



!impactmakers

Better Business. Better Community.

Why Choose MS Azure?



Dave Williams

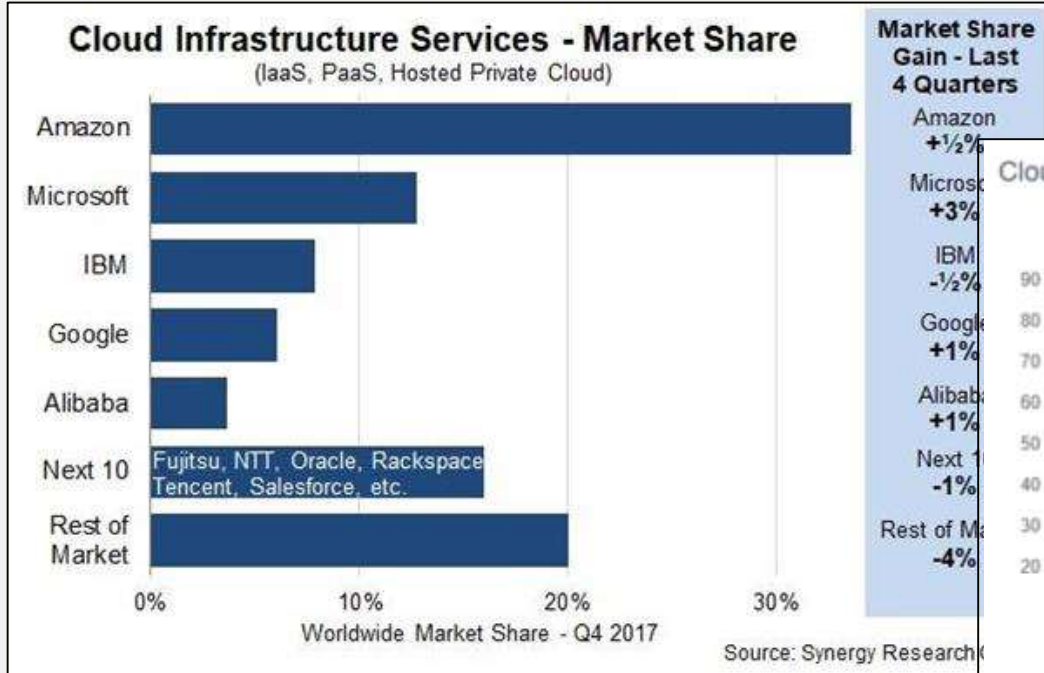
- **Cloud Architect**
- **AWS and Azure Expertise**

Agenda

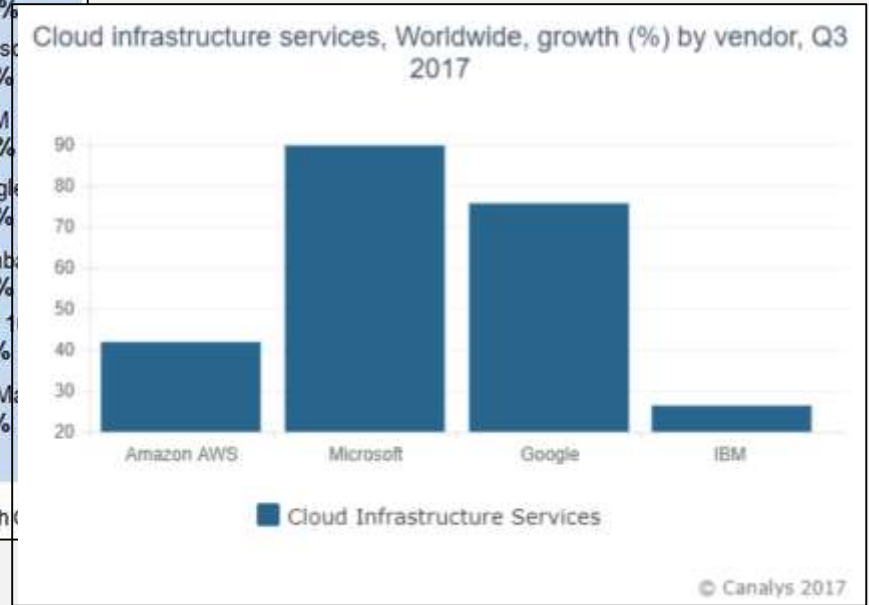
- How to choose a public cloud service provider
- Microsoft Azure Strengths:
 - Identity & Azure Active Directory
 - Infrastructure as Code
 - Azure App Services
 - Government Focus
- Closing

Choosing a Public Cloud Service Provider

Current Market Share



Recent Growth



How do you choose?...

What is Azure?

Microsoft's Cloud Products... a suite of services

- [Azure Active Directory](#)
 - Identity Store and domain management
 - AKA "tenant" or "directory"
- [Azure Subscription](#)
 - Where workloads are deployed
 - Similar to an AWS Account
- Office 365
 - Web offered MS Office Suite
 - Plus other tools: OneDrive, Skype, SharePoint



Azure Active Directory



Azure



Office 365

Our Focus: Azure AD and Subscriptions

Key Terms

Three service offerings within a Subscription

- IaaS – Infrastructure as a Service
 - Networks, storage, compute
 - E.g., Virtual Machines supporting workloads
- PaaS – Platform as a Service
 - Compute and OS often managed
 - Configuration and management environment
 - E.g., Azure App Services or Azure SQL DB
- SaaS – Software as a Service
 - Fully hosted applications
 - E.g., Office 365



Servers and storage



Networking
firewalls/security



Data center physical
plant/building



Development tools,
database management,
business analytics



Operating systems



Hosted applications/apps

Azure Strengths – Identity

Identity and Active Directory

- A single, shared ID store
 - Supporting...
- Real Single Sign On
- Easy connection to enterprise environment
- Supports many design patterns
- Offers Domain Services
 - Group Policy
 - Mobile Device Management
 - Domain Join



Azure Active Directory



Azure



Office 365



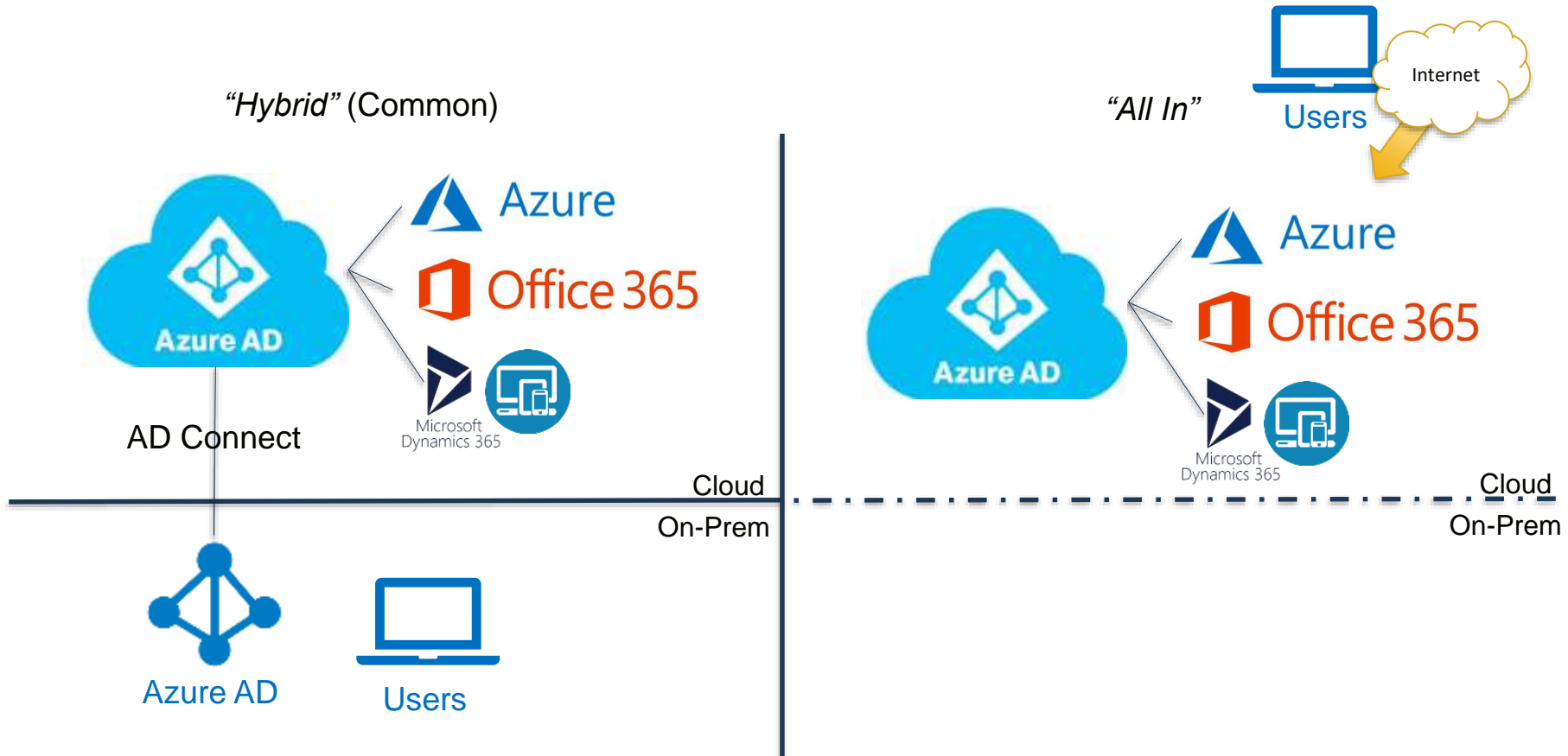
Microsoft Dynamics 365

Other MS Products



3rd Party Apps

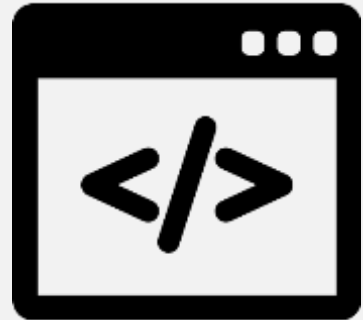
Azure Strengths – Identity: Two Patterns



Azure Strengths

Infrastructure as Code

- What is infrastructure as Code?
 - IT provisioning process where systems are built, managed, and provisioned via code
 - Rather than a manual process
 - Enables DevOps by treating infrastructure like software
- Why it is Valuable
 - Make infrastructure builds faster.
 - Enables DevOps
 - Removes errors and allows testing before deployment
 - Enables repeatable builds
 - Code is self-documenting
 - Integrates with source control



Azure Strengths

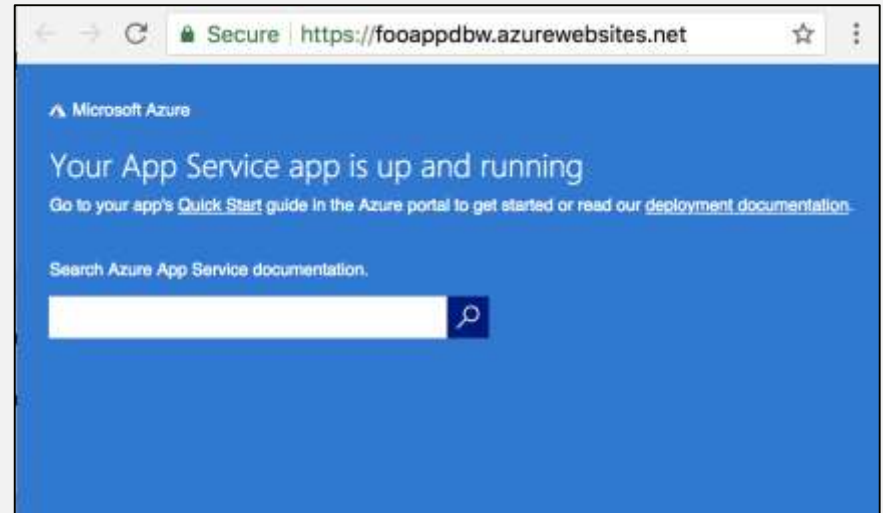
Infrastructure as Code

- Infrastructure as Code (IaC) is a native part of Azure
- "Azure Resource Manager" aka "ARM" templates (scripts) are built for all resources
 - ...even when using the web based GUI portal
 - ARM scripts (templates) are JSON scripts
- The ARM scripts can be downloaded
 - Enables quick learning of IaC
 - This is unique in the industry
- What does it look like? →
- Let's look at a real example
 - ...in the Azure Portal
- Longer talk in IaC later today

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]
```

Azure Strengths – App Services

- What are Azure App Services?
 - PaaS platform for hosting web and mobile applications
 - Removes server management and enables deployment
- Supports Web, Mobile, API apps
 - Java, .Net, NodeJS, PHP, etc.
- Tight integration with common tooling and processes
- Easy scaling
- App deployed in less than 2mins →



Azure Strengths – Government Focus

- Microsoft Azure for Government (MAG)
 - Different platform than Commercial (MAC); isolated
 - FedRAMP accredited environments
 - 6 Regions (4 Gov - 2 DOD)
 - All rated at FedRamp High; Impact Level (IL) 4 and 5 provisional authorization
- On-prem ID's can be synced to enable SSO through, Azure AD federation
- With Azure Premium features additional security controls can be implemented
 - Privileged Identity Management (PIM)
 - Intune for mobile device management
 - Mobile Application Management (MAM)
- Includes Azure Gov Secret



Select regions							
Azure Government							
Products	US GOV NORTH REGIONAL	US GOV VIRGINIA	US GOV IOWA	US GOV ARIZONA	US GOV TEXAS	US DOD EAST	US DOD CENTRAL
Compute							
Virtual Machines		●	●	●	●	●	●
AK - AZ		●	●	●	●	●	●
AD		●	●	●	●	●	●
Events					●		
AK - All Compute (Internal)							

Source: <https://azure.microsoft.com/en-us/global-infrastructure/services/>

Summary

- Lots of choices when choosing a public cloud provider
- Challenging to identify differentiating capabilities
- Azure strength areas
 - Identity
 - Infrastructure as Code
 - App Services (PaaS App hosting)
 - Government

Thank You!

Questions?

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