



Azure Operation Roundtable Road to the Cloud

From Theory to Practice

21.10.2021 | 13:30 – 16:00

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Agenda



Welcome and Introduction



Every Company is a Software Company



Road to the Cloud - 60 min



Coffee break - 15 min



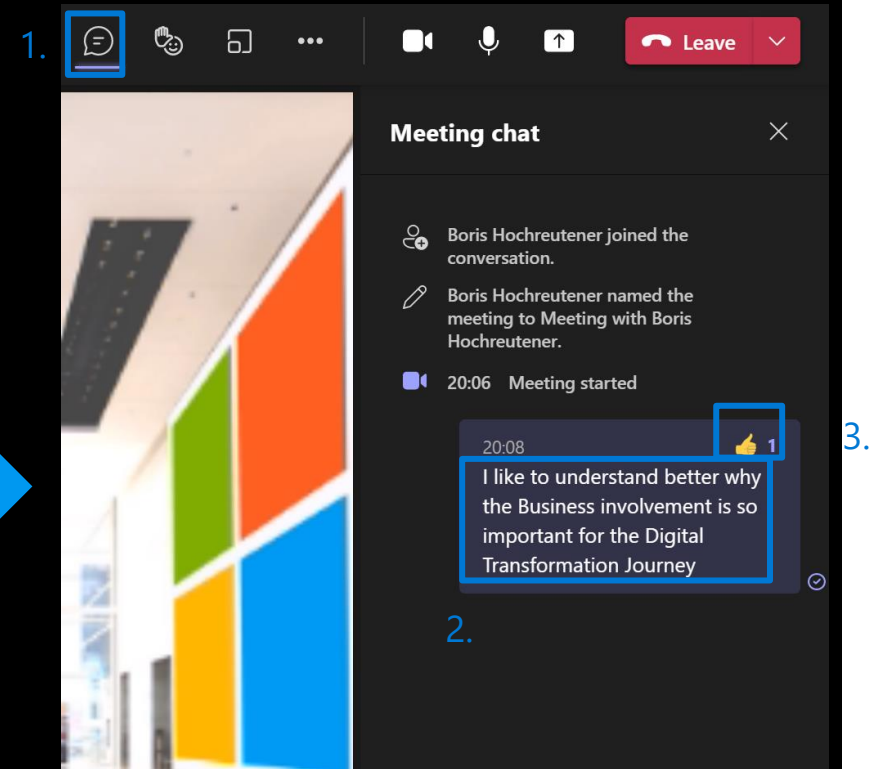
Roundtable Q&A - 60 min

Welcome to our #virtual Roundtable



We start with a Road to the Cloud to ensure a common End2End understanding and wording. This session will be followed by more interactive conversation based on your questions in the 2nd Roundtable Session.
Please continuously raise your questions and ideas in our Chat.

HOW



1. Press the "Chat" icon in Teams
2. Ongoing Ask your questions in the Chat
3. Continuously vote questions –then more thumbs up then higher the priority in the 2nd Roundtable Session

It's tough out there ...



Business is faster

Competition is fiercer

Time-to-market is key

Every company is a software company

"Silicon Valley is coming. We are going to work hard to make our services as seamless and competitive as theirs."

Jamie Dimon
JP Morgan CEO

J.P.Morgan

"Walmart is redefining the next generation of retail growth and is the best-positioned retailer to win at the convergence of digital and physical retail."

Doug McMillon
Walmart CEO

Walmart 

"We are putting 70% of our applications in the cloud to improve flexibility. And, we are launching truly game-changing applications to improve our efficiency."

Jeffrey Immelt
GE CEO



"It's about looking ahead to the changes coming to the global automobile business, particularly from potential "disruptors" in Silicon Valley - and preparing Ford to thrive through those changes."

Mark Fields
Ford Motor Company CEO



Today, digitization offers new opportunities to transform your business



Accelerated product lifecycles



Digitally enabled design and production processes

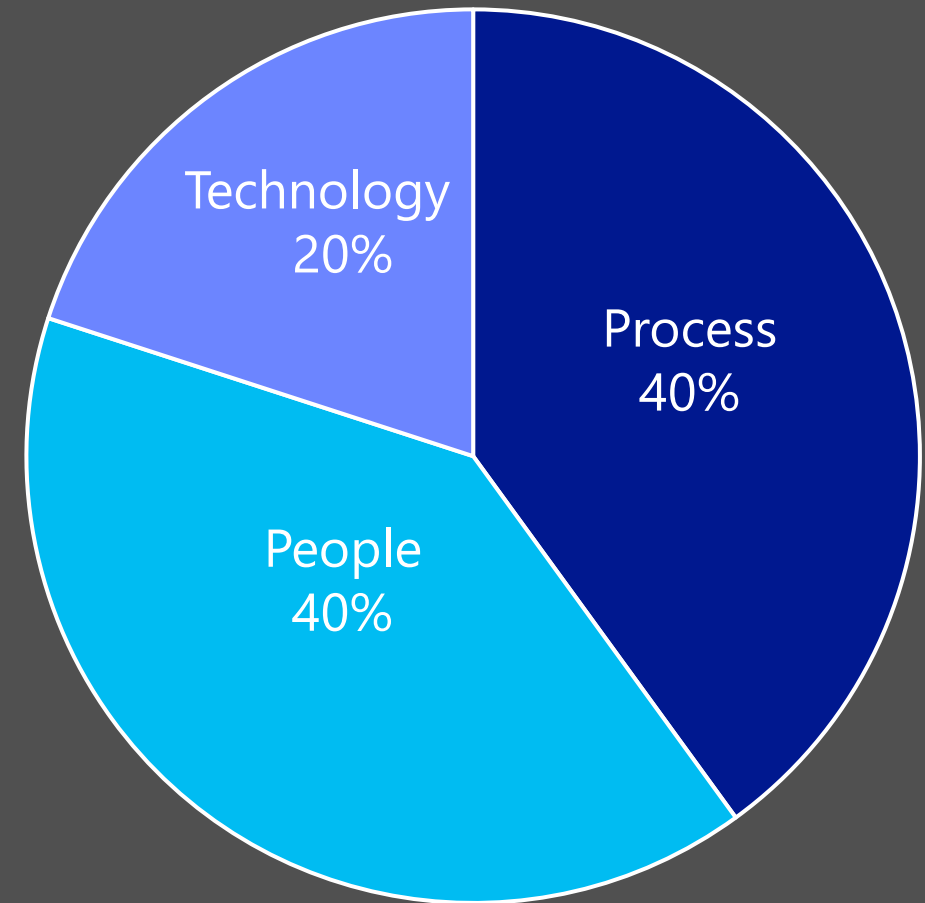


Redefined value chains

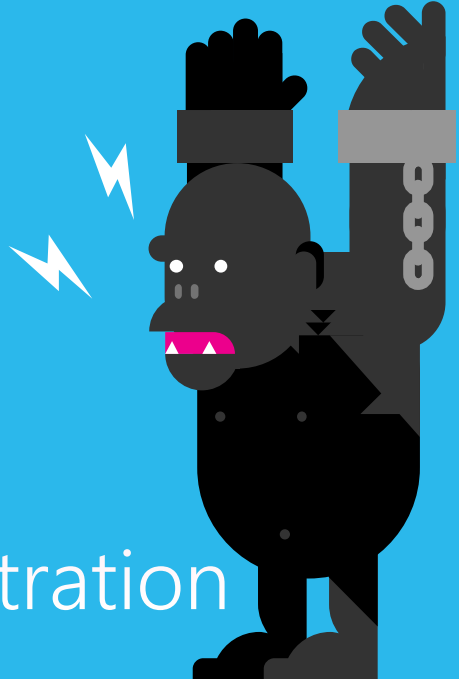


Innovation is emerging from unexpected places and time to market is key

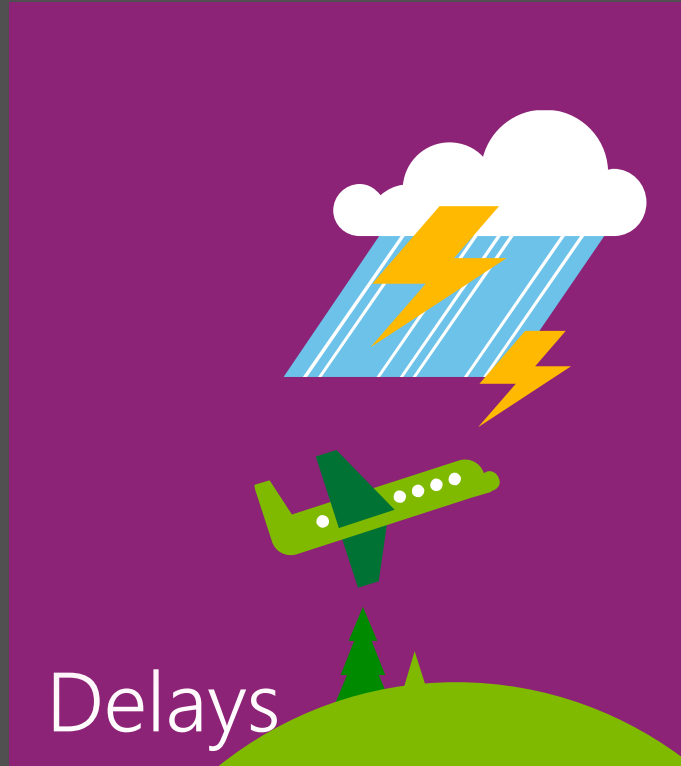
Transformational Challenges



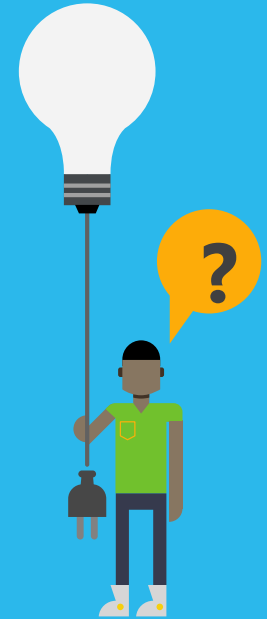
Today Challenges



Frustration



Delays



Lack of insights



Lack of resources and commitment

HOW to manage the Digital Transformation ?

Think about an Iceberg

Delivery

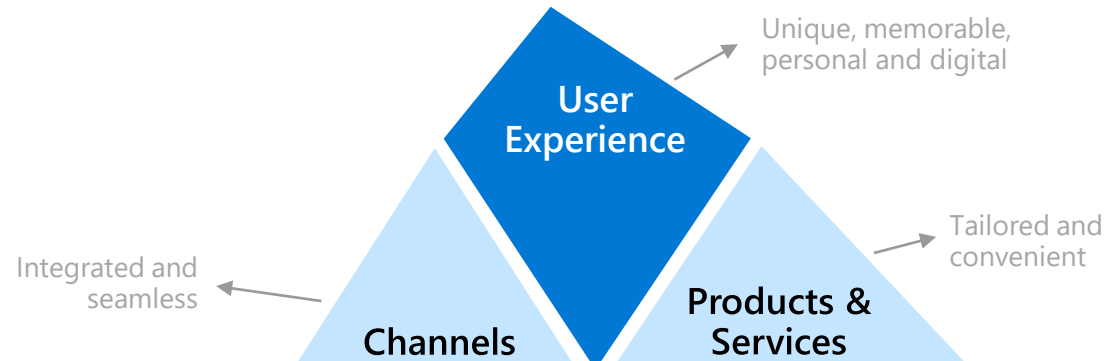
Preperation



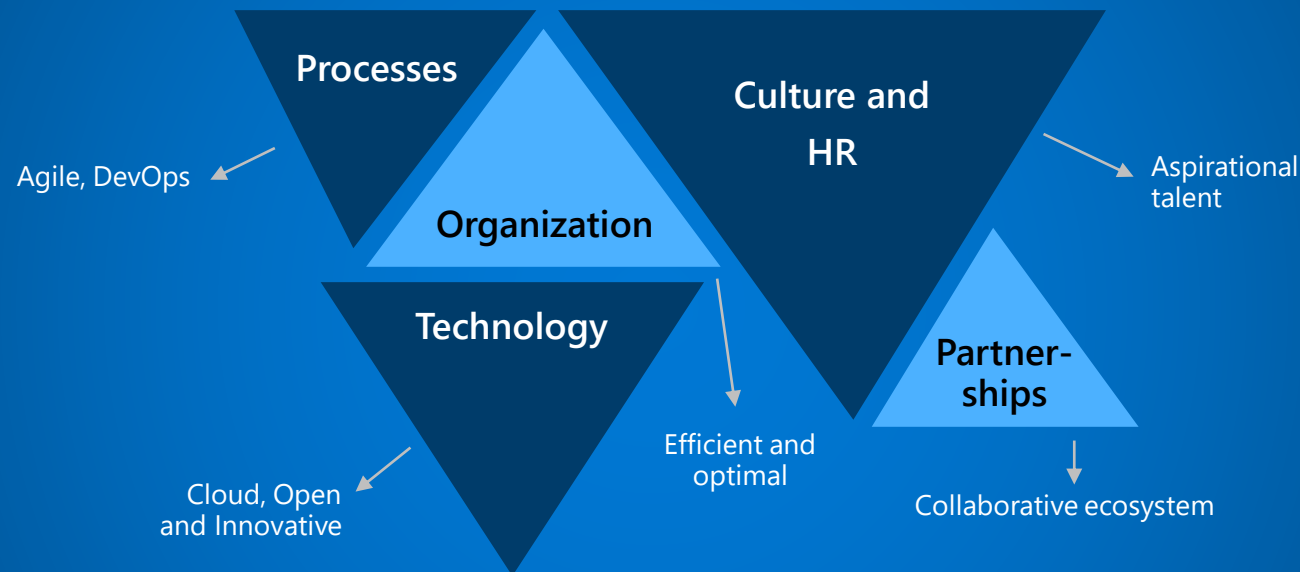
Digital Transformation is changing the industry

Start with a Vision and a Strategy by focus on clearly defined Use case

Delivery



Preperation



Strategy and Horizons | What are you going to build?

a House

a Stadium

a Bridge

DELIVERY



⚠ All foundations are **not** created equal ⚠

PREPERATION





ROAD TO THE CLOUD

On Premises
Initial Situation

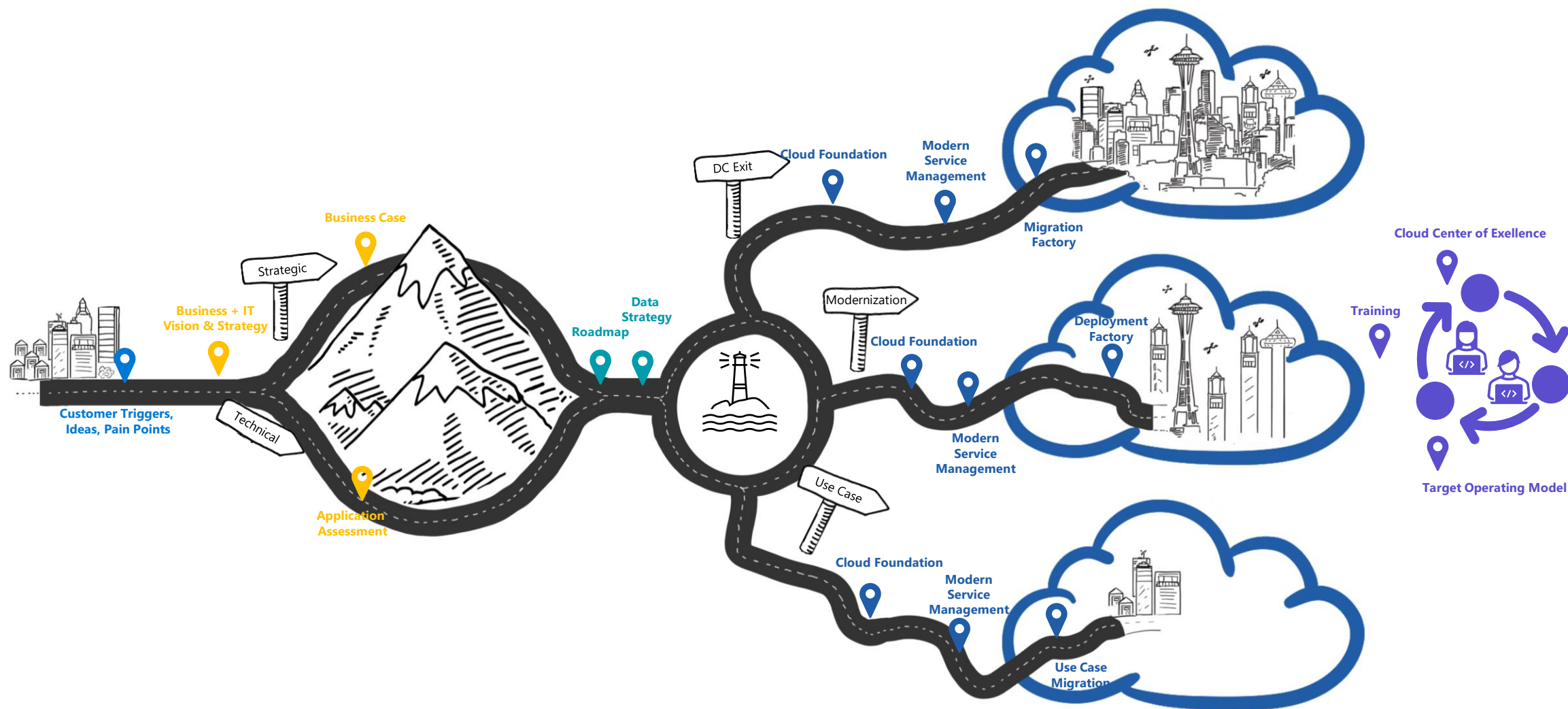
Assessments + Concepts
Business + Technical + Financial

Strategy
Vision + Mission + Roadmap

Transformation
People + Process + Technology

Cloud Master
Operation + Optimization

ROAD TO THE CLOUD



On Premises
Initial Situation

Assessments + Concepts
Business + Technical + Financial

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Vision + Mission + Roadmap

Transformation
People + Process + Technology

Cloud Master
Operation + Optimization

What's important for you?





Trusted Cloud Principles

Commitment to principles worthy of your organization's trust

Security



The confidentiality, integrity, and availability of your data is protected.

Privacy & Control



No one is able to use your data in a way that you do not approve.

Compliance



Your content is stored and managed in compliance with applicable laws, regulations and standards.

Transparency



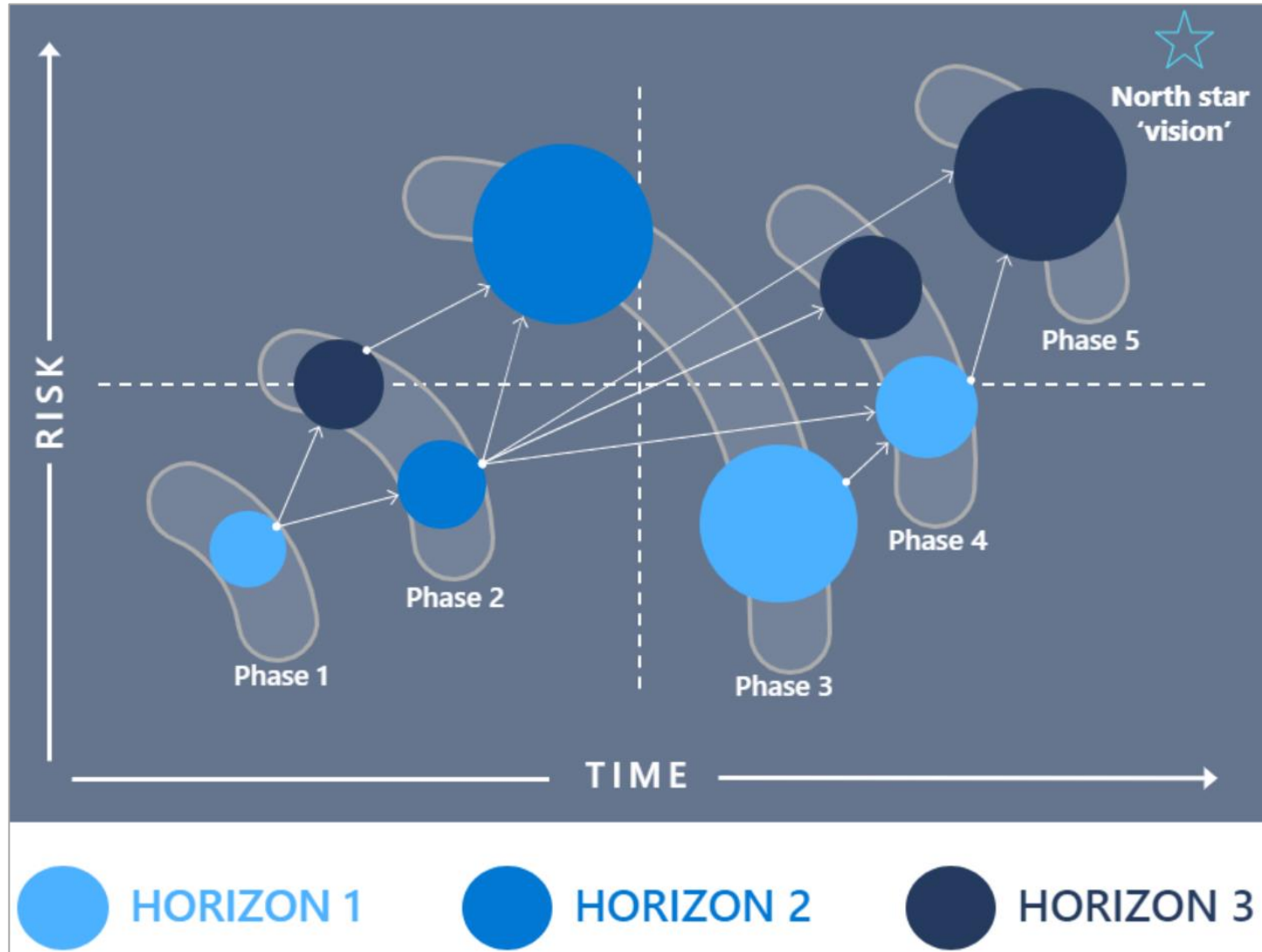
You have visibility into how your data is being handled and used.

You gain **TRUST** with **EXPERIENCE**



Horizon based on your North Star Vision

The three horizons are not bounded by time and runs in parallel



HORIZON 1



'BUILD FOUNDATION'

Optimize core to enable operational excellence, cost efficiency, agility, scale, and resilience

HORIZON 2



'ACCELERATE GROWTH'

Extend capabilities to build differentiating business offerings to grow market share

HORIZON 3



'FUEL TRANSFORMATION'

Transform to a digital-first company through co-innovation to create new market spaces





Customer Triggers

Every organization has its own drivers for cloud adoption



Cost optimization , Reduction
Datacenter harmonization



Time to Market



Competitive threats



Rapid scale web
apps and infrastructure



Business agility



Application modernization



Compliance
(Workplace / Data Protection)



Digital transformation



Data modernization



Cybersecurity threats
Business continuity



New value streams



Budget and resource
constraints



Strategy | Start your Journey with WHY

Every organization has its own drivers for digital transformation and cloud adoption



Learn more:

- ☐ [Simon Sinek The Golden Circle](#)
- ☐ [CAF | Strategy](#)

Many strategies

Outside in

WHY

More successful strategies

Inside out

HOW

WHAT

Vision + Motivation

Preparation with Principles + Process

Deliverables with Results + Products

3 Key take aways:

1. Start with WHY
2. Document your strategy regards your Stakeholder demands and ensure simplicity
3. Continously learn and adapt your Strategy to achieve your Vision



Digital
Transformation
Strategy



Document



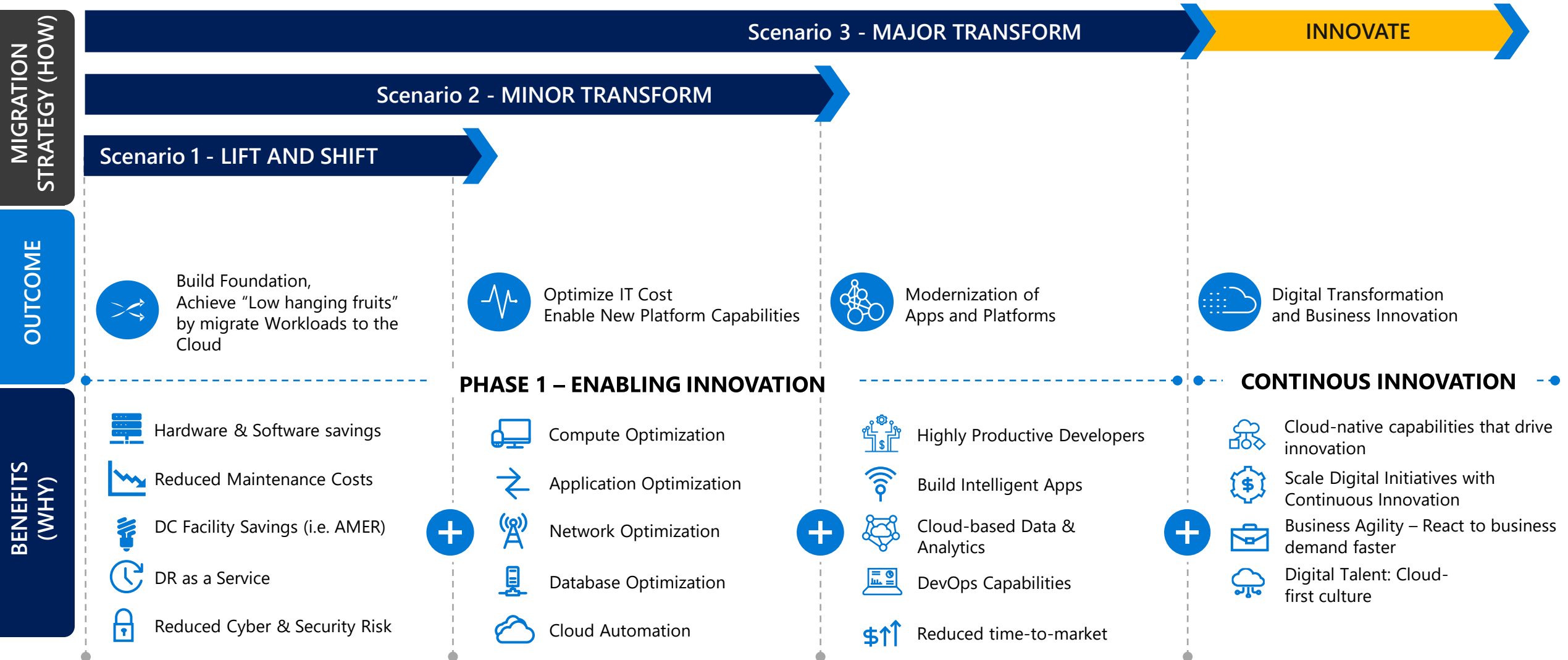
Film



Show

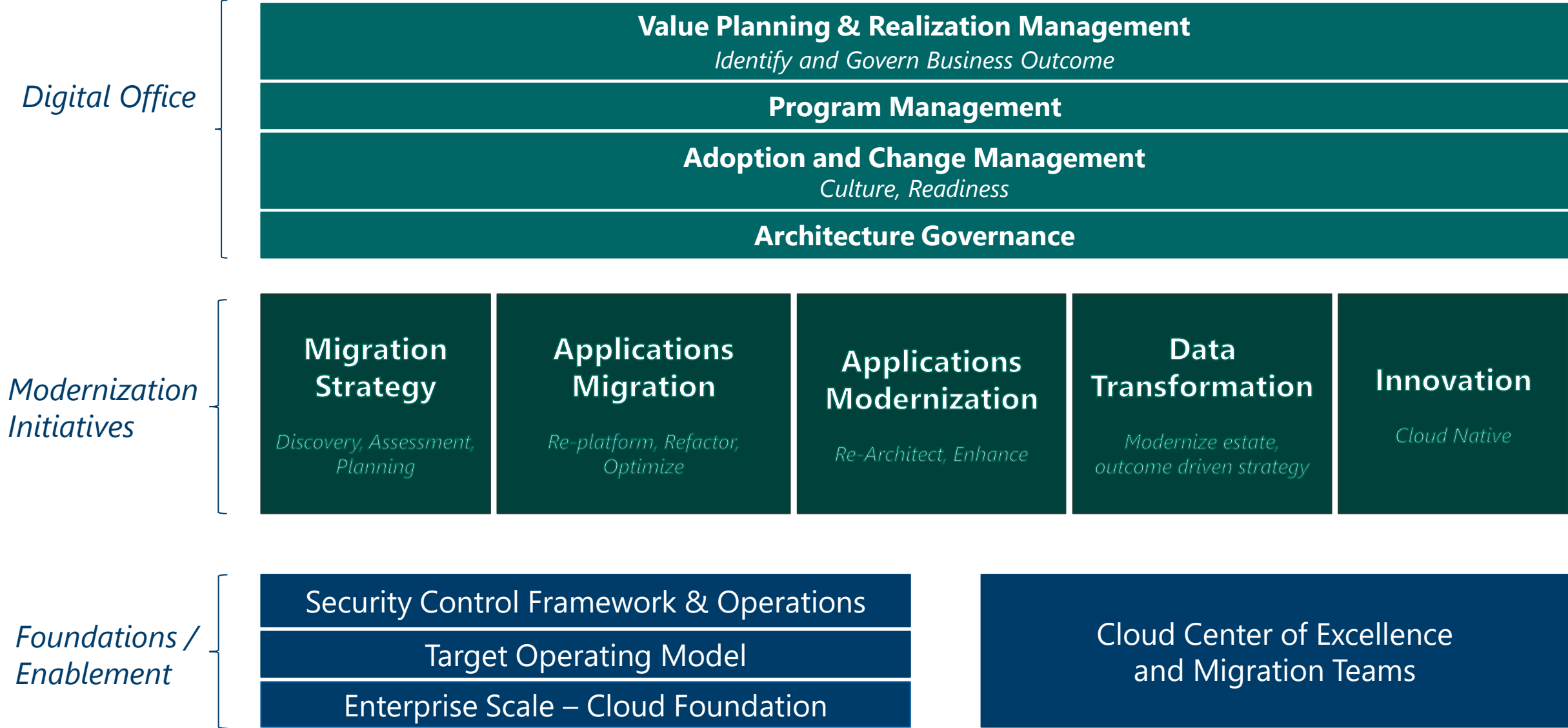


WHY Cloud and HOW to achieve





A strategic cloud journey needs a structured approach



Technical Assessments

Assessment timeframe: 4-6 weeks

Addressing roadblocks



What must be
migrate now?



How much will it
cost to move?



How do I transition
my workloads

Data Sources



Architects
+
Product Owners



CMDB
+
Asset Mgmt.



Service
Management



Azure
Migration
Assessment

Addressing your **roadblocks** according
your **Vision** and **Strategy**

Senior leadership take care for **good communication**
what is the **goal** of the technical assessment

Define which **KPI** are required for a potential **Business Case**

Ensure good source **data quality** and discover **dependencies**

Assumptions are not bad must **defined precisely**

Use the **Azure Migrate** tool to **assess** your product
and **calculate** your **OPEX** costs



assessment_12_26_2018_13_28_1 – Azure readiness

Assessment

- >>
- Edit properties

Export assessment

Recalculate

Columns

Delete assessment

Essentials

⌵



Details

How do I modify list of assessed machines?

NAME	AZURE VM READINESS	AZURE VM SIZE	SUGGESTED TOOL	OPERATING SYSTEM	BOOT TYPE	DISKS ON-PREMISES	STORAGE ON-PREMISES (GB)
NestedScaleVM1161	✓	Standard_A8_v2	Azure Site Recovery	Microsoft Windows Server 2...	BIOS	12	0.05
NestedScaleVM1188	✓	Standard_A8_v2	Azure Site Recovery	Microsoft Windows Server 2...	BIOS	12	0.05
NestedScaleVM1167	✓	Standard_A8_v2	Azure Site Recovery	Microsoft Windows Server 2...	BIOS	12	0.05
NestedScaleVM1193	✓	Standard_A8_v2	Azure Site Recovery	Microsoft Windows Server 2...	BIOS	12	0.05
NestedScaleVM1162	✓	Standard_A8_v2	Azure Site Recovery	Microsoft Windows Server 2...	BIOS	12	0.05
NestedScaleVM1168	✓	Standard_A8_v2	Azure Site Recovery	Microsoft Windows Server 2...	BIOS	12	0.05
NestedScaleVM1169	✓	Standard_A8_v2	Azure Site Recovery	Microsoft Windows Server 2...	BIOS	12	0.05
NestedScaleVM1179	✓	Standard_A8_v2	Azure Site Recovery	Microsoft Windows Server 2...	BIOS	12	0.05
NestedScaleVM1175	✓	Standard_A8_v2	Azure Site Recovery	Microsoft Windows Server 2...	BIOS	12	0.05



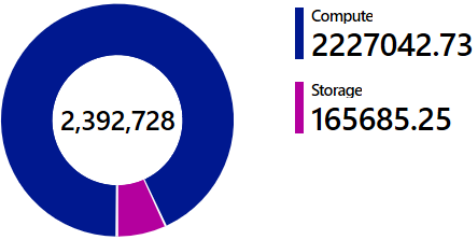
assessment_12_26_2018_13_28_1 – Cost details

Assessment

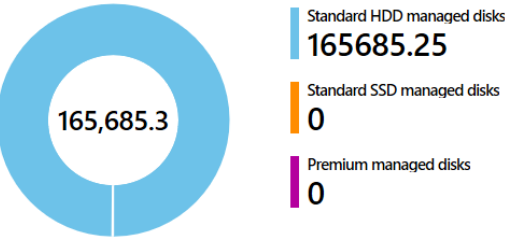
- Edit properties
- Export assessment
- Recalculate
- Columns
- Delete assessment

Essentials

Monthly cost estimate (USD)



Storage - Monthly cost estimate (USD)




Details [How do I modify list of assessed machines?](#)

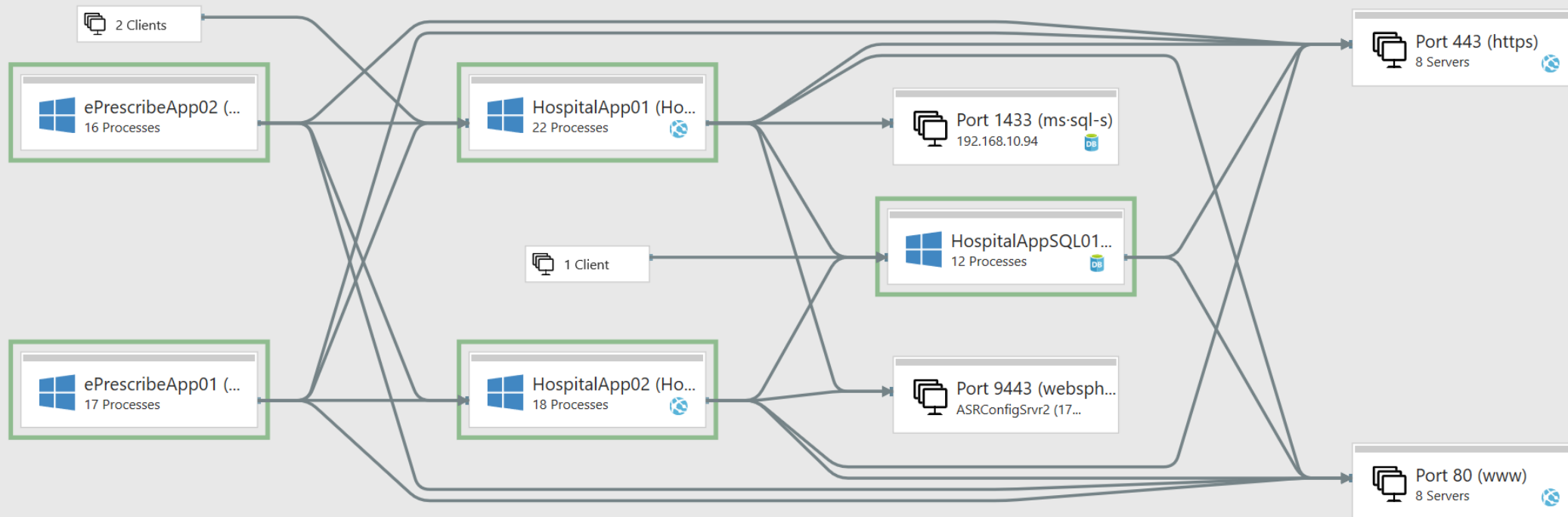
Search to filter machines

NAME	AZURE VM SIZE	AZURE STORAGE (MANAGED DISKS)	MONTHLY COMPUTE COST ESTIMATE (USD)	MONTHLY STORAGE COST ESTIMATE (USD)
NestedScaleVM1161	Standard_A8_v2	384 GB (384 GB Standard, 0 GB Premium)	247.75	18.43
NestedScaleVM1188	Standard_A8_v2	384 GB (384 GB Standard, 0 GB Premium)	247.75	18.43
NestedScaleVM1167	Standard_A8_v2	384 GB (384 GB Standard, 0 GB Premium)	247.75	18.43
NestedScaleVM1193	Standard_A8_v2	384 GB (384 GB Standard, 0 GB Premium)	247.75	18.43
NestedScaleVM1162	Standard_A8_v2	384 GB (384 GB Standard, 0 GB Premium)	247.75	18.43
NestedScaleVM1168	Standard_A8_v2	384 GB (384 GB Standard, 0 GB Premium)	247.75	18.43
NestedScaleVM1169	Standard_A8_v2	384 GB (384 GB Standard, 0 GB Premium)	247.75	18.43
NestedScaleVM1179	Standard_A8_v2	384 GB (384 GB Standard, 0 GB Premium)	247.75	18.43
NestedScaleVM1175	Standard_A8_v2	384 GB (384 GB Standard, 0 GB Premium)	247.75	18.43

HospitalApp

 Use Ctrl + Click to multiselect machines on the map to add or remove from the group.

Legend    

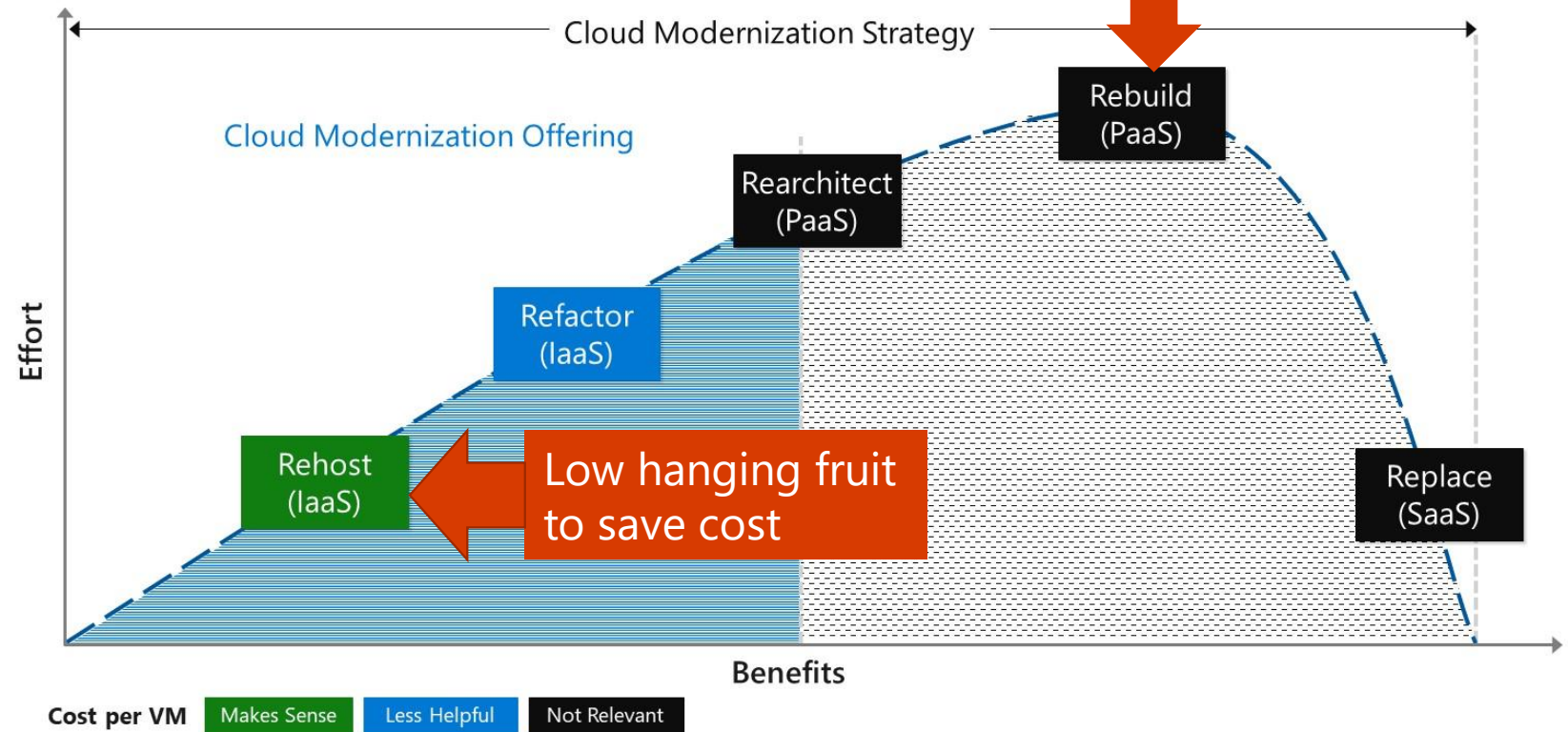


Migration Strategy and Investments



Azure Migration is a comprehensive approach to move your apps and infrastructure to Azure, while enabling agility and innovation.

Cloud Modernization and Cost per VM



Graph based on Gartner data and classification of workloads



Business Case Methodology – 3 Step approach



Current State Assessment

1. Step


- Getting current state information with regards to the company and IT profiles who will be impacted
- Substituting the missing piece of information by own Assumptions



Business Value Analysis for proposed list of initiatives

2. Step

- Understanding the impact on Hardware, Software, Personnel and other IT cost items. Analysis of benefits expected through the initiatives
- Using a budgetary estimation approach to drive the overall investment estimates
- Evaluation and Analysis of benefits/cost reductions.



Financial Analysis & Business Case Summary

3. Step

- Financial Analysis which showcases benefits in terms of
 - **Savings/Benefits**
 - **ROI**
 - **TCO**



Understand your migration readiness

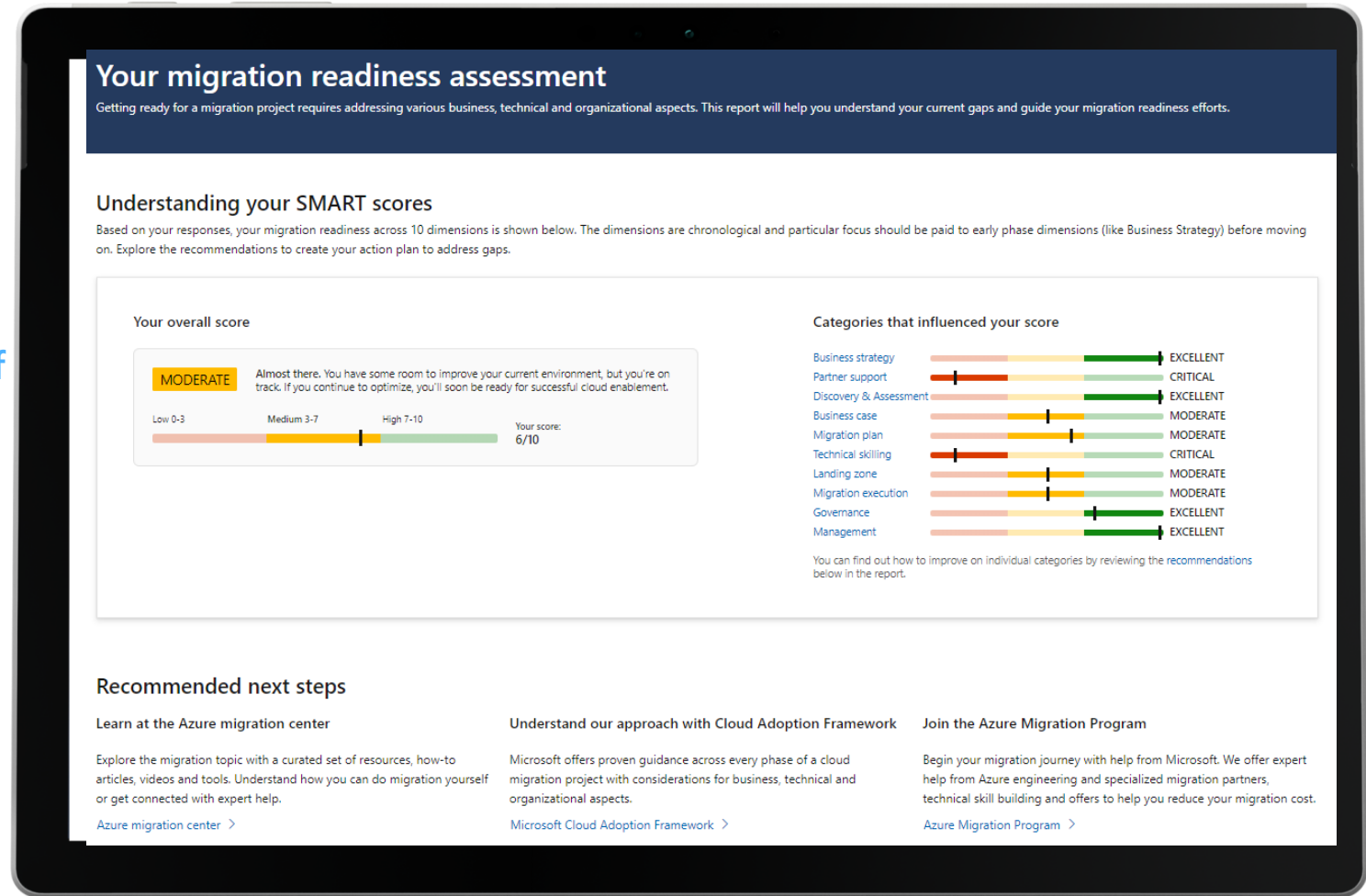
SMART is a short online questionnaire that scores your readiness to migrate across 10 dimensions and support you by defining your Roadmap

Recommended approach

➤ Use SMART to get a quick understanding of your readiness

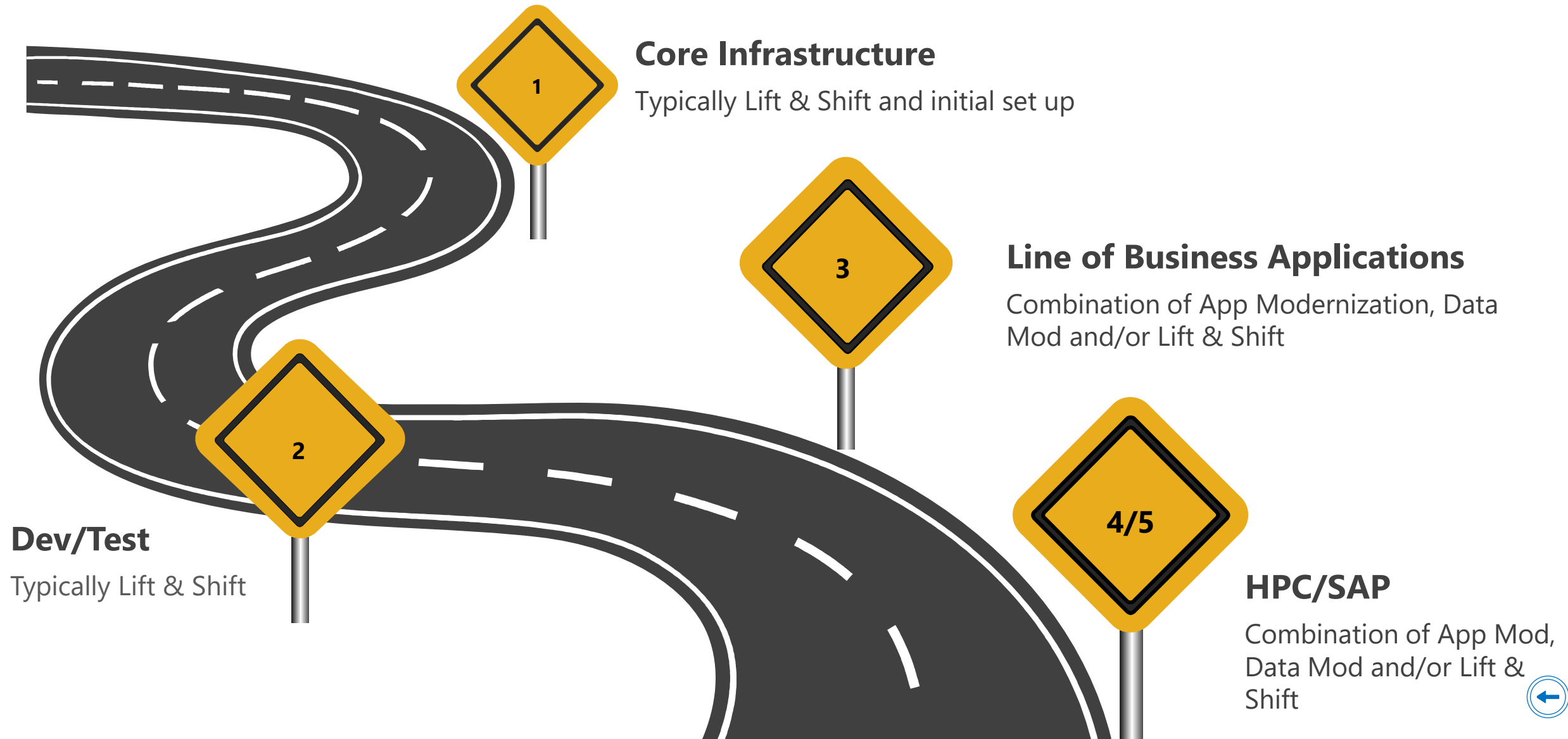
➤ Engage in a Solution Assessment for a detailed migration and modernization plan

Be SMART
migrate with a plan
aka.ms/smarttool



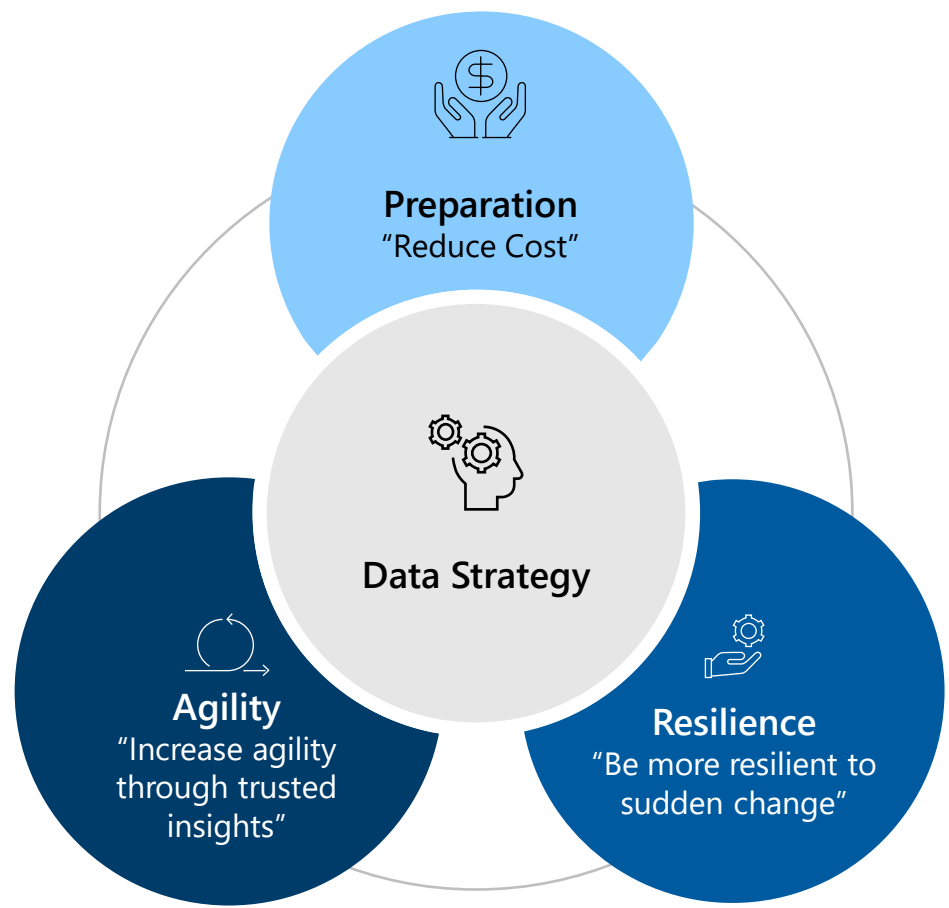
A typical Migration Roadmap

Start small and grow big to ensure a mature cloud operation



...establishing a framework as guard rails

Modern Data Estate



Reduce costs
though Preparation



Increase your agility
through trusted
insights



Be more resilient
to sudden change

People and Processes

- Governance**
"manage the system"
- Charter
 - Tenets
 - Standards
 - Data Quality
 - Security
 - Privacy
 - Ethics

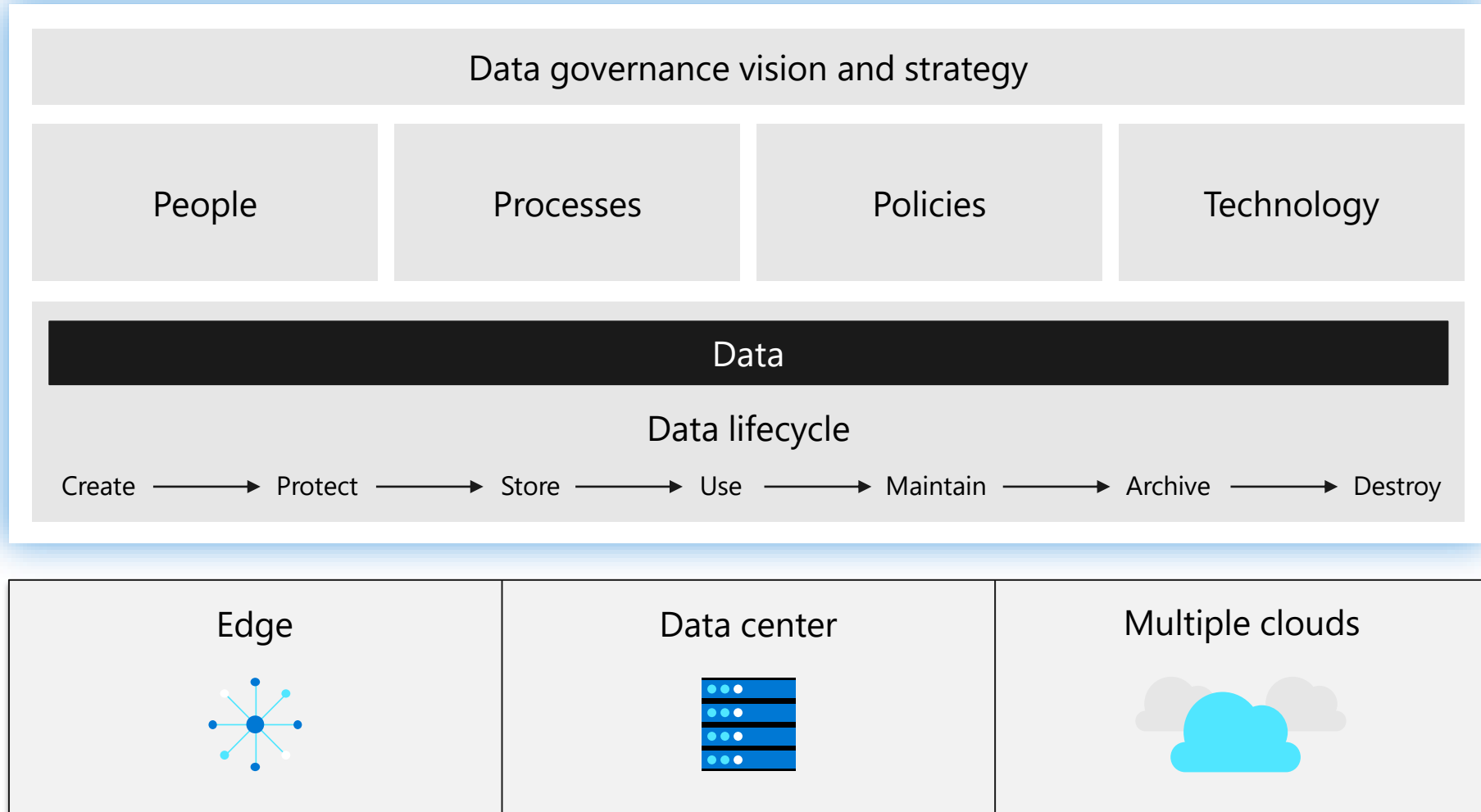
- Architecture**
"manage the container"
- Data lake provisioning
 - Master Data Management
 - Metadata Management
 - Common Data Model
 - Data Access Management

- Data Lifecycle**
"manage the content"
- ingestion for compute,
 - Handshaking
 - Control file
 - Discovery (Data Catalog)
 - Lineage
 - Data Contract
 - Linkage (Merge Service)
 - Classification
 - Retention





What is in a data governance framework?



Cloud Foundation




Automize everything you can to be able to scale and ensure a compliant Foundation

Disney



Disney reused the Animation, to use the work that was allready successfull.

Enterprise Scale

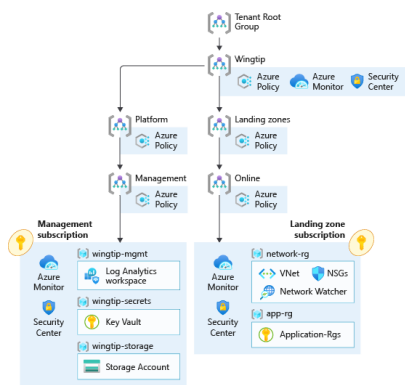
-  Enterprise-scale is an architectural approach and a reference implementation
-  It enables effective construction and operationalization of landing zones on Azure, at scale
-  This approach aligns with the Azure roadmap and the Cloud Adoption Framework for Azure.

IaC available for free on GitHub

Deploying Enterprise-Scale Architecture in your own environment

The Enterprise-Scale architecture is modular by design and allows customers to start with foundational Landing Zones that support their application portfolios, regardless of whether the applications are being migrated or are newly developed and deployed to Azure. The architecture can scale alongside the customer's business requirements regardless of scale point. In this repository we are providing the following three templates representing different scenarios composed using ARM templates.

Reference implementation	Description	ARM Template	Link
Contoso	On-premises connectivity using Azure vWAN	Deploy to Azure	Detailed description
AdventureWorks	On-premises connectivity with Hub & Spoke	Deploy to Azure	Detailed description



Enterprise DevOps

Empower DevOps in your Enterprise

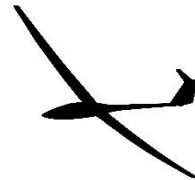
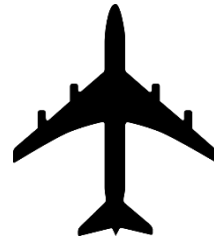
Platform Team

- Provide Core Platform Services
- Provide landing zones & guardrails
- Automate compliance & security
- Follow BizDevOps practices

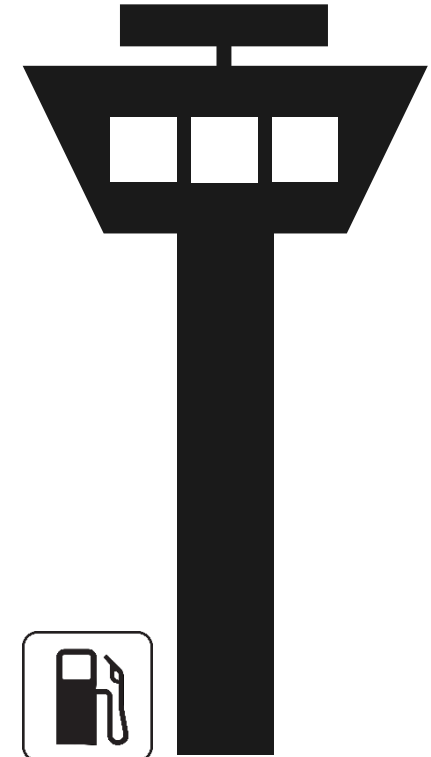
Product Team

- Handles code & infrastructure
- Deploy and Change Product
- Follow BizDevOps practices
- Responsible for Product

Product



Platform



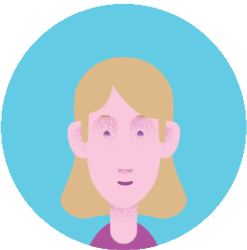
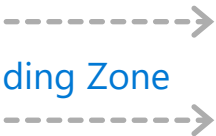
Azure Governance

Move with speed but safely and still having control



Developers

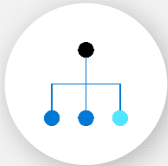
Responsible for Landing Zone



Operations



Azure



Management Groups



Security Center



Sentinel



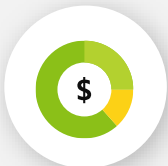
Policy



Blueprints



Monitor



Cost Management



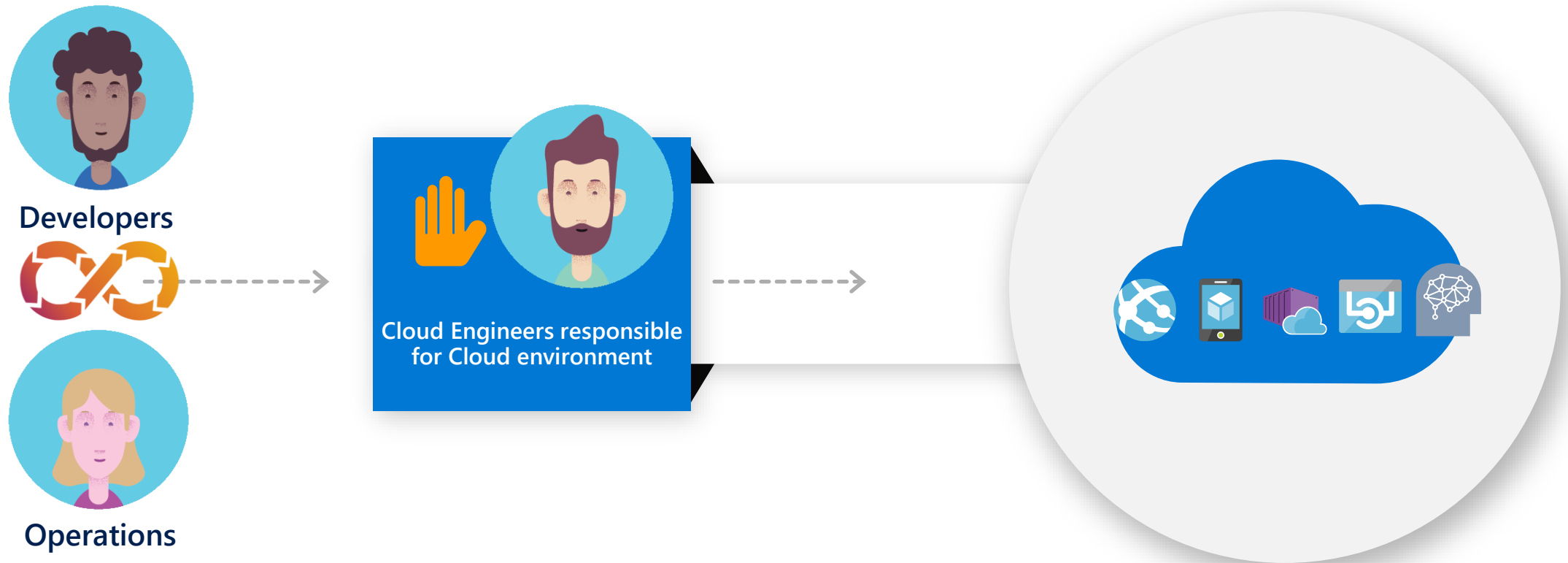
Platform Team

Responsible for Cloud Platform



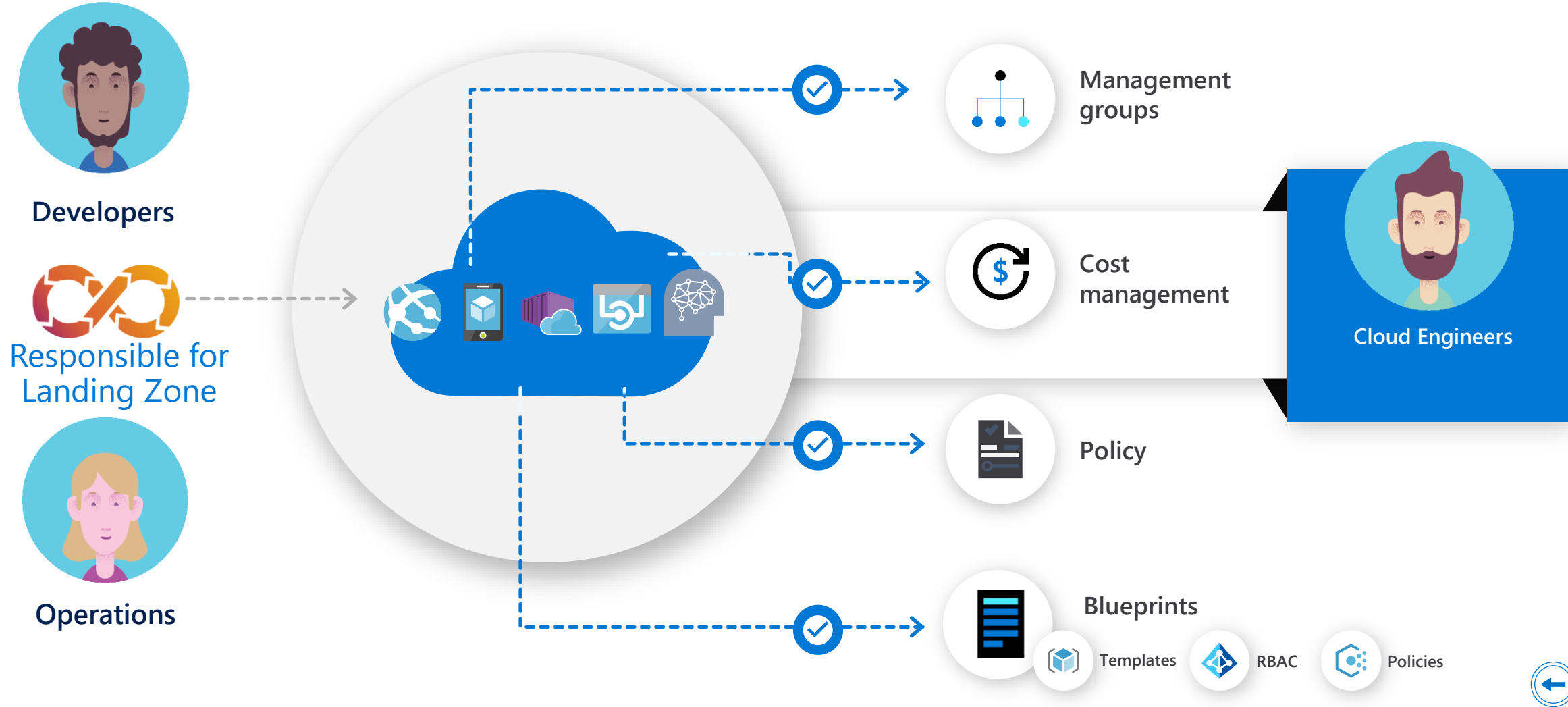
Traditional approach to control

Block Dev/Ops from directly accessing the cloud (portal/api/cli) to attain control



Speed + control

Cloud-native governance -> removing barriers to compliance and enabling velocity



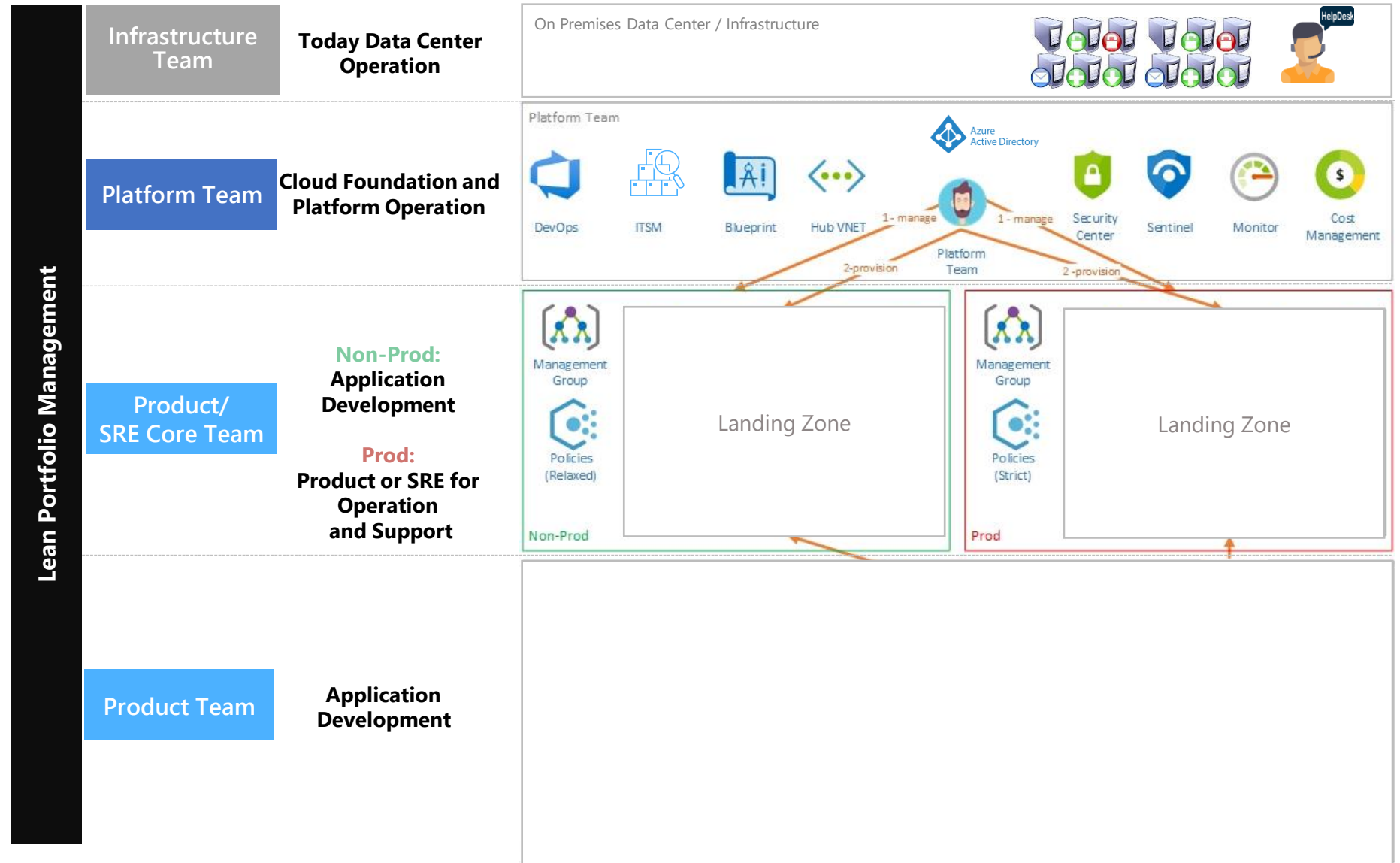
Blueprint | Based on these responsibilities, there is a clear interaction



CLOUD STRATEGY

Key Take Away:

- ✓ Management execute, adopt and change the strategy continuously
- ✓ Give at the beginning clear advise, teams, roles and responsibilities but allow self management and growth
- ✓ Ensure with BizDevOps the generation of value
- ✓ Connect the existing with the new world and motivate all for the change

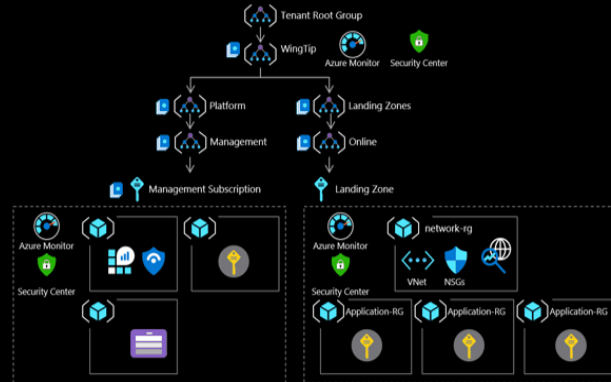


Enterprise Scale Landing Zone

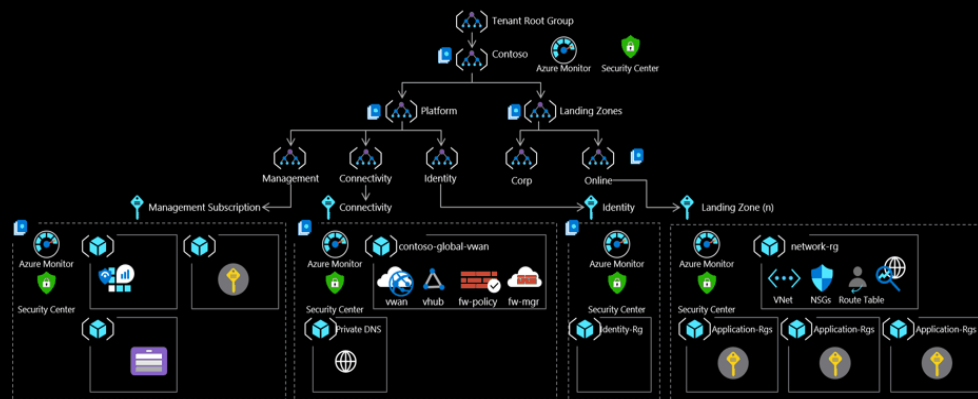
Enterprise-Scale Reference Implementations

Reference implementation	Description	ARM template	Link
Contoso	On-premises connectivity using Azure vWAN	Deploy to Azure	Detailed description
AdventureWorks	On-premises connectivity with Hub & Spoke	Deploy to Azure	Detailed description
WingTip	Azure without hybrid connectivity	Deploy to Azure	Detailed description

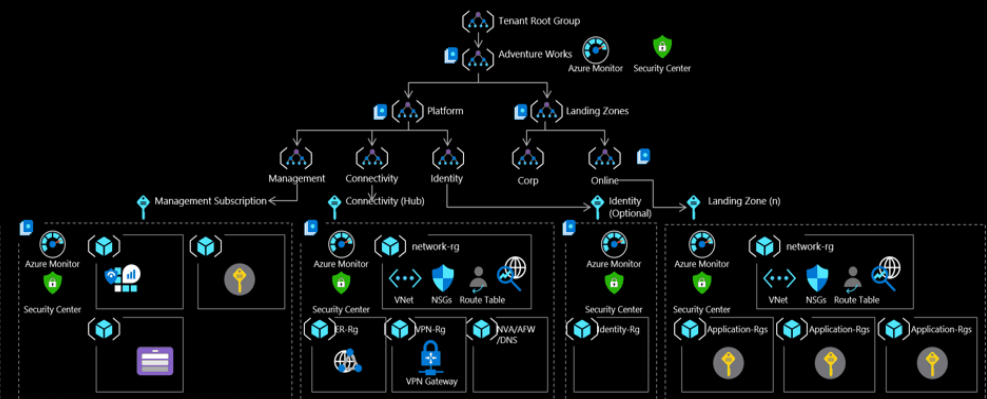
Azure only (wingTip)



On-premises connectivity using Azure vWAN (Contoso)



On-premises connectivity using Hub & Spoke (Adventure Works)



How we make Service Management Modern?

Your IT organization and processes need to be modified, automatized and aligned with your business objectives to enable the business in achieving its goals (OKR).



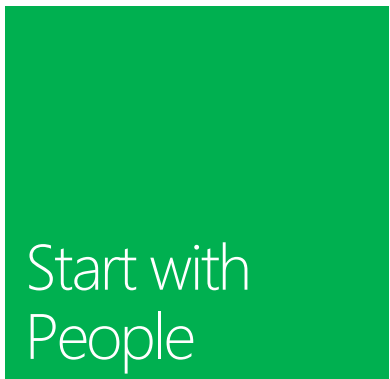
Enable
Modern and
Cloud



DevOps and
Agile
practices



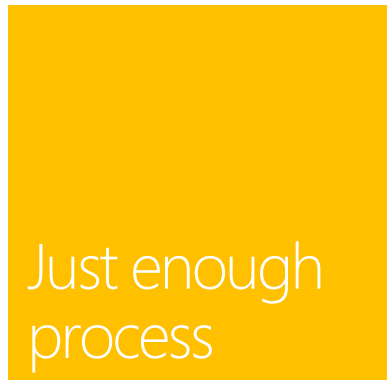
Automation



Start with
People



Just enough
process



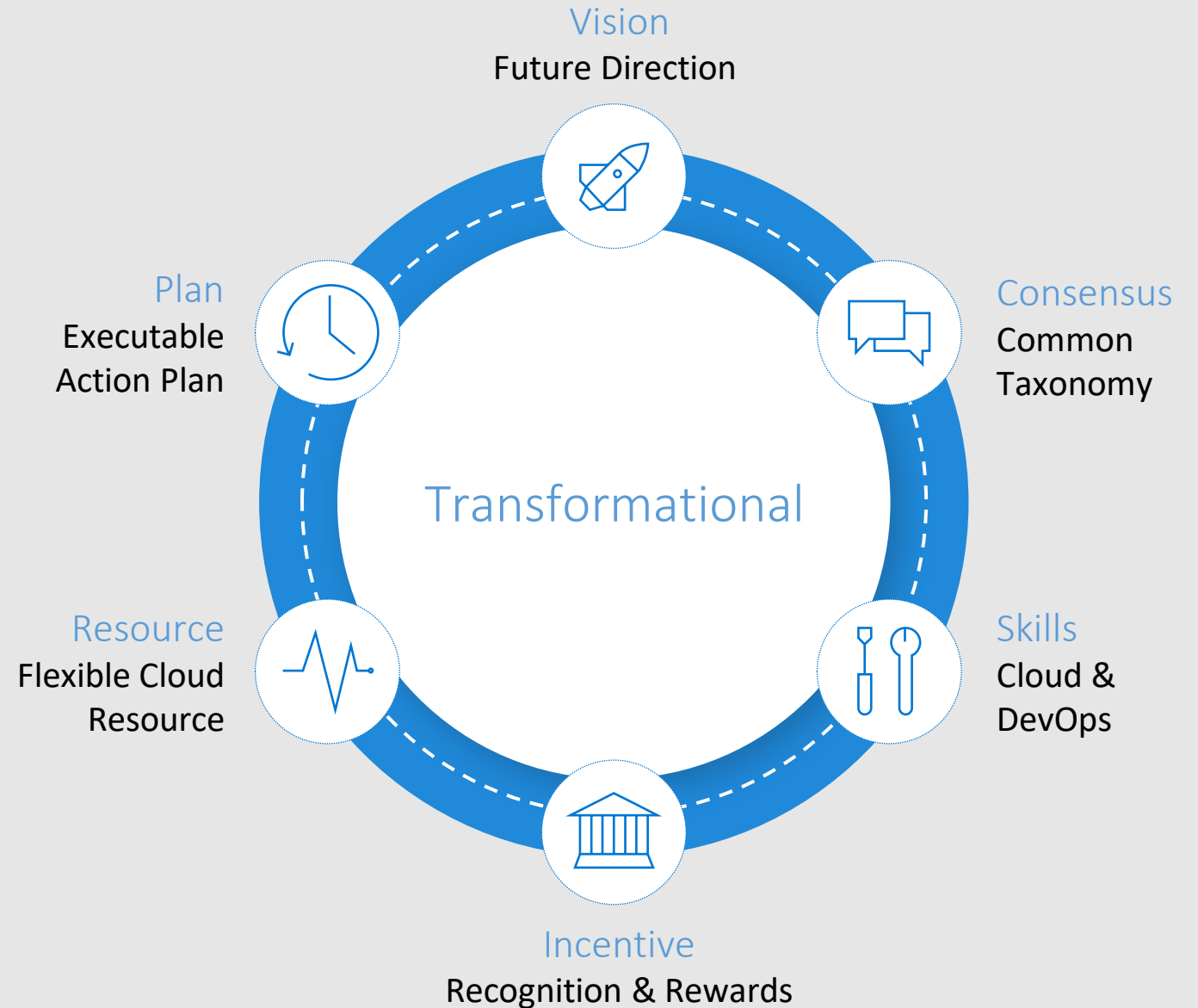
User and
Customer
centric



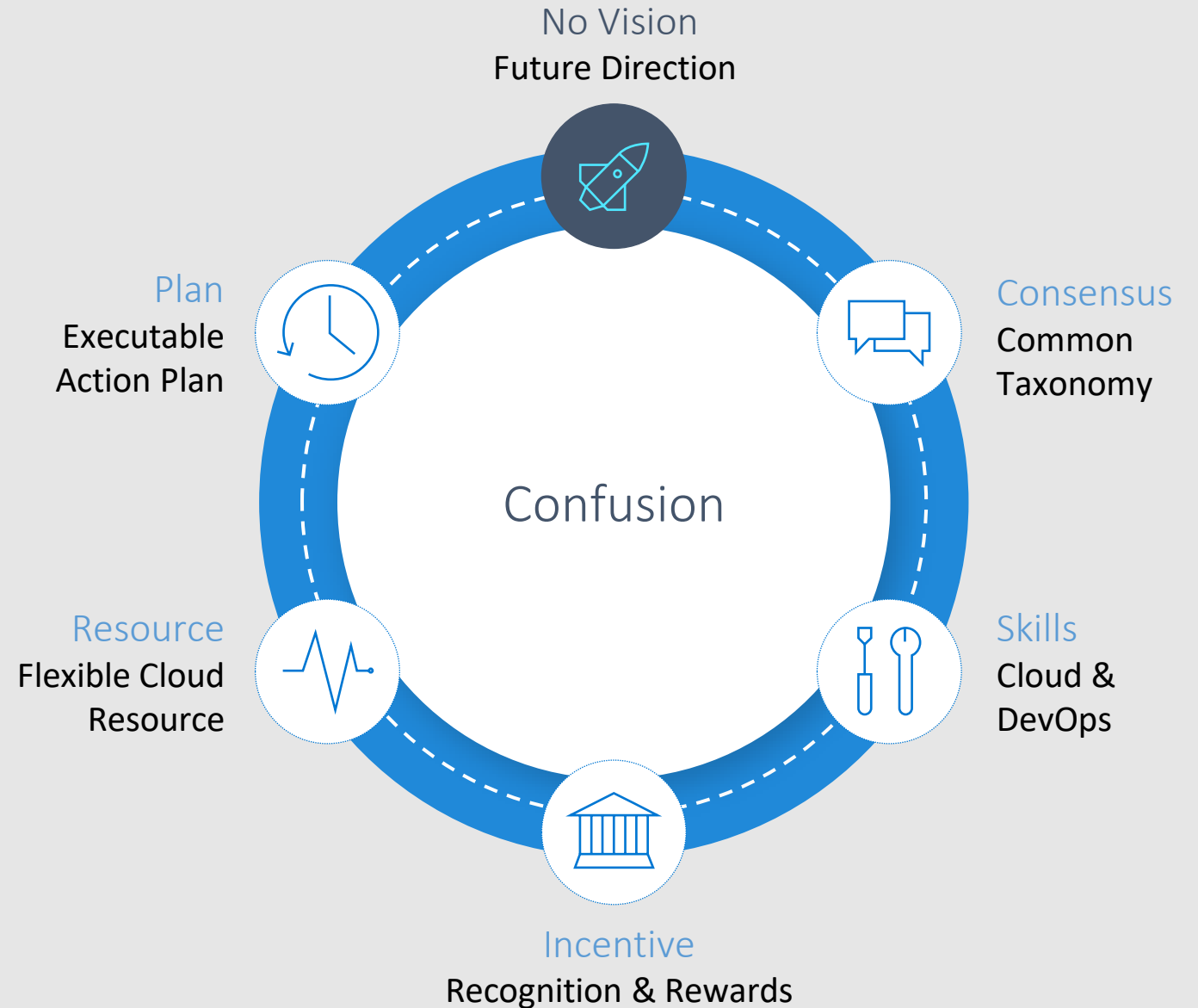
DevOps is transformational



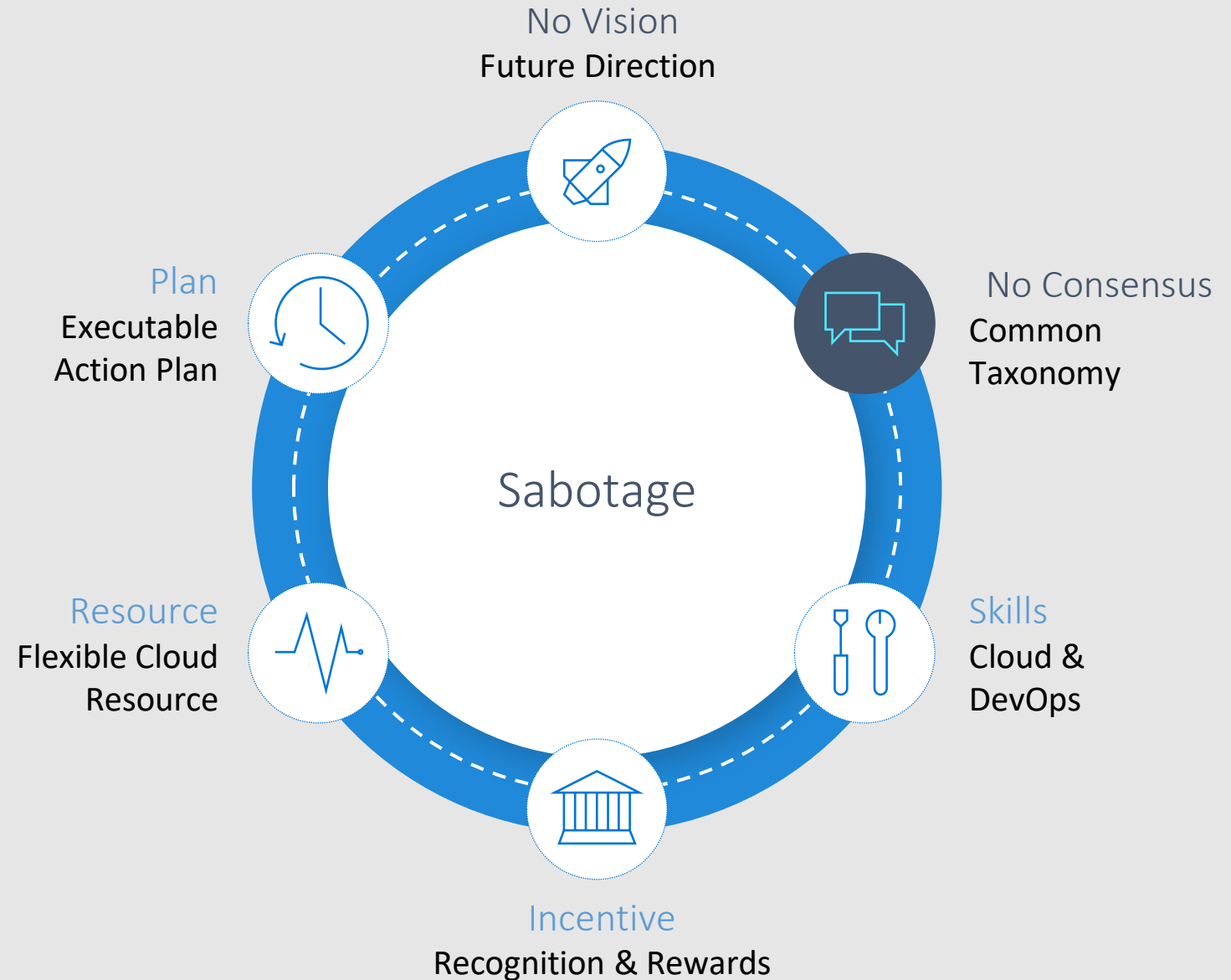
DevOps Transformation is PEOPLE Transformation



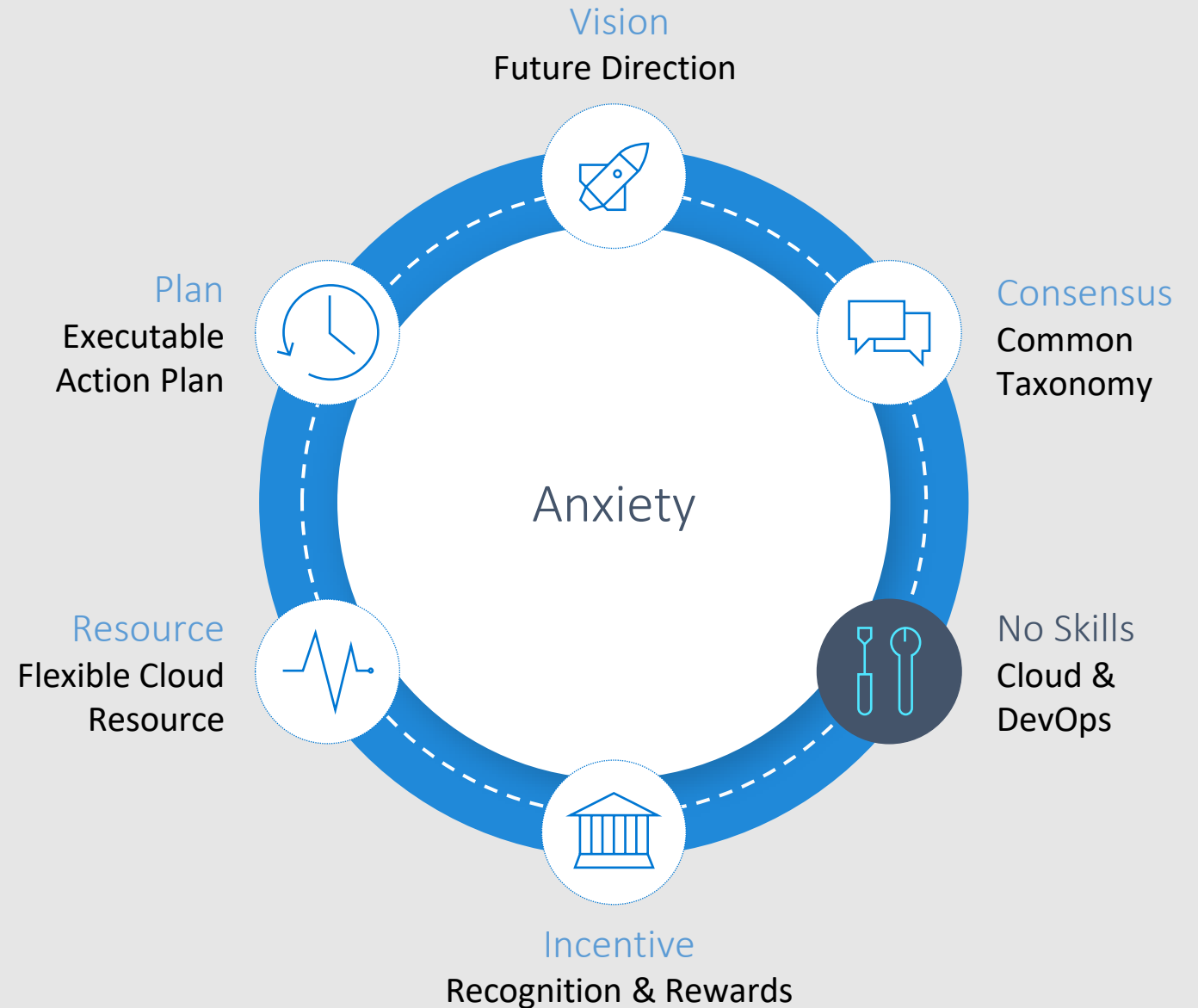
DevOps Transformation is PEOPLE Transformation



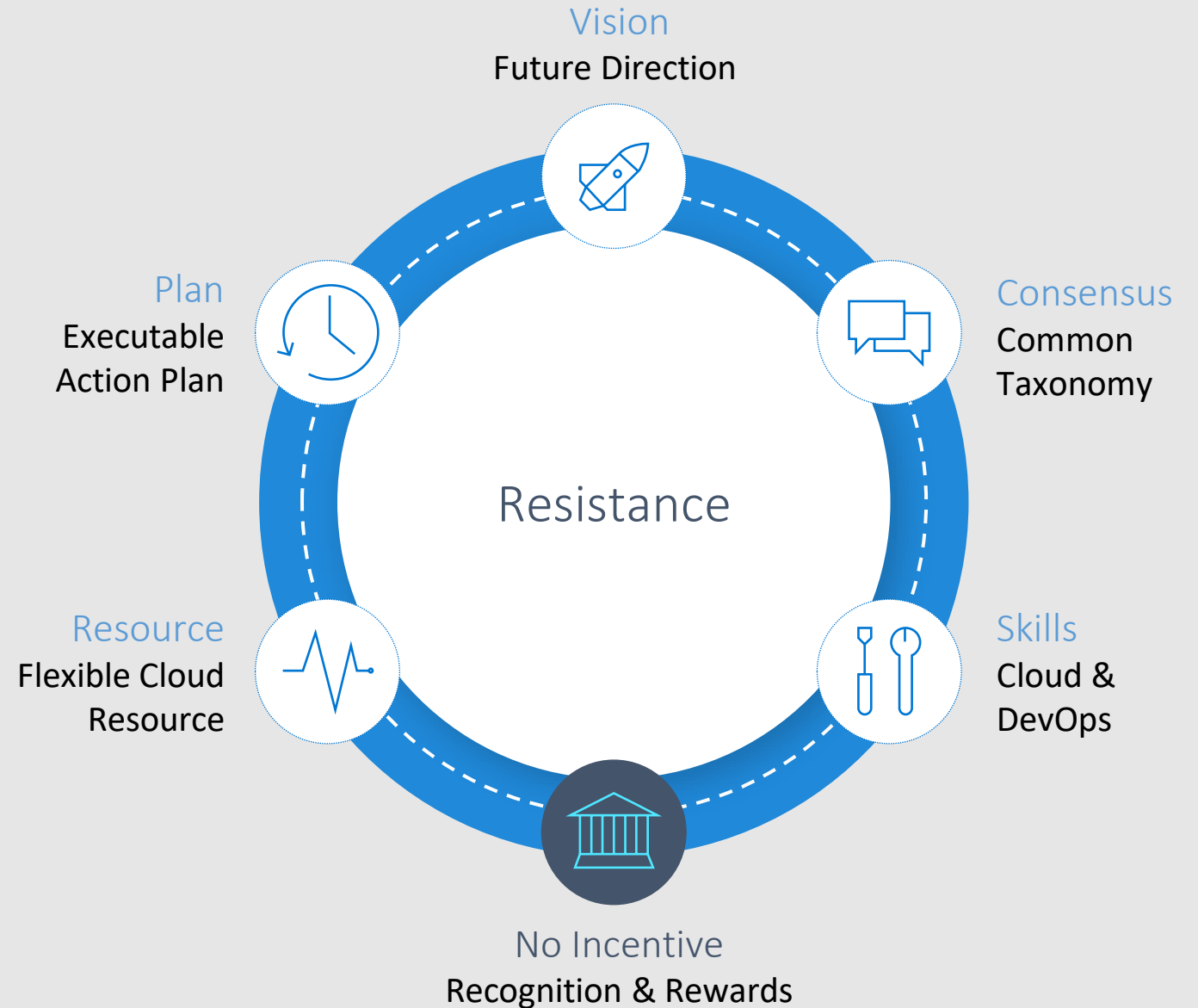
DevOps Transformation is PEOPLE Transformation



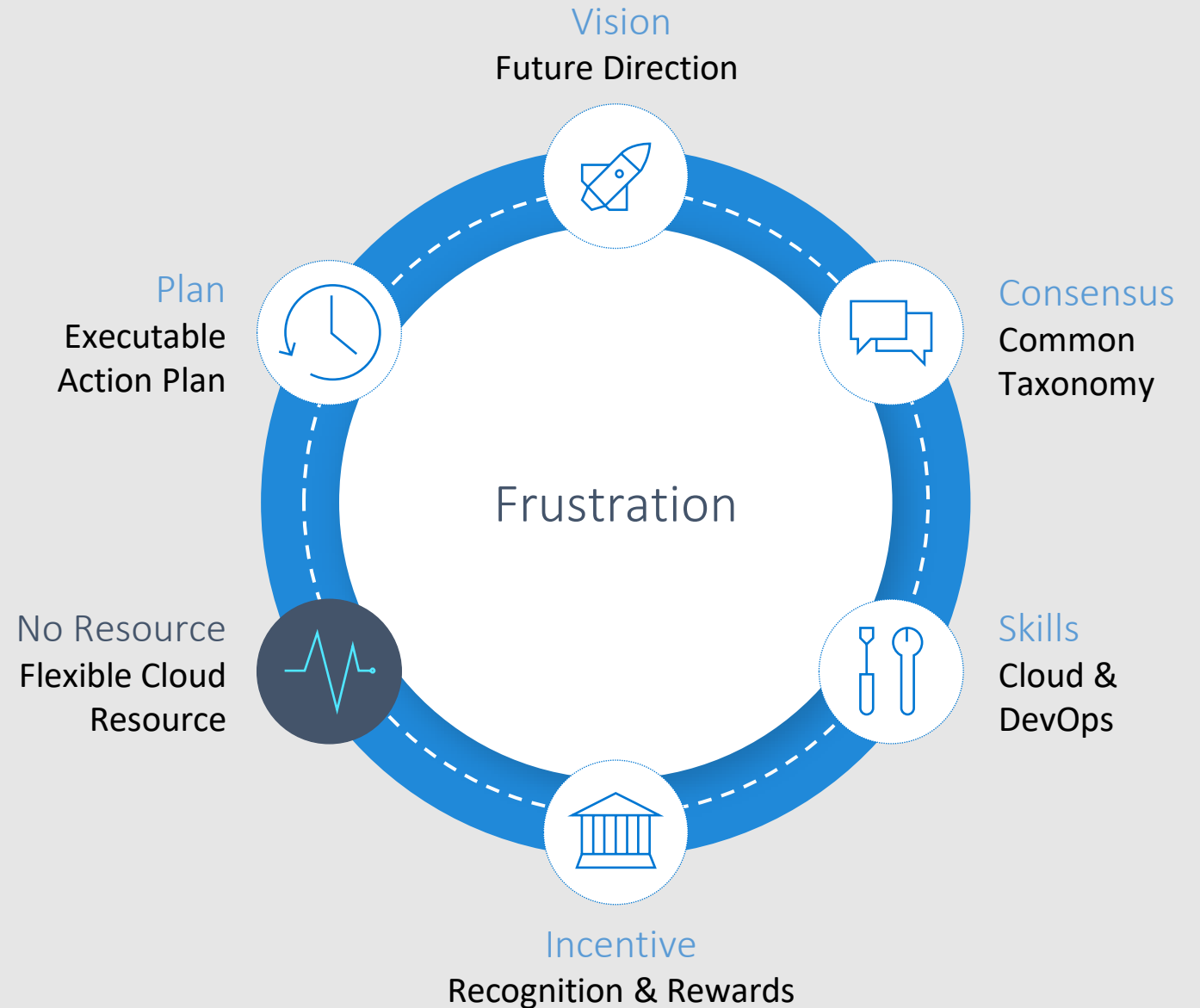
DevOps Transformation is PEOPLE Transformation



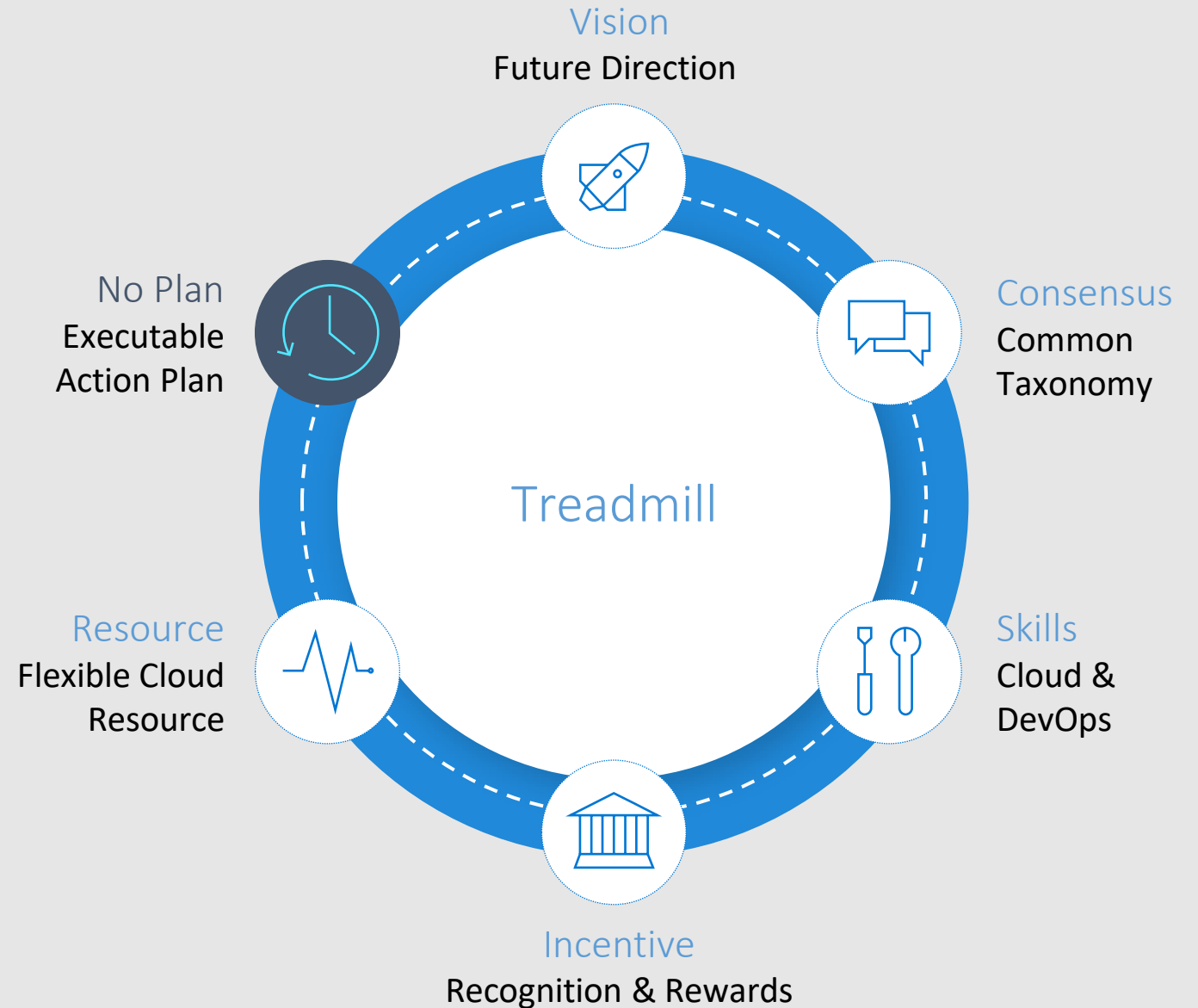
DevOps Transformation is PEOPLE Transformation



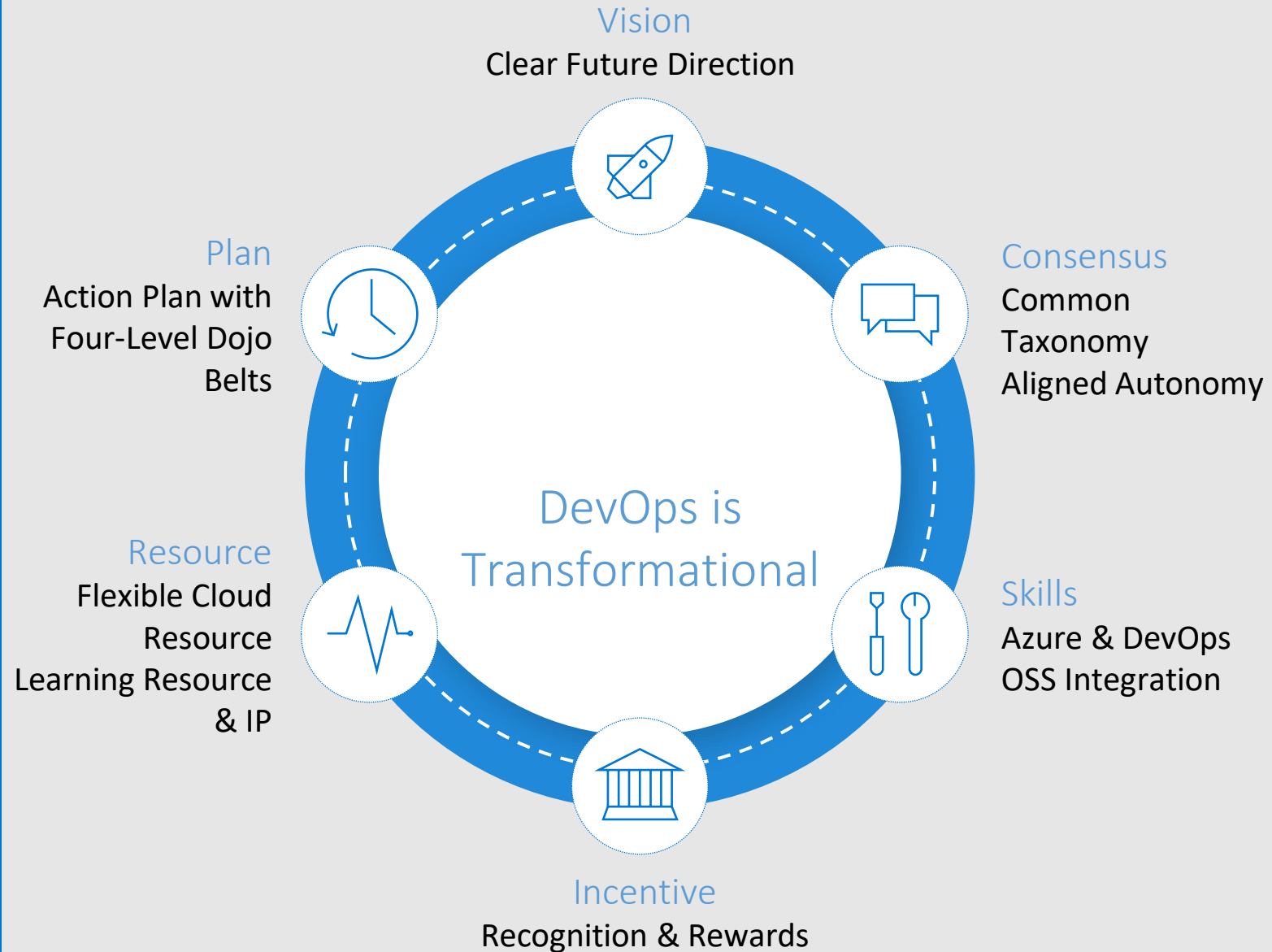
DevOps Transformation is PEOPLE Transformation



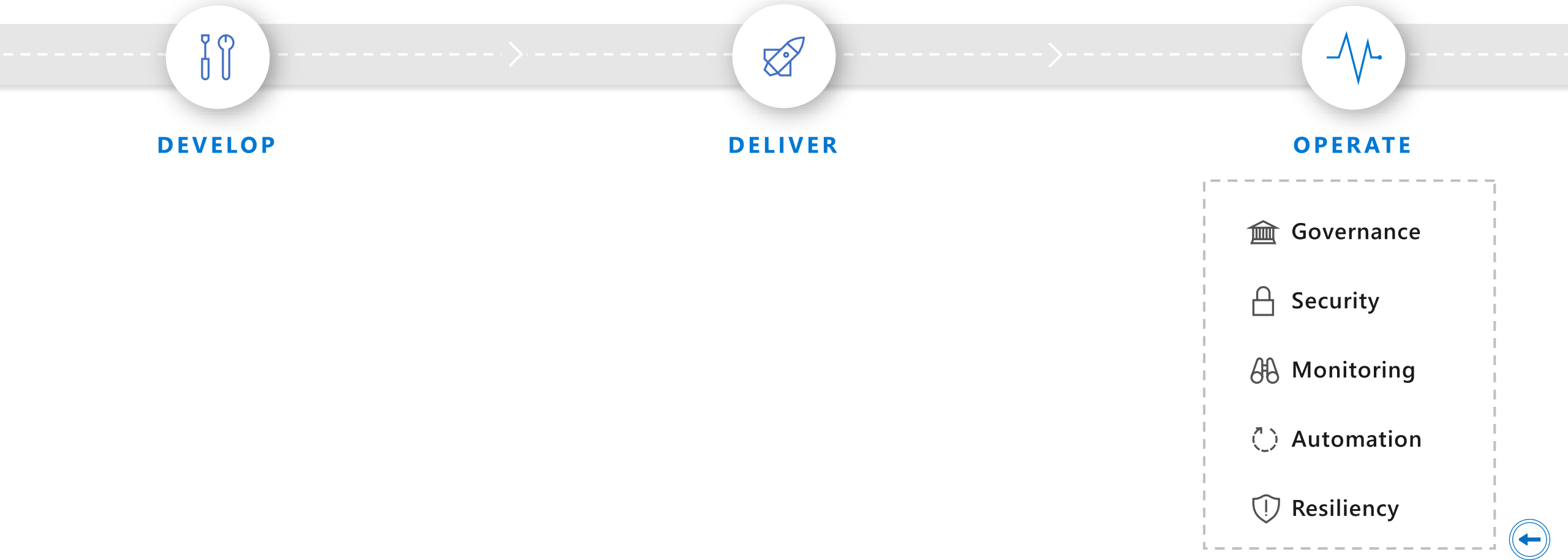
DevOps Transformation is PEOPLE Transformation



DevOps Transformation is PEOPLE Transformation



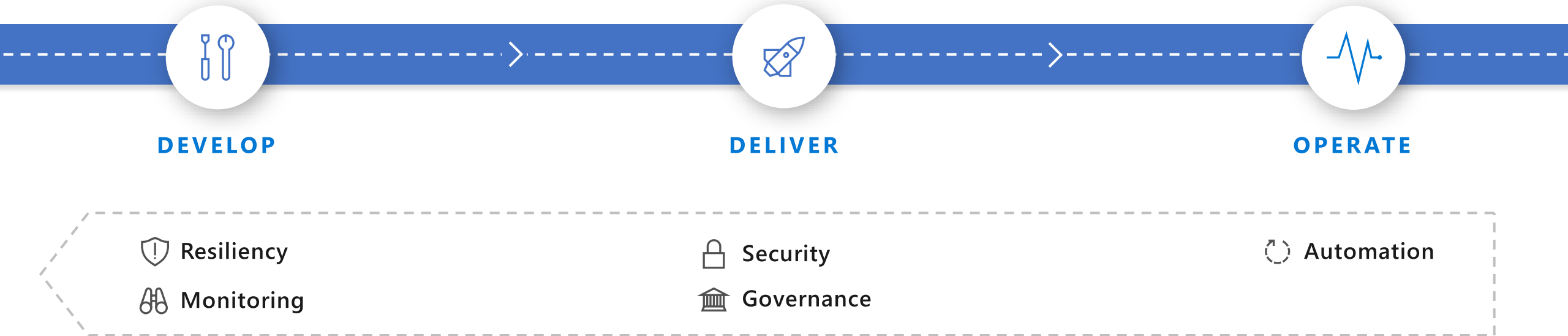
From reactive operations






Moving to proactive operations with Azure

"Shifting left"



Azure Migration & Modernization Teams in Action



 Factory enabled team

For more information, visit:
<https://aka.ms/modernization>



Upskilling Plan Components

What's in an upskilling plan



Shadowing

Team up with peers through hands on shadowing



Digital Skilling

Free on-demand training



Instructor Led Training

In person & virtual classes from MSFT Trainers & Learning Partners



Certifications

Azure certifications to validate knowledge

Approach: Build skills in phases

3

Specialty

Dive deep into Azure Cloud Services

-based on CCOE, Team, Role and/or Individual need

2

Individual / Team based

Training & certification

-for a targeted audience

1

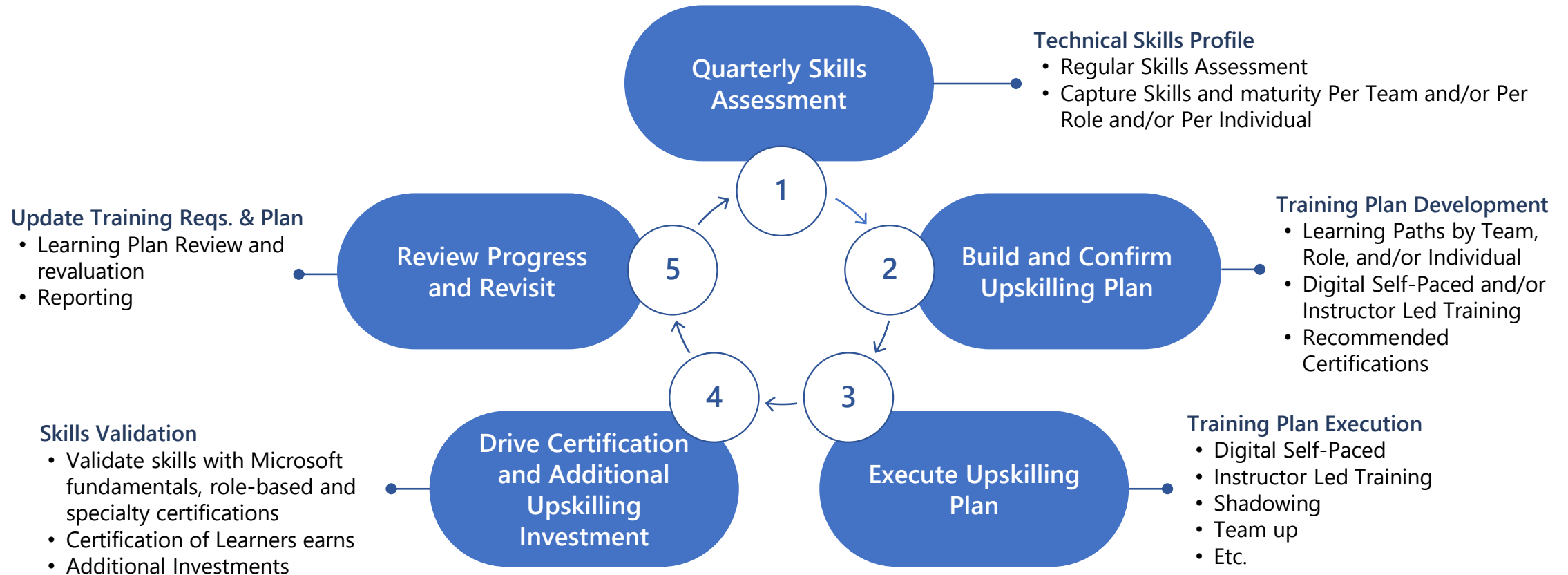
Fundamentals

Training & certification

-for everyone



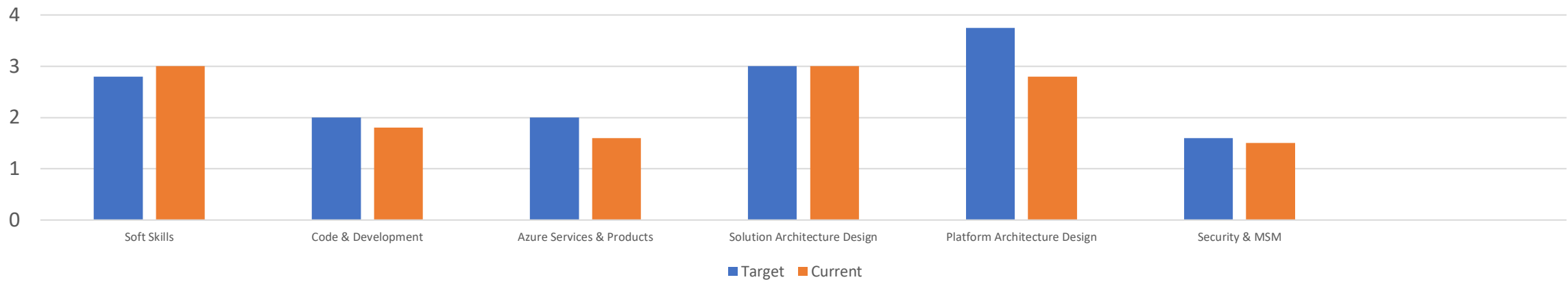
Upskilling Plan Process





Architecture Team - Skills Assessment Review

SKILLS OVERVIEW



HOT TOPICS

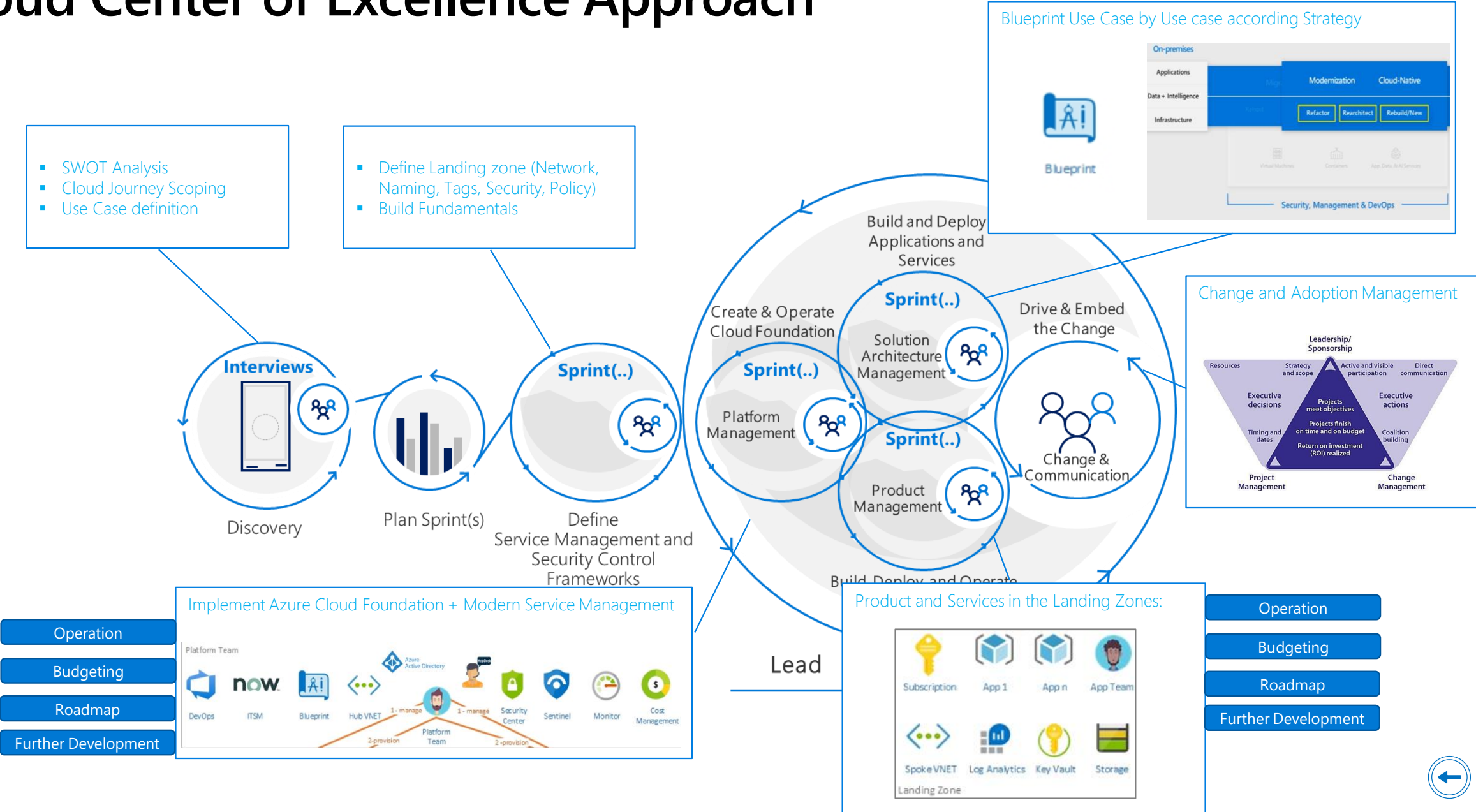
Topic for the coming months	Level
Azure Kubernetes Service (AKS)	L100-L200
Azure Architecture Skills	L200-L300

RECOMMENDED AZURE CERTIFICATIONS

Certification	Recommendation
AZ-303 – Azure Architecture Technologies	Highly Recommended
AZ-304 – Azure Architecture Design	Highly Recommended
AZ-204 – Developing Solutions for Microsoft Azure	Recommended
AZ-400 – Azure DevOps Solution	Optional



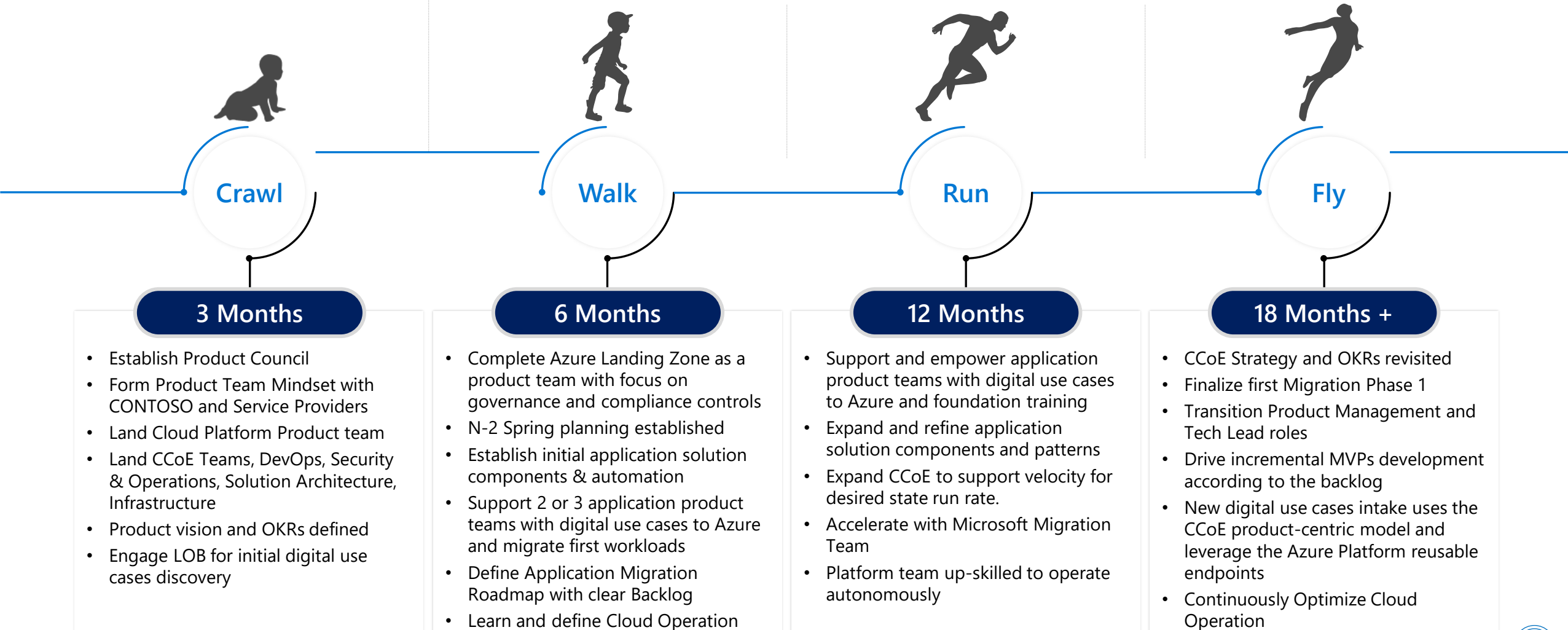
Cloud Center of Excellence Approach





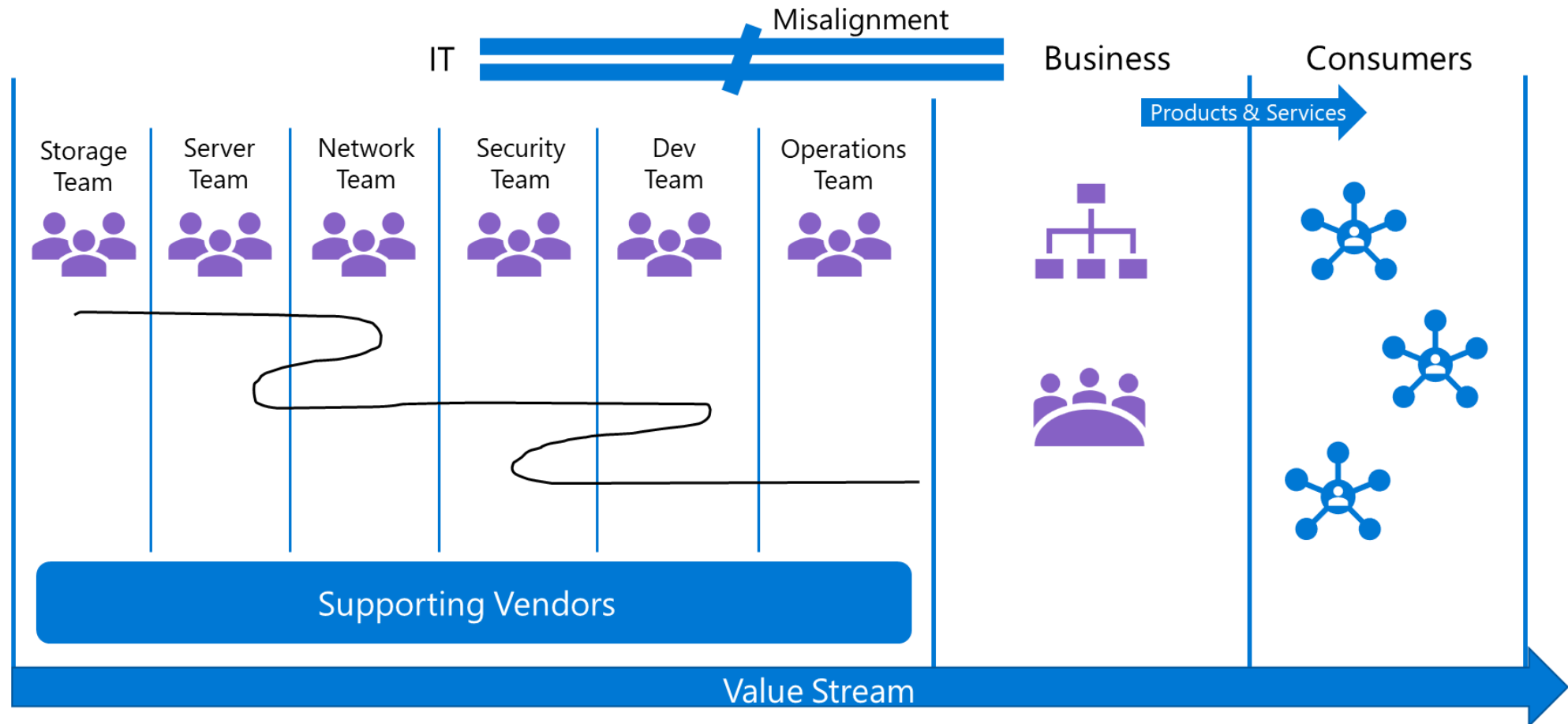
CCoE for Lean-Product | Milestones and Objectives Overview

A roadmap to provide a clear sense of the business objectives for Customers and Microsoft Consulting Services



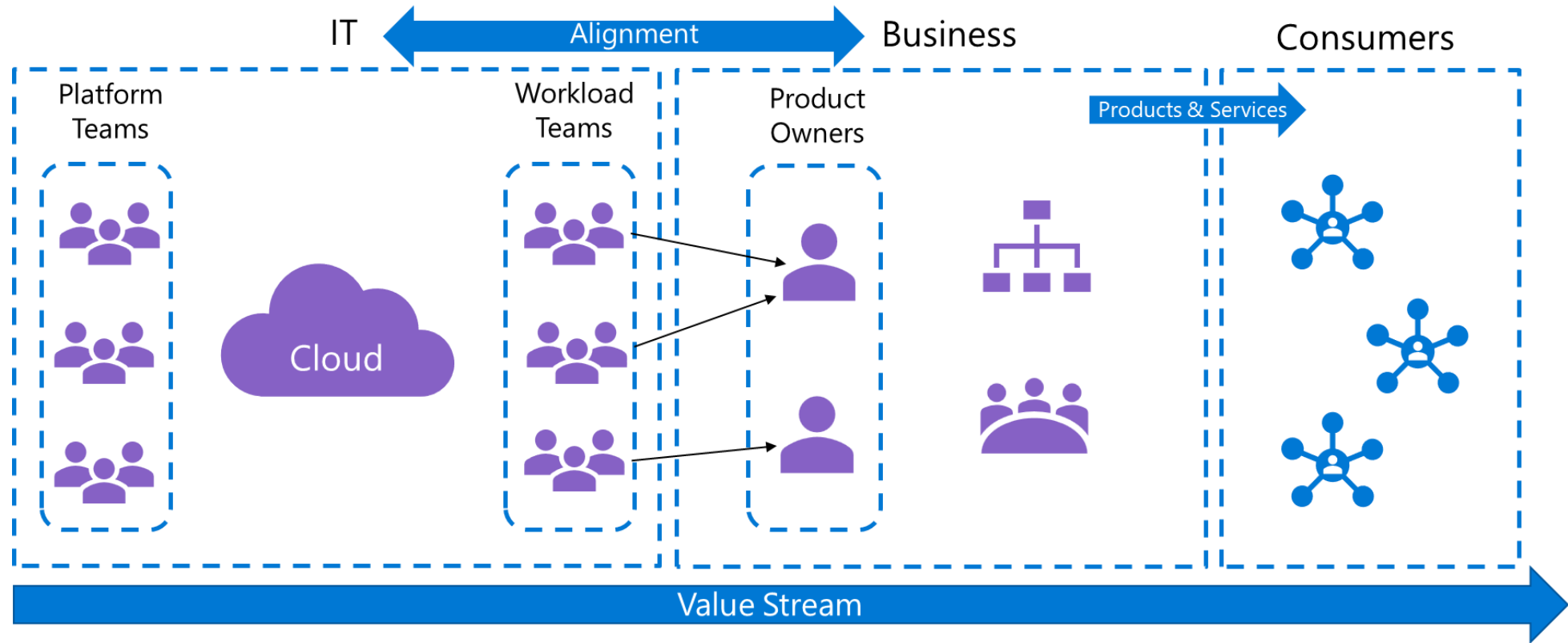
Target Operating Model

Functional Organization



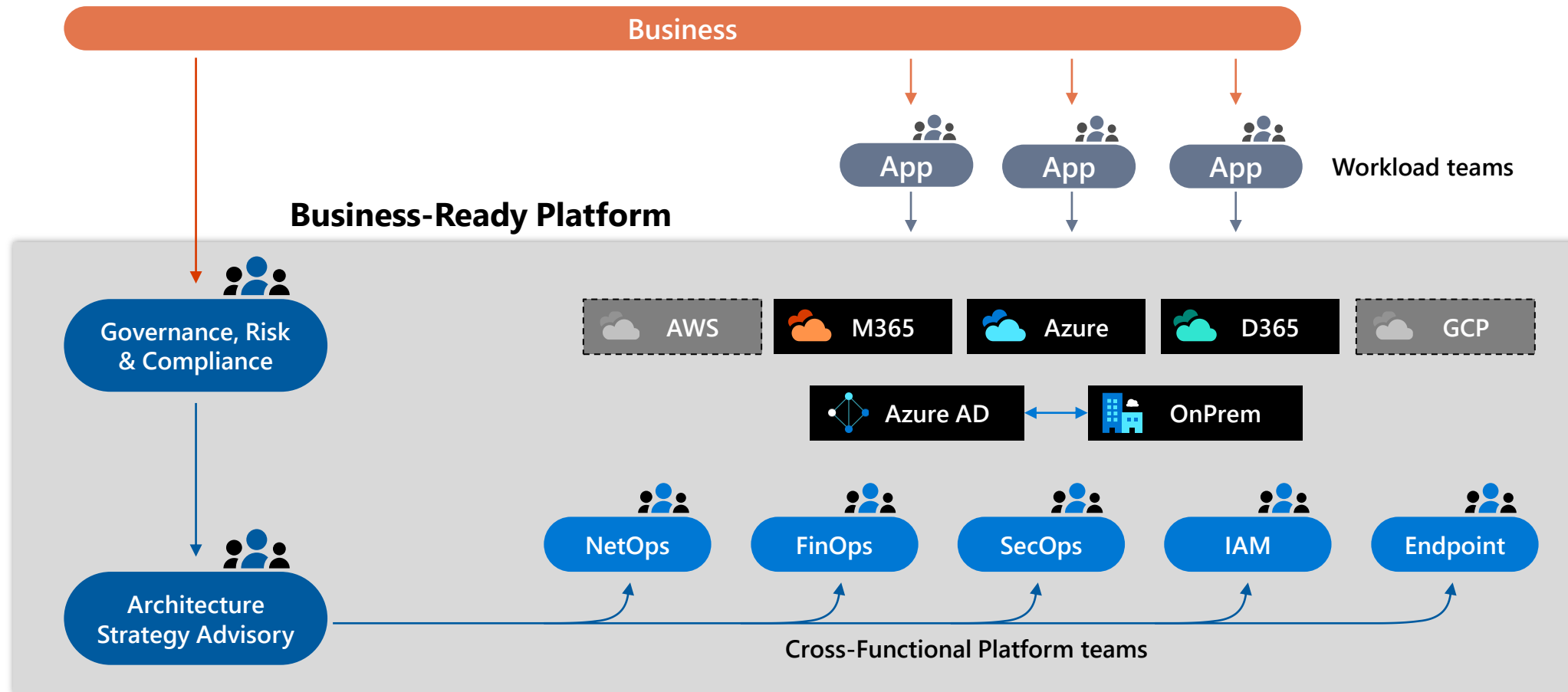
Target Operating Model

Product Organization



Target Operating Model

Leading to a Business-Ready Platform



TOM RASCI | Detail View by Team



→ Use **TOM** for **task assignment** in detail

Service	Product	Task Name	Task Description	Recurrence	Possible Least Privileged Role	Responsible Group	Comments	Automation: Y/N	If no / Duration?	Link
Azure Foundation										
Subscription Management	Azure Portal	Create subscription	Programmatically create Azure subscriptions	As Required	Account Owner (EA)	Cloud Platform Team		Y		https://docs.microsoft.com/en-us/azure/azure-resource-manager/programmatically-create-subscription?tabs=rest
Subscription Management	Azure Portal	Define subscription policies	Define policies on the level of the subscription	Yearly	Resource Policy Contributor	Cloud Platform Team		Y		https://docs.microsoft.com/en-us/azure/azure-policy/azure-policy-introduction
Subscription Management	Azure Portal	Subscription model	Understand the relationships of organizations, subscriptions, licenses, user accounts, and tenants across Microsoft's cloud offerings to set your Subscriptions model	Yearly	Global Administrator	Cloud Platform Team		N	200h	https://docs.microsoft.com/en-us/office365/enterprise/subscriptions-licenses-accounts-and-tenants-for-microsoft-cloud-offerings
Subscription Management	Azure Portal	Review of billing information	Review your monthly Azure bill and be able to understand usage and charges	Monthly	EA Reader reader	Cloud Platform Team		N	150h	https://docs.microsoft.com/en-us/azure/billing/billing-understand-your-bill

Assign Responsible Group, Recurrence, Automation Level and Workload to Automate

Use **task assignment** to evaluate and define required **roles** and **responsibilities**



Use all **results** to define RASCI and visualize **how** the **teams work together**

Service	Task Name	Task Description	Recurrence	Automation: Y/N	Product Owner	Platform Architect	Platform Engineer	Site Reliability Engineer	Product Owner	UX Architect	Developer	tester	Product Manager	Stakeholder X	Stakeholder Y	People Manager X	Cloud	SRE	Security
Azure Foundation																			
Subscription Management	Create subscription	Programmatically create Azure subscriptions	As Required	Y	A		R			C	I		I				S		

R = Responsible (execute)

A = Accountable (billing, sign contract etc)

S = Support is usually seen as a role that actively takes work away from the R

C = Consulted, which primarily contributes knowledge

I = Informed, will get informet about the progress



Let's have a 15min break

Roundtable and Q/A starts at 14:45

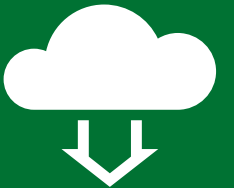


Summary

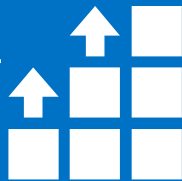
Start with WHY and involve Business , Customer and IT for your Digital Transformation Journey



Remain People focused with adoption and change management – process and technology is a natural outcome



Focus on simplicity, standardization, automation and reuse existing Blueprints and our Cloud Adoption Framework



There are risks and obstacles along the journey – allow a failure culture and establish continuous learning



Focus on outcomes, not methods and invest now to empower your business in the cloud with new technology





THANK YOU

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Thank you

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