



2019

Global **Azure** **BOOTCAMP**

Microsoft Azure for Architects & Tech Leaders

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About Speaker



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Microsoft MVP since year 2008



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@VikramPendse

Azure momentum 2018-2019

- 54 Azure Regions
- Available in 140 countries
- Up to 1.6 Pbps of bandwidth in a region
- Azure DevOps
- Intelligent Cloud – Intelligent Edge



Azure is World's Computer

Satya Nadella (CEO Microsoft) in //build 2018

Agenda

- Why we see failures on Azure?
- Cloud Design Patterns
- Security - Azure Environment & Your Applications
- Choosing Right Services and Right Sizes
- Demos (Tools, Migration, Security)
- Summary

Why we see failures on Azure?

Sales / Pre-Sales failures

- Wrong Service choices for saving costs in proposal/close the proposal
- Lack of questionnaire during the pre-sales to capture details of App/Workload
- Lack of understanding of Security and Compliance requirements and offers from platform

Technical Team failures

- IaaS is the final Choice
- Lack of awareness of Migration Tools & Azure Services
- Blind Service Mapping with Compete Cloud



Cloud Design Patterns

Availability

Data Management

Design and Implementation

Messaging

Management and Monitoring

Performance Scalability

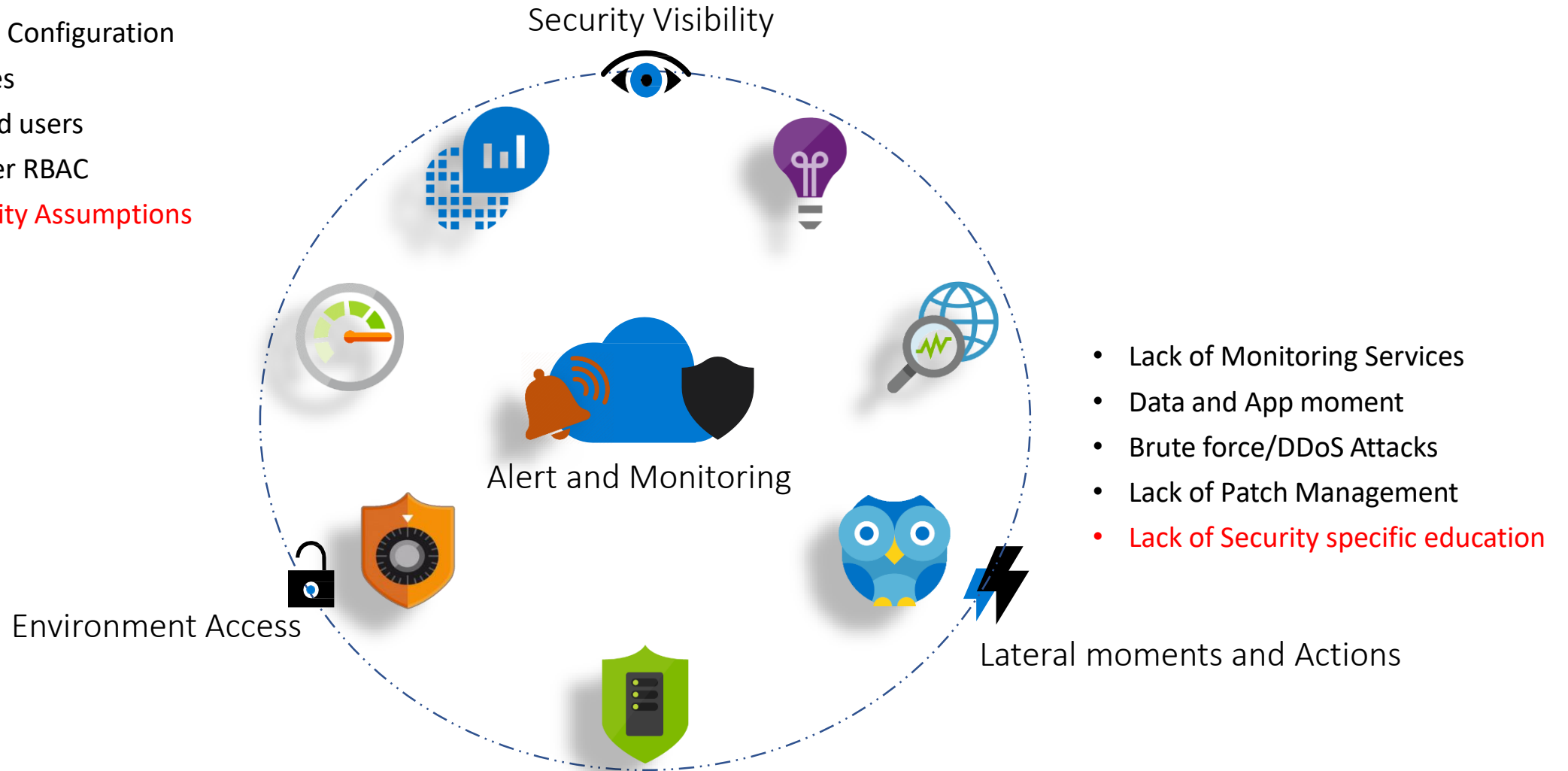
Resiliency

Security

Today we have around 30+ Cloud Design Patterns

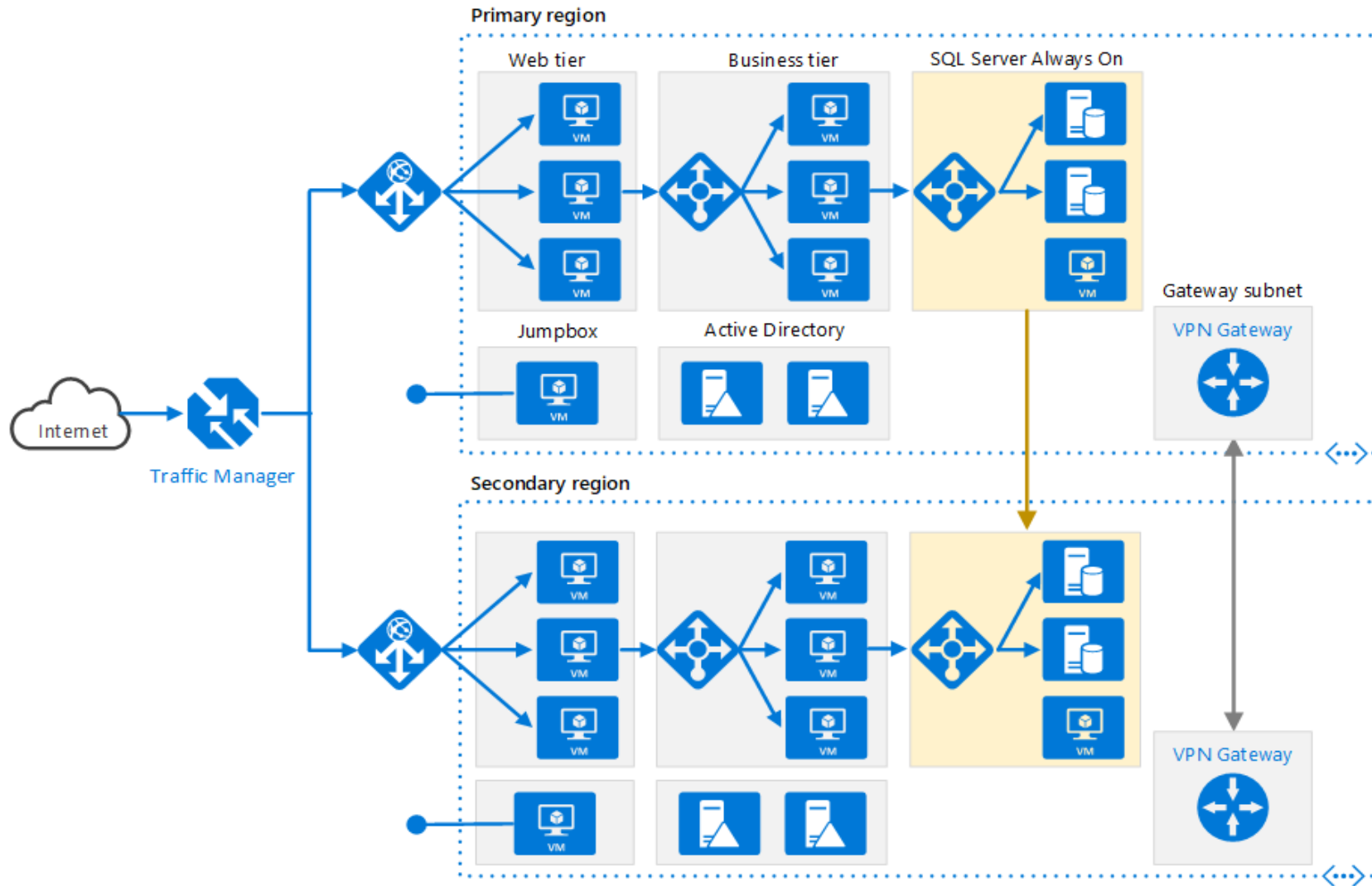
Cloud Security Challenges

- Insecure App Configuration
- Vulnerabilities
- Compromised users
- Lack of proper RBAC
- **Wrong Security Assumptions**




Multi-region Azure IaaS Architecture

Turn this into new age modern and secure architecture



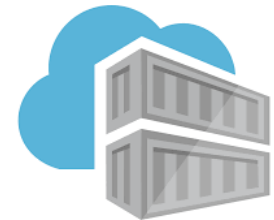
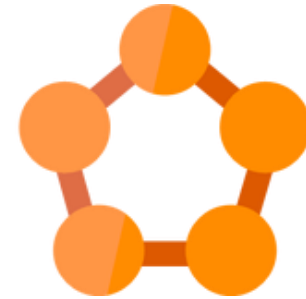


Demos

- WAF – Web Application Firewall
 - Azure FDS – Azure Front Door Service
 - Azure Sentinel
- 

Microservices - Kubernetes is now industry standard

- ACR – Azure Container Registry
- AKS – Azure Kubernetes Service
 - Good for Linux/Open Source Workloads
- ASF – Azure Service Fabric
 - Good for Windows Workloads
 - Non containerized apps
 - Stateful
- ASFM – Azure Service Fabric Mesh

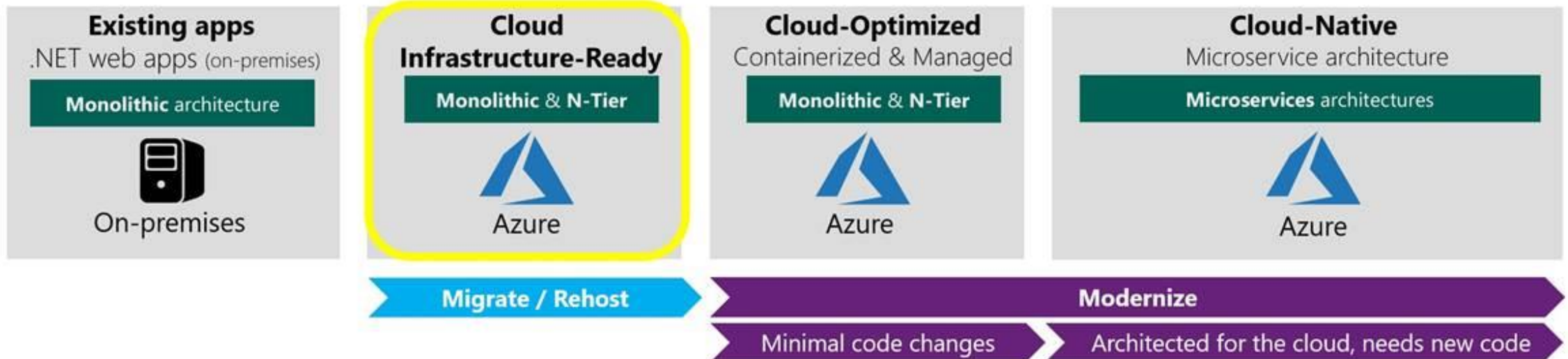


If IaaS..which
is the right
VM Series
and Type?

Series	Type	Workload
A-Series	Entry-level economical VMs for dev/test	Dev/Test, PoCs, Small Workloads
B-Series	Economical burstable VMs	Dev/Test, PoCs, Build Servers
D-Series	General purpose compute	Enterprise Grade, RDBMS, High Performance
DC-series	Protect data in use	Confidential queries, Consortiums, Data Protection
E Series	Optimised for in-memory hyper-threaded applications	SAP HANA, SAP S/4 HANA, Large In-memory business critical workloads
F-Series	Compute optimised virtual machines	Batch Processing, Web Servers, Analytics, Gaming
G-Series	Memory and storage optimised virtual machines	Large SQL, ERP, SAP workloads
H Series	High-performance Computing virtual machines	All HPC / High Performance requirements (Simulation, Rendering etc.)
Ls-Series	Storage optimized virtual machines	NoSQL, Redis, Transactional DB requirements
M-Series	Largest-memory optimised virtual machines	SAP HANA, Parallel compute, Large In-memory workloads
N series	GPU enabled virtual machines	Deep Learning, Simulation, Gaming etc.


Migration and Modernization

Existing .NET application modernization: Maturity models





Demos

- Azure Migration Tool set – App Migration and DMA
 - Azure App Configurator (Launched last week 😊)
 - Clouddockit – Every Architect/Pre-Sales and Tech Lead should have such tools !
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A BIG thank you to local sponsors!





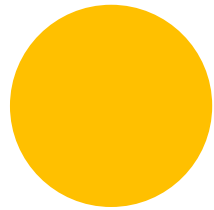
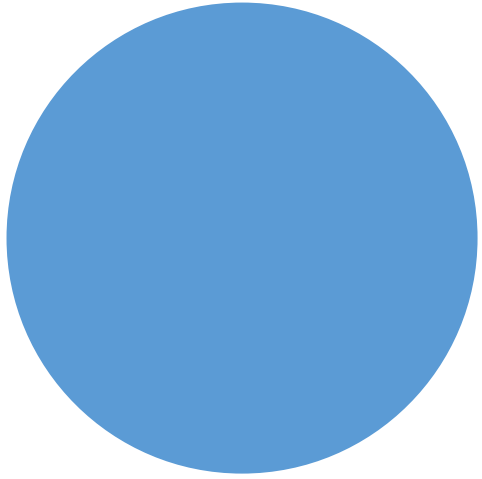


Feedback !

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