



COMMUNITY DAY

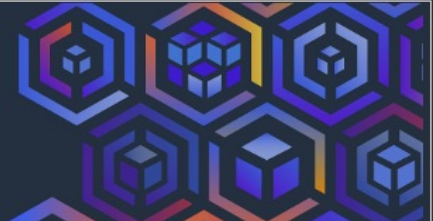
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Cloud Transformation

Breaking down the history and journey





Who Am I?

Name	Paul Dunlop
Age	Old
Job	National AWS Lead @ Datacom
Industry Exp	Over 28 years in IT and 9 with AWS tech
Hobbies	3D Printing Computer Gaming Making Music Spending time with Family





Today's Session

Disclaimer: Today is my opinion and not that of my employer (we're in alignment though 😊)

95% of this content is publicly available for you to find and consume

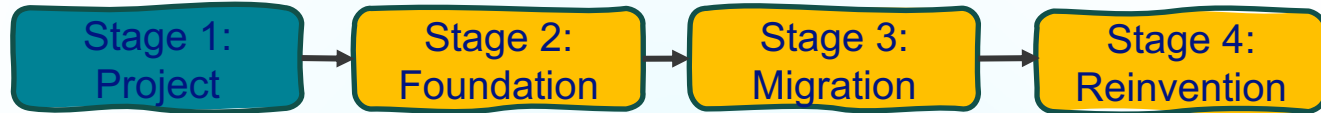
My goal is to help you with your reading journey!



aws.amazon.com
The Journey Toward Cloud-First & the Stages of Adoption | Amazon Web Services
"I can't change the direction of the wind, but I can adjust my sails to always reach my destination." Jimmy Dean In my last post, I introduced some patterns I've observed within large enterprises that have implemented cloud-first policies. These enter...

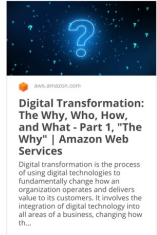
Historical / Typical Cloud Journey in 2016

<https://aws.amazon.com/blogs/enterprise-strategy/the-journey-toward-cloud-first-the-stages-of-adoption/>



What we saw

- No structure.
- Typically started from Rogue Project.
- No C-Level buy in.
- Implemented bottom up.
- Re-invention = Stalling Point.



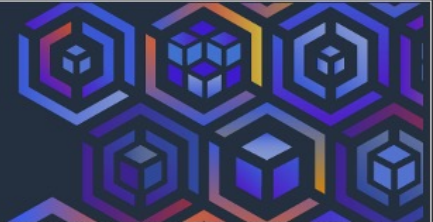
2023 Cloud Adoption = Digital Transformation

<https://aws.amazon.com/blogs/enterprise-strategy/digital-transformation-the-why-who-how-and-what-part-1-the-why/>



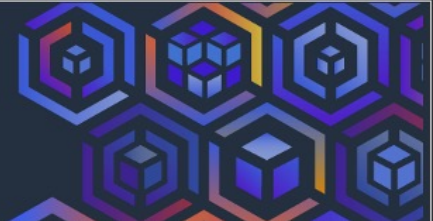
Key Points:

- Your business is driven by Business Strategy not technology. It defines why your company exists.
- Digital strategy is more than Cloud.
- Cloud Strategy draws upon the industry standard Cloud Adoption Frameworks.



6 Transformation Principles that enable Success

- 1/ Clear, **business-driven** digital transformation strategy supported from the top down
- 2/ The **whole company** is involved in digital transformation: it's not just a technology project
- 3/ Digital transformation is an overarching and **ongoing activity** and not just a project
- 4/ Embrace an **organizational culture** that tolerates experiments and errors
- 5/ An **openness** to changing ways of working
- 6/ A desire to invest and an appreciation of a **learning culture**

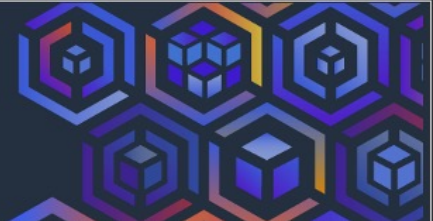


AWS Consultancy Tools

AWS have the following available for customers and partners to help with their journey:

- AWS Cloud Adoption Framework
- AWS Cloud Enablement Engine (CCoE) *(Somewhat Defunct)*
- AWS Cloud Operating Model (Updated 2023)
- AWS Migration Acceleration Program (MAP)

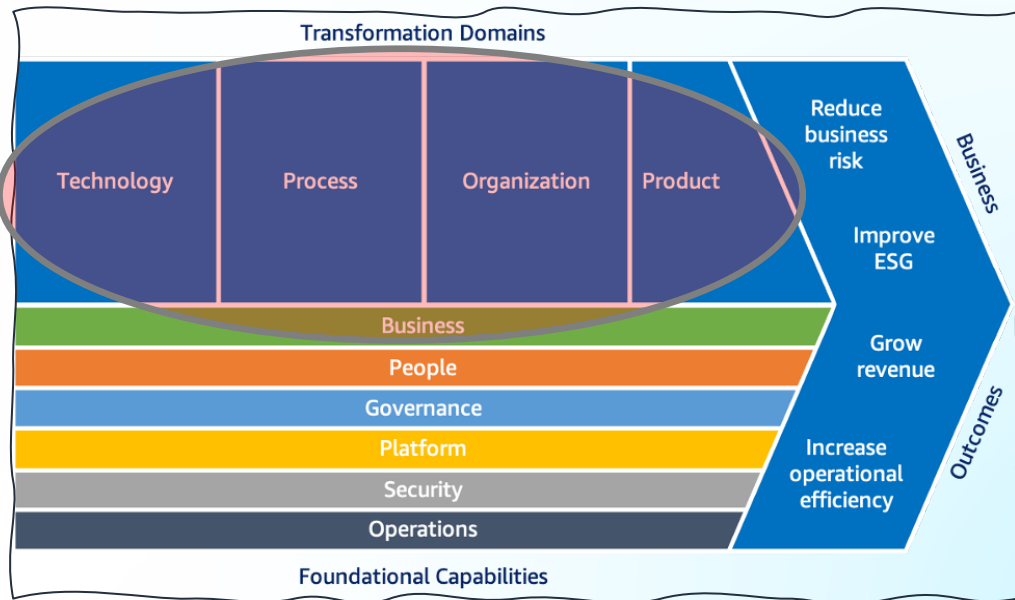
AWS Cloud Adoption Framework



AWS Cloud Adoption Framework

Cloud Transformation Value Chain

Your Business outcomes are accelerated by a set of 4 Transformation Domains underpinned by 6 foundational capabilities.



Transformation Domains

Technological transformation focuses on using cloud to migrate and modernize legacy infrastructure, applications, and data and analytics platforms.

Process transformation focuses on digitizing, automating, and optimizing your business operations.

Organisational transformation focuses on reimagining your operating model; how your business and technology teams orchestrate their efforts to create customer value and meet your strategic intent.

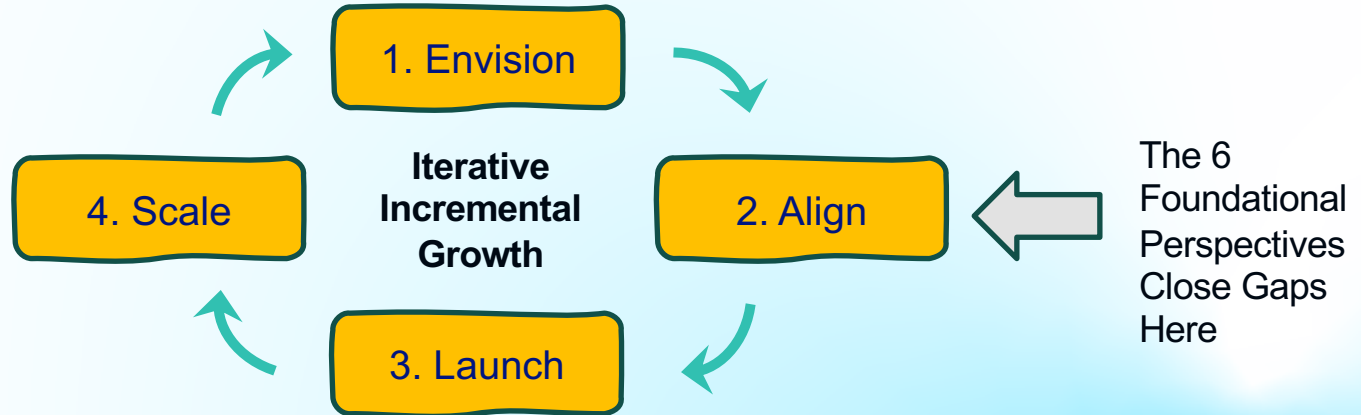
Product transformation focuses on reimagining your business model by creating new value propositions (products, services) and revenue models. Doing so may help you reach new customers and enter new market segments.

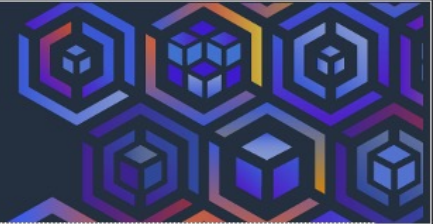


CAF Phases

The AWS **CAF** recommends **four iterative** and **incremental** cloud transformation **phases**.

Each organization's cloud **journey is unique**. To succeed in your transformation, you'll need to envision your desired target state, understand your cloud readiness, and adopt an **agile** approach to closing the gaps. **Transforming incrementally** will allow you to **demonstrate value quickly** while minimizing the need to make far-reaching predictions.





Phases

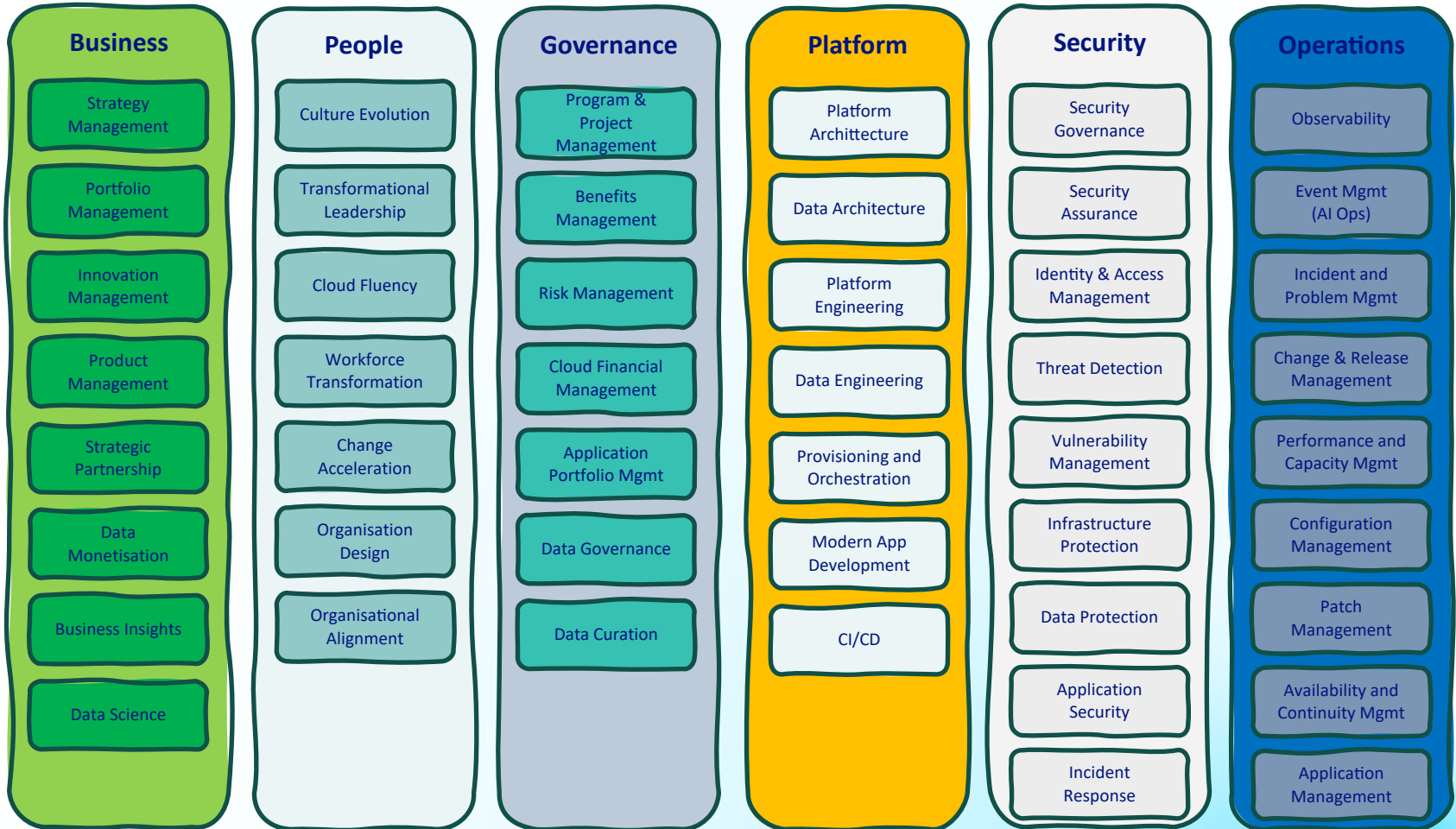
1. Envision phase focuses on demonstrating how cloud will help accelerate your business outcomes.

2. Align phase focuses on **identifying capability gaps** across the six AWS CAF perspectives, identifying cross-organizational dependencies, and surfacing stakeholder concerns and challenges.

3. Launch phase focuses on delivering **pilot initiatives in production** and on demonstrating incremental business value.

4. Scale phase focuses on **expanding production pilots** and business value to desired scale and ensuring that the business benefits associated with your cloud investments are realized and sustained.

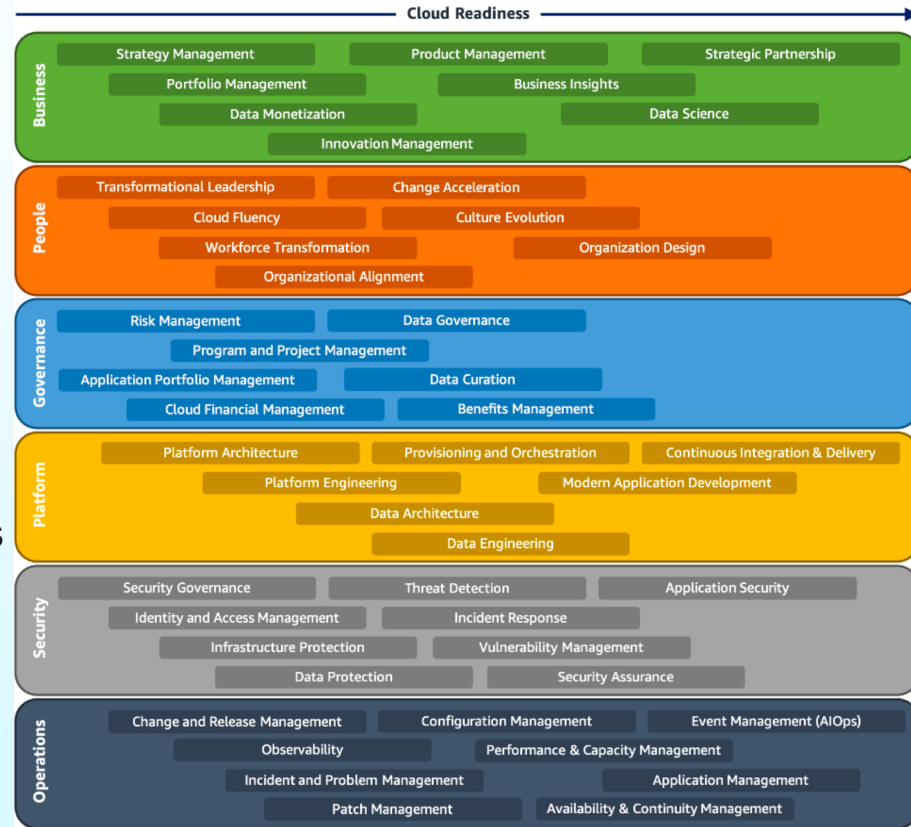
Foundational Capabilities – The 6 CAF Perspectives





Cloud Readiness; AKA your Roadmap

- Planning is essential
- Heat map your maturity
- You may not need to tackle all the foundational capabilities at once.
- Evolve the foundational capabilities and improve their cloud readiness as they progress through their cloud transformation journey.
- Consider tailoring the suggested sequence shown in the following figure to your particular needs as a programme of work.



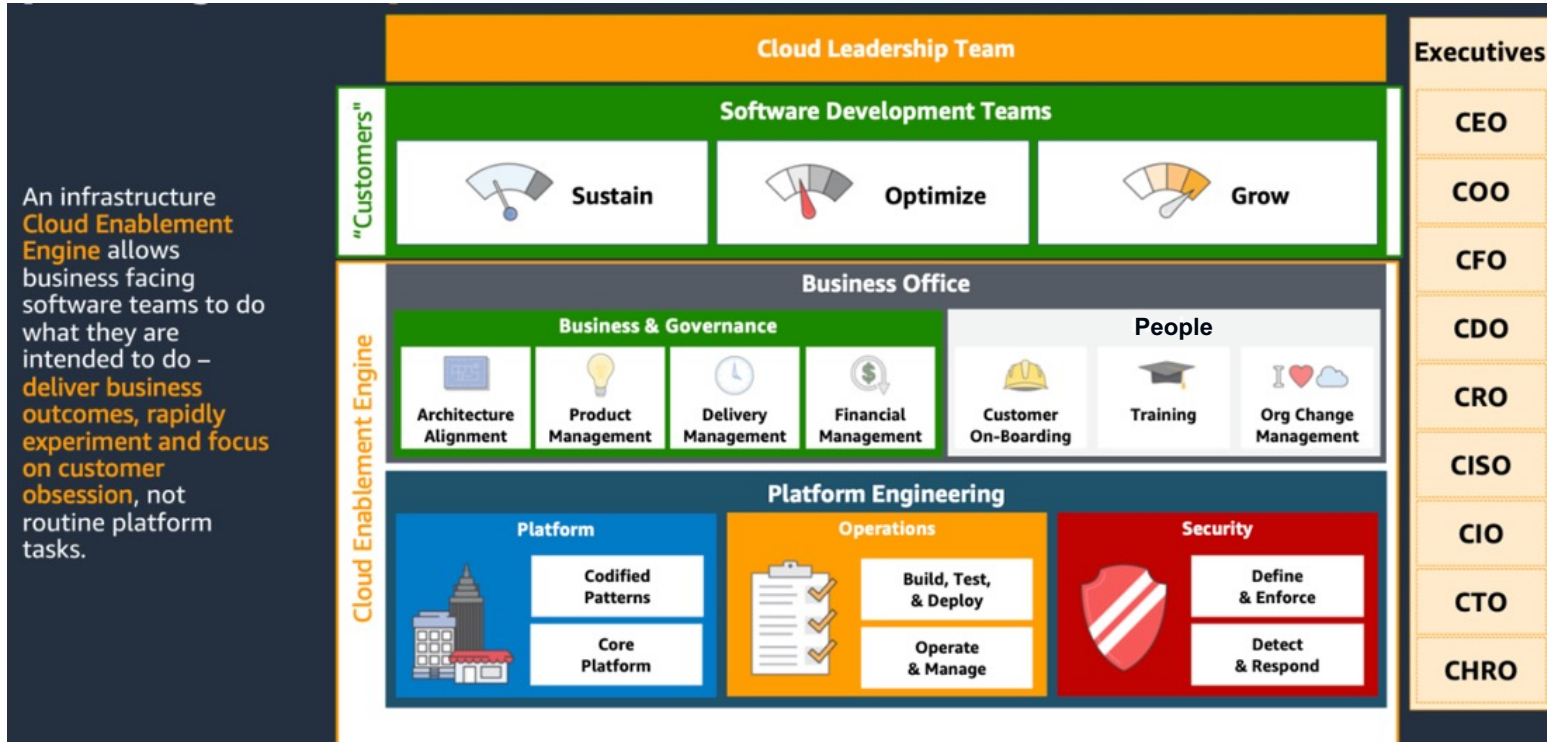


AWS Cloud Enablement Engine





CLOUD ENABLEMENT ENGINE (superseded now)





Similar to the CAF, the CEE defined domains and focus areas within each domain to uplift during transformation

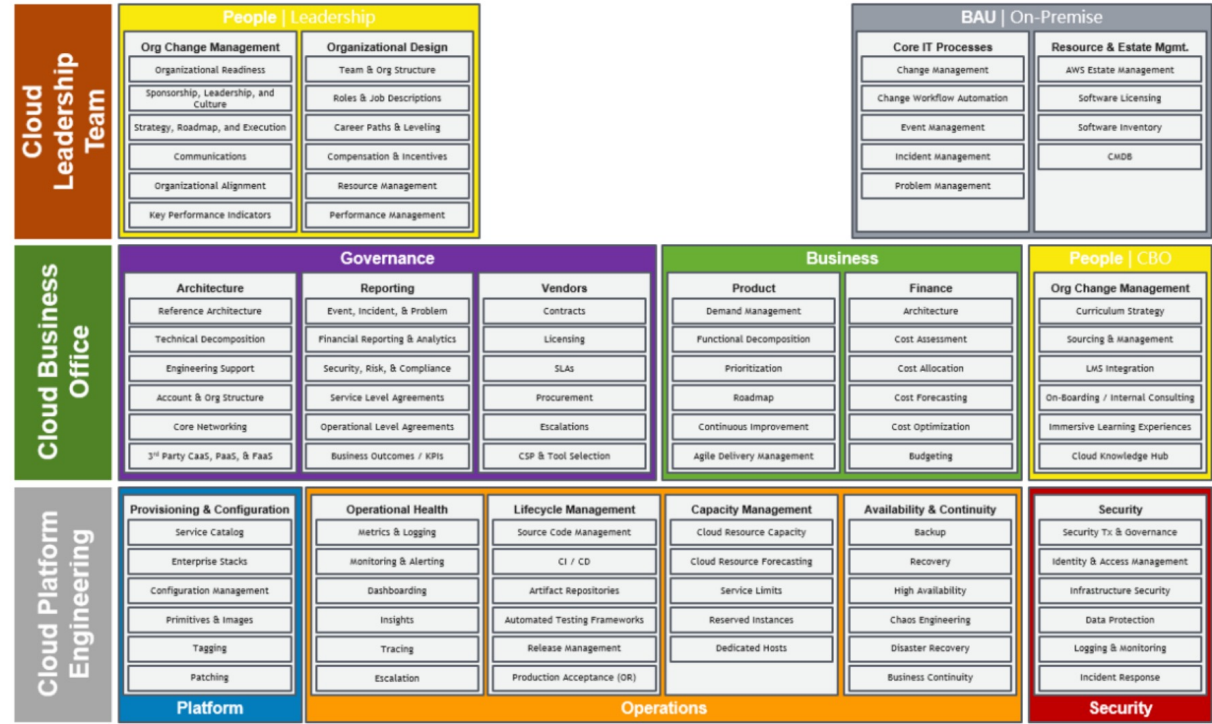
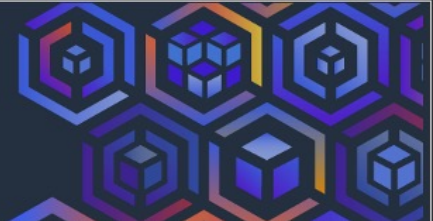


Figure 6: AWS Operational Domain Model



CLoud ENABLEMENT ENGINE

Was it about a Cloud Operating Model or a Cloud Centre of Excellence?

Both!

What is the difference?

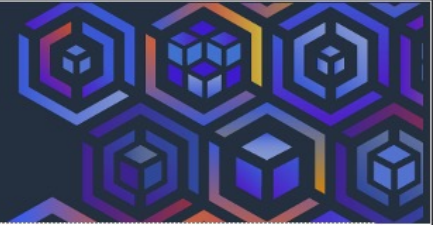


A Cloud Center of Excellence is not a Cloud Operating Model

	Cloud Operating Model	Cloud Center of Excellence
Use case	When you have significant workloads in the cloud, but you aren't meeting the key performance indicators (KPIs), business outcomes, or values you were expecting to gain from the cloud over traditional on-premises approaches	When progress has stalled or your organization needs to enable the adoption of the cloud and new ways of thinking, deciding, behaving, and innovating by standardizing best practices for autonomous work
Teams included	IT and business teams	Cross-functional, multi-skilled resources aligned to the Cloud Leadership Team, Cloud Business Office, and Cloud Platform Engineering
Focus	Supporting, enabling, and optimizing cloud workloads by maturing your organization's existing operating model and capabilities to adopt cloud-first ways of working	Establishing an entity to accelerate and build technical and cultural foundations to enable migration and innovation
Expected outcomes	Greater operational efficiencies, reduced cost of IT delivery, reduced risk, greater agility, and more innovative technical capabilities and services	Accelerated and sustainable cloud adoption; empower cloud-driven products teams with a self-service environment, minimized disruptions, greater adoption of standardized approaches and patterns, and increased productivity that accelerates delivery; optimized agility and value of cloud; scale through ongoing risk mitigation

A Cloud Center of Excellence (CCoE) is a cross-organisational leadership function. It supports successful cloud adoption across the enterprise through alignment, enablement and automation.

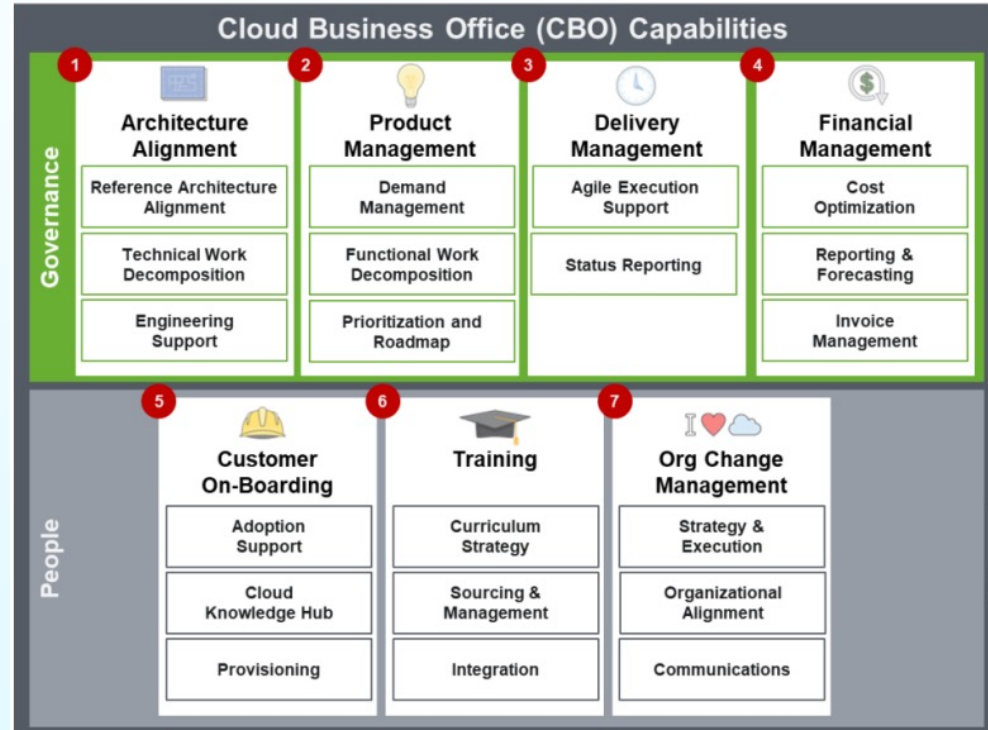
A Cloud Operating Model is the operating model within an IT organisation. It is used to build, mature, and optimize one or more cloud environments.



Functions to evolve and embed

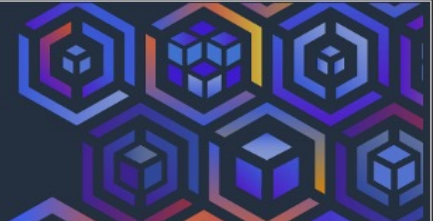
Whether you use your existing teams or you set up a new CCOE these 7 functions are necessary to establish for successful Public Cloud Adoption

These become part of your new overarching operating model

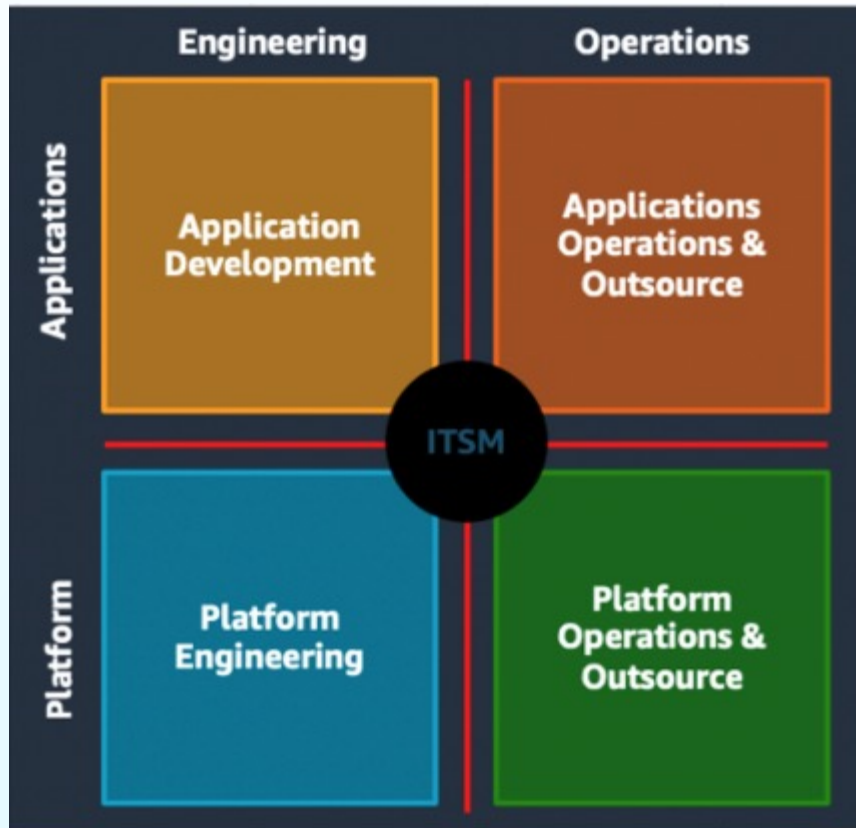


Operating Models





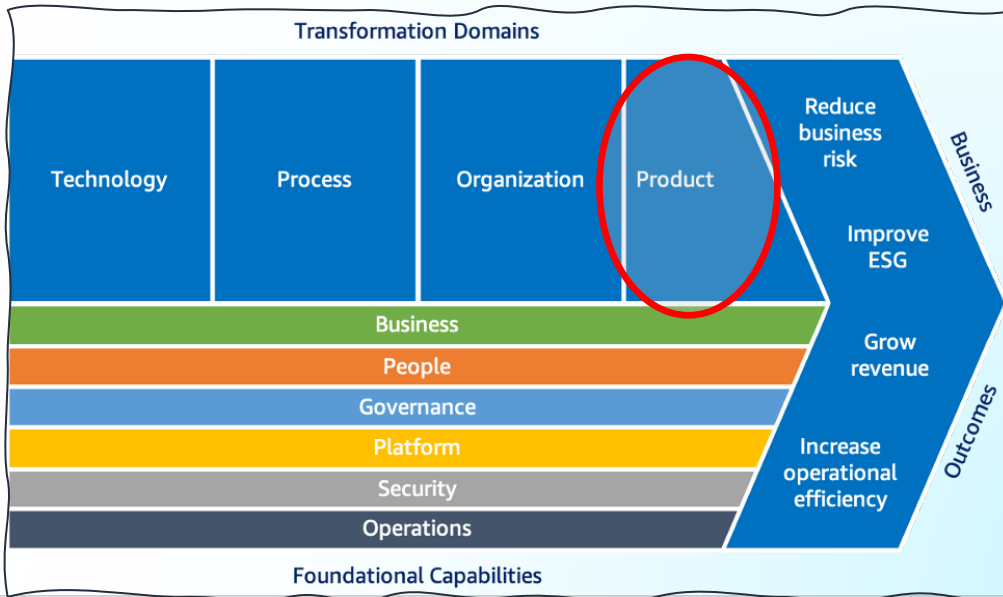
Traditional





What is one of the Biggest changes to the way we Operate?

PUBLIC CLOUD MAKES EVERYTHING A PRODUCT!



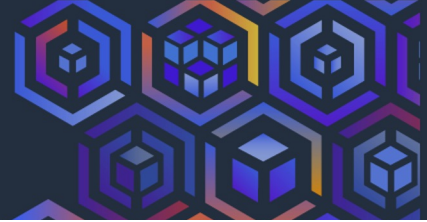
All the Infrastructure people just groaned...

In Cloud, “Product” typically relates to software or components thereof



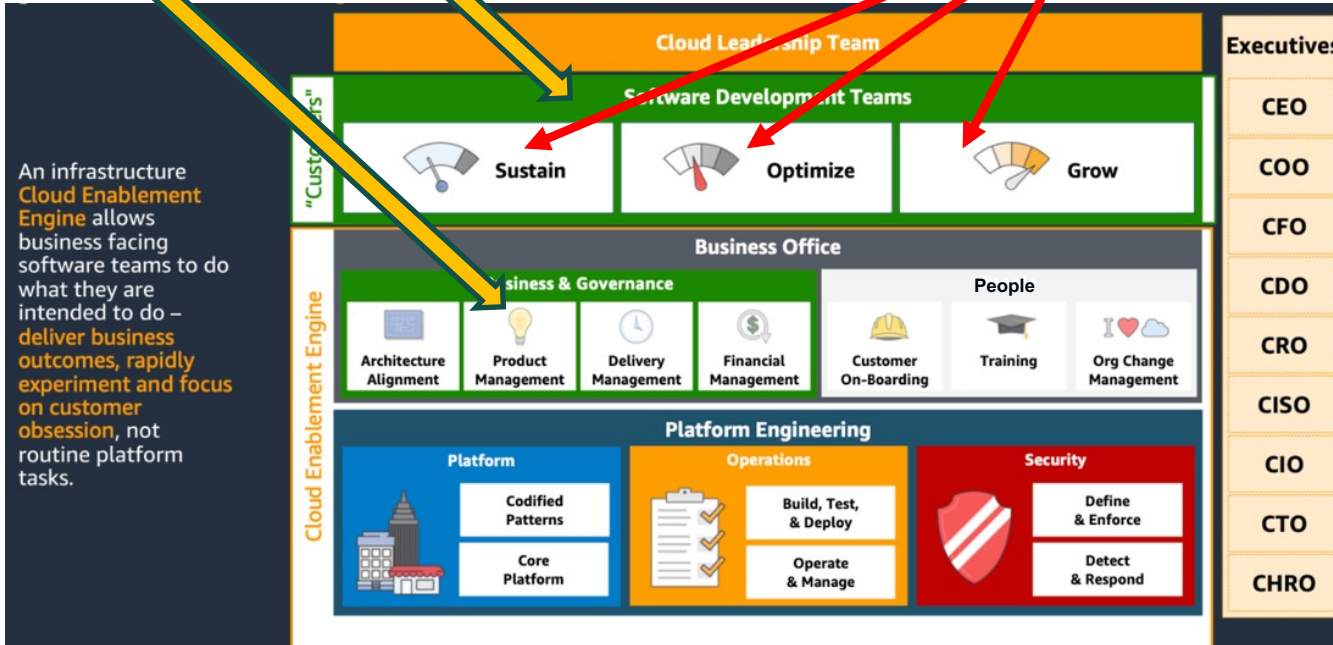
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Product Mgmt and Product Creators

What Are These?



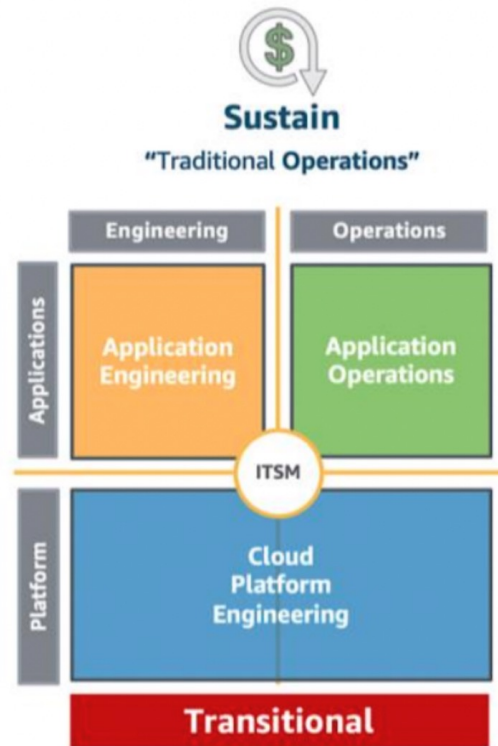


SUSTAIN

Takes on a Traditional Operations approach.

Nearly identical to the legacy, activity-based model we see in most organisations where boundaries between engineering, operations, infrastructure and application teams exist.

This model works best for lift-and-shift workloads where there is little or no value in changing the operational approaches for the workload either because it rarely changes or has a limited lifespan left.



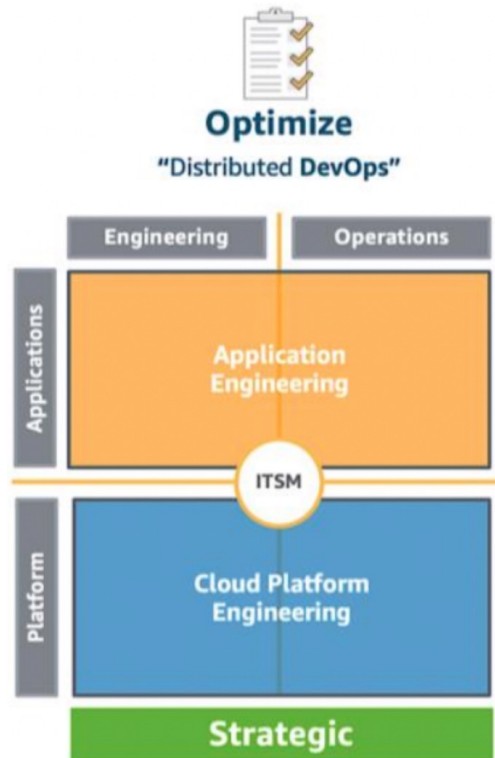


OPTIMIZE

Application Engineering is now also responsible for Application Operations. Think of this as DevOps for the application team, where they own the full outcome of delivering and operating their application.

Cloud Platform Engineering now owns engineering and operations of the platform services they provide to enable Application Teams.

Implies a Shared Responsibility Model between the Application and Platform teams.





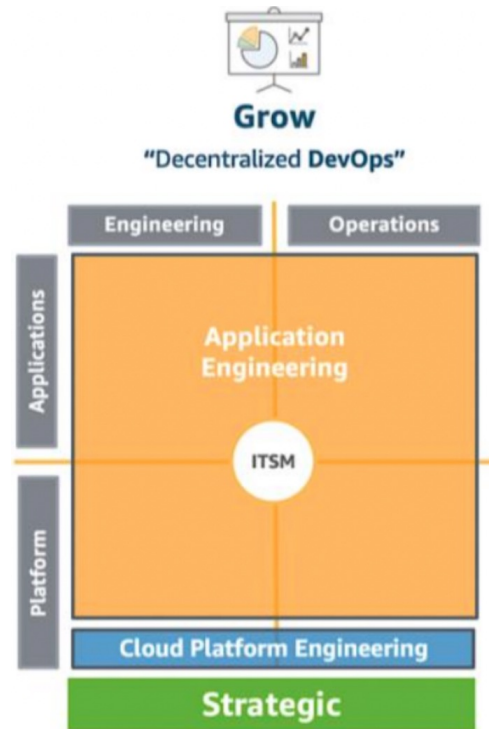
GROW

For teams that are:

- on the bleeding edge of technology
- looking to consume the latest AWS services

Application engineering is responsible for their applications they are empowered to build out platform capabilities that have not yet been standardized by the Cloud Platform Engineering team.

Cloud Platform Engineering still provide standard accounts and guard rails that prevent Application teams from configuring Services in a way that would expose the enterprise to inappropriate security, financial, or operational risk





LETS CHALLENGE WHAT A PRODUCT IS

for a moment, lets pretend its not Software Development Driven

PETS

VS

CATTLE

Stateful

! NEEDS CARE !

Stateless

Monolithic

Loosely Coupled

Vertically Scaled

Horizontally Scaled

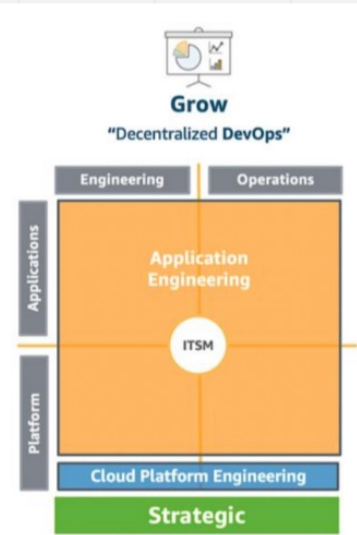
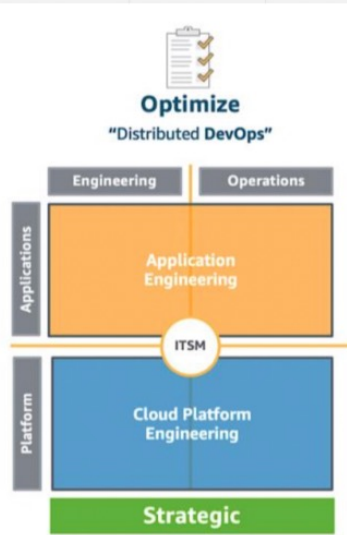
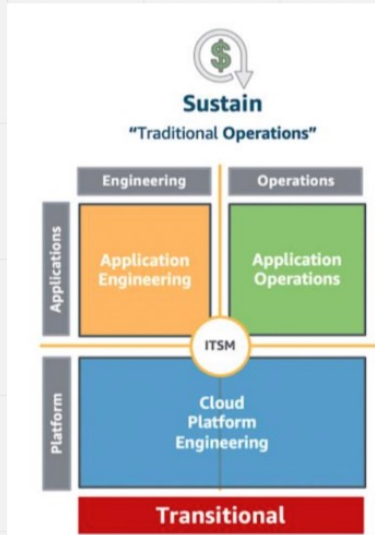
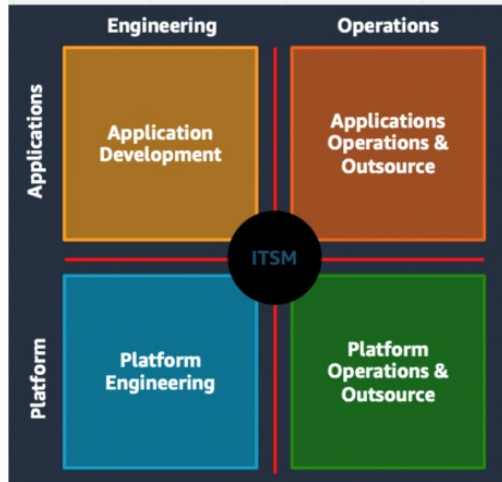
Tight Release Controls

Agile Release Controls

Migration - Lift and Shift

Productisation of Application

Migration - Modernisation



Traditional Support Model

Segregation Pillars of management and governance

Rigid ITSM

Traditional Support Model

Segregation Pillars of management and governance

Rigid ITSM

Applications replatformed to use more Managed Services where Platform Engineering still manage aspects of the "infrastructure".

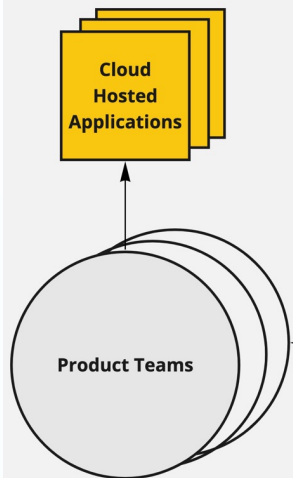
Apps best suited are fully modernised loosely coupled architecture "serverless" orientated apps

Product Teams Own Infrastructure deployment and what they build they support.

Apps best suited are fully modernised loosely coupled architecture "serverless" orientated apps

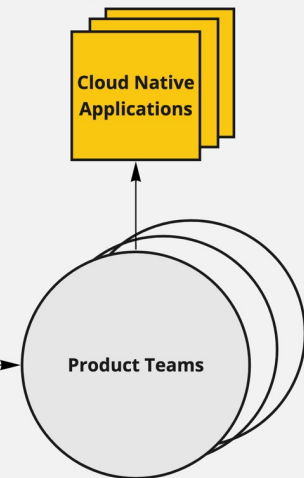
Pets

3 tier monolith running on PaaS in AWS

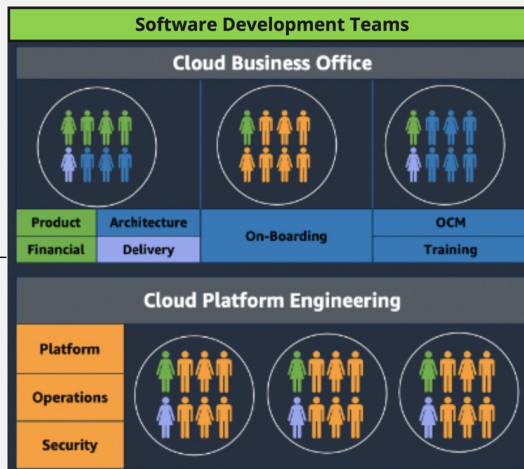
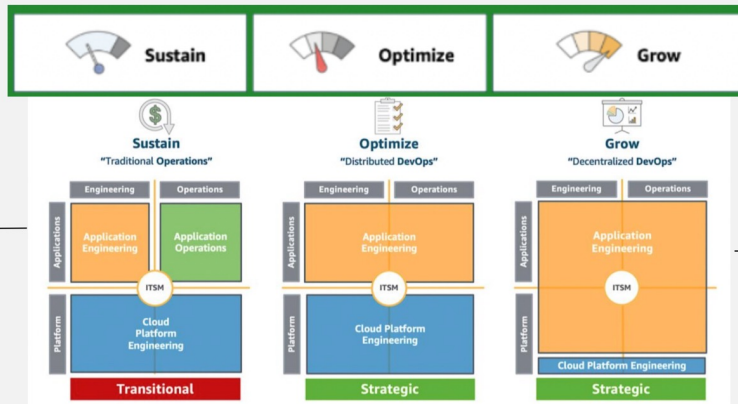


Cattle

DevOps CICD app built using Containers or Serverless



Operating Models



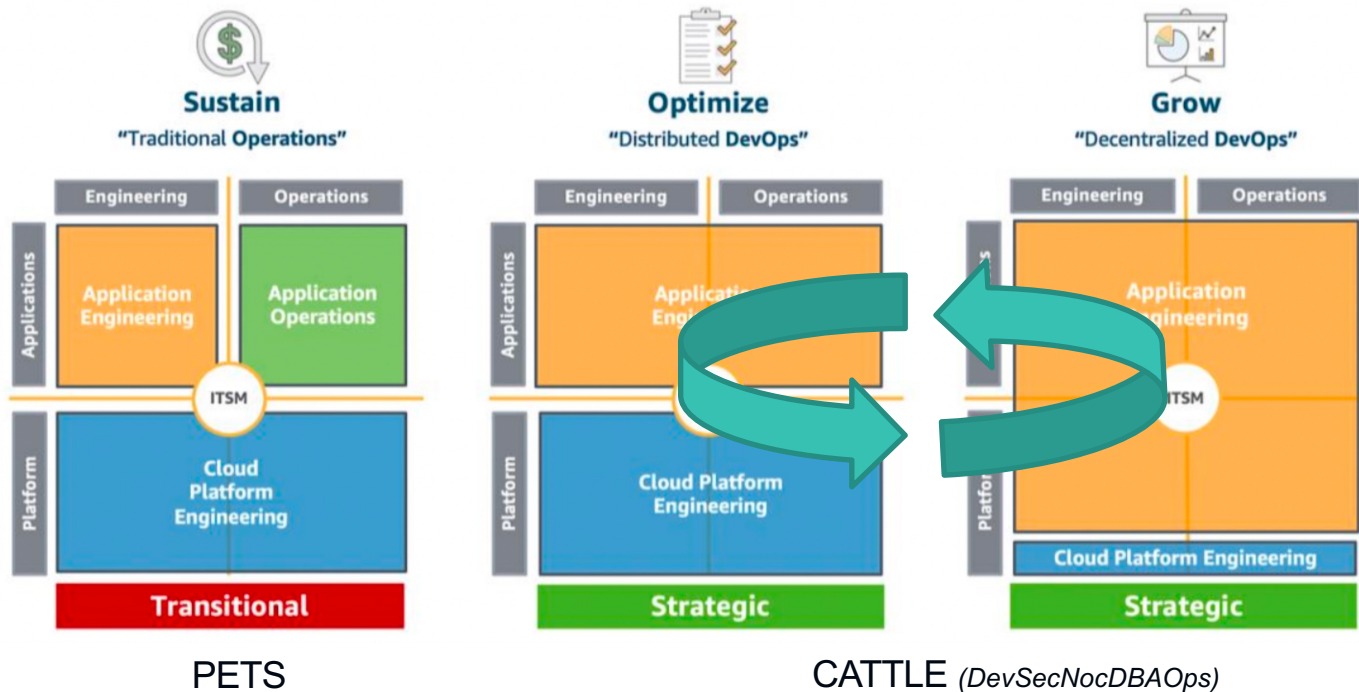
Different Application Types Warrant Different Operating Models.

Pets get:
Sustain + Optimize

Cattle get:
Growth + Optimize



YOU WILL HAVE MORE THAN ONE TECHNOLOGY OPERATING MODEL IN PLAY AT A TIME





AWS MAP Program

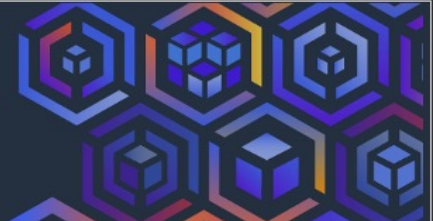
Enabling Partners to help





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AWS MIGRATION ACCELERATION PROGRAM

Migration customer journey





THINGS TO CONSIDER WHEN USING MAP

Bases funding available off the Annual Reoccurring Revenue (ARR) post migration.

Funding is available in 2 Buckets. MAP Full an MAP Lite.

Contextualised to a set of Workloads, aka Applications.

The workload context can only be “MAP’d Once”.

Mobilize Workstreams are often pulled out and run on their own as a result.. e.g.

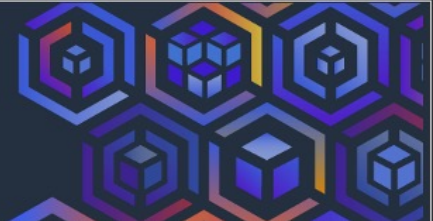
- App Discovery
- Landing Zone
- Migration Readiness Assessment
- Cloud Operating Model

Doing so likely causes funding opportunities to be missed.



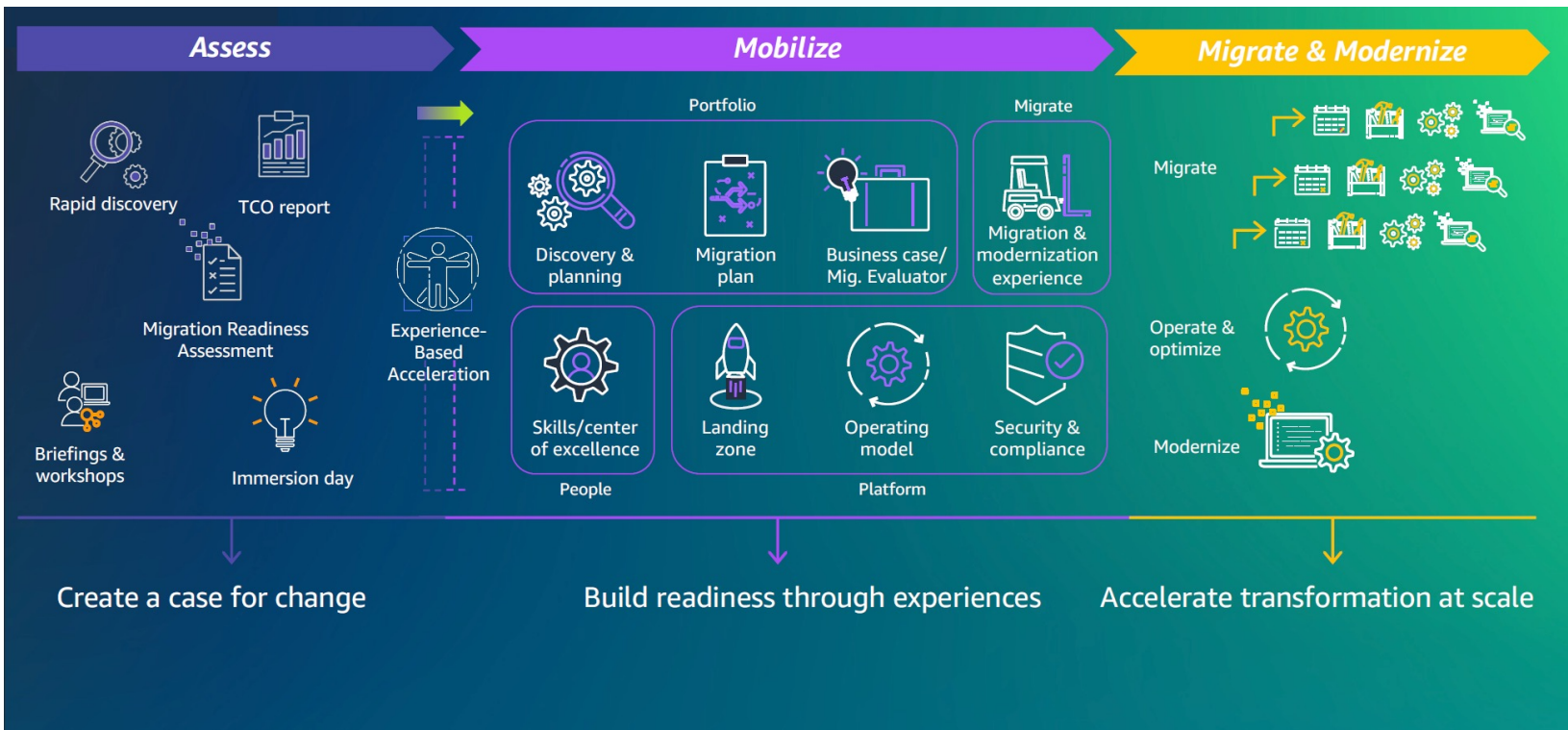
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AWS MIGRATION ACCELERATION PROGRAM

**MAKE
THE MOST
OUT OF
MOBILIZE!**





Key Take Aways





Take Aways

- The 6 transformation principles that enable success are imperative
- Build a roadmap that is aligned to your business strategy & maturity
- Be aware of the Pet trap in your operating model when trying to productise and become DevOps orientated because....
- Innovation requires Failure; Become Fluid
- Continuous Training is paramount
- Consider partnering with an experienced AWS Partner
- Check back in with the frameworks regularly as they change over time!



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Thanks for your time