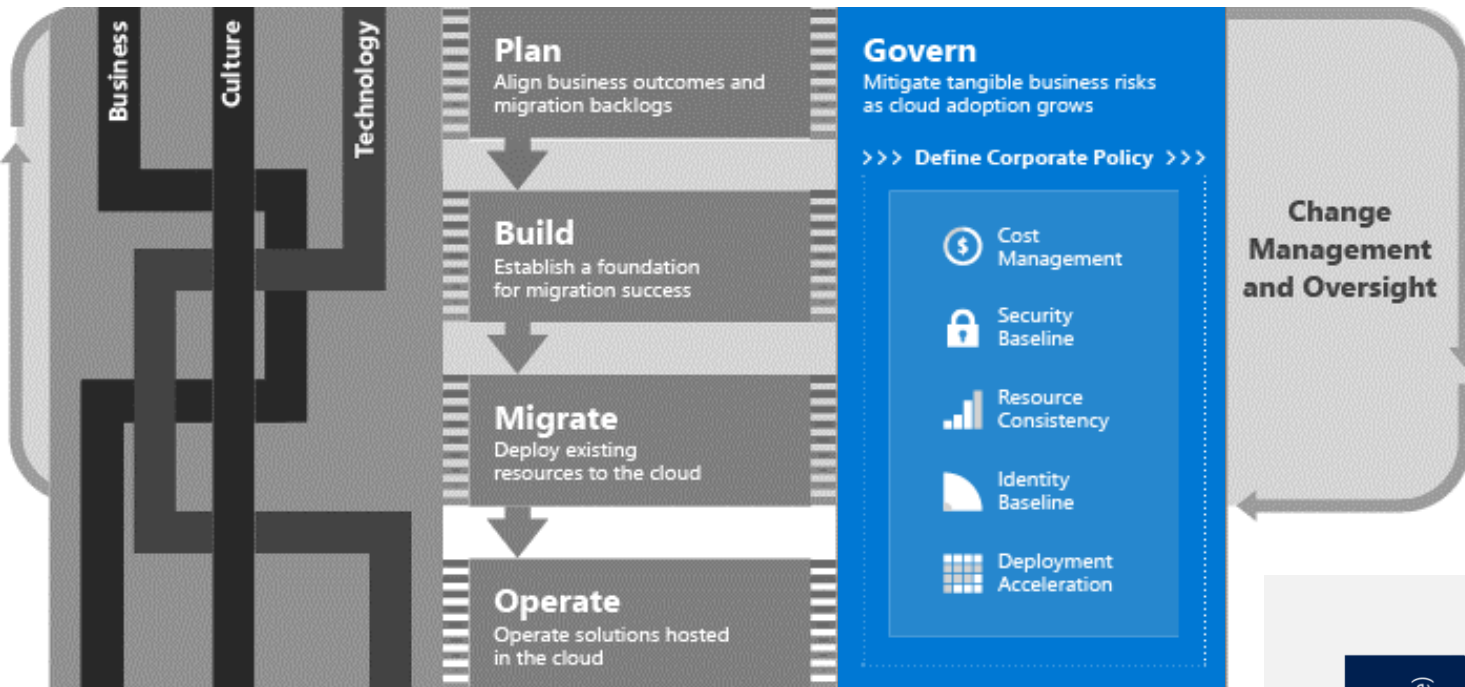


Introduction to CAF the Governance Journey

James Complin
Senior Cloud Solution Architect
Microsoft

Broad view of the Microsoft Cloud Adoption Framework (CAF)



Customer success is measured in business transformation, not technical implementations.

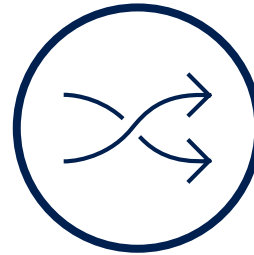
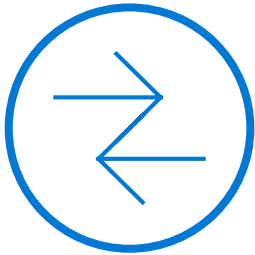
CAF maps to customer execution, *NOT Microsoft features and functions*, to drive Transformative Thought Leadership and customer success.

Today's conversation focuses on one section of CAF, **Governance**

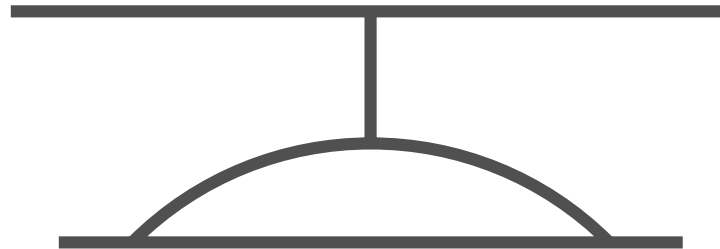


Objective of this model: Create balance

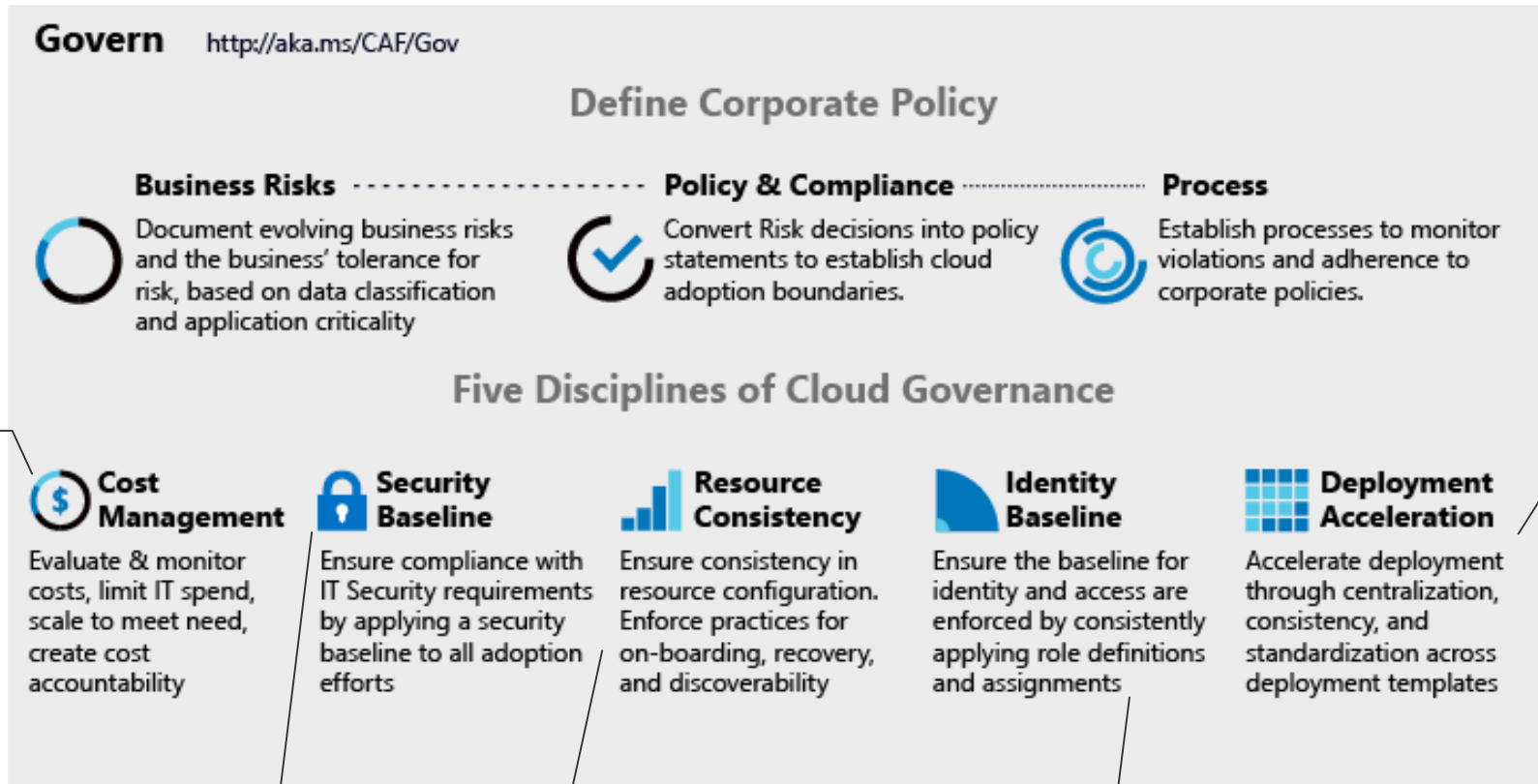
**Control &
Stability**



**Speed &
Results**



Making Governance actionable with native tools



- Azure Blueprints
- Azure Policy
- *Azure Cost Management*
- *Azure Advisor*
- Azure Portal
- Azure EA Content Pack

- Azure Blueprint
- Azure Policy
- Resource Grouping & Tagging
- Resource Manager Templates
- Azure DevOps
- Azure Site Recovery
- Azure Backup
- Azure Automation

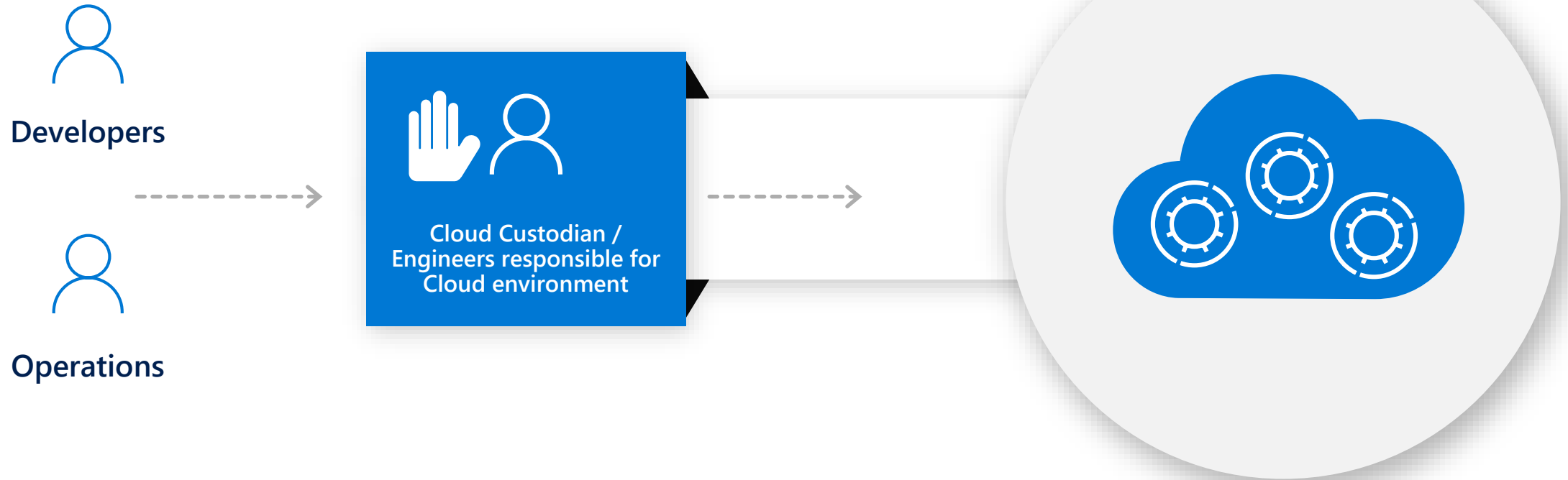
- Azure Blueprints
- Azure Policy
- *Azure Security Center*
- Subscription Design
- Encryption
- Hybrid Identity
- Azure Networking
- Azure Automation

- Azure Blueprints
- Azure Policy
- *Azure Monitor*
- Resource Manager Templates
- Resource Graph
- Management Groups

- Azure Blueprints
- *RBAC*
- Azure AD
- Azure AD B2B
- Azure AD B2C
- Directory Federation
- Directory Replication

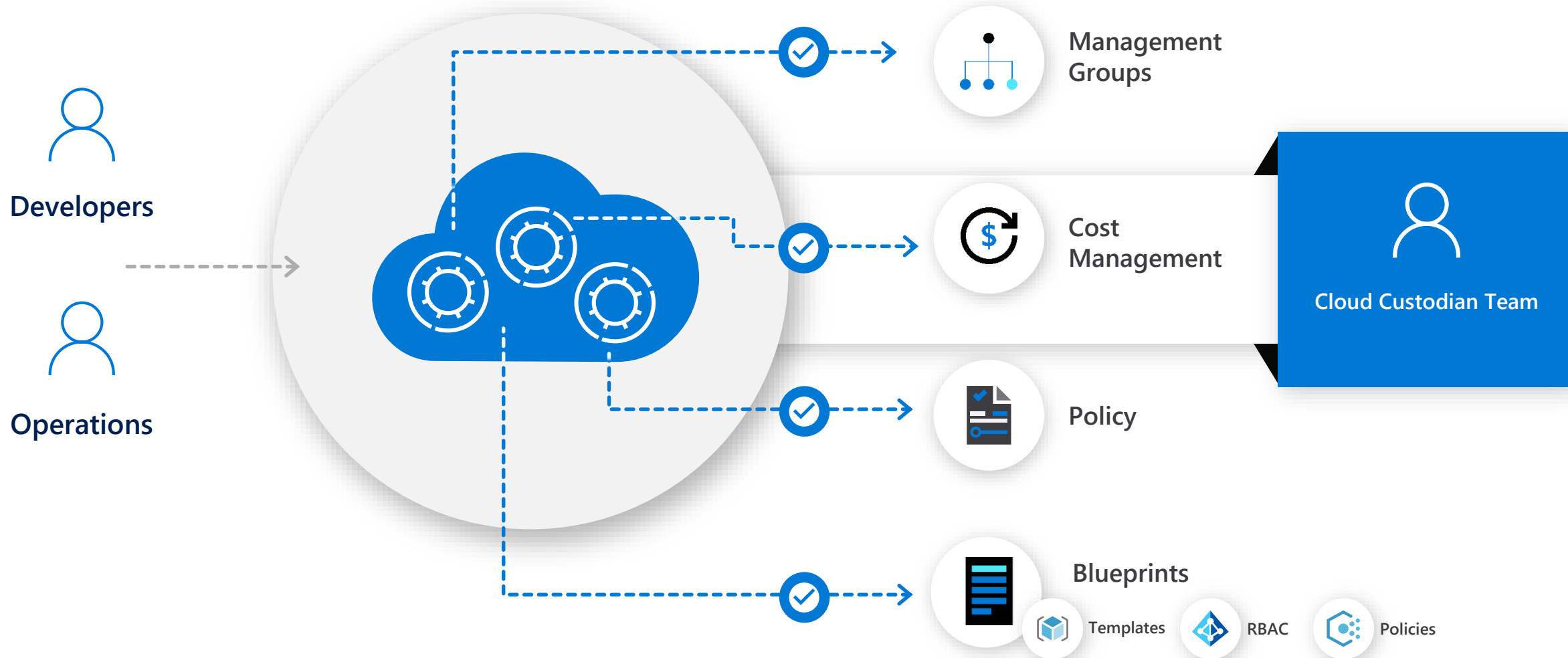
Traditional approach

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



Azure is designed for effective governance

Enforce compliance at scale and increase agility



Governance for the cloud

The broadest governance portfolio of any cloud



Management Group

Define organizational hierarchy

Hierarchy



Policy

Real-time enforcement, compliance assessment and remediation

Control



NEW

Blueprints

Deploy and update cloud environments in a repeatable manner using composable artifacts

Environment



NEW

Resource Graph

Query, explore & analyze cloud resources at scale

Visibility



NEW

Cost Management

Monitor cloud spend and optimize resources

Consumption

Azure Governance Architecture

Providing control over the cloud environment, without sacrificing developer agility

1. Environment factory

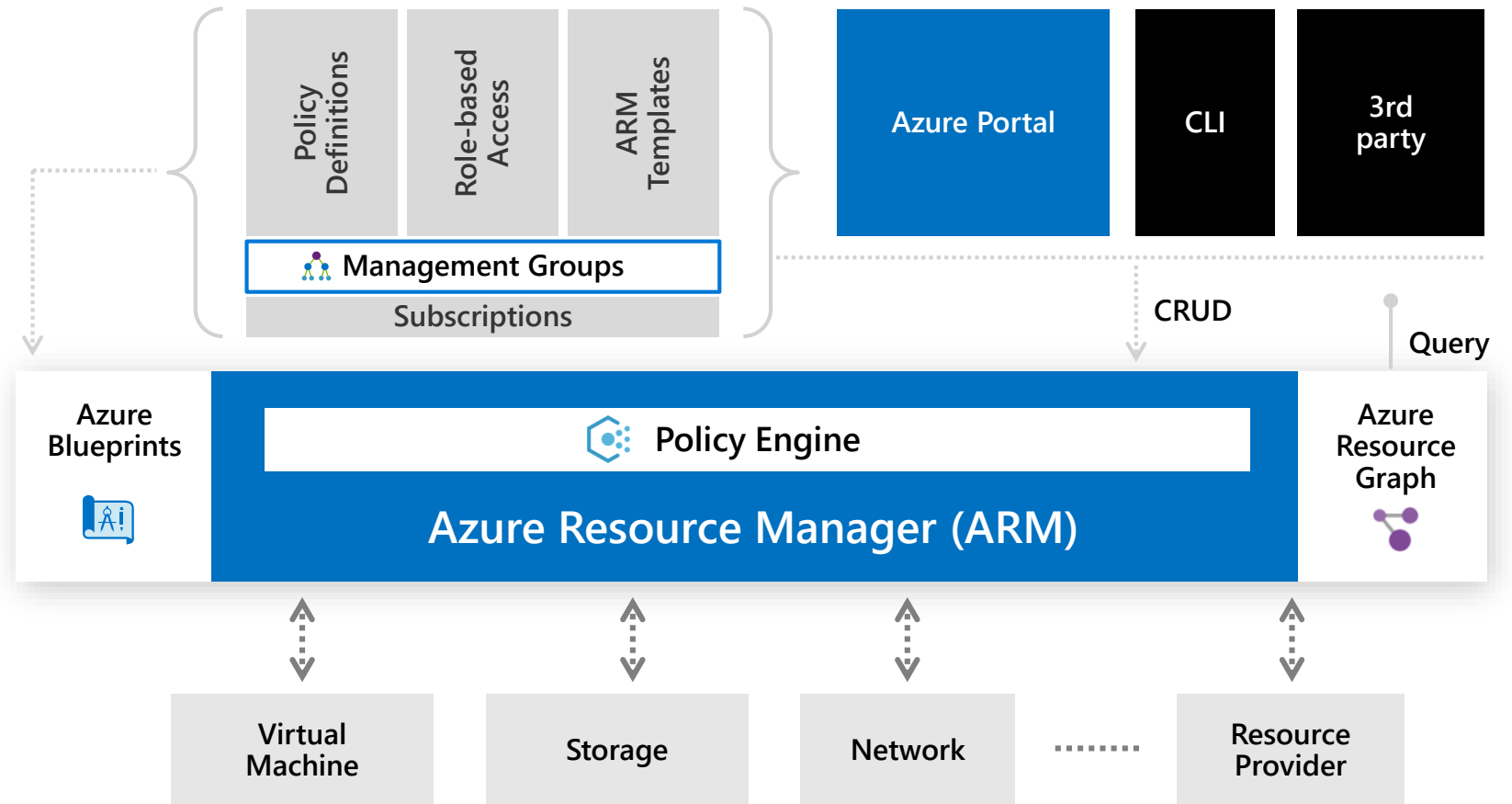
Deploy and update cloud environments in a repeatable manner using composable artifacts

2. Policy-based control

Real-time enforcement, compliance assessment and remediation at scale

3. Resource visibility

Query, explore & analyze cloud resources at scale

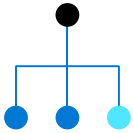


Introducing Azure Management Groups

Efficiently apply governance controls and manage groups of Azure subscriptions



- 1 Ensure compliance
- 2 Empower DevOps
- 3 Manage costs

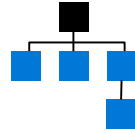


Simplify subscription management

Group subscriptions into logical groups

Inherit properties that apply to all subscriptions

View aggregated information above the subscription level

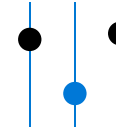


Fit your organization

Create a flexible hierarchy that can be updated quickly

Mirror the hierarchy to the organizational model that works for you

Scale up or down depending on the organizational needs



Apply controls at scale

Leverage Azure Resource Manager (ARM) objects that integrate with other Azure services

Azure services:

Azure Policy

RBAC

Azure Cost Management

Azure Blueprints

Azure Security Center

Management Group & subscription modeling strategy



1

Ensure compliance

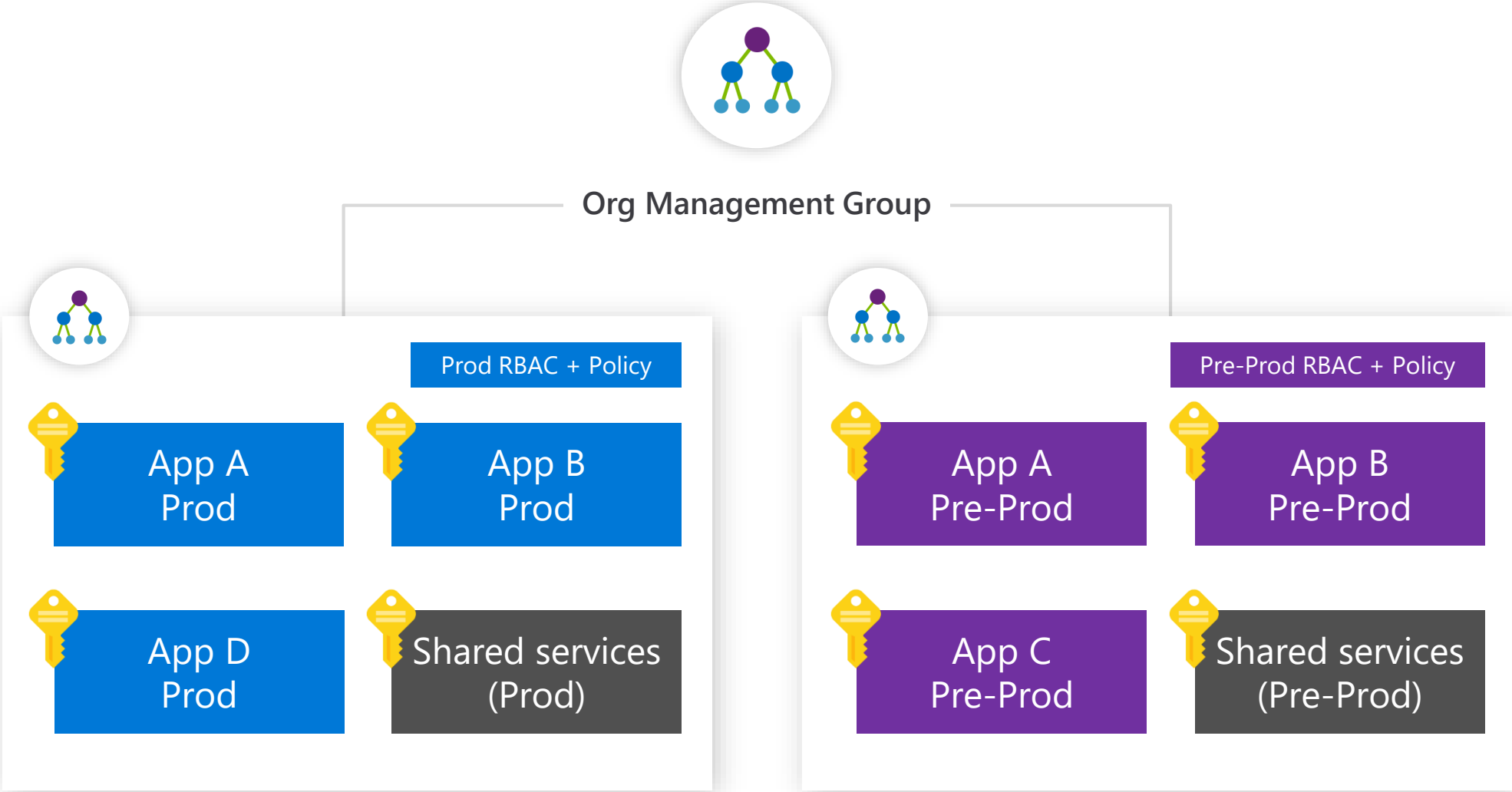
2

Empower DevOps

3

Manage costs

Microsoft recommended



Azure Policy

Active control and governance at scale for your Azure resources



- 1 Ensure compliance
- 2 Empower DevOps
- 3 Manage costs



Enforcement & compliance

Turn on built-in policies or build custom ones for all resource types

Real-time policy evaluation and enforcement

Periodic & on-demand compliance evaluation

VM In-Guest Policy (**NEW**)



Apply policies at scale

Apply policies to a Management Group with control across your entire organization

Apply multiple policies and & aggregate policy states with policy initiatives

Exclusion Scope



Remediate & automate


Remediate existing resources at scale (**NEW**)

Automatic remediation resources at deployment time

Trigger alerts when a resource is out of compliance

Enforce policies as part of the development process

Shift left to deliver compliant code faster



1

Ensure compliance

2

Empower DevOps

3

Manage costs



Policy as Code

Pre-flight

Validation


Authoring

-  Policy
-  Security
-  Monitoring



Enforce policies as part of the development process

Shift left to deliver compliant code faster



1

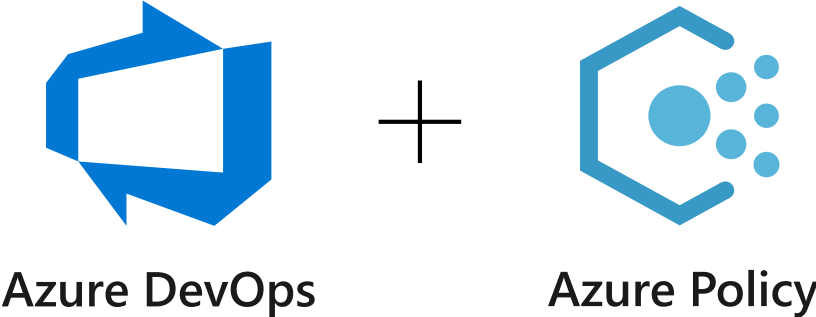
Ensure compliance

2

Empower DevOps

3

Manage costs



Azure Blueprints

Enabling quick, repeatable creation of fully governed environments



- 1 Ensure compliance
- 2 Empower DevOps
- 3 Manage costs



Streamline environment creation

Centralize environment creation through templates

Add resources, policies and role access controls

Track blueprint updates through versioning



Enable compliant development

Empower developers to create fully governed environments through self-service

Create multiple dev-ready environments and subscriptions from a centralized location

Leverage the integration with Azure Policy on the DevOps lifecycle



Lock foundational resources

Ensure foundational resources cannot be changed by subscription owners

Manage locks through a centralized location

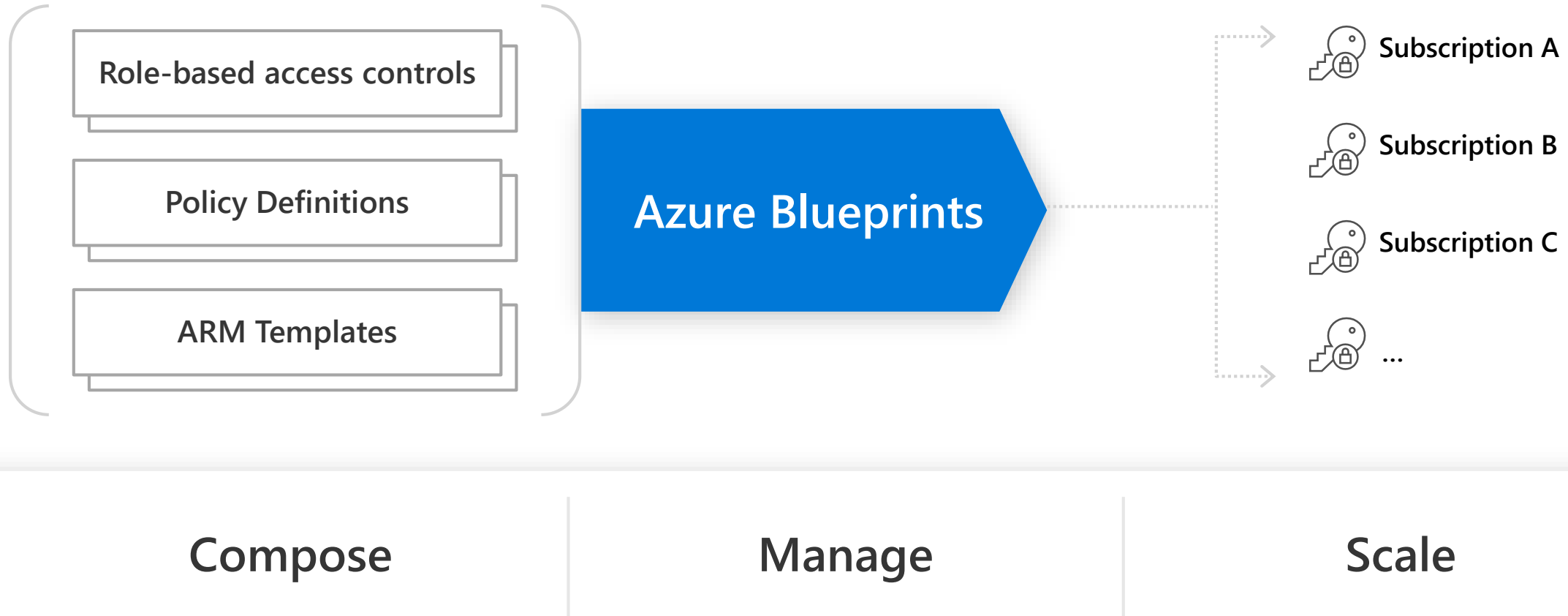
Update locked resource through blueprint definition updates

Azure Blueprints

deploy and update cloud environments in a repeatable manner
using composable artifacts



- 1 Ensure compliance
- 2 Empower DevOps
- 3 Manage costs



Azure Resource Graph

Get visibility into your resources for effective inventory management



- 1 Ensure compliance
- 2 Empower DevOps
- 3 Manage costs

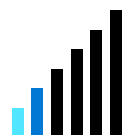


Explore your resources

Get visibility into your Azure resources across subscriptions and management groups.

Access the information you need in the portal, CLI or PowerShell

Find assets based on resource properties or their relationships



Query & analyze

Get the exact information you need through queries in seconds

Perform analysis at scale across all your environments

Leverage **Keyword Query Language** for easy query creation



Assess impact

Understand the impact of applying policies before their implementation

Get a view of the operational impact of common actions like deprecations

Azure Cost Management



- 1 Ensure compliance
- 2 Empower DevOps
- 3 **Manage costs**



Monitor cloud spend

Track usage and cost trends

Detect spending anomalies and usage inefficiencies

Forecast future spend using your historical data

Visualize data in consolidated or custom dashboards



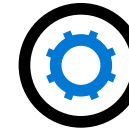
Drive organizational accountability

Allocate usage and costs to business units and projects

Produce chargeback and show back reports

Let teams access data and insights with Role-Based Access Control

Automatically alert stakeholders of spending anomalies and overspending risks



Optimize cloud efficiency

Increase resource utilization with virtual machine right-sizing

Eliminate idle resources

Improve virtual machine reserved instances management

Pay less for Windows Server and SQL Server resources through Azure Hybrid Benefit

Thank you.