



# GETTING REACQUAINTED WITH MICROSOFT AZURE

*Where are you in your  
cloud journey?*

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# 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



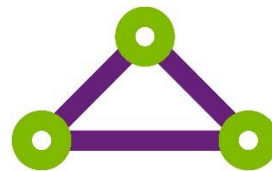
- The evolution rate of the Cloud may be faster than anything else technologically over the past three decades
- Azure now includes hundreds of virtual machines and platforms with thousands of configuration options
- Expand consideration to include Microsoft's Azure hosted Office 365 and Dynamics 365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

# Cloud foundations

- Extending your data center

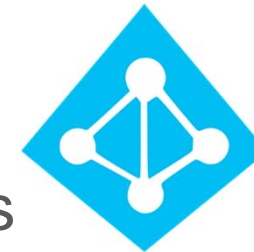
- Networking

- 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



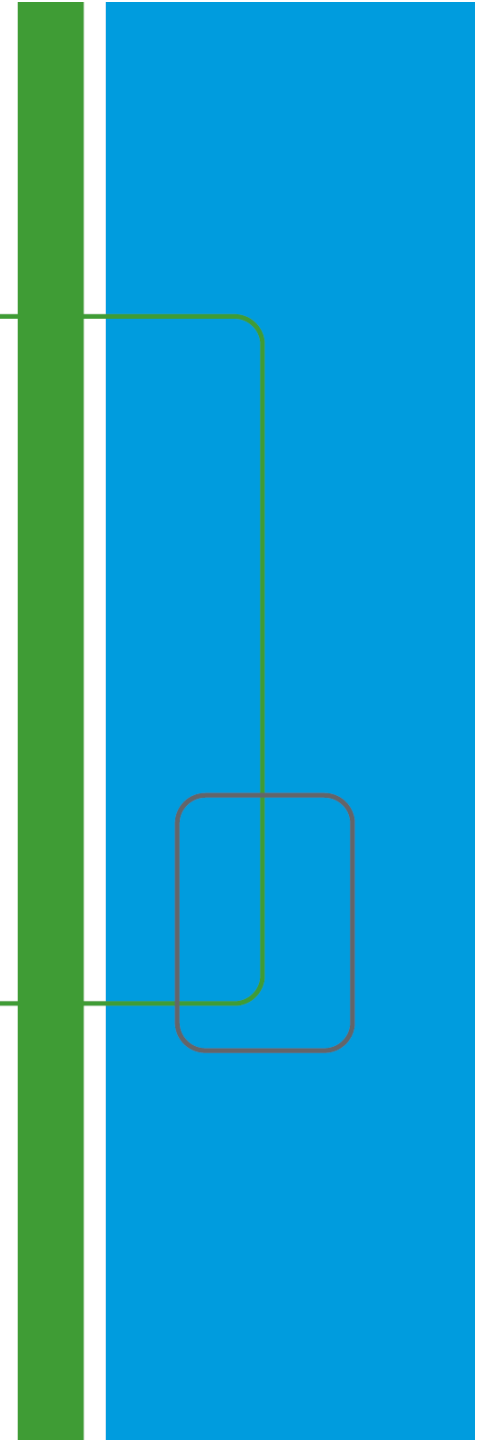
# Security management

- 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



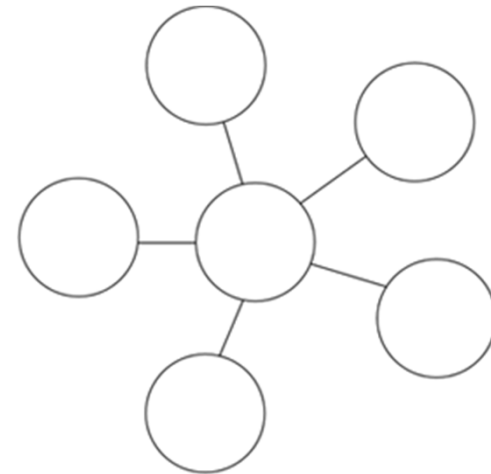
SharePoint





# Hub and spoke architecture

- Build out the foundation for your future cloud implementations
- Create a “hub” consisting of
  - Core networking
  - Identify 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

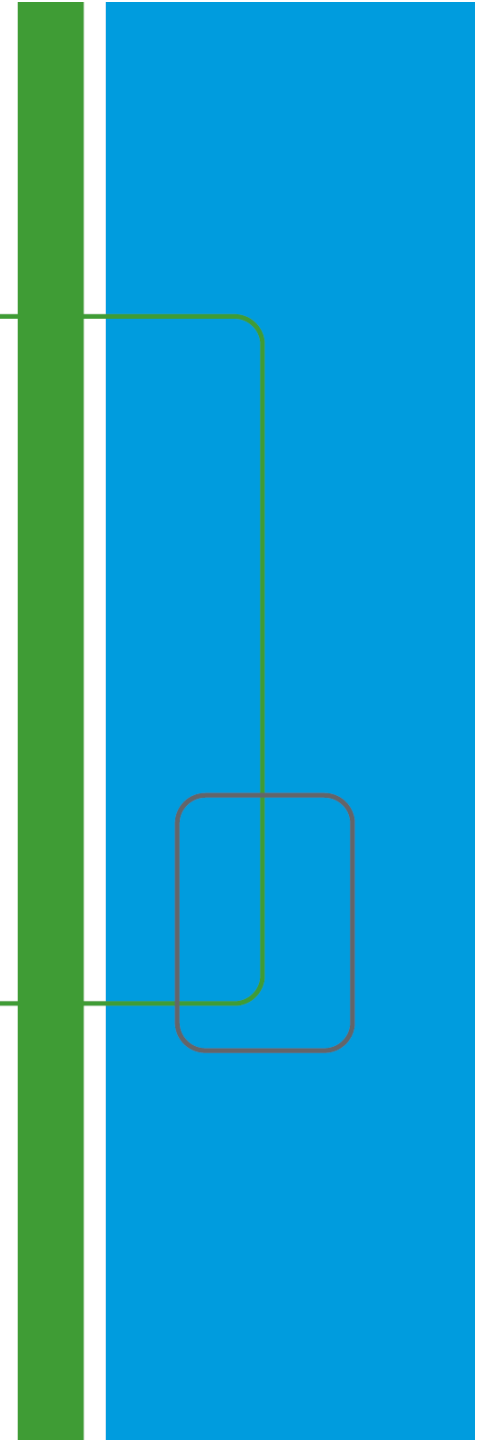


# Understanding Cloud application options

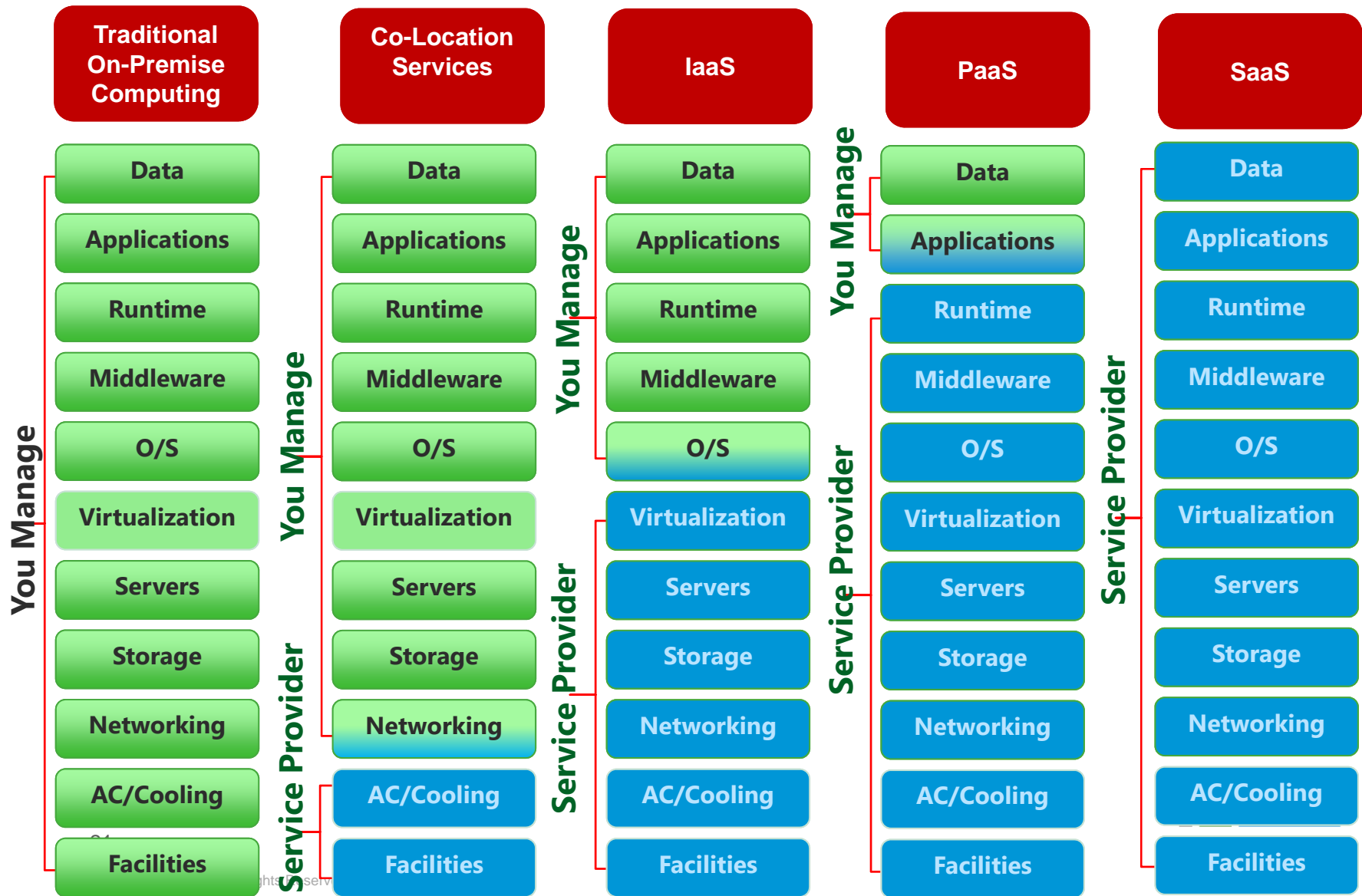
- There are multiple options for migrating legacy applications to the cloud with varying complexity and benefits
- Simplest Form: **Rehosting**
  - Pros:
    - Simplest migration – “lift and shift”
    - Eliminates facilities management
  - Cons:
    - No functional cloud benefits
    - Still significant 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

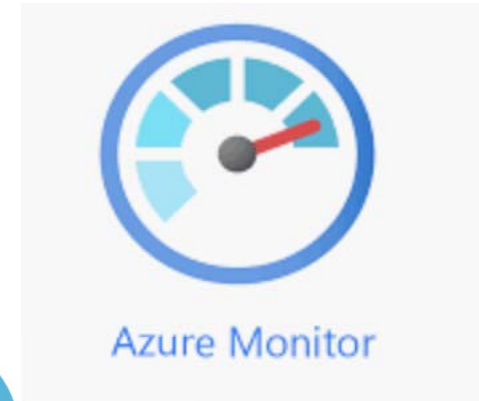
# Azure tools at your disposal



Azure Sentinel



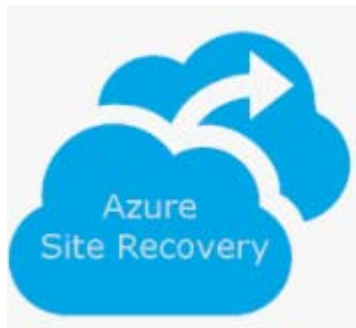
Azure Defender



Azure Monitor



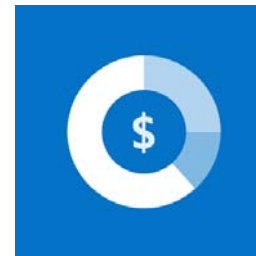
Azure Arc



Azure Site Recovery

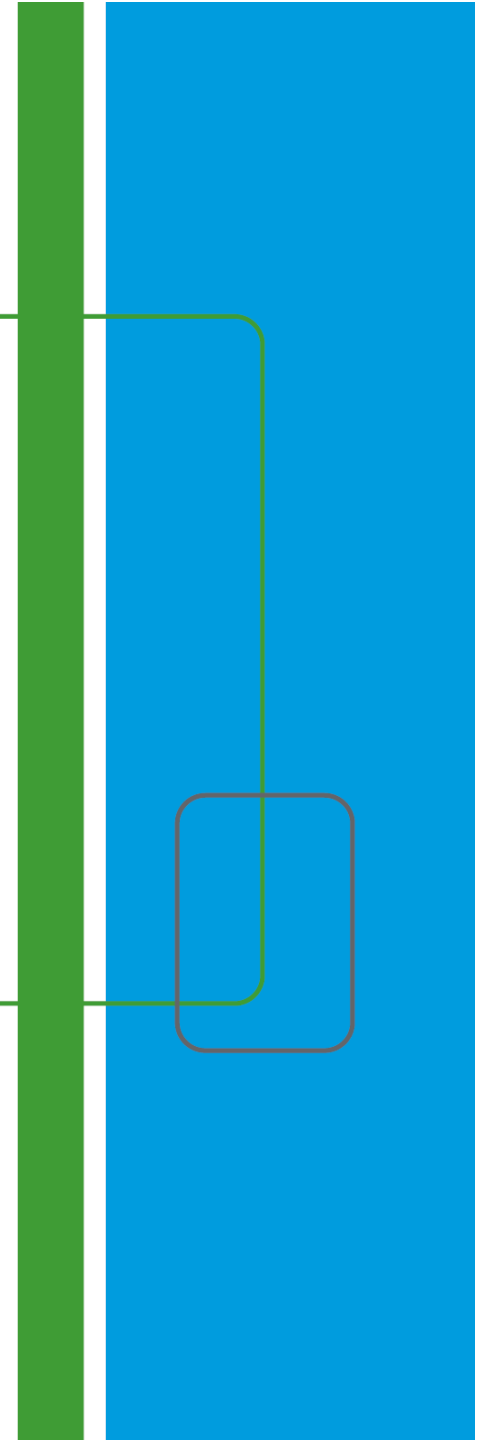


Azure Backup



# 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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