

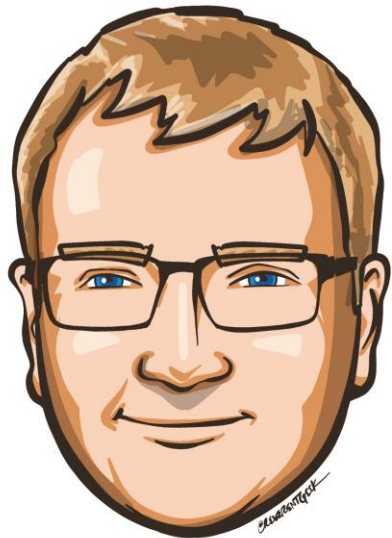
Microsoft Azure Overview

Presented by: Luke Murray



Who am i?

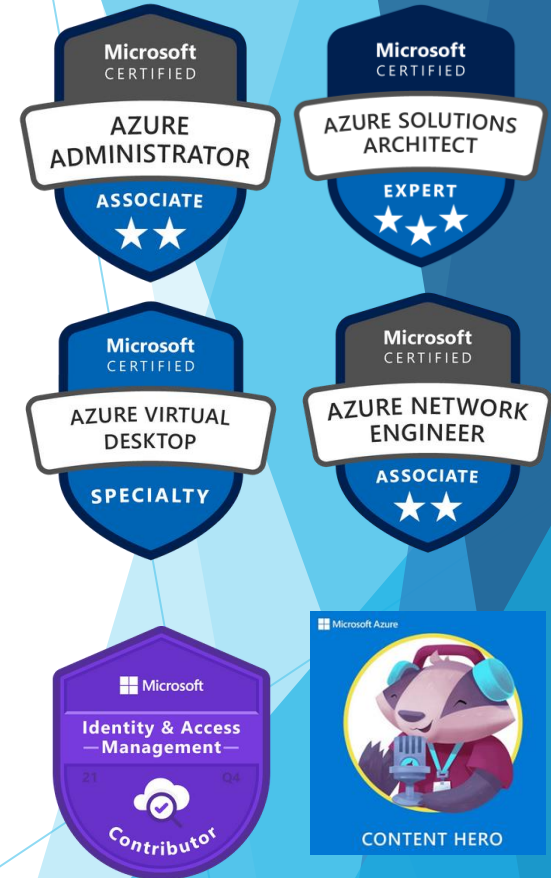
Luke Murray
Technical Consultant,
Azure Solutions Architect Expert,
Technologist and a drinker of coffee.



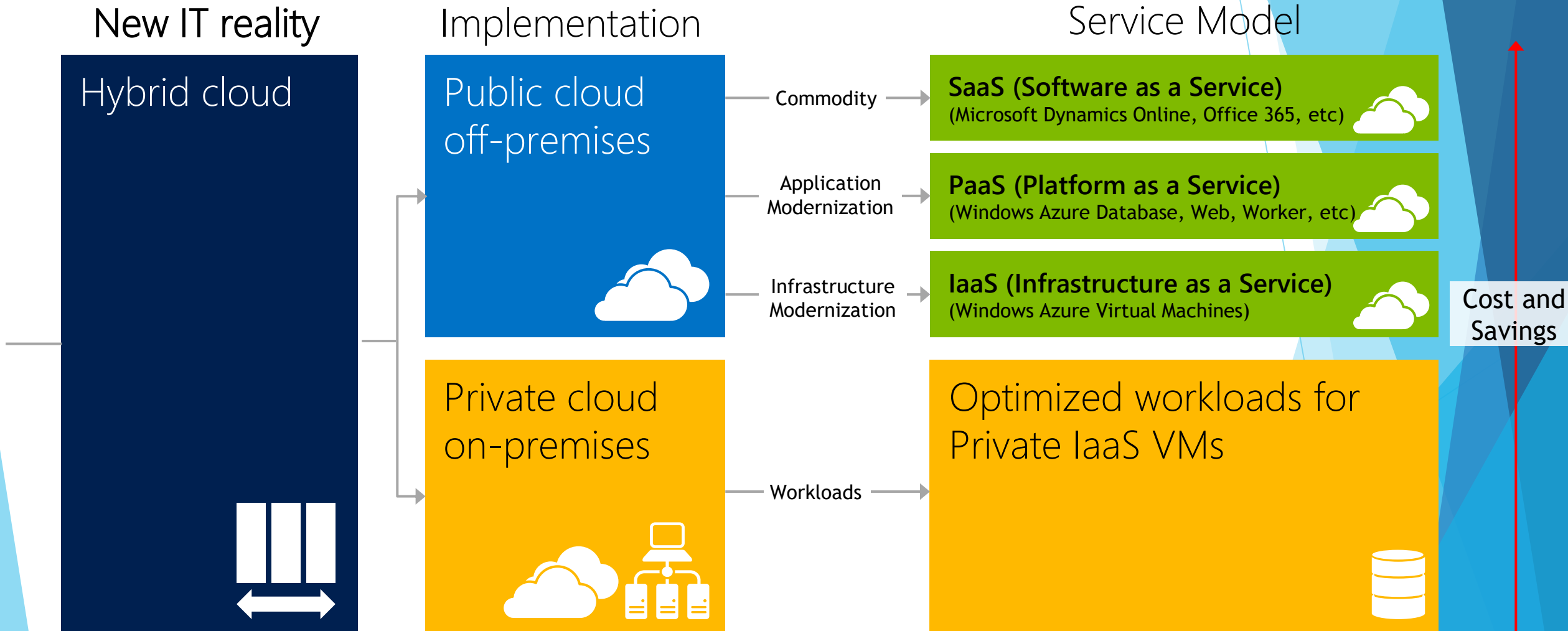
@lukemurraynz



luke.geek.nz



Azure readiness



SaaS

PaaS

IaaS



Hosted applications/apps

Development tools,
database management,
business analytics

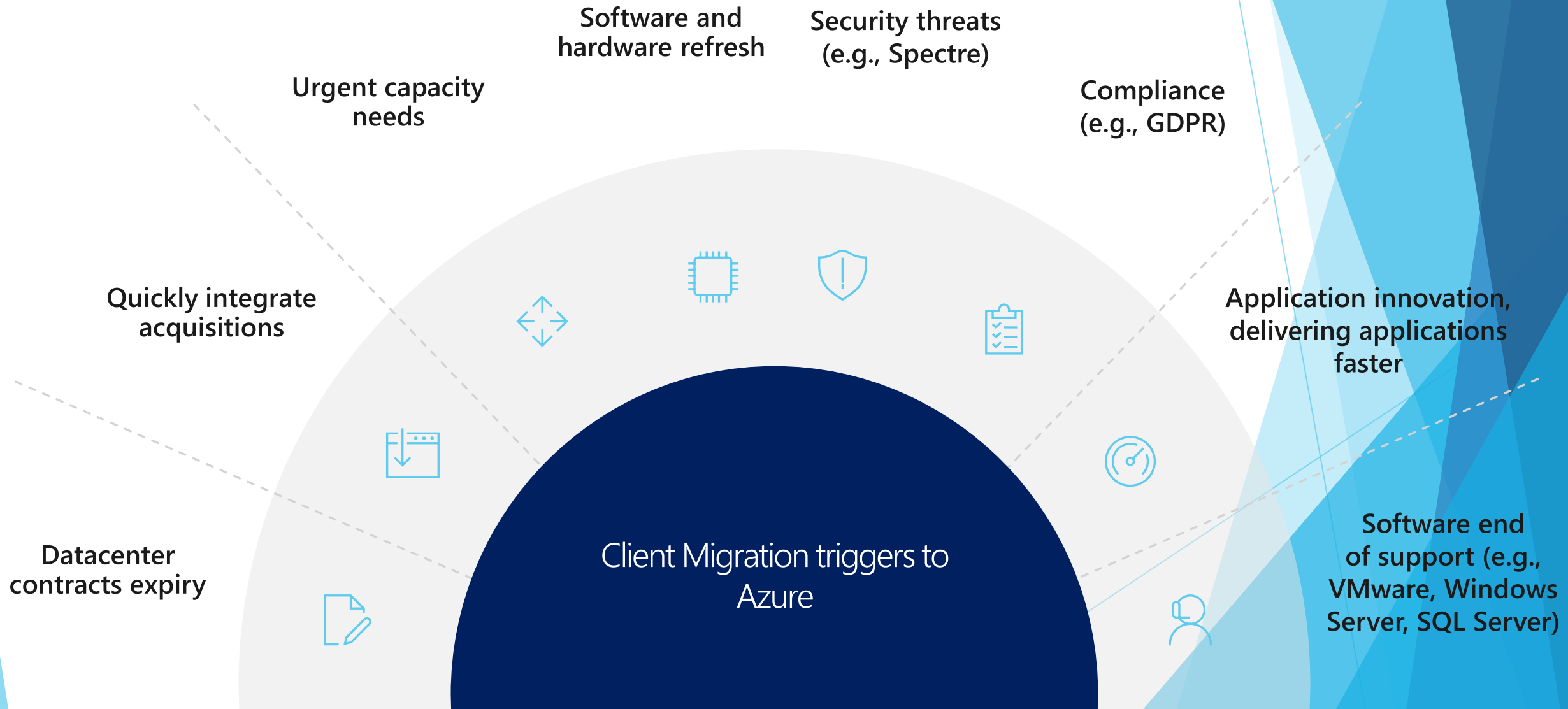
Operating systems

Servers and storage

Networking
firewalls/security

Data center physical
plant/building

Azure readiness



60+ AZURE REGIONS 40+ PEERING LOCATIONS 185+ EDGE SITES





Azure (commercial)



Azure Government



Azure Government Secret



Azure Government Top Secret

DoD Impact Level 2 (IL2)
FedRAMP High
HIPAA

DoD Impact Level 4 (IL4)
DoD Impact Level 5 (IL5)
FedRAMP High
ITAR, DFARS
IRS 1075, CJIS, HIPAA

DoD Impact Level 6 (IL6)
ICD 503
JSIG (PL-3)

ICD 503 (in progress)
ICD 705
JSIG (PL-3)

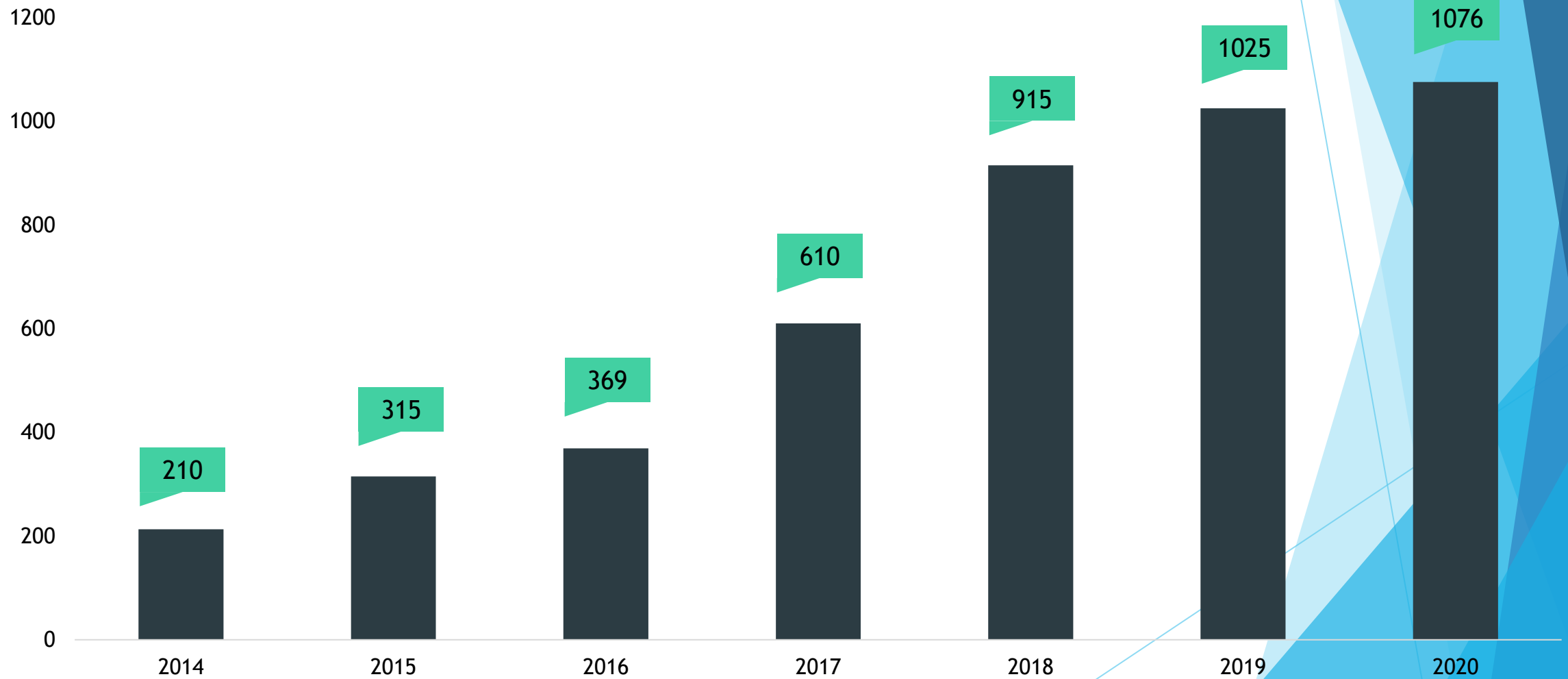
Azure products

AI + Machine Learning	Media
Analytics	Hybrid
Blockchain	Migration
Compute	Mixed Reality
Containers	Mobile
Databases	Networking
Developer Tools	Security
DevOps	Storage
Identity	Web
Integration	Windows Virtual Desktop
Internet of Things	Microsoft Game Development
Management	



With over 6,000 services, Azure has a wide range of flexible offerings. Azure draws on Microsoft's vast data capacity to provide software, platform, and infrastructure as a service.

Pace of innovation | capabilities



Azure retirements

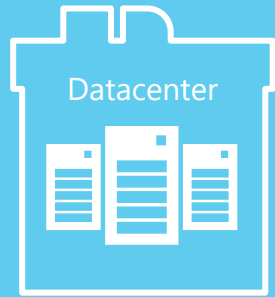
- Azure is 13 years old; retirements are part of the natural lifecycle of any service or feature
- Retirements do not mean that all Azure customers are impacted
- Continuous innovation and modernization of Azure services helps unlock new and better opportunities
- It is our commitment to provide customers as much time and information, to plan thoughtfully

Our customer commitment	How we communicate	Where we communicate	When we communicate
<p>Minimum 12-month notice to remove any material feature or functionality, or discontinue a service*</p> <p>Minimum 90-day notice to retire anything else</p> <p>Modern Lifecycle Policy</p> <p>Online Services Terms</p> <p>*excluding Previews</p>	<p>Targeted communications directly to active usage Azure subscriptions</p> <p>Viewable by anyone with admin permissions on subscription</p>	<p>Authenticated</p> <ul style="list-style-type: none">• Health advisory message in Azure Service Health*• Direct email to admins <p>Unauthenticated</p> <ul style="list-style-type: none">• Azure Updates post• Banner messages on retiring service pages <p><small>*Set up a Service Health Alert to receive an email, text, vmail, as well</small></p>	<p>Initial retirement notification per policy</p> <p>Reminder messages at T-6 months, T-3 months, T-1 month, then weekly until T-0</p> <p>Will send an update notification if any plans significantly change</p>

Azure protection options for all scenarios

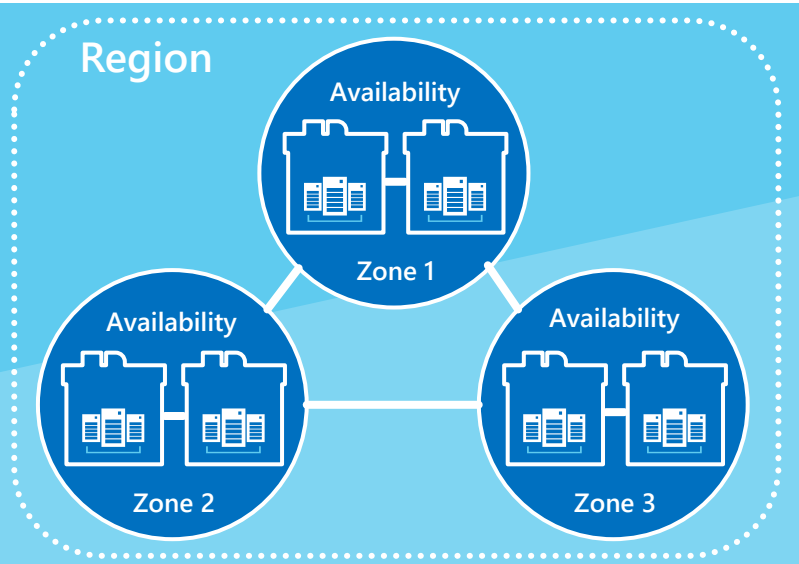
Introducing Availability Zones, protecting from datacenter level failures

Blast radius



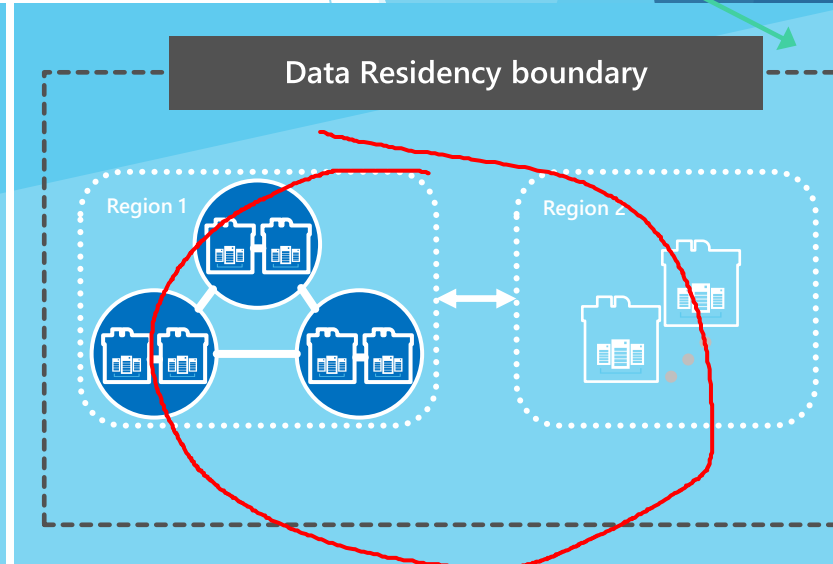
Availability Sets

High Availability protection from hardware failures in a datacenter



Availability Zones

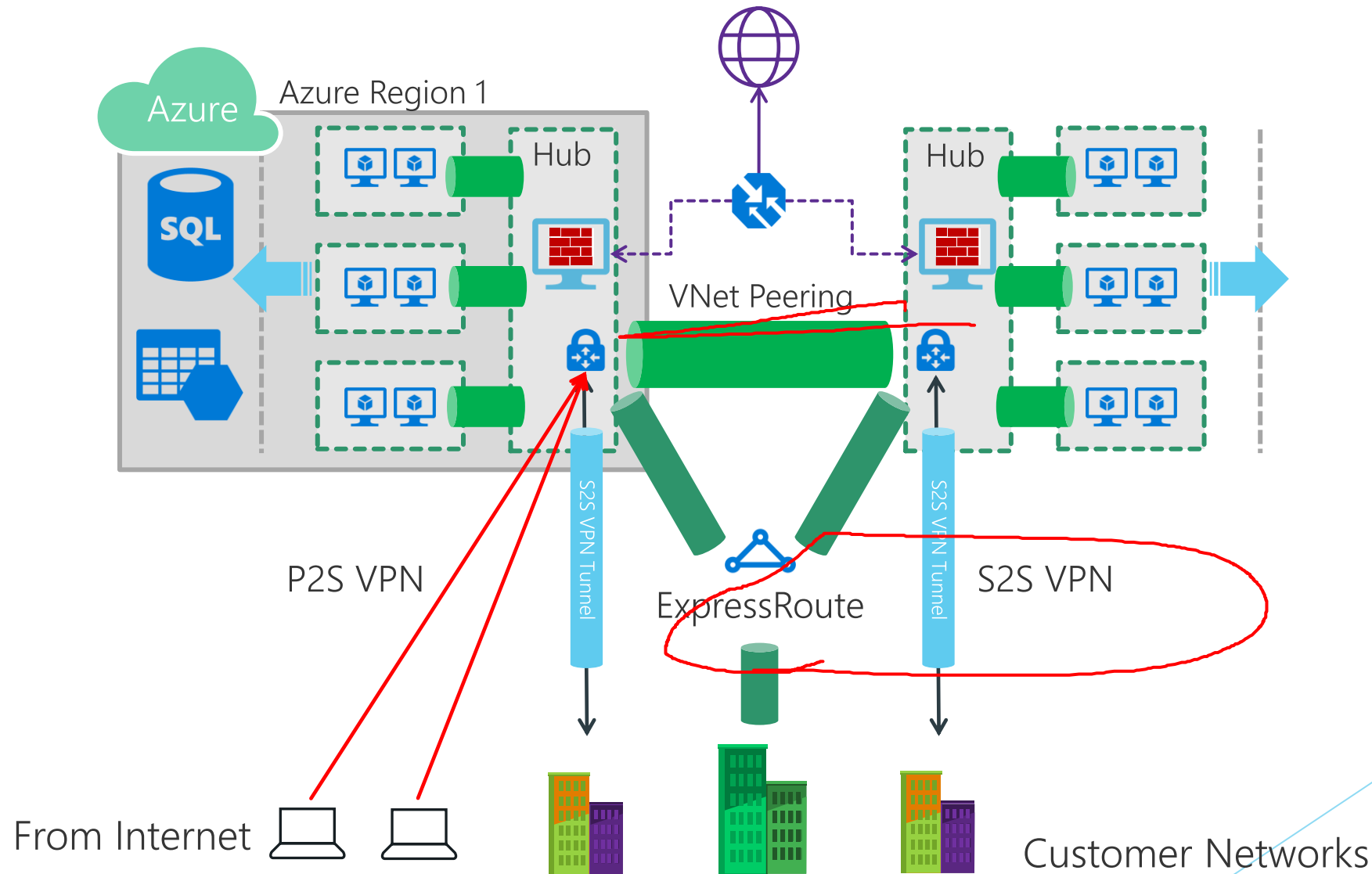
High Availability protection against loss of datacenters; Multiple datacenters per physically separated zone; each zone features independent network, cooling, and power



Region Pairs

Protection for your data and applications from the loss of an entire region with Geo-Redundant Storage (GRS) and Azure Site Recovery

Azure Routing



Azure portal offers enterprise-grade management

Govern

Policy management
Cost management

Configure

Update management, scripting
automation, configuration

Secure

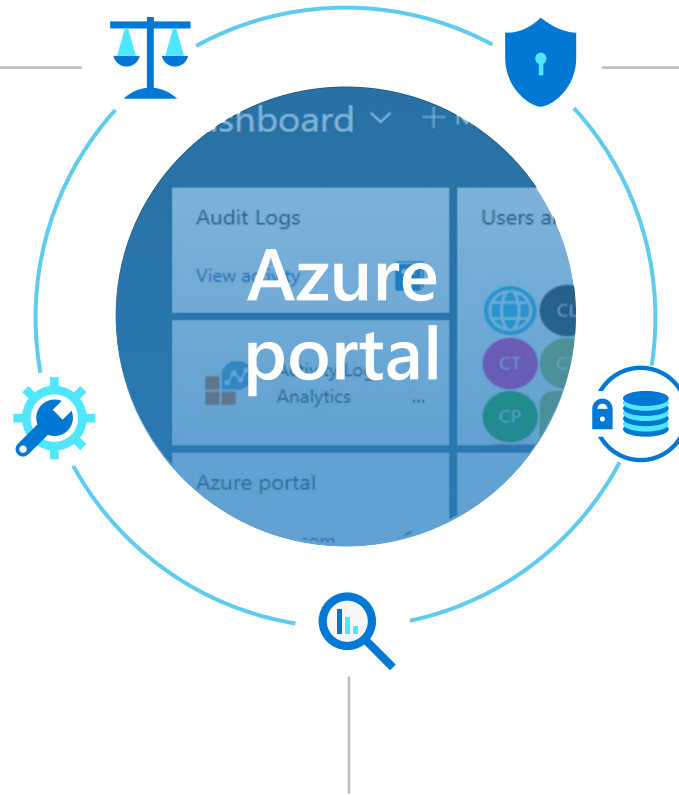
Security management
Threat protection

Protect

Backup and
disaster recovery

Monitor

App, infrastructure and network monitoring
log analytics, and diagnostics

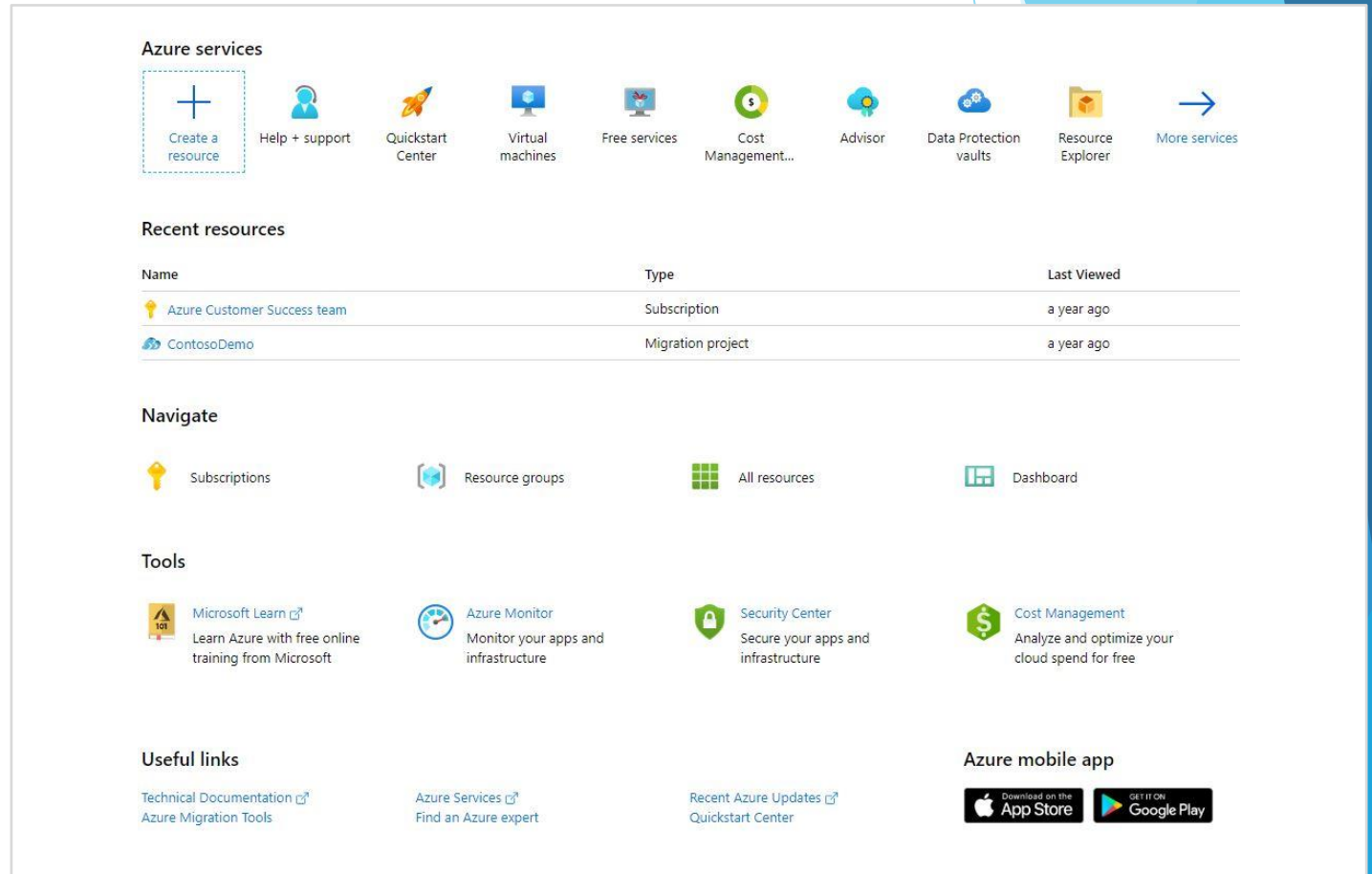


Azure portal is customizable—portal.azure.com

Create portal dashboards



By key roles, (e.g., operations, finance, development), key projects, and key service KPIs



Azure services

- Create a resource
- Help + support
- Quickstart Center
- Virtual machines
- Free services
- Cost Management...
- Advisor
- Data Protection vaults
- Resource Explorer
- More services

Recent resources

Name	Type	Last Viewed
Azure Customer Success team	Subscription	a year ago
ContosoDemo	Migration project	a year ago

Navigate

- Subscriptions
- Resource groups
- All resources
- Dashboard

Tools

- Microsoft Learn Learn Azure with free online training from Microsoft
- Azure Monitor Monitor your apps and infrastructure
- Security Center Secure your apps and infrastructure
- Cost Management Analyze and optimize your cloud spend for free

Useful links

- Technical Documentation Azure Migration Tools
- Azure Services Find an Azure expert
- Recent Azure Updates Quickstart Center

Azure mobile app

- Download on the App Store
- GET IT ON Google Play

Azure mobile app

Now available on Android and iOS

[Download the app today.](#)

Stay connected to your Azure resources—anytime, anywhere



Monitor and manage your Azure resources on the go

Get notifications and alerts about important health issues

Easily access Service Health events and information

Quickly diagnose and fix issues from your mobile device

Run Azure Cloud Shell scripts (PowerShell or Bash) from the app

Receive Azure Alerts as push notifications via action groups

Dark theme supported

[Learn more](#)
Check product availability [in your region](#)

Azure Quickstart Center

**Accelerate your
Azure deployment**



A focused view of the top Azure services guides you through options to help you easily build, test, and deploy your project to the cloud.

**Not quite ready to launch
a project? No worries**



Built in setup guides enable you to make decisions as you prepare to migrate or drive innovation with Azure services.

**Need more learning resources?
We have you covered**



Our recommended learning paths let you take a hands-on approach to building Azure skills and knowledge.

Azure policy for enterprise cloud control and compliance

Enforcement and compliance

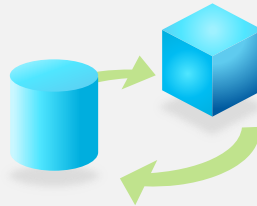


Turn on built-in policies or build custom ones for all resource types

Real-time policy evaluation and enforcement

Periodic and on-demand compliance evaluation

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 initiative

Exclusion scope

Remediation



Real time remediation

Remediation on existing resources

Azure Advisor

Your free, personalized guide to Azure best practices

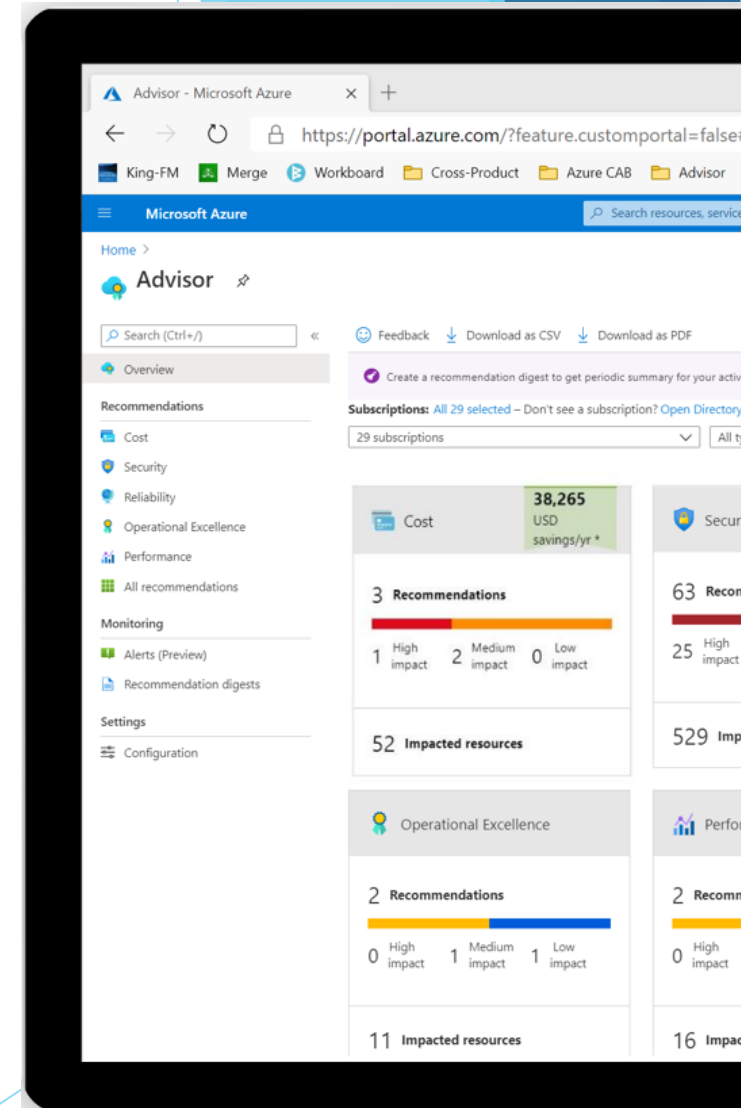


Optimize your Azure resources for cost, security, high availability, performance, and operational excellence

Find all your optimization recommendations from across Azure in one place

Quickly and easily act on best practice recommendations with simple, step-by-step guidance and quick links

Get notified about new recommendations and recommendations you haven't actioned yet



Azure communicates incidents, upcoming maintenance, and health advisories via Azure Service Health

Azure Service Health alerts is strongly recommended



Examples of alerts include:
An alert to email your dev team when a resource in a test/dev subscription is impacted

An alert to update ServiceNow via webhook when a resource in production is impacted

An alert to send an SMS to a specific number when resources in a given region are impacted



The screenshot displays the Azure Service Health interface. On the left, a sidebar lists various health categories like 'Service Health', 'Health history', and 'Health advisories'. The main pane shows a table of incidents with columns for 'Incident name', 'Status', 'Severity', 'Resolution', 'Start time', and 'End time'. One incident is highlighted, showing details about a 'Service Health - Health history' event. A video inset in the bottom right corner shows a Microsoft representative speaking. The Microsoft logo is visible in the top right corner of the interface.

Outages, resilience, & Azure Service Health
Personalized view of Azure health and architecting for resilience

Azure Monitor

aka.ms/AzMonOverview

- Detect & diagnose issues across apps and dependencies with App Insights
- Correlate issues at infra level with insights for VMs, AKS, SQL, Networks, etc.
- Drill down with Log Analytics for troubleshooting & deeper diagnostics
- Operationalize at scale with Smart Alerts & Automated Actions
- Create visualizations with Azure Dashboards & Workbooks



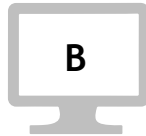
Compute Options for all Types of Apps



Entry level



Burstable



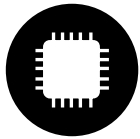
General Purpose



Compute Intensive



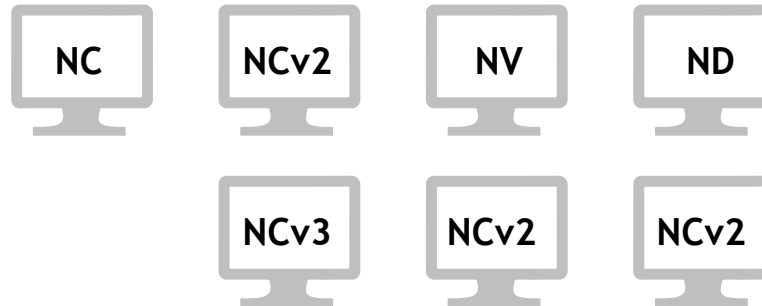
Storage Optimized



Memory Optimized



Graphics Intensive

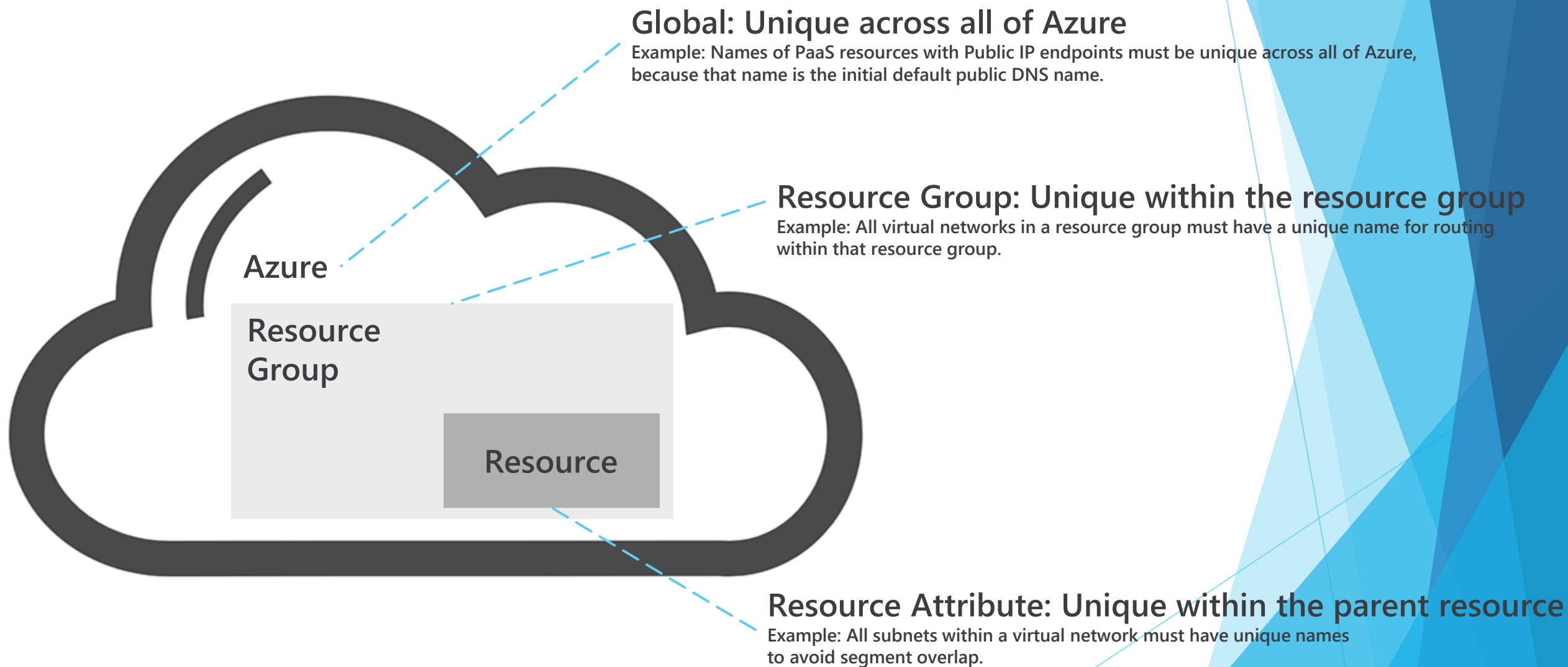


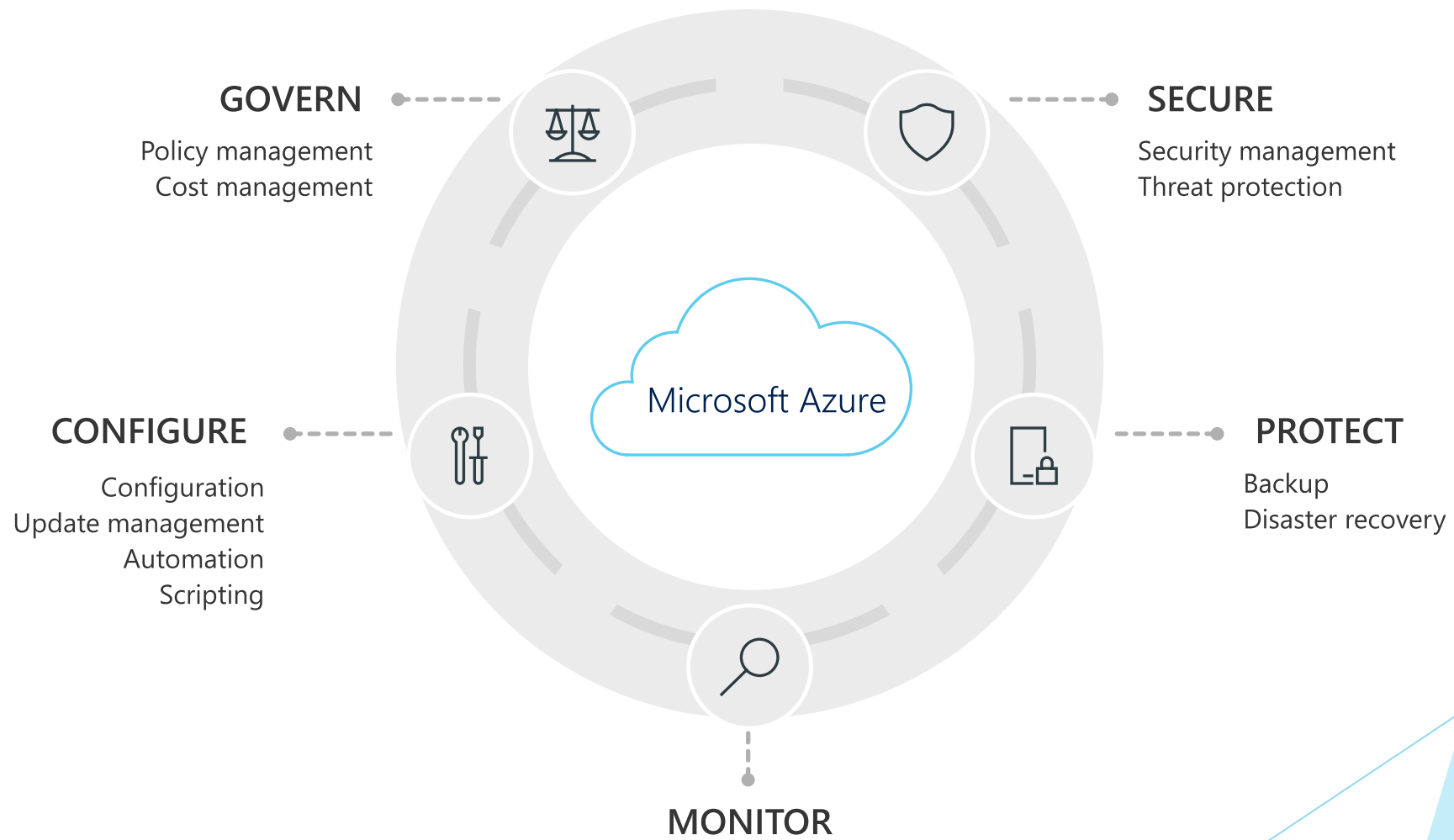
High Performance Computing



Purpose-built SAP HANA



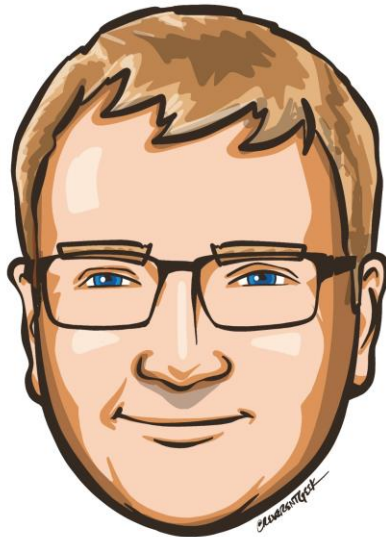




Who am i?

Thank you for watching the Microsoft Azure overview, hopefully you have learn't something! Let me know your thoughts in the comments below

Follow me on Twitter, my website or find me on LinkedIn.



@lukemurraynz



luke.geek.nz