



GETTING REACQUAINTED WITH MICROSOFT AZURE

*Where are you in your
cloud journey?*

May 19, 2021

Your presenter



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Cloud practitioner with 10 years of experience helping clients utilize cloud computing to enhance and optimize their technology delivery.

Today's objective

At the end of this session, you will:

- Bring your core Azure knowledge up to date
- Understand a framework to structure your organization's Cloud roadmap
- Reconsider your Cloud environment management and maintenance obligations
- Have an inventory of basic and transformational workloads for Cloud consideration

Our agenda

- Where are you in your cloud journey?
- Reintroduction to Microsoft Azure
- Building your Cloud foundation
- Managing your Cloud assets
- Progressing to transformational workloads



Reintroduction to Microsoft Azure

The constant evolution of



Microsoft Azure

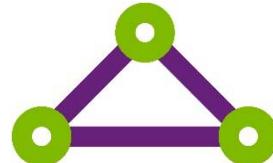
- The evolution rate of the Cloud may be faster than anything else technologically over the past three decades
- Azure now includes hundreds of virtual machines and platforms with thousands of configuration options
- Expand consideration to include Microsoft's Azure hosted Office 365 and Dynamics 365 platforms as well

Cloud foundations

- Extending your data center

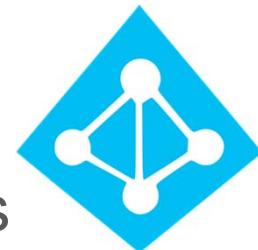
- Networking

- VPN Gateway
 - Virtual Network
 - Azure ExpressRoute



- Identity Management

- Azure Active Directory
 - Azure Active Directory Domain Services
 - Azure Active Directory External Identities



Compute and storage

- Virtual Machines
 - Windows or Linux
 - 46 global regions
 - Hundreds of CPU, RSM and storage options
 - General Purpose
 - Compute Optimized
 - Memory Optimized
 - Storage Optimized
 - High Performance
 - Variety of payment options
 - Pay as you Go
 - Reserved Instance
 - Spot Instance



Cloud platforms

- Windows Virtual Desktop



- Azure Databases

- Azure SQL
 - Azure Cosmos DB
 - Azure Database for MySQL
 - Azure Database for PostgreSQL



- Azure Media solutions

- Azure Media Services
 - Azure Content Delivery Network



Cloud management and governance

- A never ending stream of provided tools to manage and secure your Azure assets
 - Azure Monitor
 - Azure Advisor
 - Azure Site Recovery
 - Azure Cost Management and Billing
- With even more tools in preview today
 - Azure Blueprints
 - Azure Automanage
 - Azure Purview



Security management

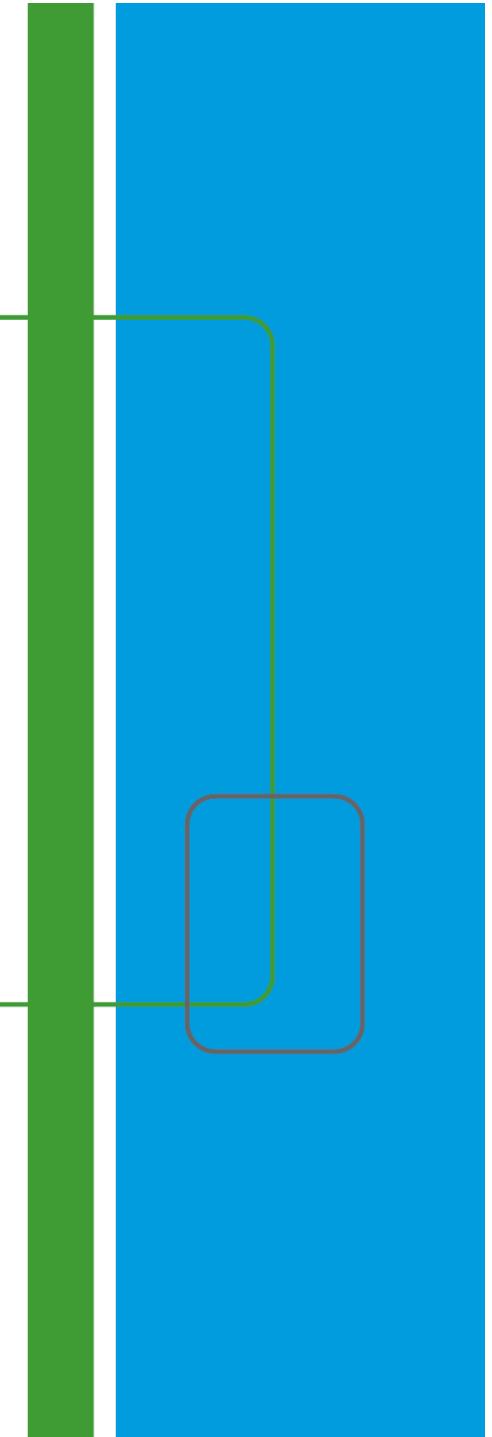
- There are also a multitude of Azure tools for security management
 - Azure Security Center
 - Azure Sentinel
 - Azure Defender
 - Azure Arc
 - Azure DDoS Protection





Where are you in
your Cloud journey?

Building your Cloud foundation



The journey to the Cloud

- Getting Started
 - Cloud Education
 - Cloud Philosophy Definition
 - Cloud Roadmap Development
- Getting To The Cloud
 - Cloud Migration
- Cloud Governance and Management
 - Manage For Cost, Performance, Security
- Cloud Transformation
 - Leverage For Competitive Advantage



Inventory prospective Cloud workloads

- The first step is simple enough (😊) – compile an inventory of IT assets for Cloud consideration:
 - Business Applications
 - Data
 - Networking
 - Compute
 - Storage



Setting expectations

- Once you've inventoried the IT workloads, set your expectations regarding each as relates to:
 - Performance
 - Availability
 - Backup and Recovery
 - Scalability and Elasticity
 - Security and Sensitivity
 - Regulations and Compliance



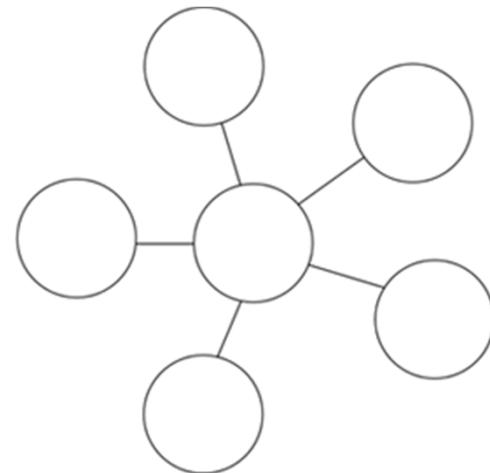
Incorporate your core Office platform

- Consider implementing Office 365 as part of your overall Cloud roadmap
 - Productivity platforms
 - Collaboration platforms
- Multiple points of prospective integration
 - Identity Management
 - Task and notification management
 - Unstructured content storage



Hub and spoke architecture

- Build out the foundation for your future cloud implementations
- Create a “hub” consisting of
 - Core networking
 - Identity management
- Plan to create “spokes” with virtual machines and platforms to meet business cases
- Create “spoke” compute, storage and administration blueprints to speed consistent, compliant foundation deployment



Implement core infrastructure workloads

- Build out plans and mechanisms for core infrastructure (non-application) workloads
 - Backup of on premise workloads
 - Disaster recovery destination
 - Virtual desktop
 - Test and development environments



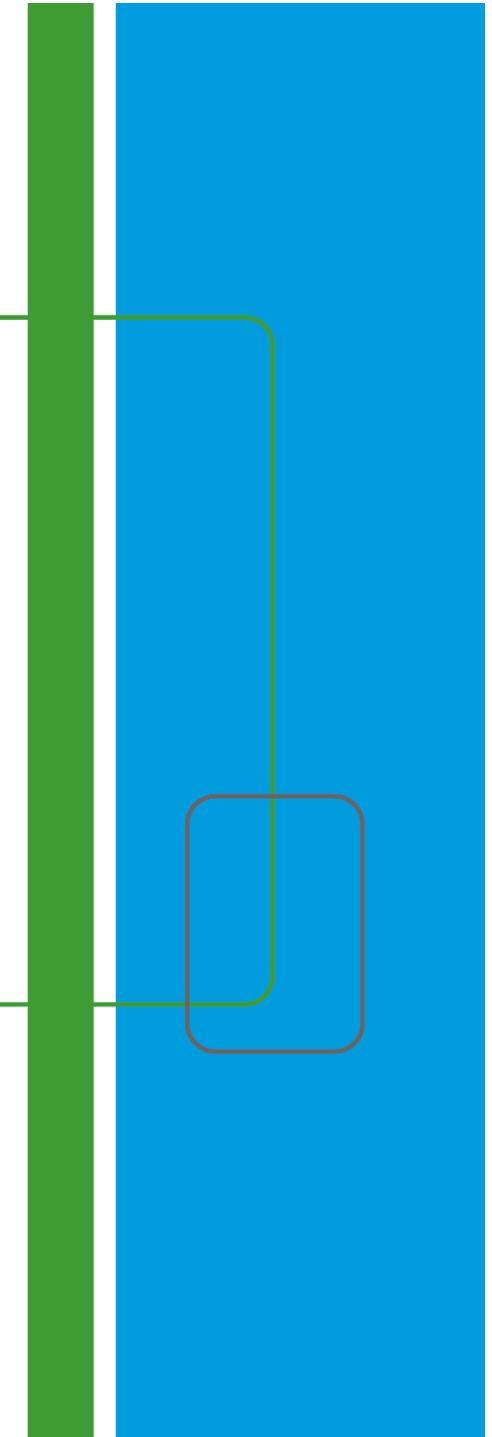
Understanding Cloud application options

- There are multiple options for migrating legacy applications to the cloud with varying complexity and benefits
- Simplest Form: **Rehosting**
 - Pros:
 - Simplest migration – “lift and shift”
 - Eliminates facilities management
 - Cons:
 - No functional cloud benefits
 - Still significant management
 - May introduce latency performance issues
 - Resource intensive applications may not see cost reduction (over-provisioning)
- Next Level: **Replatform**
 - Pros:
 - Relative speed – revising application for cloud platforms and simple functionality
 - Reduced management need – virtual machines, platforms
 - May leverage auto-scaling capabilities for peak periods reducing overall costs
 - Cons:
 - Can introduce issues
 - Management of cost to benefit ratio

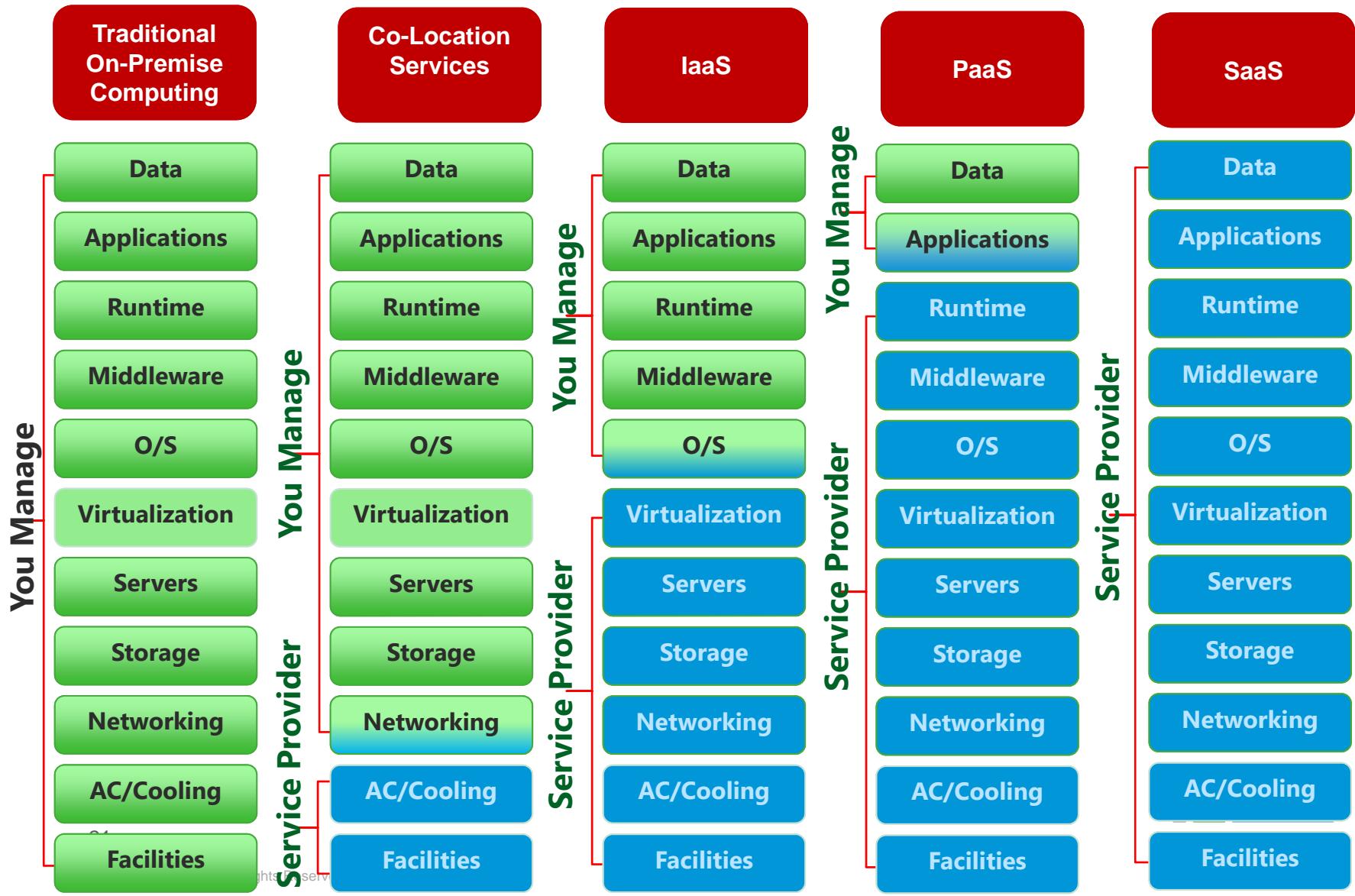


Where are you in
your Cloud journey?

Managing your Cloud assets



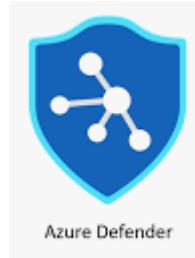
Understanding Your Obligations



Understanding your obligations

- Technical “Care and Feeding”
 - Monitoring and Response
 - Patch Management
 - Antivirus / Anti-Malware
 - Backups Administration
 - Disaster Recovery Testing
 - Security
- Non-Technical Governance
 - Spend Management
 - Risk Management
 - Regulatory and Compliance Obligations
 - Organizational Governance

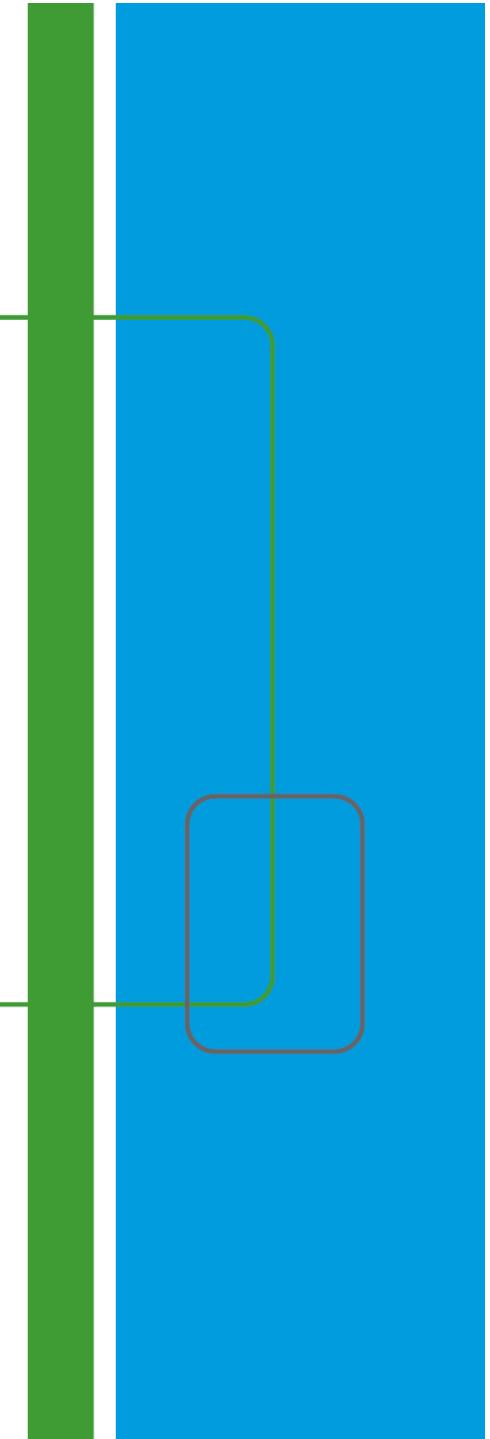
Azure tools at your disposal





Where are you in
your Cloud journey?

Progressing to transformation



Transformational Cloud opportunities

- DevOps (Refactoring Applications)
 - Re-architect and recode for cloud benefits
 - Compartmentalization and components
 - Light weight containers (including Docker)
 - Functionality, scale, security, resilience
- Hybrid Cloud
 - Hybrid Cloud networking
 - Moving workloads to the right location – cost versus performance
 - Rapid workload migrations



Transformational Cloud opportunities

- Data Analytics

- Data Storage
 - Data Analytics



Azure Analysis Services

- Internet of Things (IoT)

- Data collection from the edge
 - Insights and Actions



- Artificial Intelligence / Machine Learning

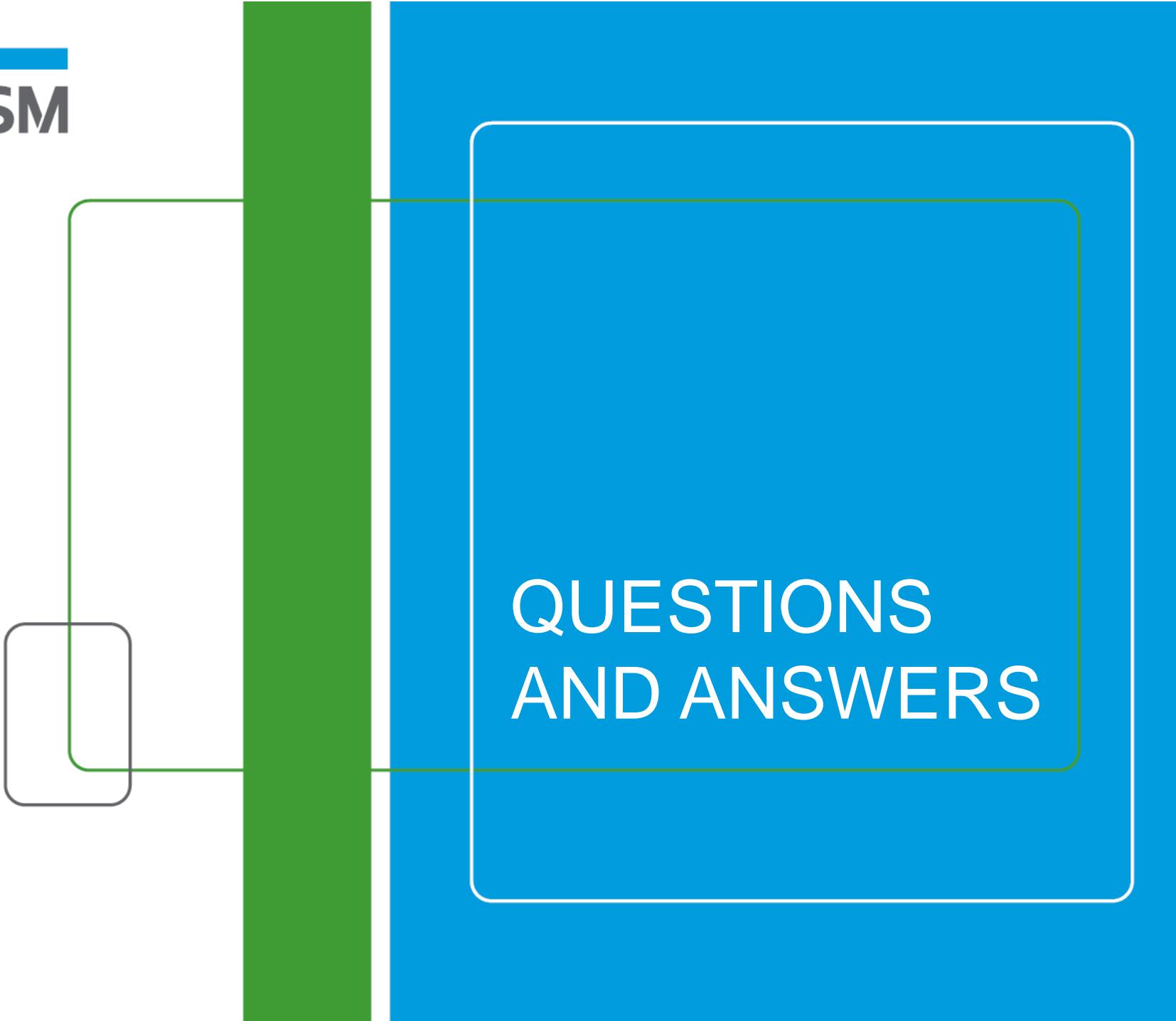
- Contextual experiences
 - Systems intelligence
 - Industry intelligence



Azure Machine Learning



THANK YOU
FOR YOUR
TIME AND
ATTENTION



QUESTIONS
AND ANSWERS



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