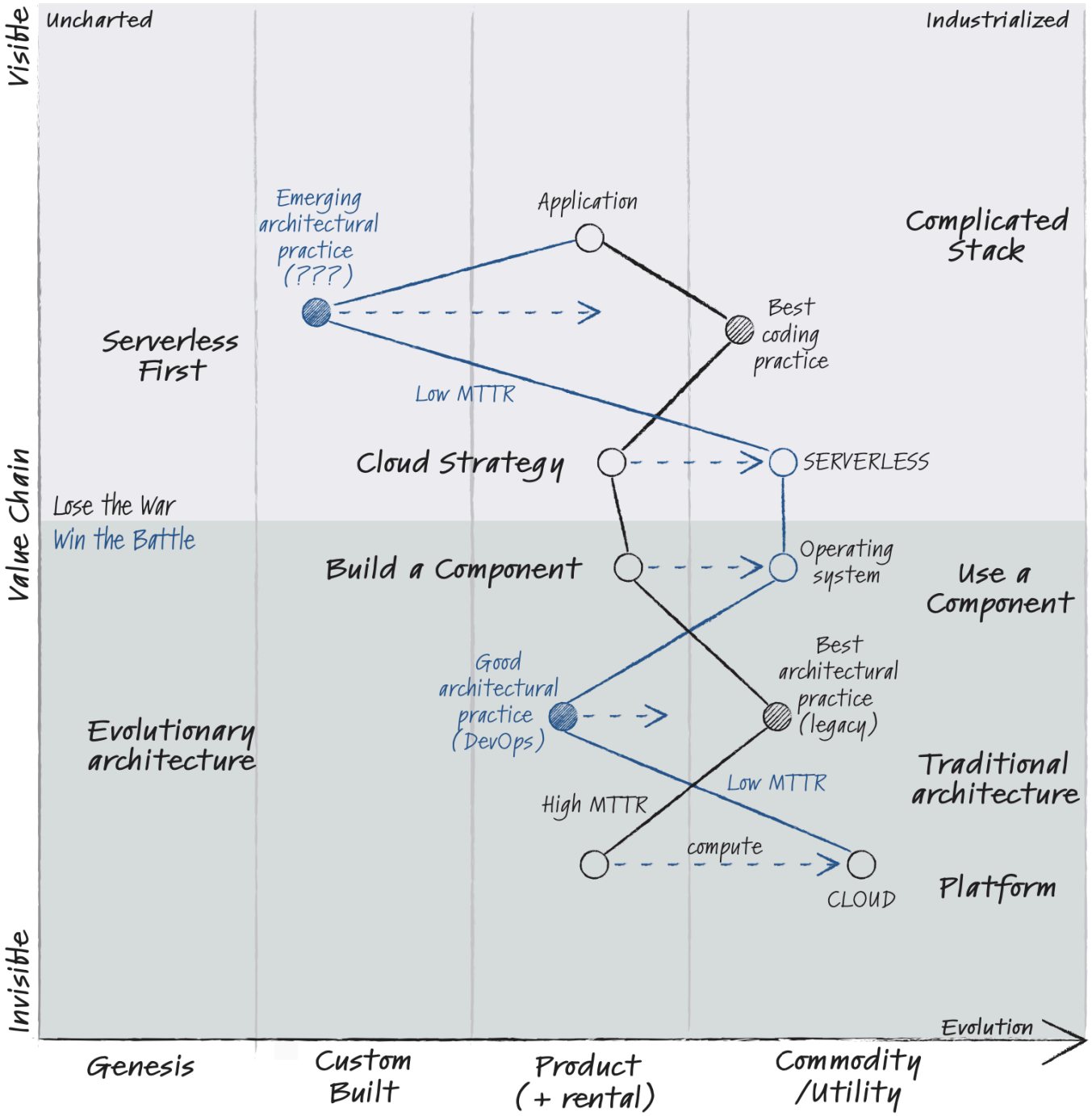
June 2022 - https://www.datadoghq.com/state-of-serverless

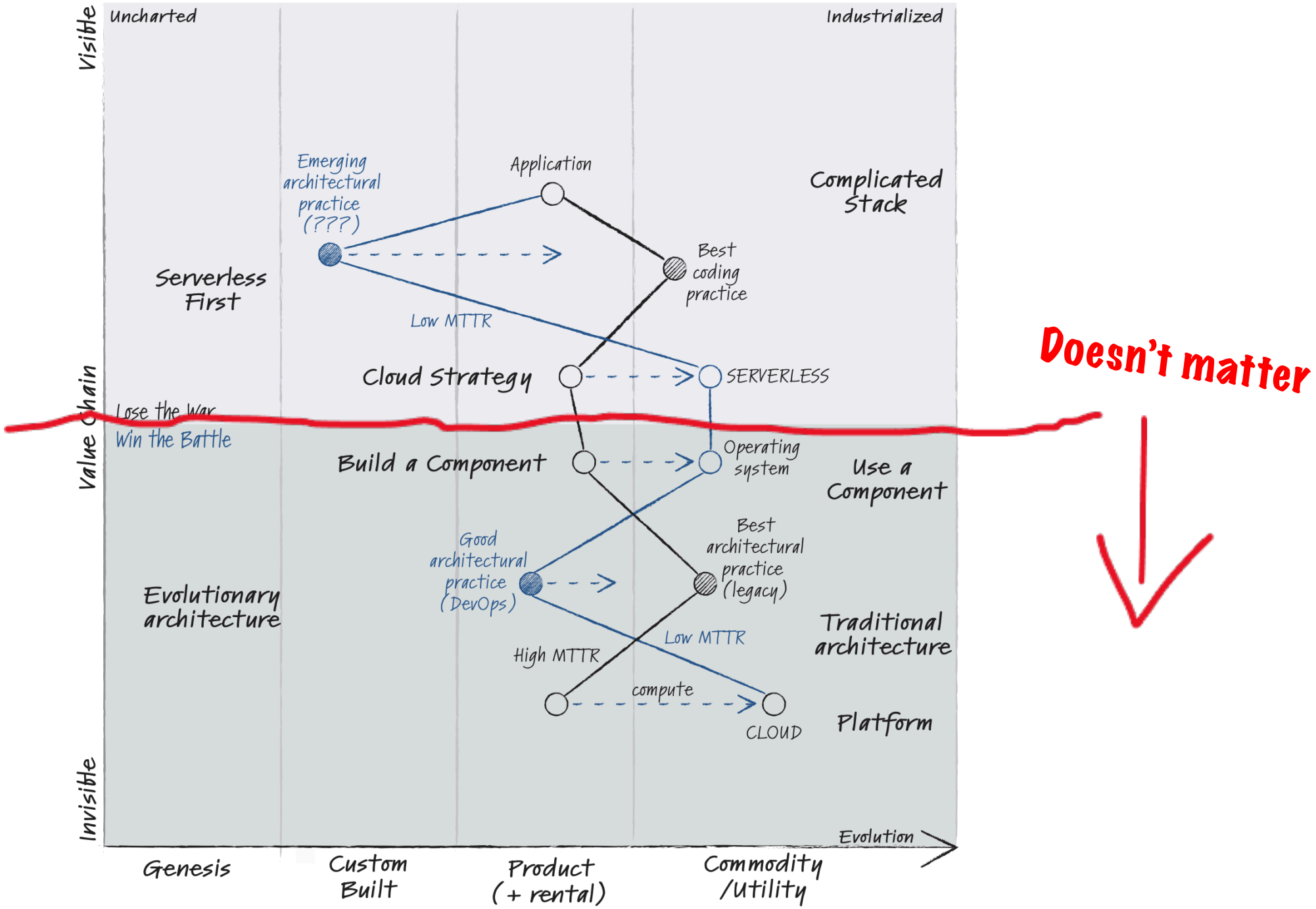
Some Serverless Myths

Myth	Challenge
1. We are different.	The ROI to “build a better cloud?”
2. Fear of Vendor Lock-in.	Speed trumps flexibility.
3. The Consultants don’t like it.	Current good practice is to push migration.
4. Serverless is immature.	Maybe in 2016, not anymore.
5. Our Engineers are not ready.	Serverless = Cloud. Train your people constantly.
6. It gets expensive fast.	FinOps & educate on OpEx / CapEx.
7. Security tools won’t work.	Educate your Security department.

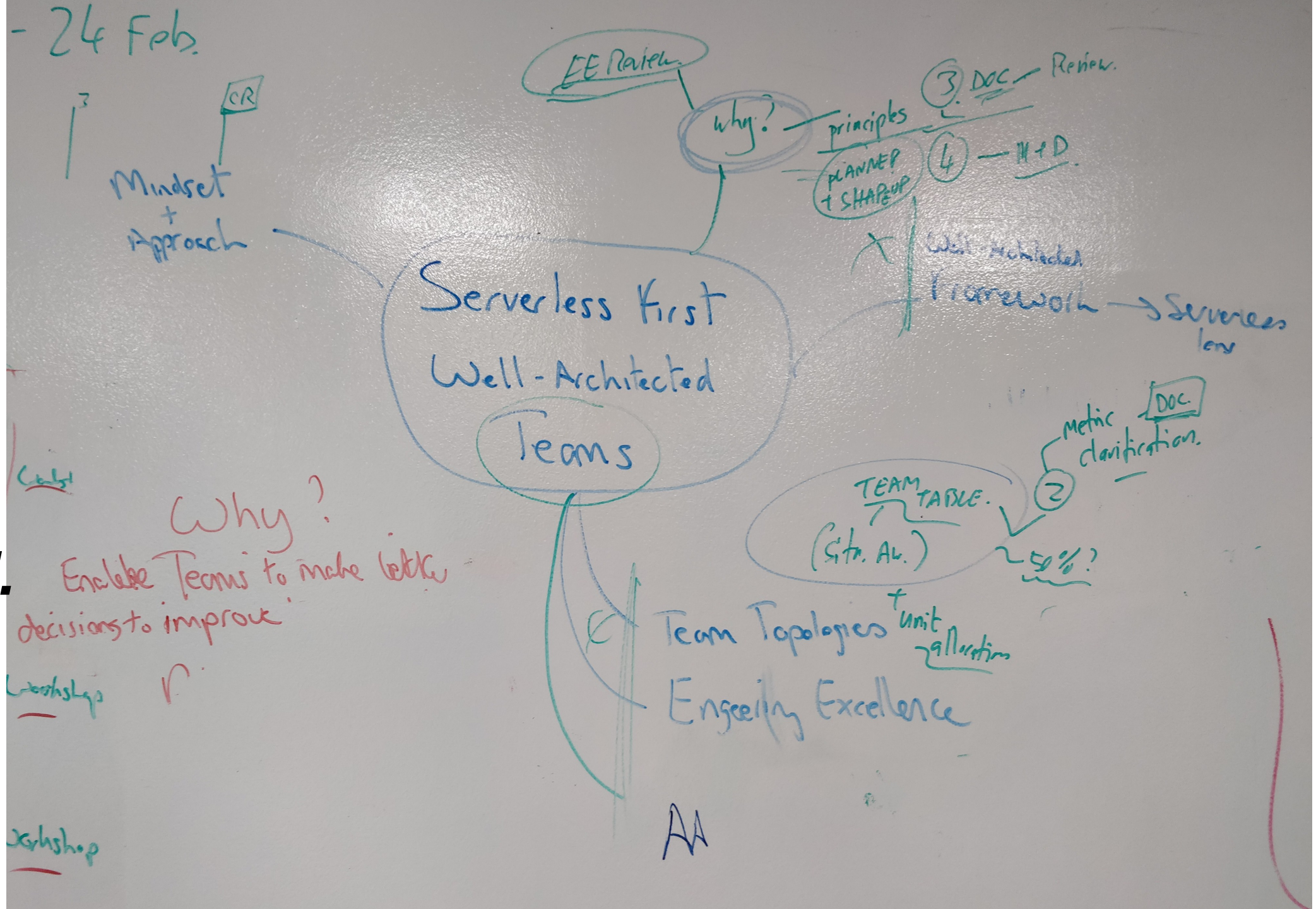
A story in maps…

Belo
w the
line

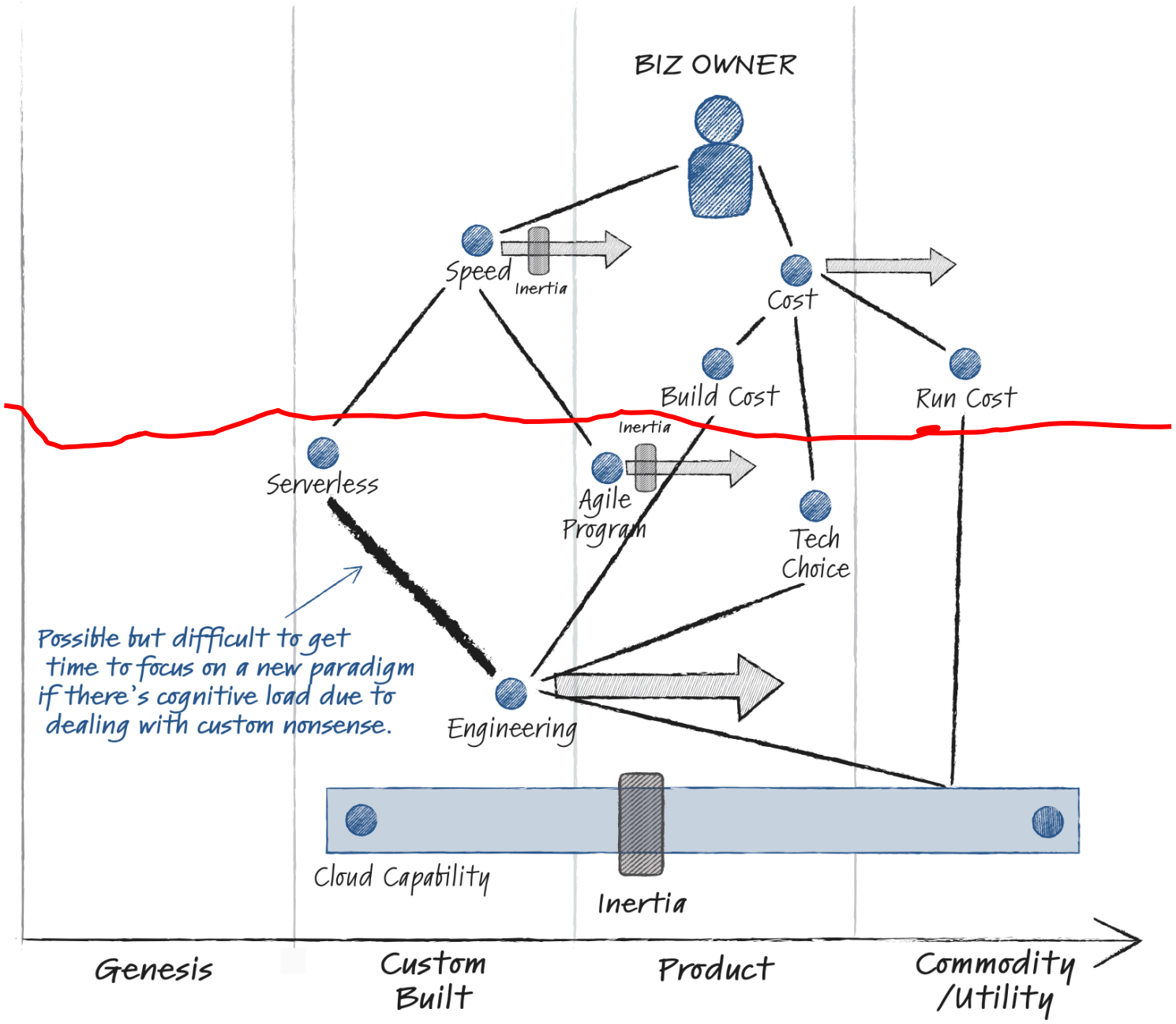



Below the line
Doesn't matter
Visible
Value Chain
Invisible
Uncharted
Industrialized
Emerging architectural practice (???)
Application
Complicated Stack
Best coding practice
Serverless First
Low MTTR
Cloud Strategy
SERVERLESS
Lose the War
Win the Battle
Build a Component
Operating system
Use a Component
Good architectural practice (DevOps)
Best architectural practice (legacy)
Evolutionary architecture
Traditional architecture
Low MTTR
High MTTR
compute
CLOUD
Platform
Evolution
Genesis
Custom Built
Product (+ rental)
Commodity /Utility

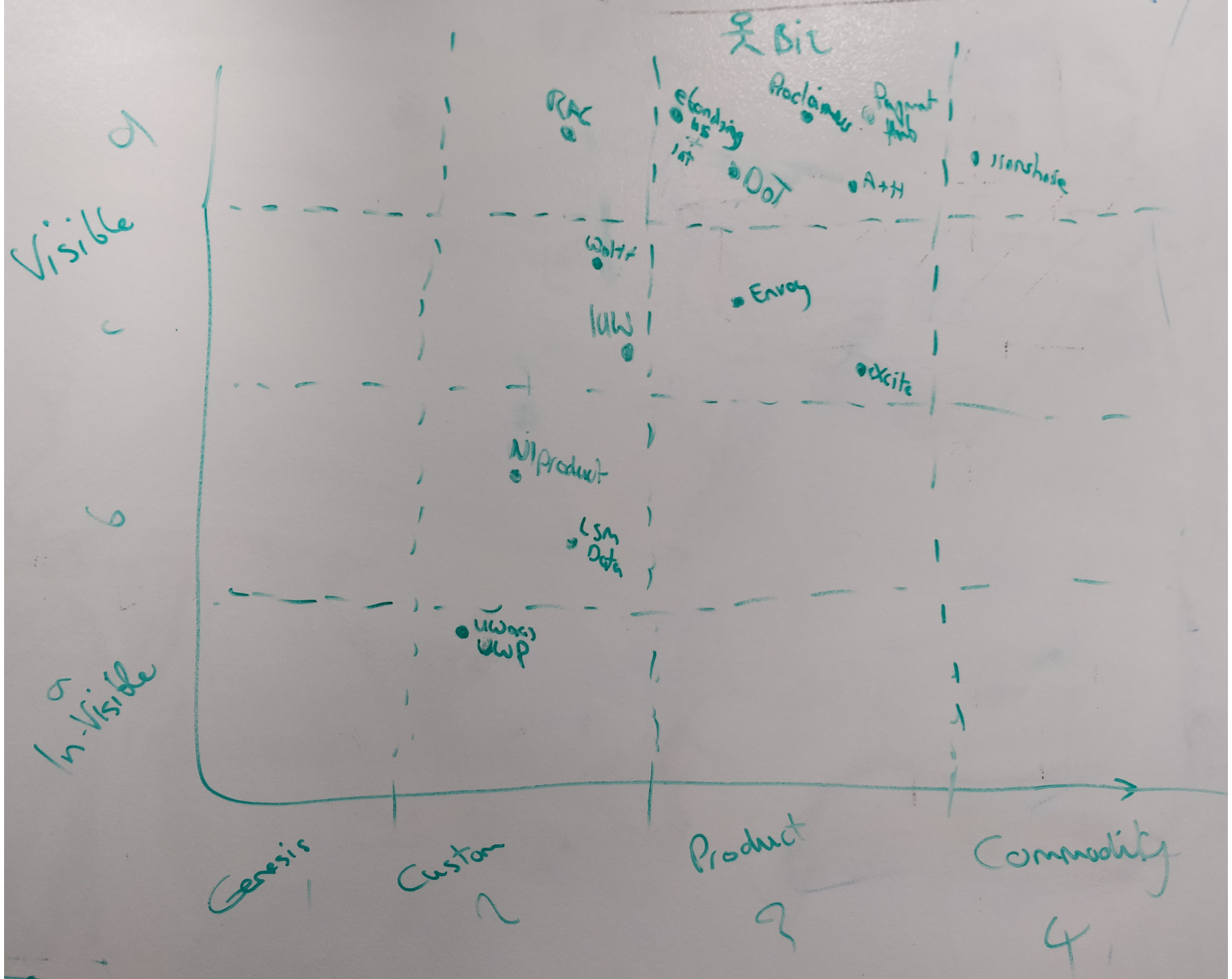
Start with the need.



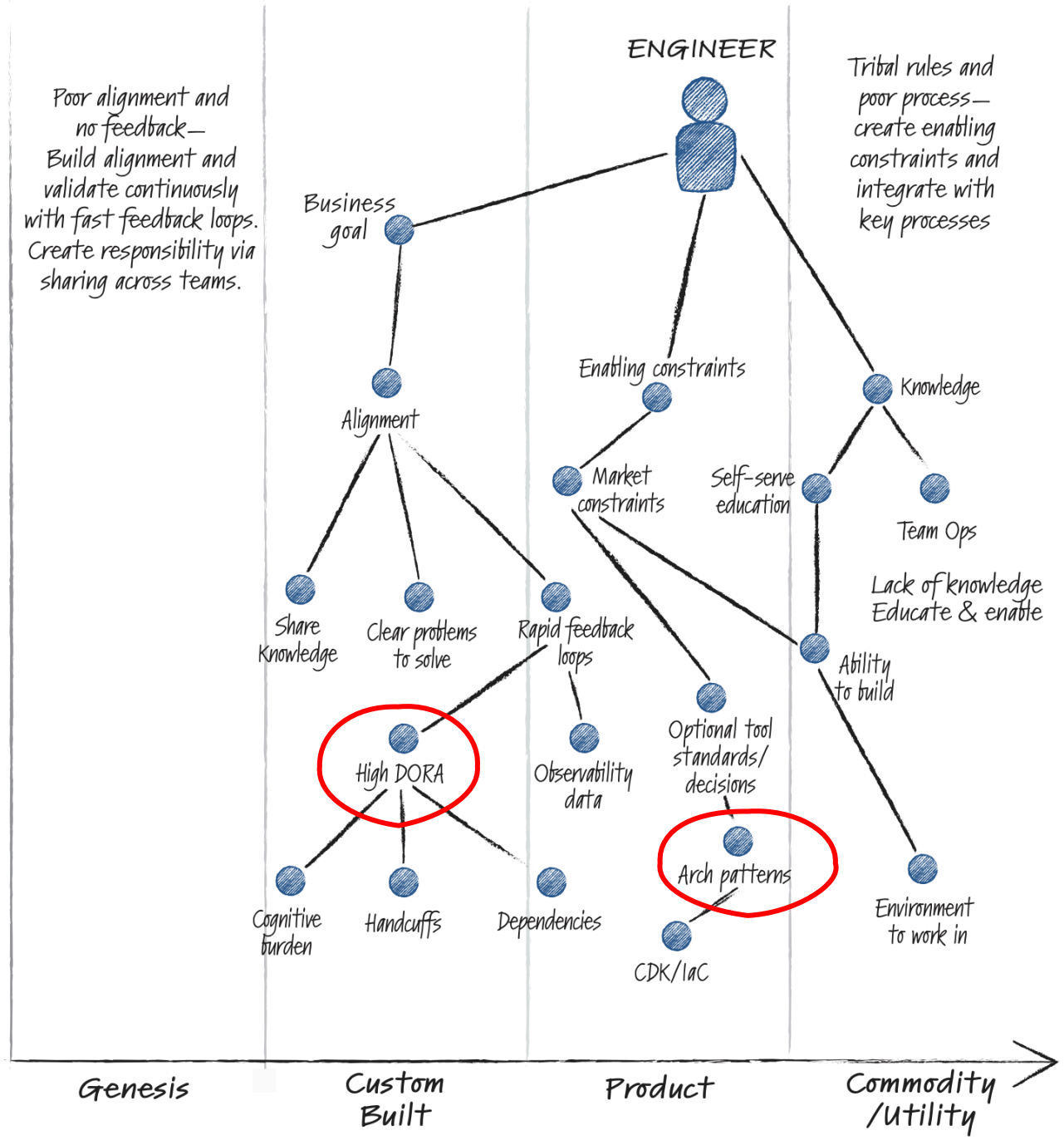
Joining the dots



Make mapping accessible for engineers

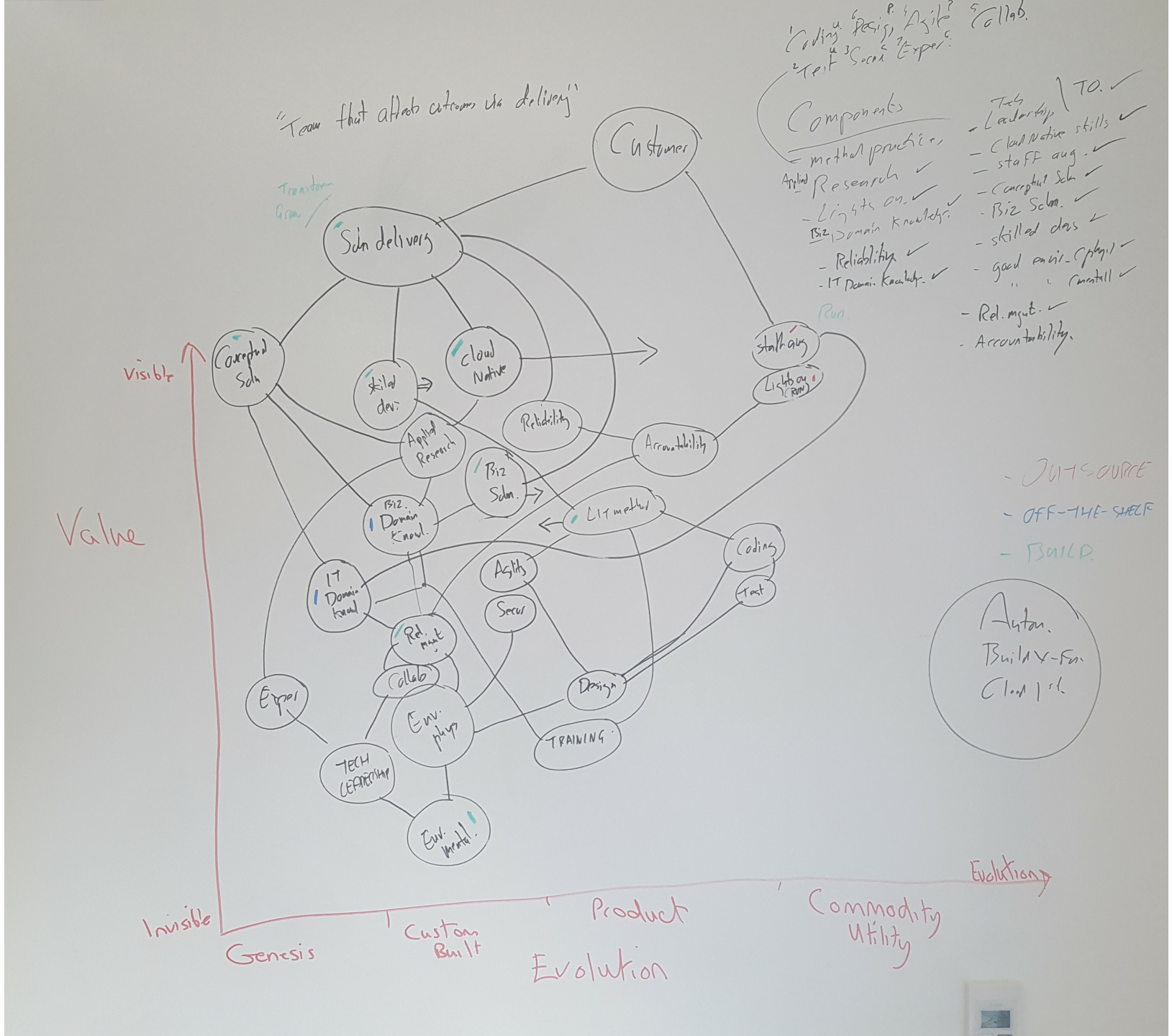


Identify the tipping point change

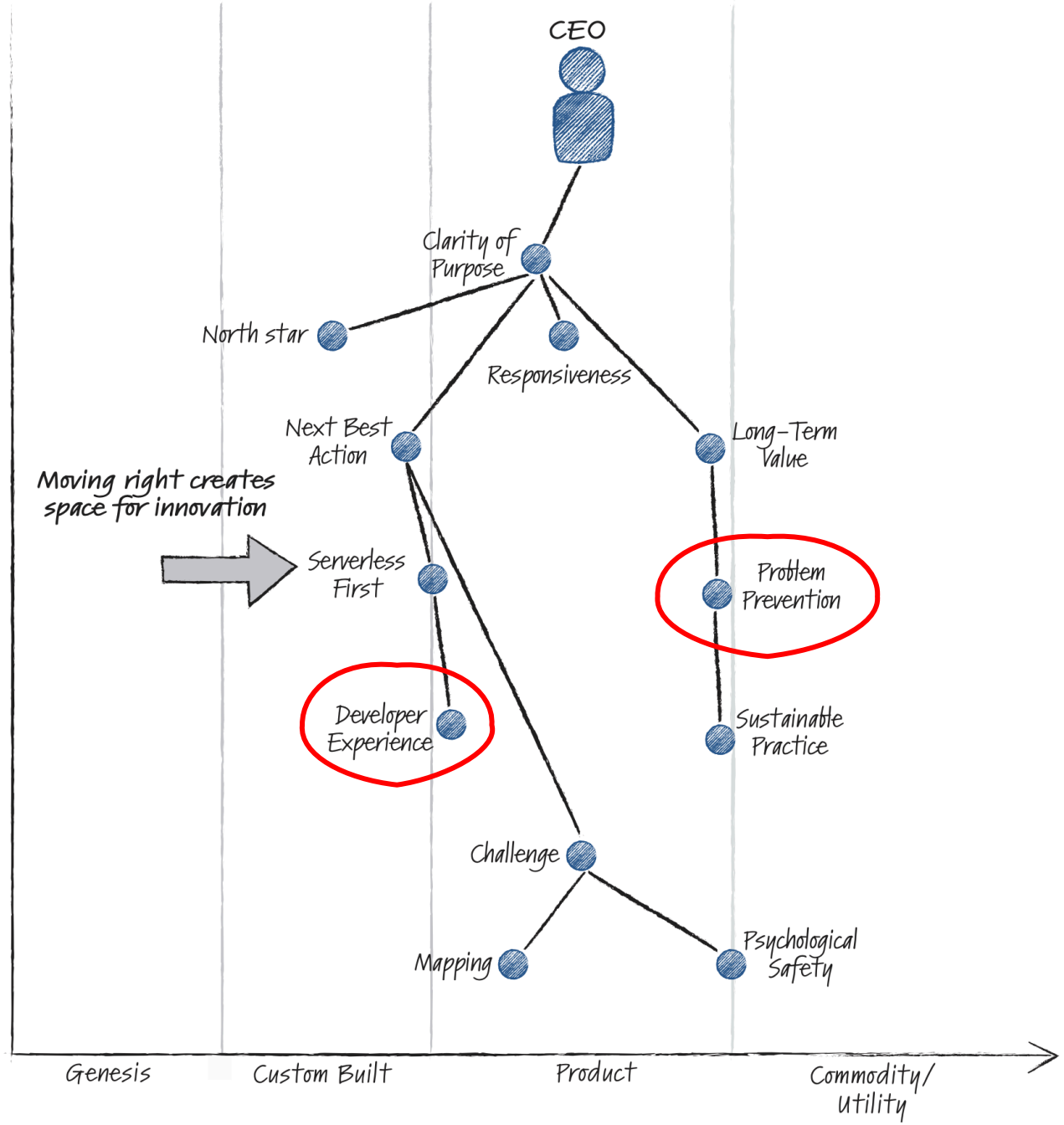


Sense making

(2015)

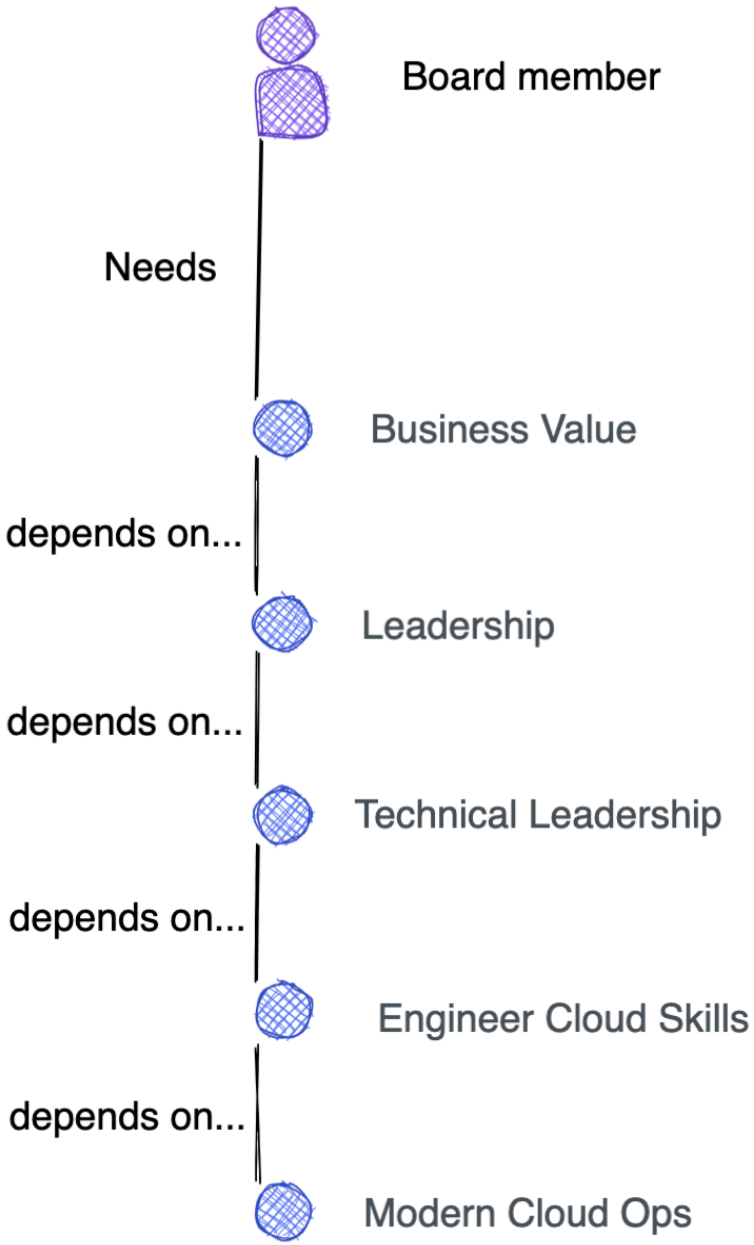


creating Space for Innovation



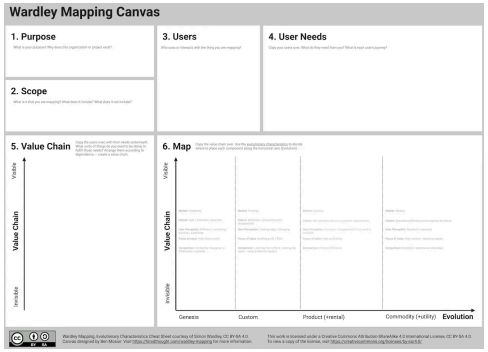
The Value Flywheel Effect

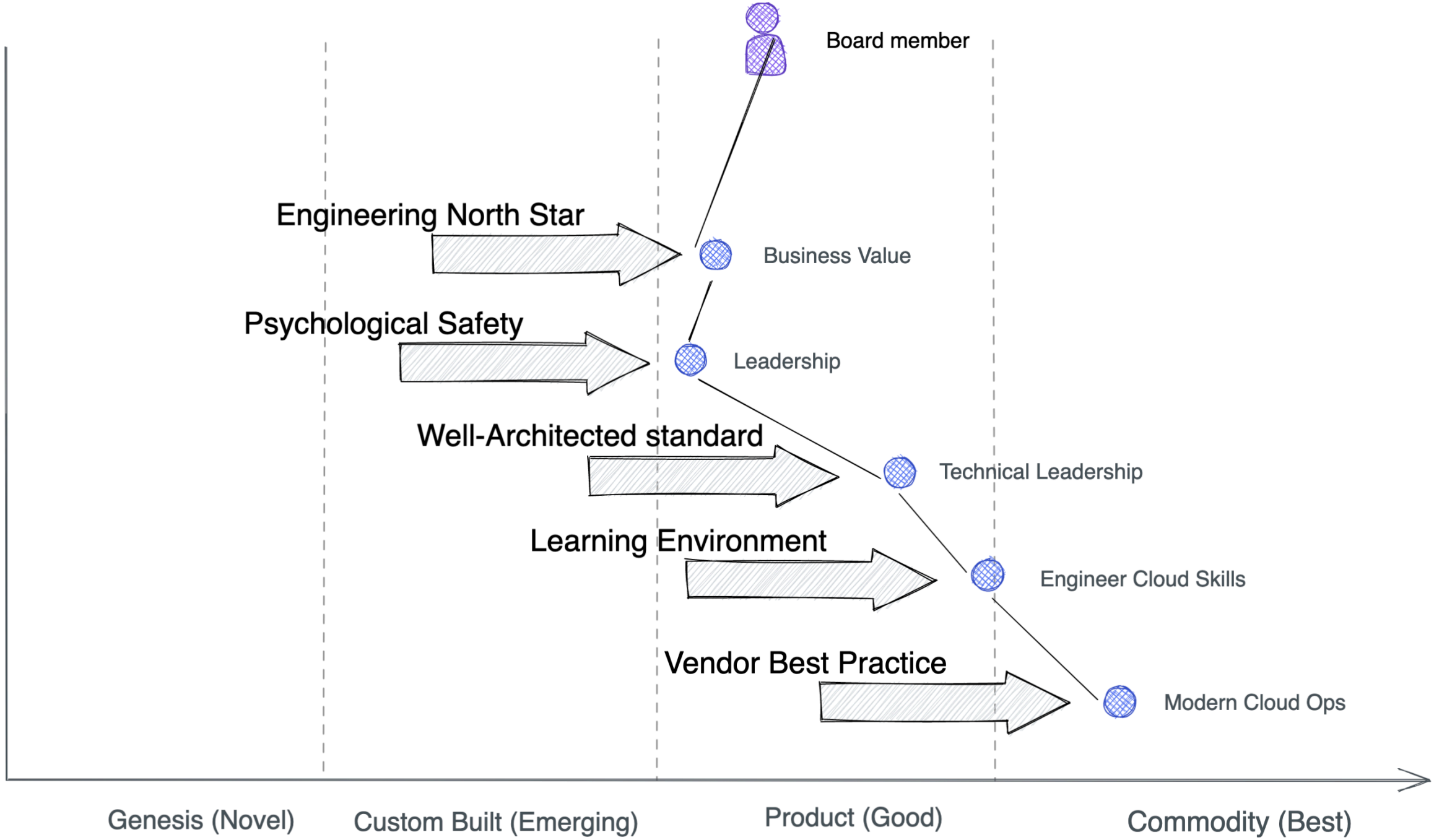
Wardley Mapping Learning sprint



Ben Mosior

learn wardley mapping .com




Board member
Engineering North Star
Business Value
Psychological Safety
Leadership
Well-Architected standard
Technical Leadership
Learning Environment
Engineer Cloud Skills
Vendor Best Practice
Modern Cloud Ops
Genesis (Novel)
Custom Built (Emerging)
Product (Good)
Commodity (Best)

The Value Flywheel

LONG TERM VALUE

Problem Prevention, Well-Architected & Sustainability

CLARITY OF PURPOSE

North Star & Time to Value

CHALLENGE

Psychological Safety & Environment for success

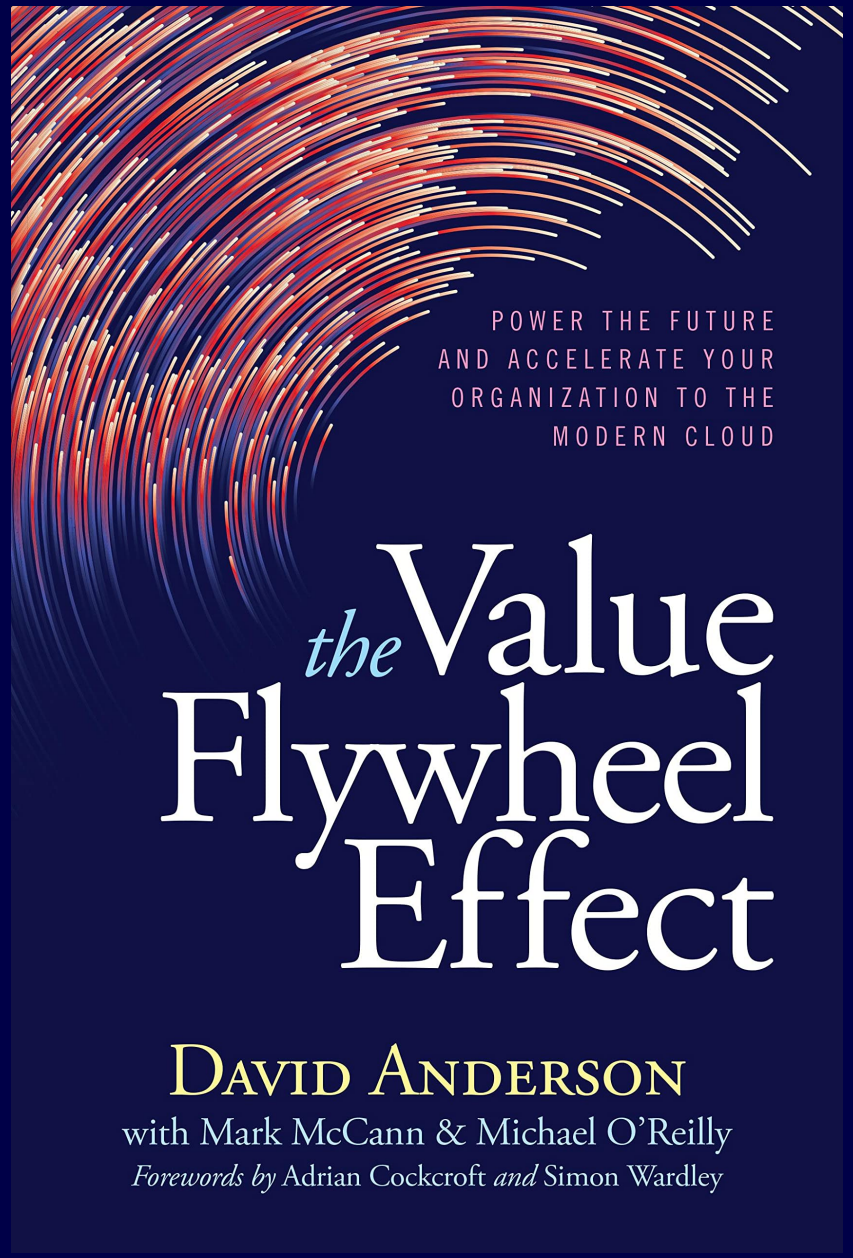
NEXT BEST ACTION

Developer Experience & Serverless First

The Value Flywheel Effect book out in Nov from IT Revolution.

TheServerlessEdge.com Blog

Serverless Craic Channel & Podcast

@davidand393 @serverlessedge

Connect, follow and subscribe!