

A large, abstract graphic on the left side of the slide features a series of concentric, curved light trails in shades of red, orange, and yellow against a dark blue background. These trails create a sense of motion and depth, resembling a flywheel or a sunburst.

Accelerating towards Serverless First with the Value Flywheel Effect.

David Anderson – Architect, G-P



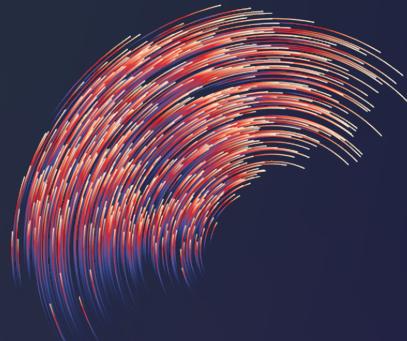
Cloud Migration

Is followed by

Modernization

with The Serverless Mindset





Journey started in 2013

1/ AWS as a partner

2/ Driving Serverless-First – “Code is a liability”

3/ Build Well

4/ Autonomy

The Second Transformation – “Modernization”

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



Liberty Mutual Reduces Costs, Improves Time to Market by Going Serverless on AWS

2021

To achieve its goal of becoming a global digital company, major insurance provider [Liberty Mutual](#) focused on three main areas of digital transformation: customer centricity, agility, and cloud-native development. To that end, the company 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 companywide transformation.

By using serverless architecture and letting AWS handle infrastructure management tasks like capacity provisioning and patching, Liberty Mutual reduced its operational burden and realized substantial cost savings. The company also used serverless solutions so that it could rapidly build more agile, high-quality applications. By eliminating operational overhead, serverless architecture facilitates experimentation, empowering teams to release quickly, get feedback, and iterate to get to market faster.

“Going serverless accelerated our engineering teams,” says Dave Anderson, director of technology at Liberty Mutual. “The more we experimented with a serverless mind-set, the more we started to see a flywheel effect where we could deliver value into the hands of our business partners quickly.”



The Value Flywheel



The Value Flywheel



Wardley Mapping creates perspective

The Value Flywheel



The Value Flywheel



The Value Flywheel



The Value Flywheel





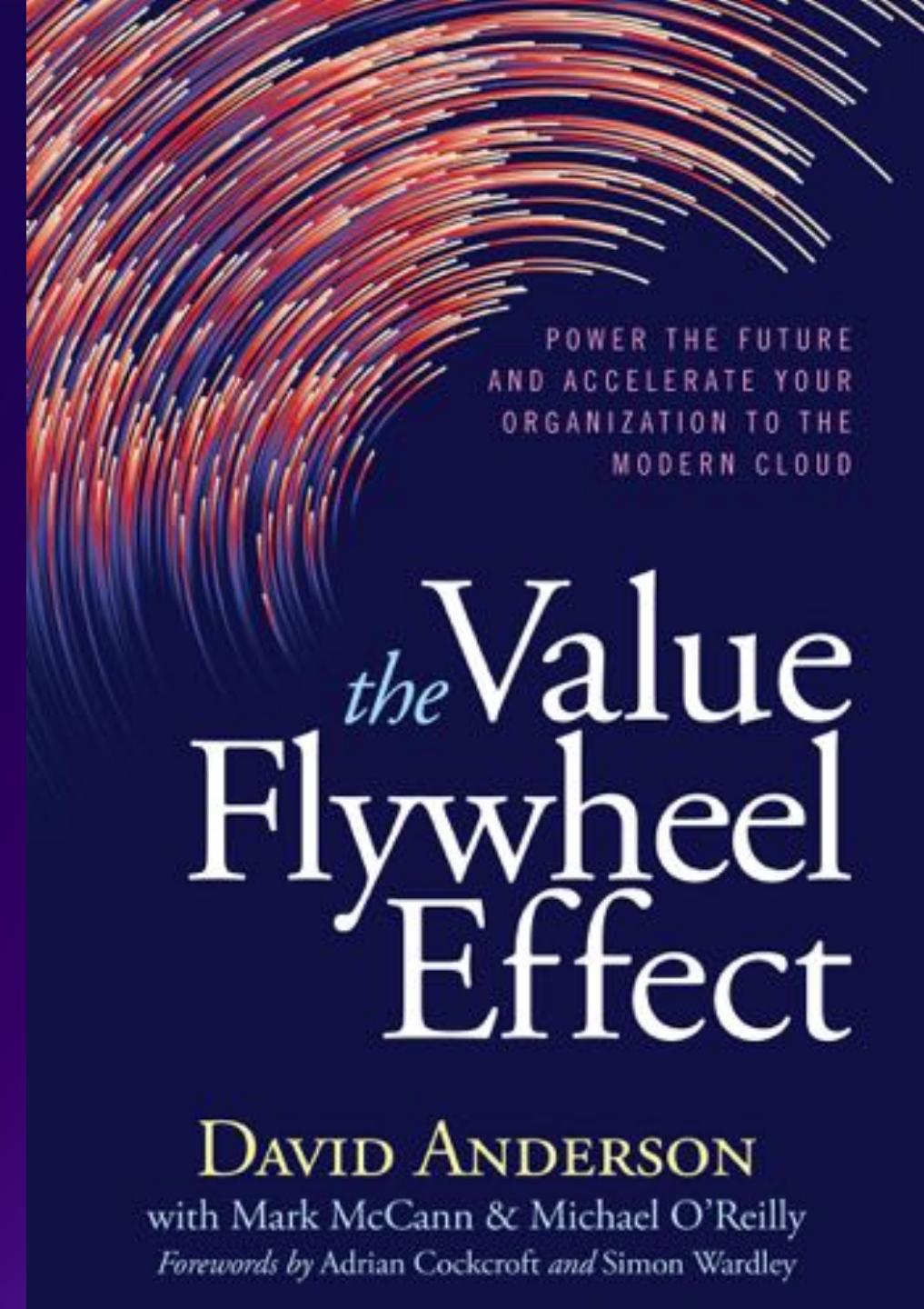
David Anderson



Mark McCann



Michael O'Reilly





Serverless-First,

not Serverless-Only.

Only a Sith deals in
absolutes



The Value Flywheel



Wardley Mapping creates perspective



How did a few
engineers figure this
out?

Wardley
Mapping.





The Architect facilitates.

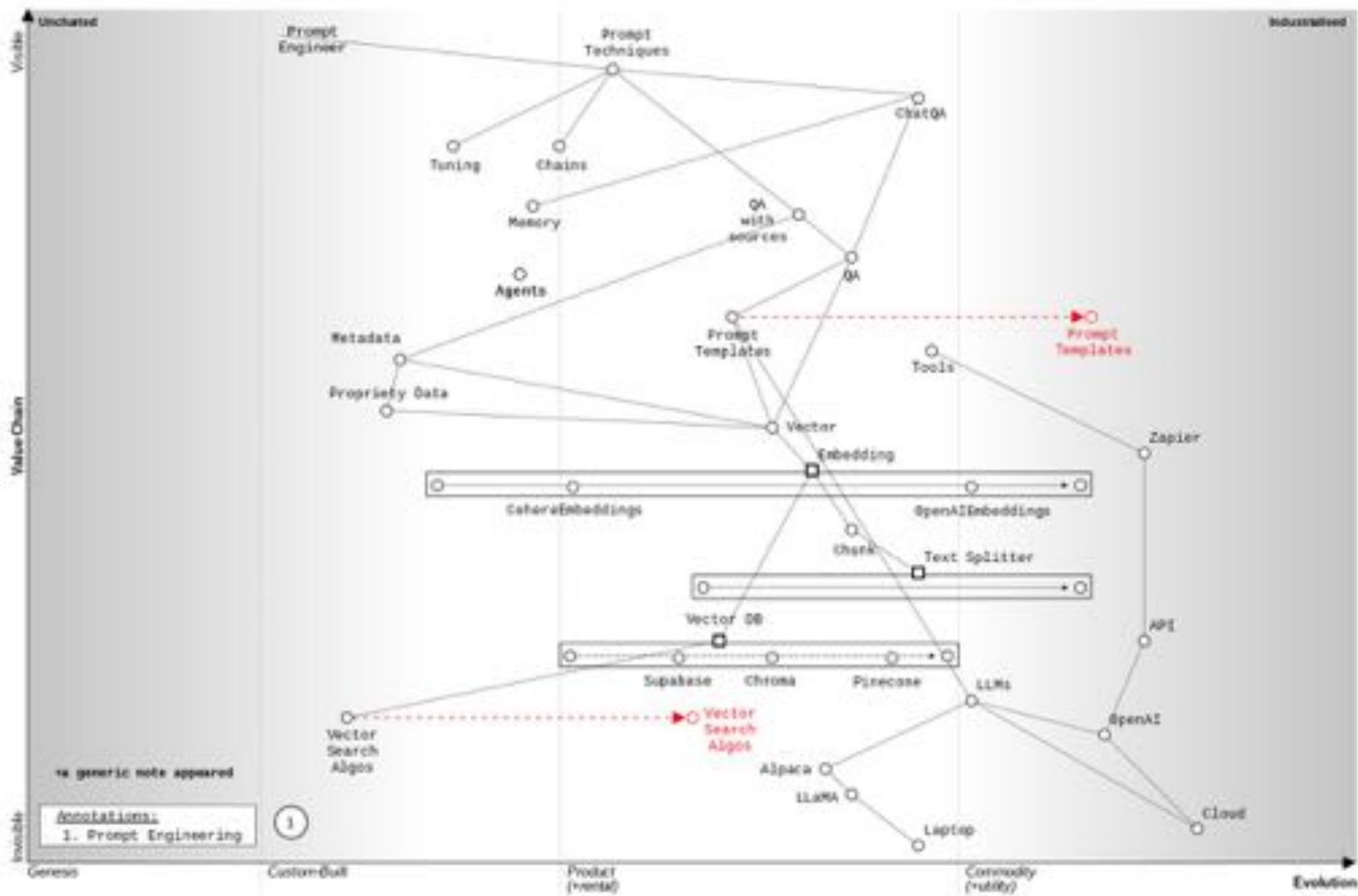
See into the future.

Spot weak areas.

Align on a direction.

Collectively, decide what moves to make.





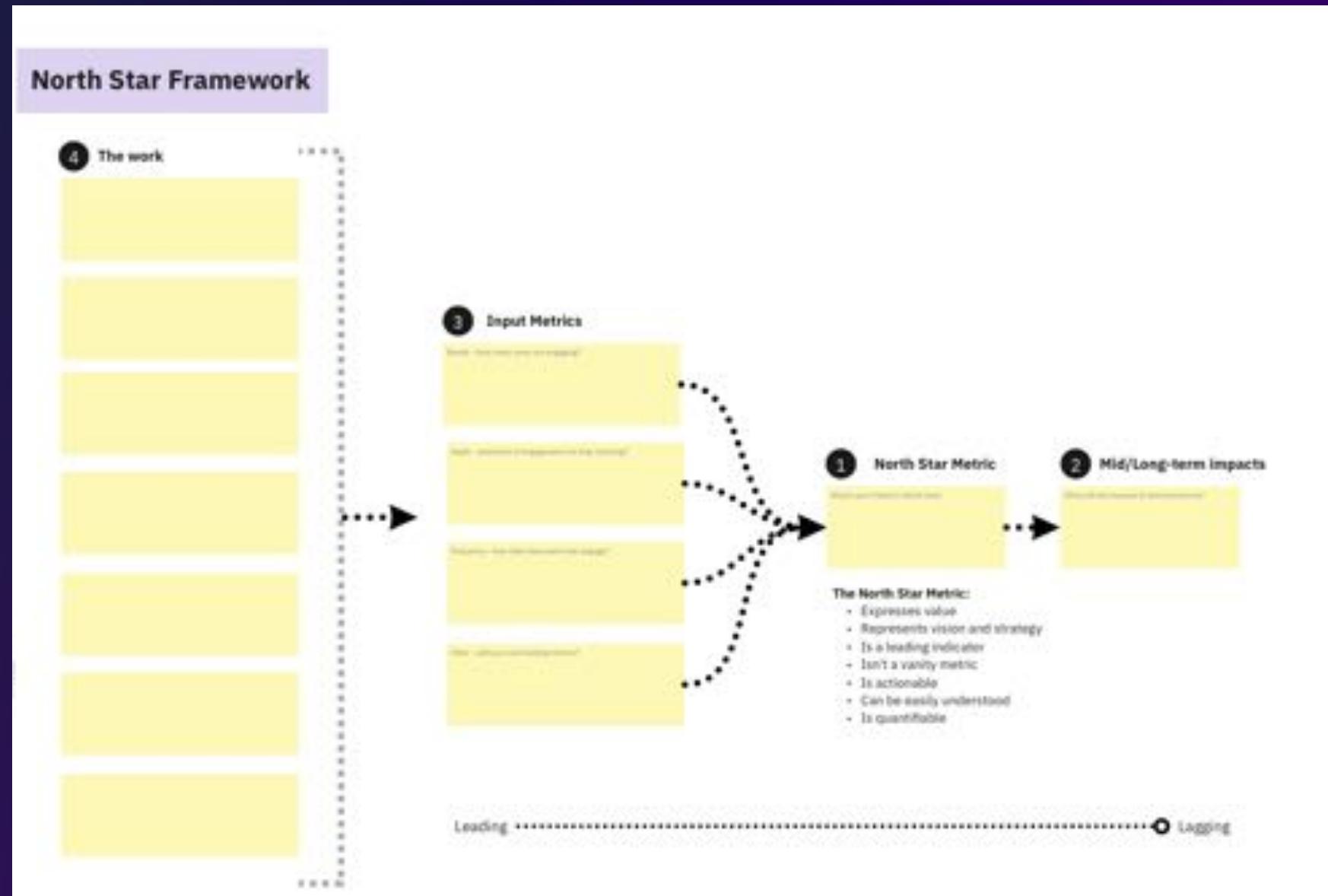
The Value Flywheel



North Star Framework

From Amplitude

Who are your Users?
What are their needs?
What is the scope?
What's the supply chain?
Invisible dependences?
What is evolving?





We are the business.



Metrics that matter

Business
Goal

Technology
Goal

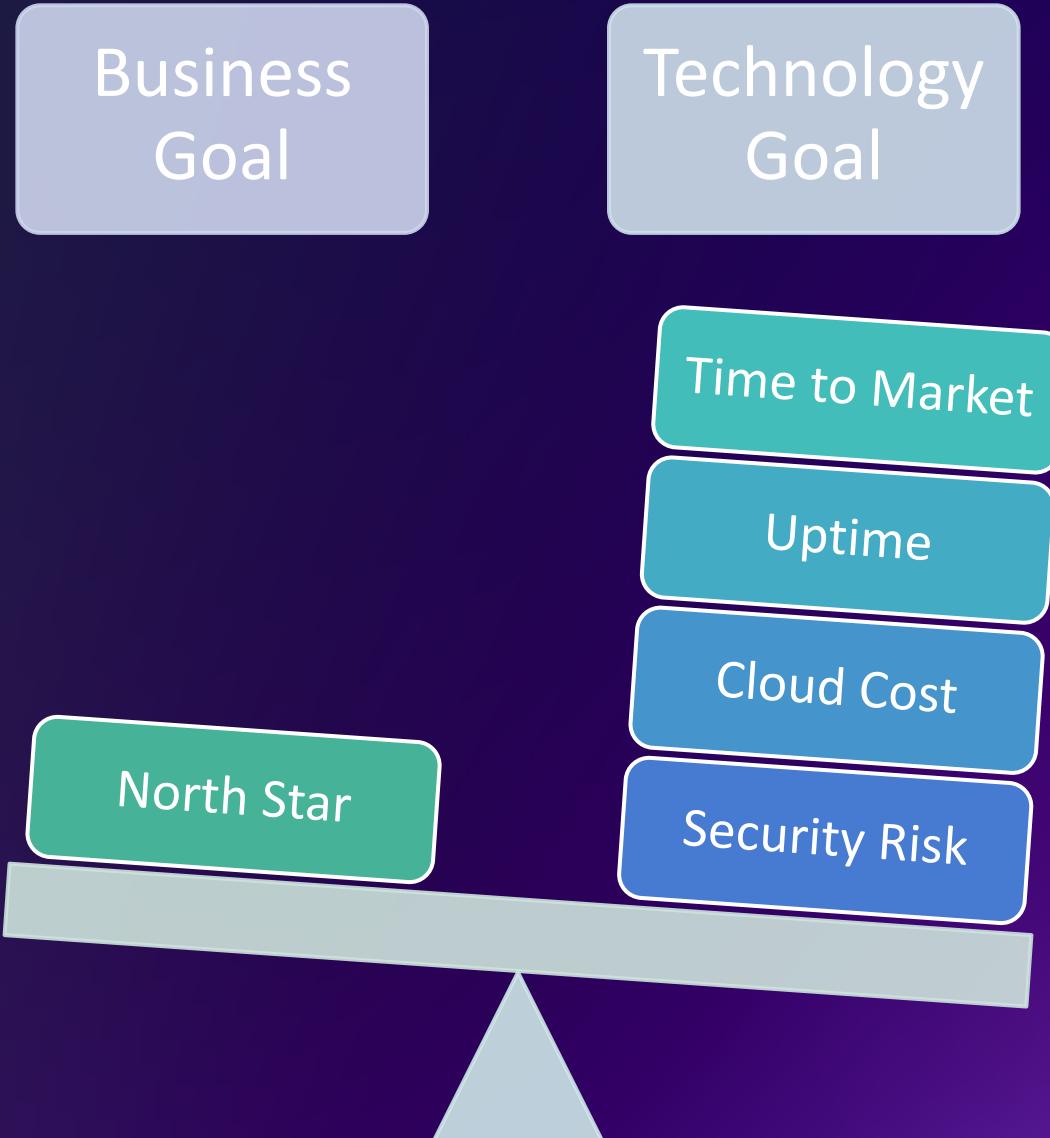
Time to Market

Uptime

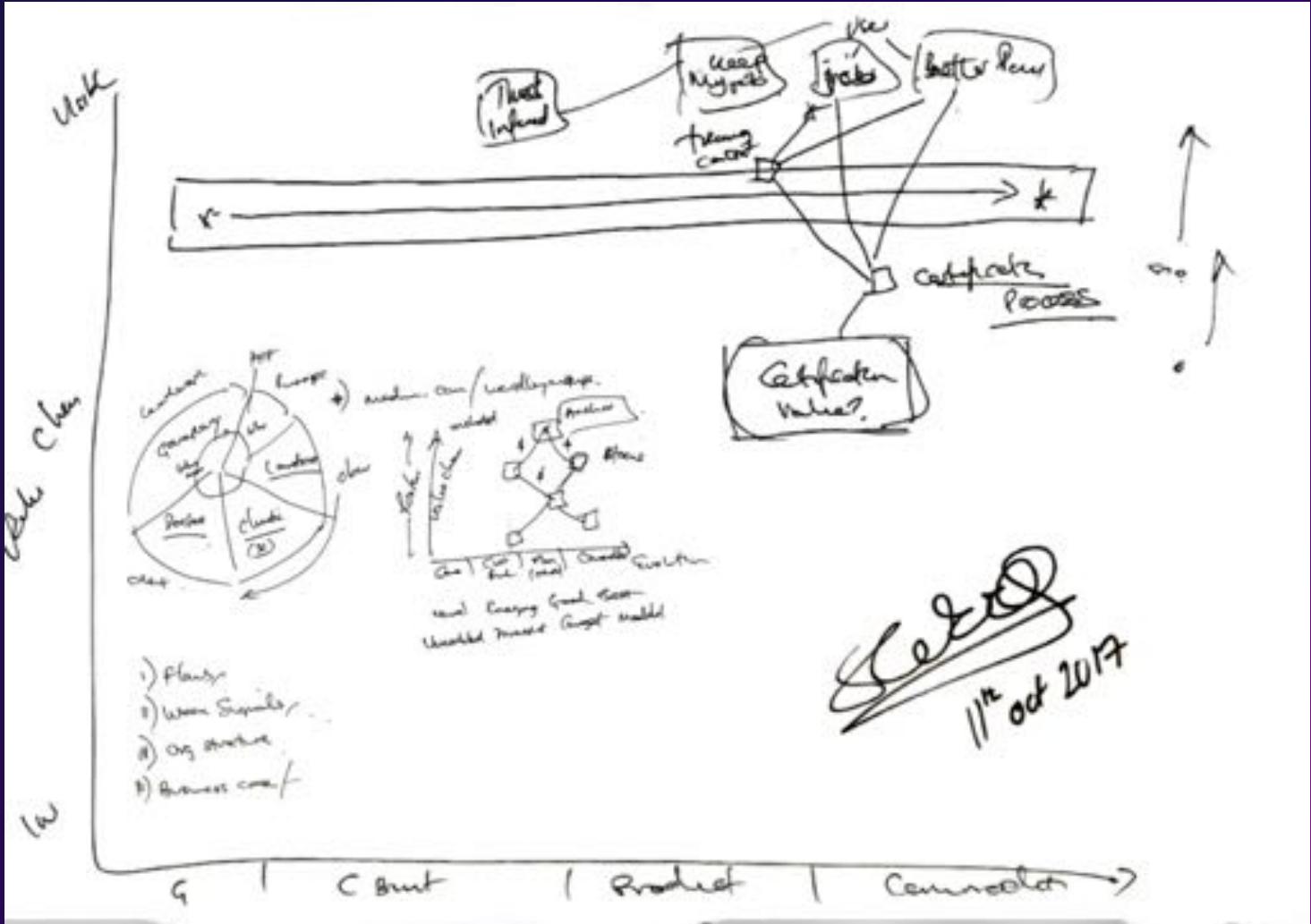
Cloud Cost

Security Risk

North Star



A Cloud Guru





The Value Flywheel





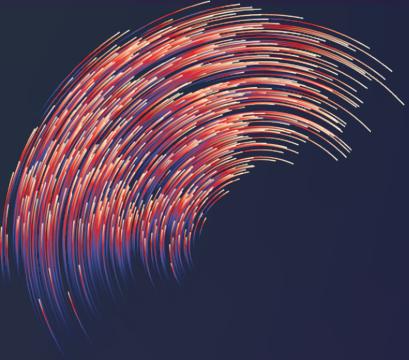
Remote work has
changed the
environment
forever.





Your system is
more than code,
it's
sociotechnical.





Taking a wider view of your tech and teams will help create an environment for success.

Consider Team Topologies.

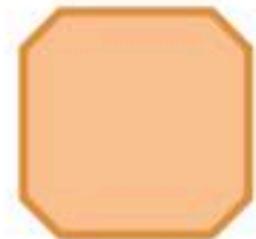
Four Team Types



Stream-aligned team



Enabling team



Complicated- subsystem team



Platform team



Create enabling Constraints



Workgrid

Technical strategy

“Got an idea? Try me.”
(Invite challenge)



The Value Flywheel



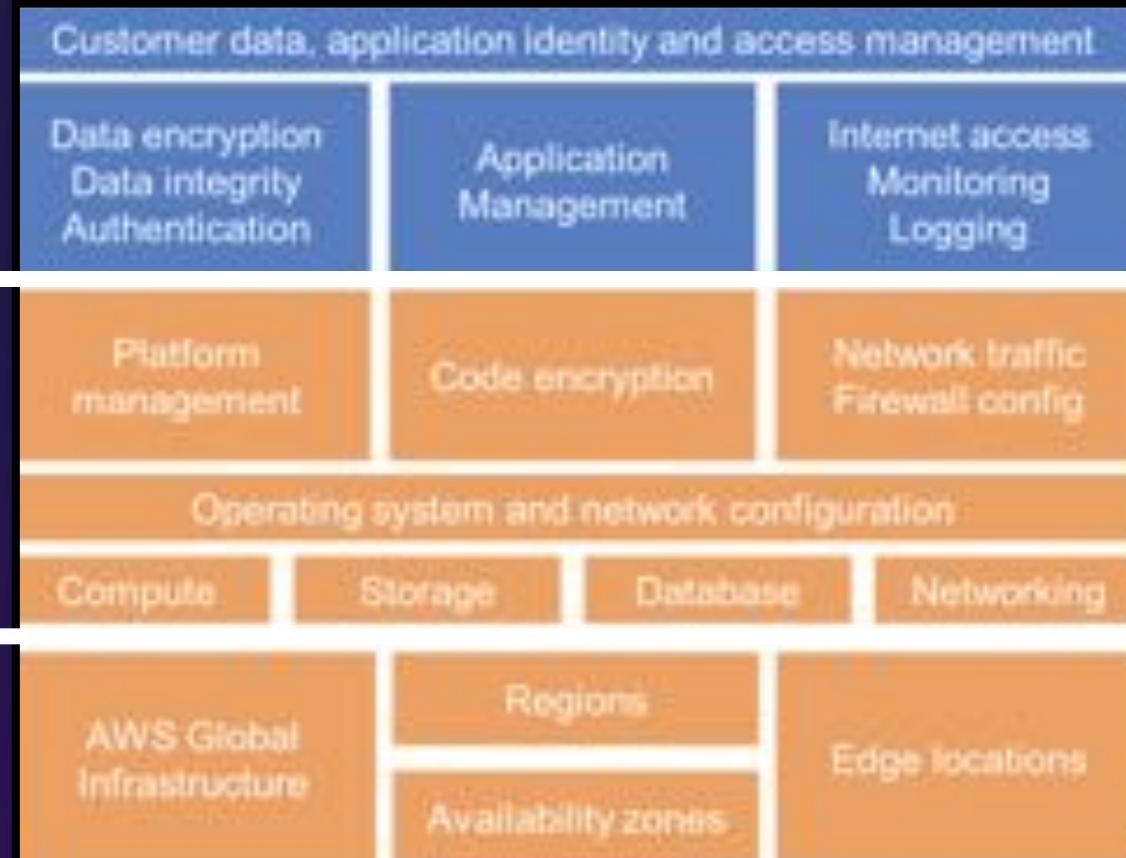


The Shared Responsibility Model

- where do you draw the line?

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

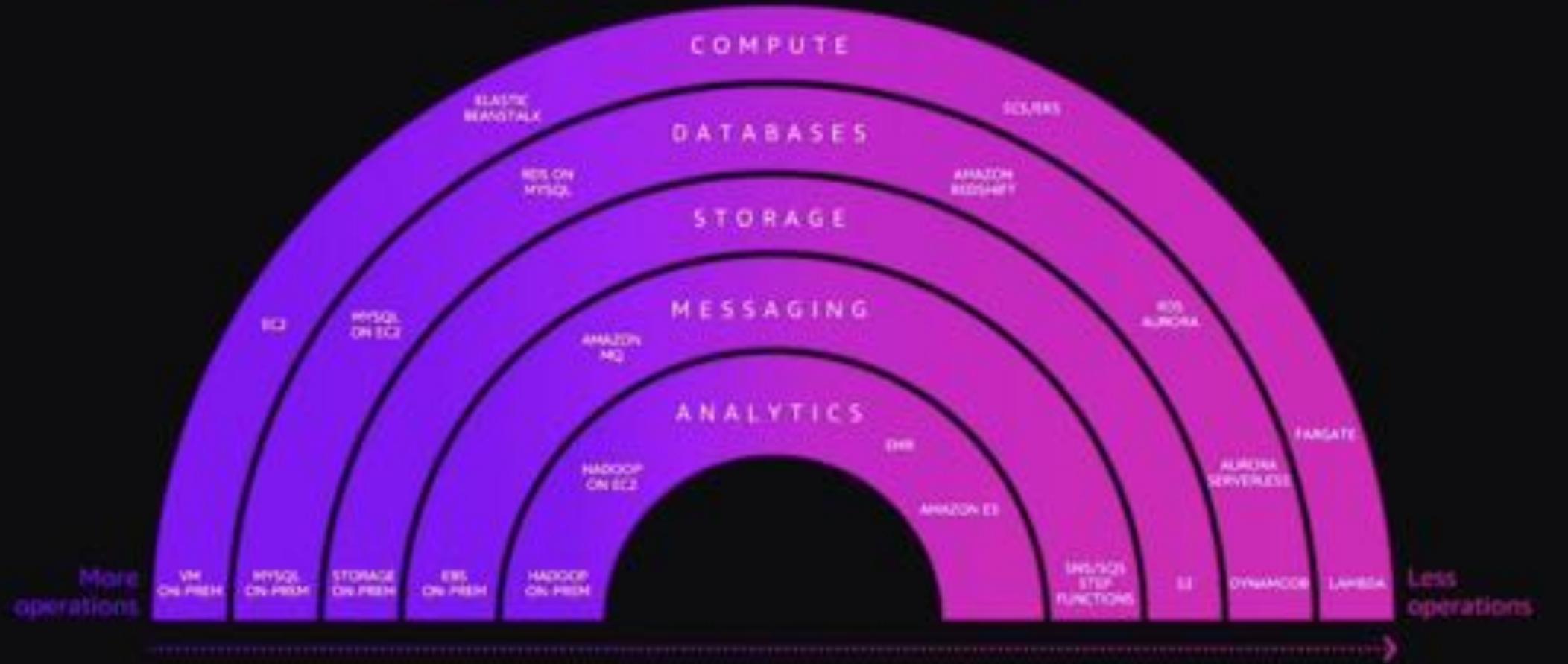
Migrated to the Cloud –
Treating the Cloud like a data centre



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

Serverless First

Serverless is an **operational construct**



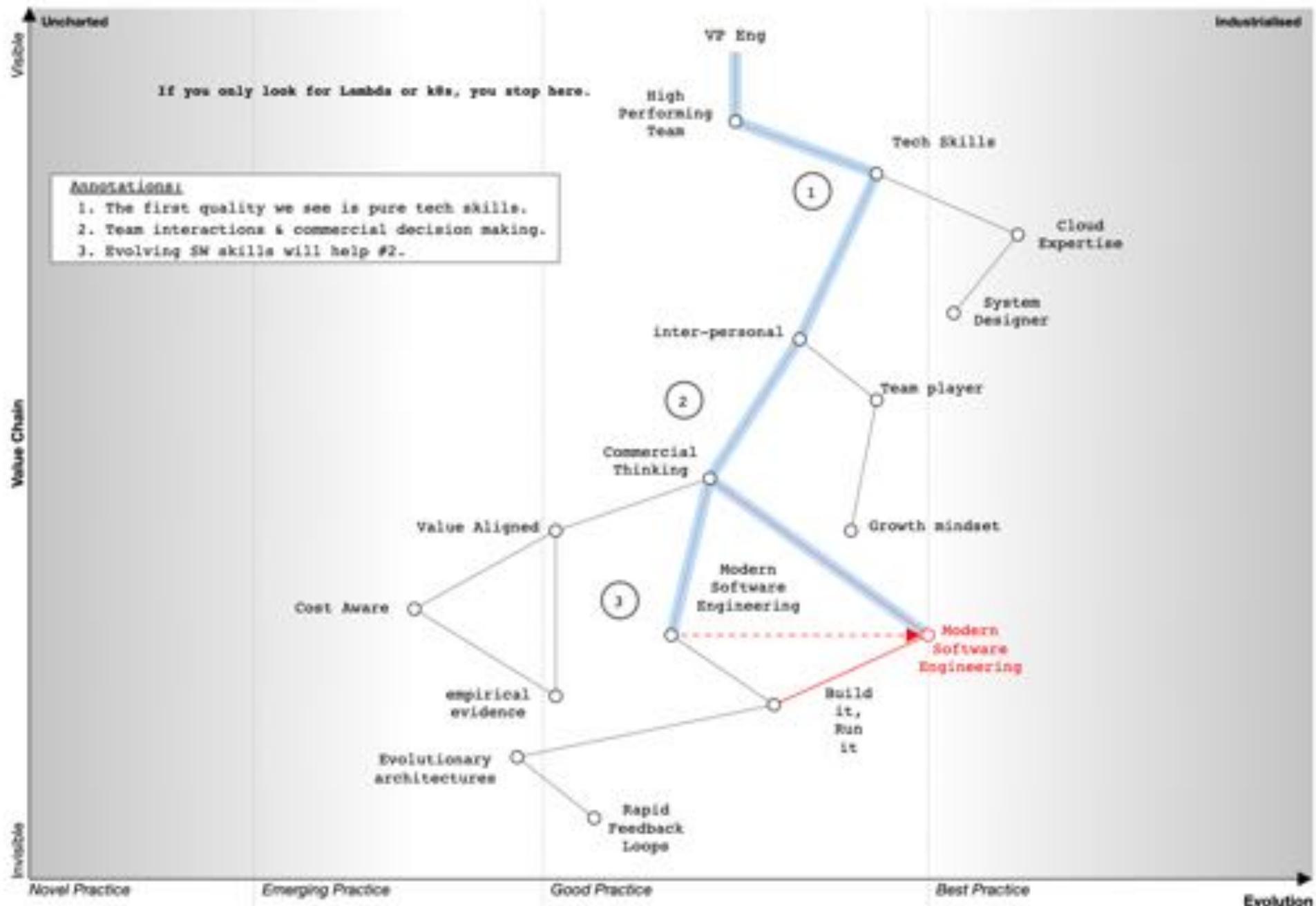
YOUR ENGINEERS ARE...

- Experts with Cloud Principles– even in leadership.
- First class System Designers (EDA?)
- Commercial thinkers – Cost & Value aware, with data.
- Sensible with learning, teaming and inter-teaming.
- A Modern Software Engineer (*nod* Dave Farley):
 - Build it, Run it, Own it.
 - Rapid Feedback Loops.
 - Modular, sense-maker, simplifier.
 - Efficient.

MODERN SOFTWARE ENGINEERING



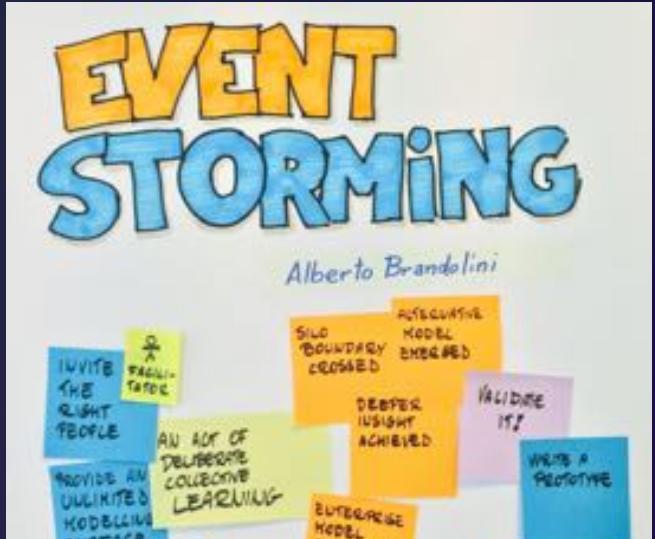
Serverless-First Engineers



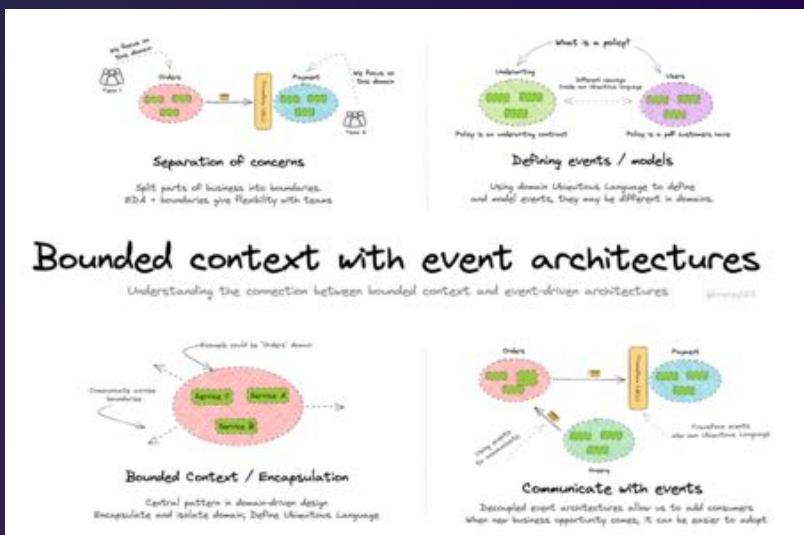
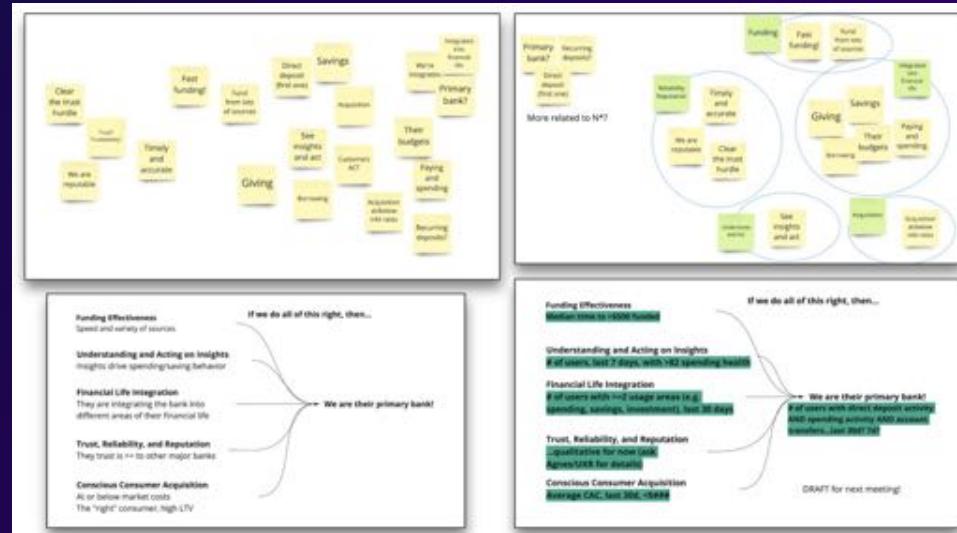


driven

Event Storming



North Star



Bounded Contexts & EventBridge



Example Mapping



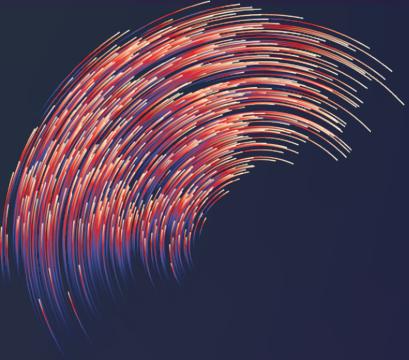
Engineers with high agency & low barriers

The Value Flywheel



SCORP & Engineering Excellence





Be Well-Architected





SCORP

Business Metrics – transactions/failures/throughput/sales

Security – Threats & mitigations

Cost – per Cloud service

Operational Excellence – DORA metrics

Reliability – Incidents

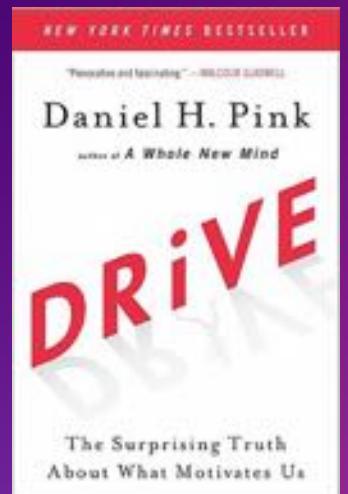
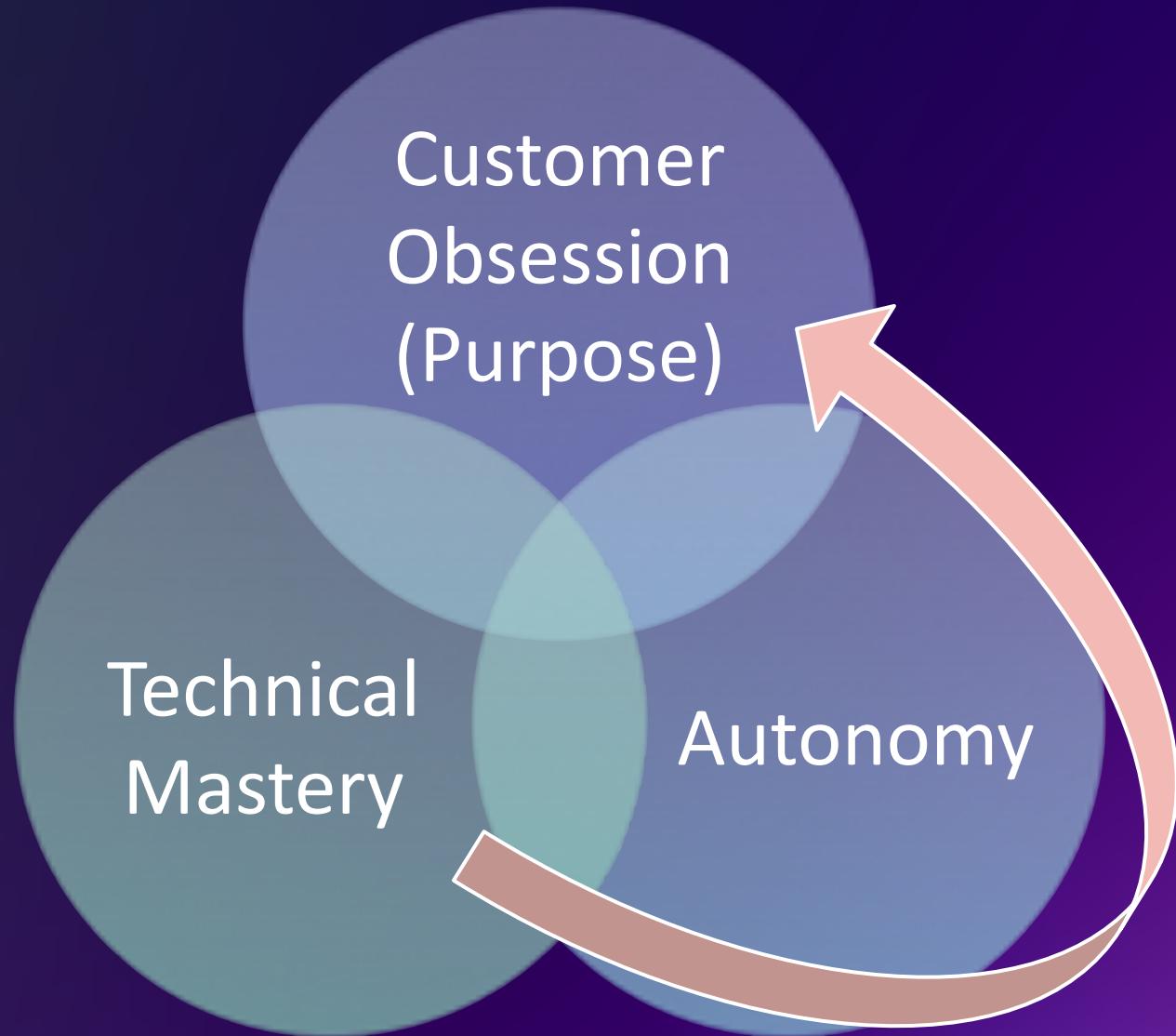
Performance – Errors/ingestion stats/various processing times

Well-Arch Review findings

In a simple wiki page, with trends across every 2 week iteration.



Engineering Excellence



SCORP & Engineering Excellence





BBC running at scale.

<https://medium.com/bbc-product-technology/bbc-online-a-year-with-serverless-ffc2ae474277>

WebCore February 2022 Highlights



WebCore highlights for February 2022.

In Summary...

1. Create an atomic habit around Wardley Mapping – sense making!
2. Use North Star to capture needs.
3. Use Team Topologies for the socio-tech picture.
4. Lean into Serverless-First as a concept.
5. Engineering Excellence & SCORP as a heartbeat.



The Value Flywheel





This is not easier,
but it's better.

Create High
Performing teams.





The Value Flywheel Effect book
out now from IT Revolution.



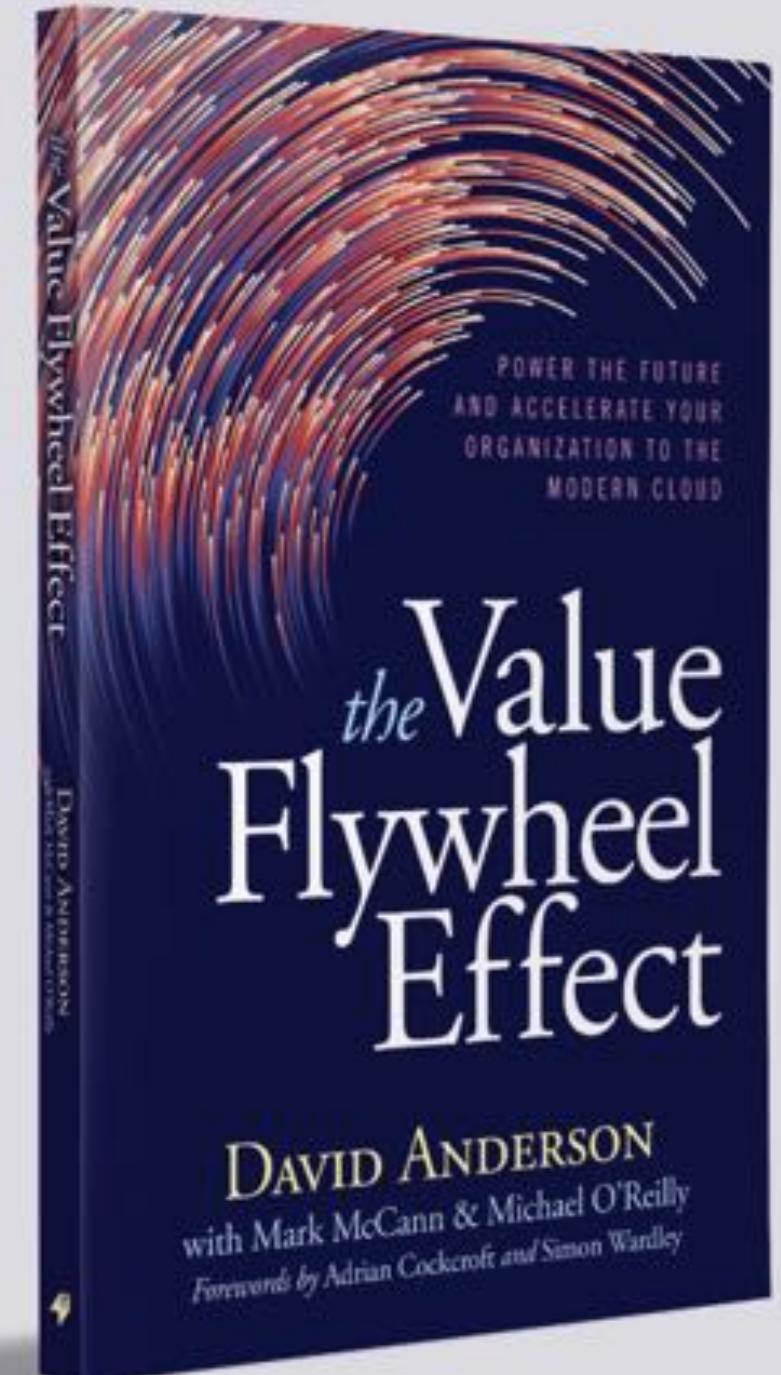
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Thank you!

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