



Azure Migration Service

Exploring the benefits of infrastructure in the cloud, from cost-effectiveness to scalability

Contents

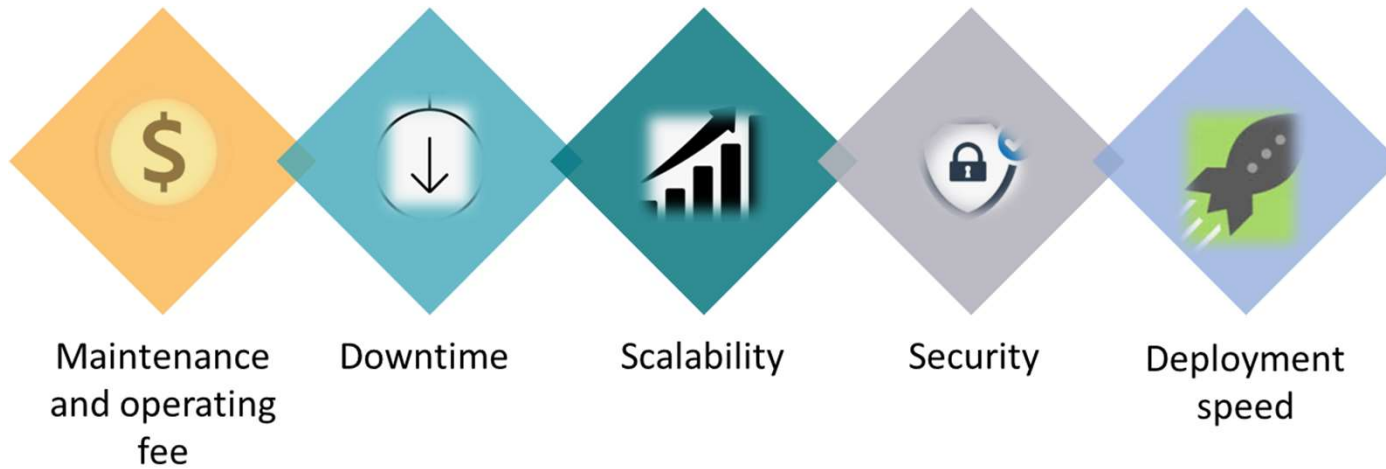
Why move to the cloud?

Cloud migration frame work for TSG

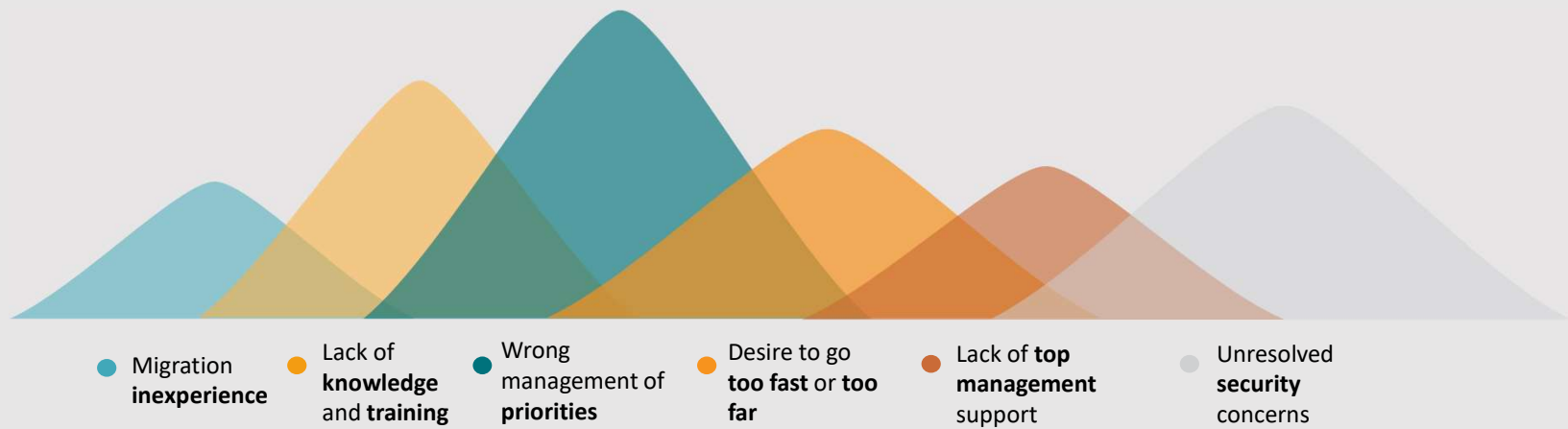
Why TSG?

Case studies

Challenges with on-premise infrastructure



Challenges for the enterprise prior to the migration



What value cloud migration brings to the business

1

Reduce data center maintenance and operating costs because it is now managed by Microsoft

2

Increase Operational Resilience through the design of highly available infrastructure across the globe

3

Save time and reduce risks thanks to automation of fully repeatable tasks

4

Increase Business Agility to answer new business needs faster

5

Focus on high value activities thanks to a clear Shared Responsibilities Model

6

Move from CAPEX to OPEX IT costs management to reduce needs of upfront investments

5 key things to make your migration a success based on our own experience



1

Migration is a Team activity and needs initiation from the top. business and application stakeholders' support before you initiate the migration



2

Migrate first, optimize later



3

Prioritize workloads for migrations and consistent execution plan



4

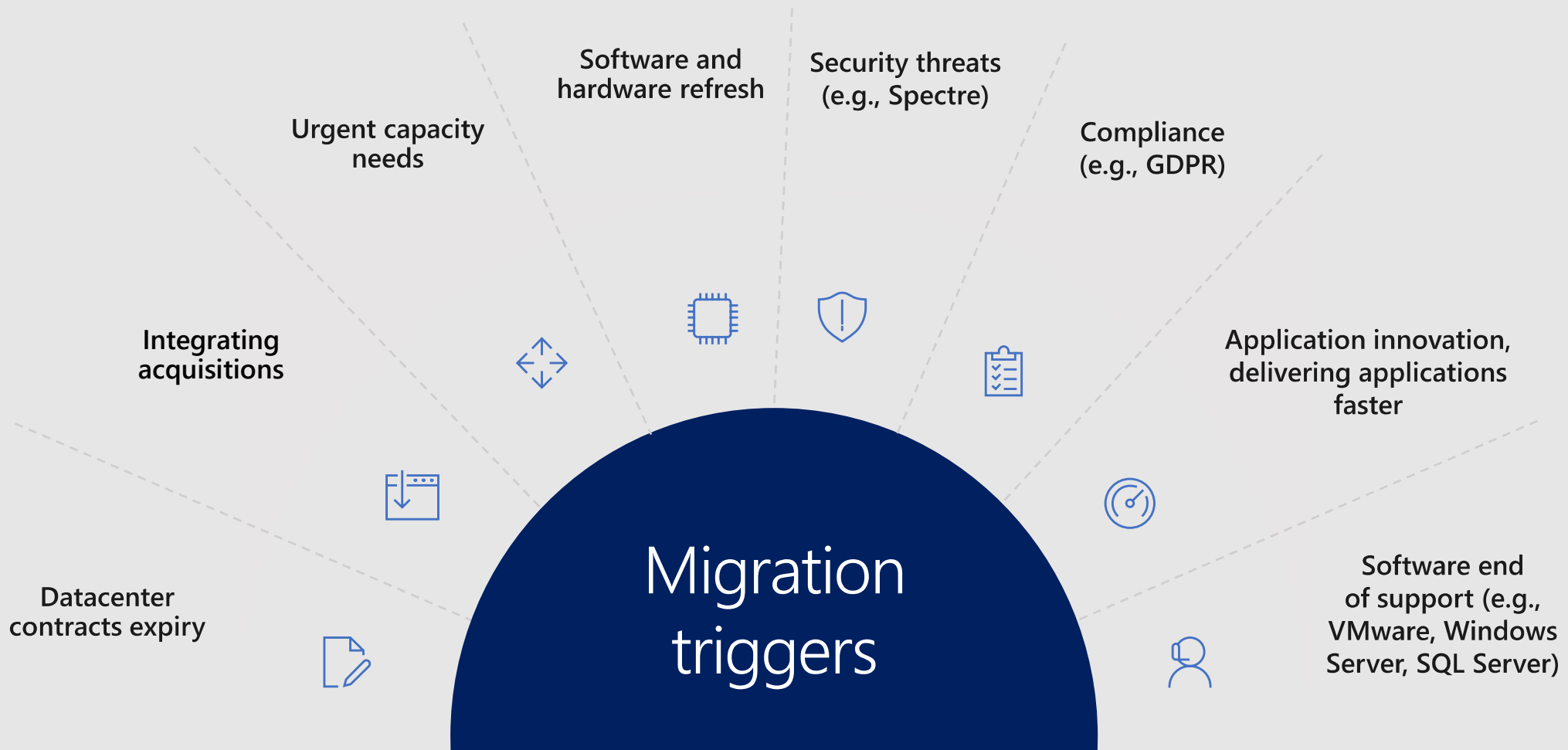
Choose a cloud provider that supports many services and reputations



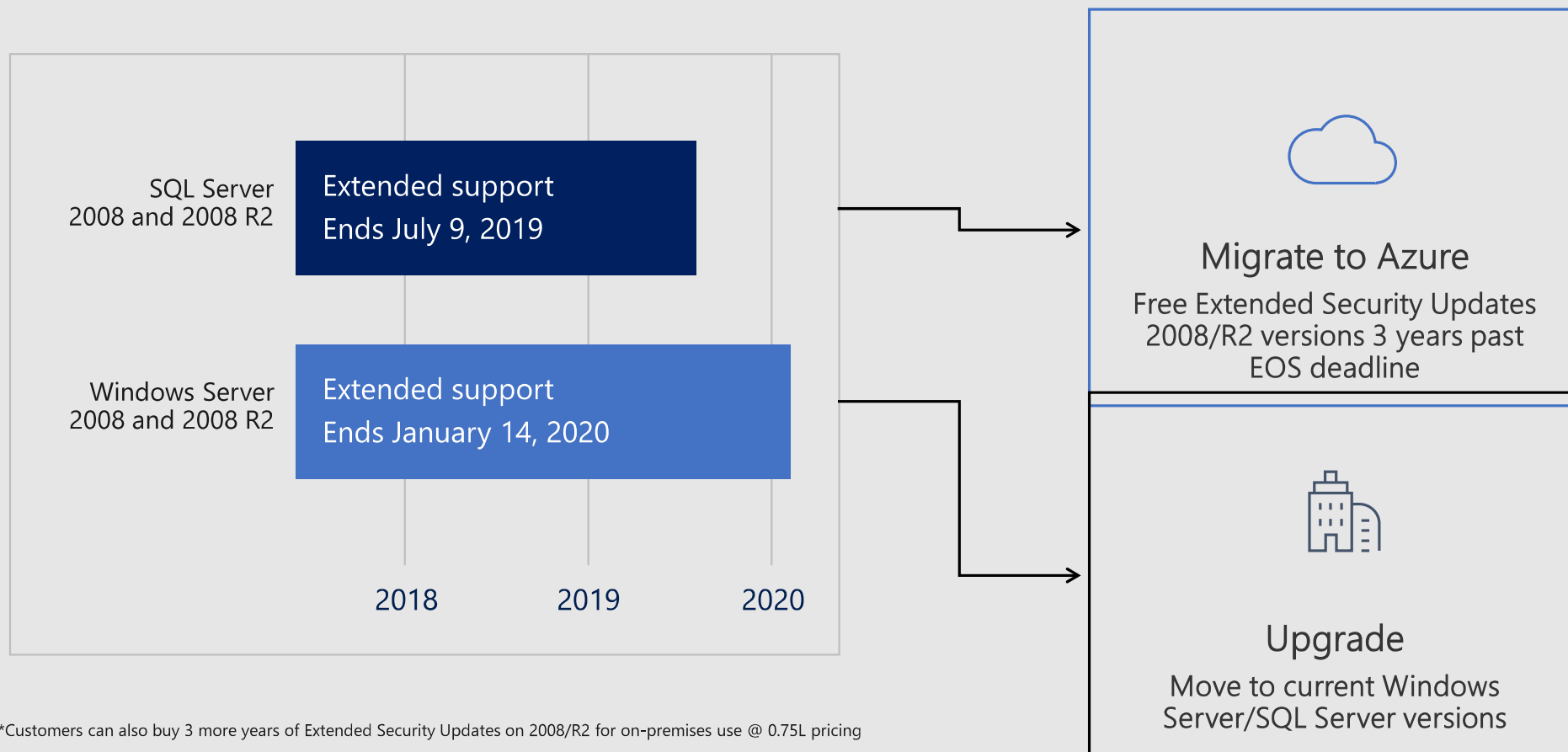
5

Choose an experienced partner

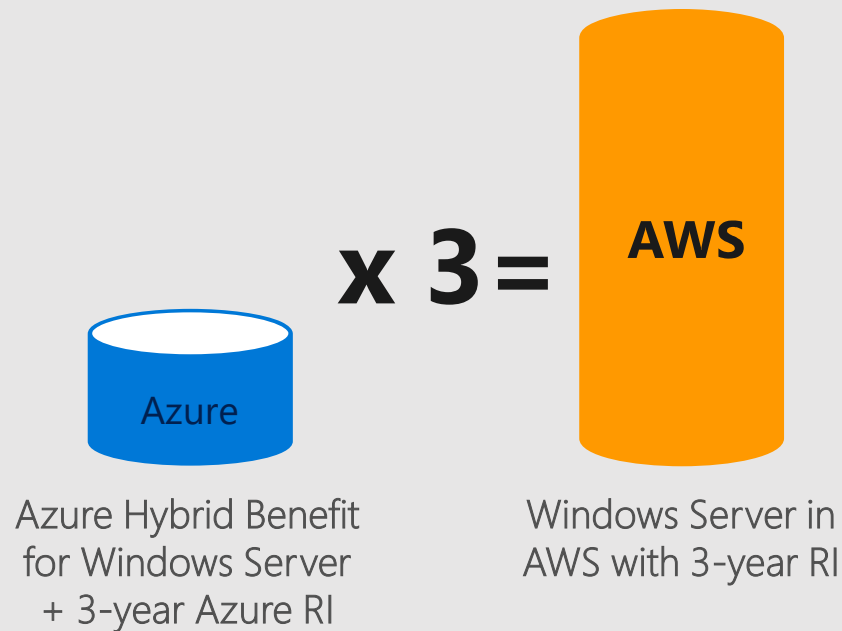
Time to migrate to cloud



Windows Server and SQL Server 2008/R2 end of support



Big savings by Azure Hybrid Benefit – every SA customer must know this



✓ Azure is the most cost-effective cloud for Windows Server

✓ Maximize value of investment in Microsoft server software

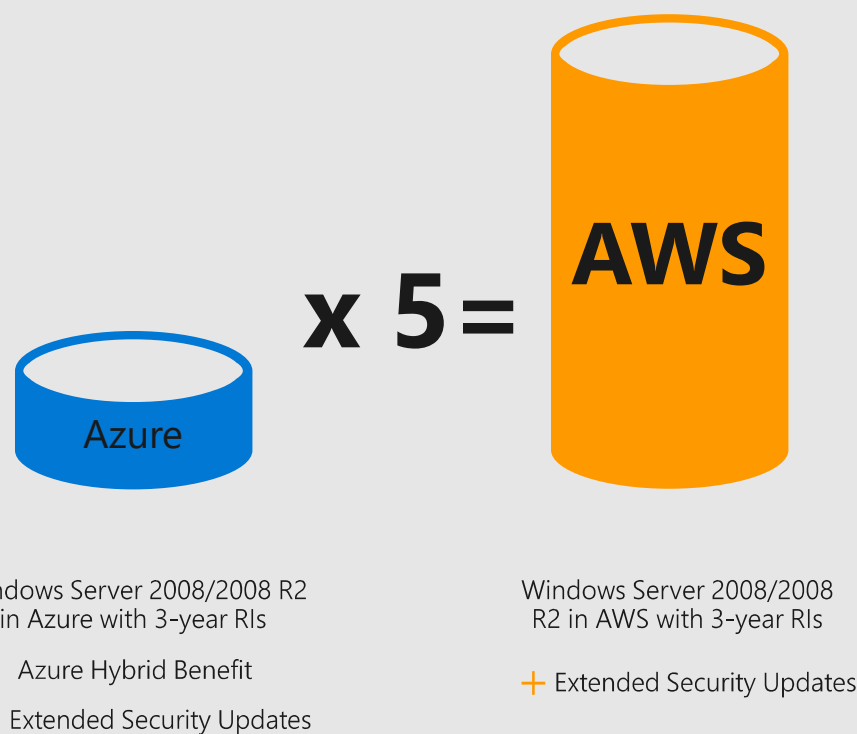
- 73% saving is based on the combination of Azure Hybrid Benefit for Windows Server and 3-year Azure Reserved Instance.
- Does not include Software Assurance cost.
- Sample annual cost comparison of two D2V3 Windows Server VMs. Savings based two D2V3 VMs in US West 2 Region running 744 hours/month for 12 months; Base compute rate at SUSE Linux Enterprise rate for US West 2. Azure pricing as of 04/24/2018. AWS pricing as of 04/24/2018. Price subject to change.
- Actual savings may vary based on location, instance type, or usage..

Windows Server 2008/R2 – Azure is most cost effective

Free Extended Security Updates in Azure
for Windows Server 2008/2008 R2

Use existing Windows Server licenses to
save with the Azure Hybrid Benefit

- The cost does not include software assurance cost
- Sample annual cost comparison of two D2V3 Windows Server VMs. Savings based on two D2V3 VMs in US West 2 region running 744 hours/month for 12 months; reduced compute rate at SUSE Linux Enterprise rate for US west 2. Azure pricing as of 04/24/2018. AWS pricing as of 04/24/2018. Price subject to change

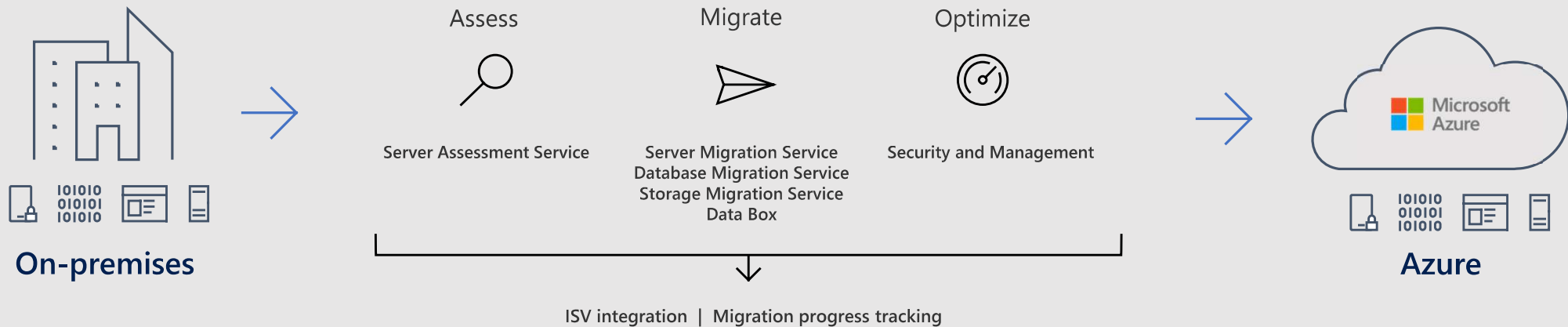


Azure migration experience

Do it yourself

Azure TCO calculator | Azure migration center | Azure Essentials

Azure Migrate: Unified, Extensible experience



Assisted

FastTrack for Azure | Managed Service Providers | Systems integrators

Choice of tools for every stage and every requirement

 Assess

Azure Migrate

Data Migration Assistant

SQL Server Migration Assistant

 Migrate

Azure Site Recovery

Azure Database Migration Service

Azure Data Box

 Optimize

Azure security and management
(security, backup, monitoring,
cost management)

Partners

 **MOVE**

 **Cloudamize**

CloudAtlas®

 **BitTitan**

STRATO**ZONE**®

 **turbonomic**

 **CloudEndure®**

 **Ispirer**

 **Corent**

 **intigua**

 **stiim**

 **ATTUNITY**

 **DATOMETRY**

 **MORPHIS**

 **Informatica**

 **QuerySurge**

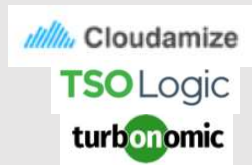
Choosing between 1st and 3rd party assessment tools



Use Azure Migrate when customer needs...

- ✓ A Microsoft Azure branded tool which is free
- ✓ Assessment of VMware environments¹
- ✓ Assessments of brand new Azure platform functionality

Use ISV tools when customer needs...



Assessment of heterogeneous environments
(physical, VMware and Hyper-V)



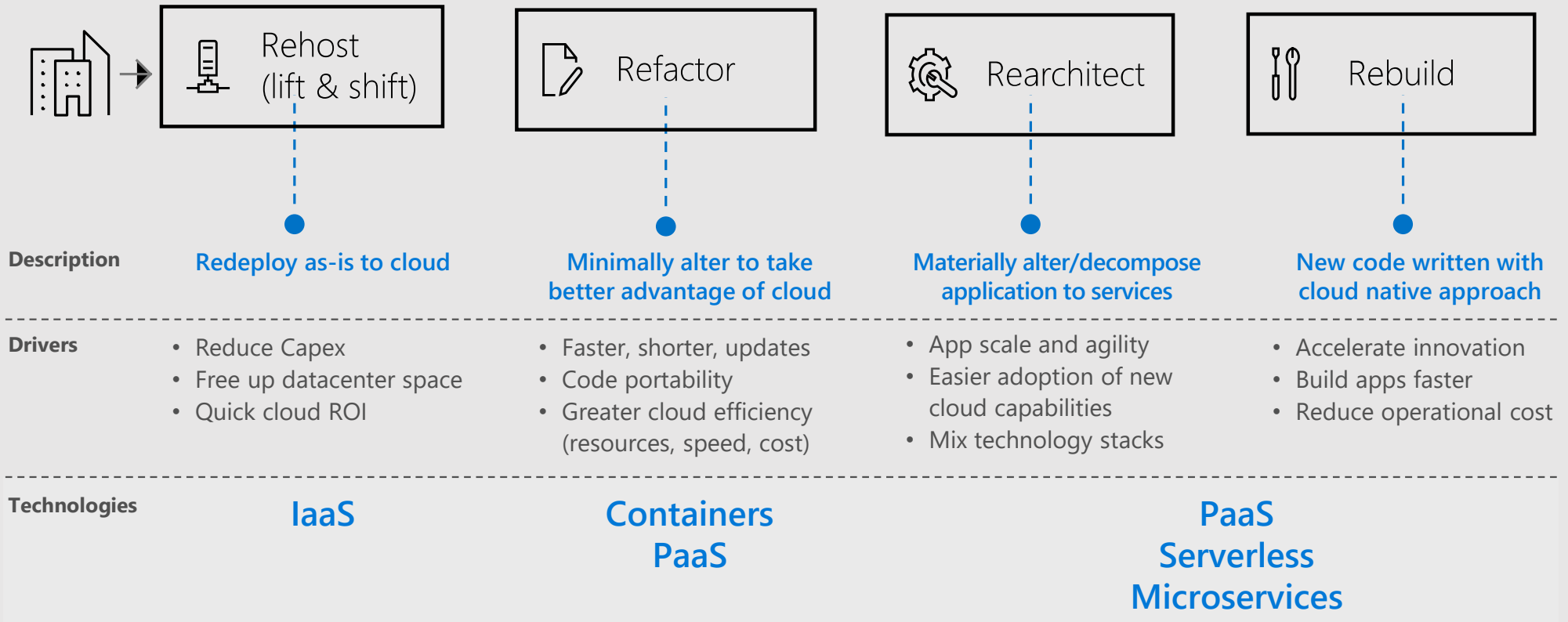
Agentless dependency visualization



Cloud economics cost modelling
(including storage/networking costs)



Cloud migration strategies



When to use which migration strategy

Objective	Rehost	Refactor	Rearchitect	Rebuild	Primary technology
Achieve rapid time to cloud	✓				IaaS, DBaaS
Migration with minimal architectural and code impact	✓				IaaS, DBaaS
Free up data center space quickly	✓				IaaS, DBaaS
Reduce capital expenditure of existing applications	✓				IaaS, DBaaS
Leverage existing investments	✓	✓	✓		IaaS, PaaS, Containers
Meet scalability requirements of existing apps more cost effectively		✓	✓		PaaS, Containers
Enable business agility with continuous innovation		✓	✓		PaaS, Containers
More easily integrate with other web and cloud apps			✓	✓	PaaS, Serverless
Enable multichannel access, including mobile and IoT				✓	PaaS, Serverless
Deliver new and breakthrough capabilities faster				✓	PaaS, Serverless

Migration strategies: Rehost application (i.e., lift & shift)



Rehost
(lift and shift)



Refactor



Rearchitect



Rebuild

What is it?

Redeploy an existing application to a cloud platform without modifying its code. The application is migrated “as is”, which provides baseline cloud benefits without the risk or costs of making code changes.

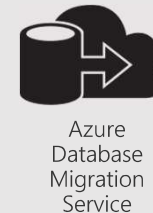
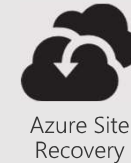
When to use

- Need to quickly move applications from on-premises to the cloud (e.g., datacenter contract expiry)
- When the application is needed, but evolving its capabilities isn't a business priority
- For applications which are architected to leverage Azure IaaS scalability
- Specific application or database requirements which can only be met by Azure VMs

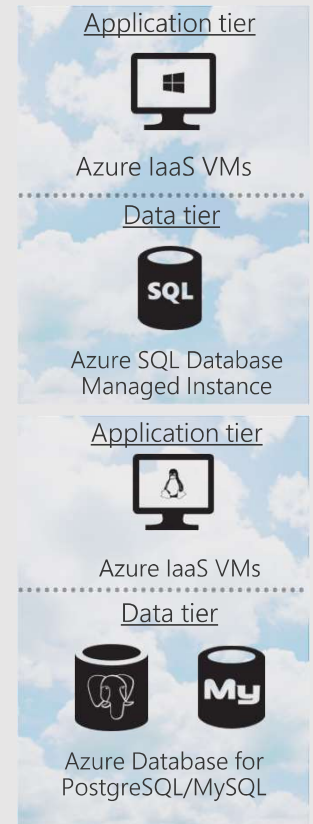
Example

Move a line of business application to Azure VMs

On-premises



Azure

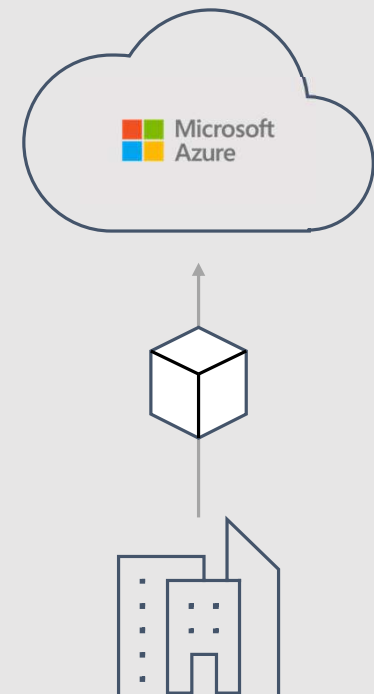


Azure Site Recovery (ASR) – GA

Migrate applications and VMs to Azure IaaS with confidence

Effortless migration of Linux/Windows VMs and applications

- **Zero** application **data** loss during migration
- **Near-zero** application downtime during migration
- **Broad coverage** for hypervisors, applications, operating systems, and Azure features
- No-impact application testing in Azure
- **Free** usage during migration



Comprehensive support for Windows and Linux migration



versions supported

Windows Server 2016

Windows Server 2012 R2

Windows Server 2012

Windows Server 2008 R2

Windows Server 2008



Linux

distributions supported



redhat RHEL 5.*, 6.* and 7.*



CentOS Cent OS 5.*, 6.* and 7.*



Ubuntu Ubuntu 14.04 and 16.04 LTS



SUSE SUSE Enterprise Server 11 SP3, SP4



Oracle OEL 6.4 and 6.5



debian Debian 7 and 8

Choosing between 1st and 3rd party migration tools



**Use Azure Site Recovery (ASR)
when customer needs...**

- ✓ A Microsoft Azure branded tool which is free
- ✓ Migration of Windows and Linux workloads (covering most versions and distros)
- ✓ Support for new Azure SKUs as they roll out

**Use ISV tools when
customer needs...**



Zerto

OS-agnostic coverage



Agentless migration solution



Rehost Windows Server on Azure



Hybrid integration
with **Windows Admin
Center** and **Windows
Server 2019**



Rich development
experience for
**existing and
new applications**



Most **cost-effective** with
Azure Hybrid Benefit +
Azure RI, (**up to 73%***
lower than AWS)



**Comprehensive
support** from a
single source

Rehost SQL Server on Azure SQL Database Managed Instance



Built-in intelligence to optimize performance and security



Breakthrough productivity and performance with in-memory technologies and dynamic scalability



Seamless and compatible migration without changing your applications



Competitive TCO from fully-managed service and hybrid benefit

Rehost open source databases on Azure Database Services for MySQL, PostgreSQL and MariaDB

More choices and full integration into Azure ecosystem and services

Managed community
MySQL, PostgreSQL,
MariaDB



Languages and
frameworks of
your choice



Scale in seconds with
built-in high availability



Secure and compliant



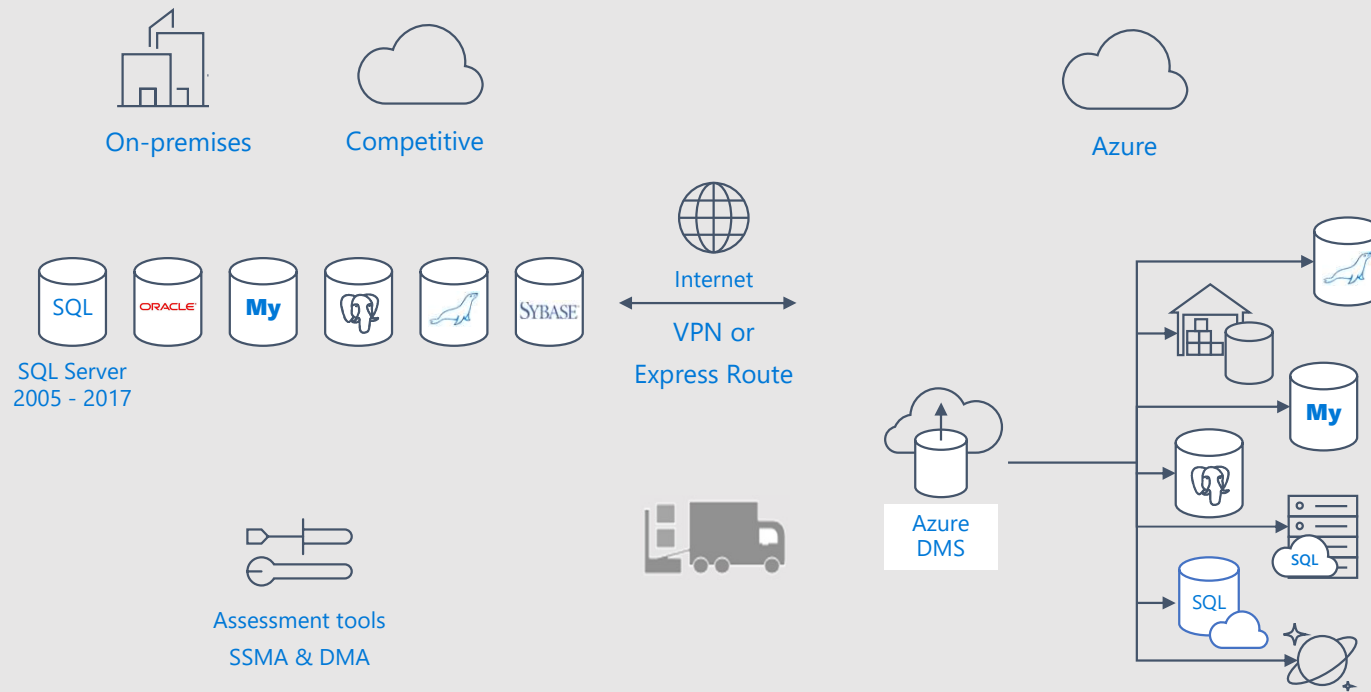
Industry-leading
global reach



← Lift and shift →

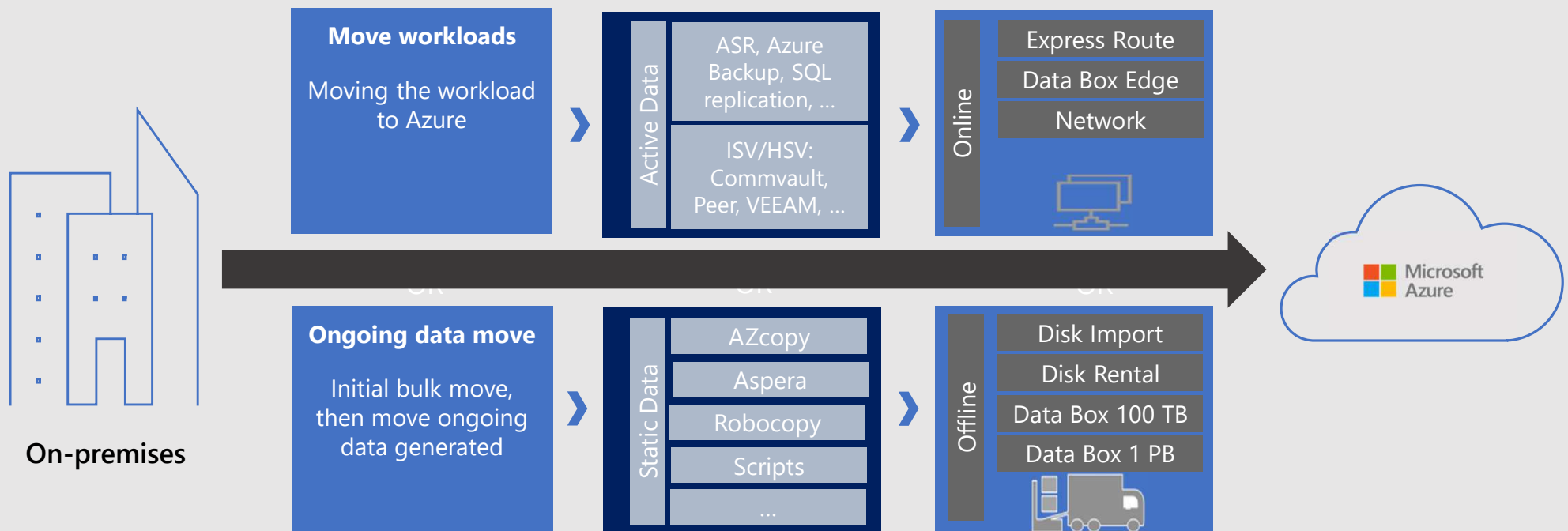
← Enterprise ready →

Seamless migrations from multiple database sources to Azure using Azure Database Migration Service



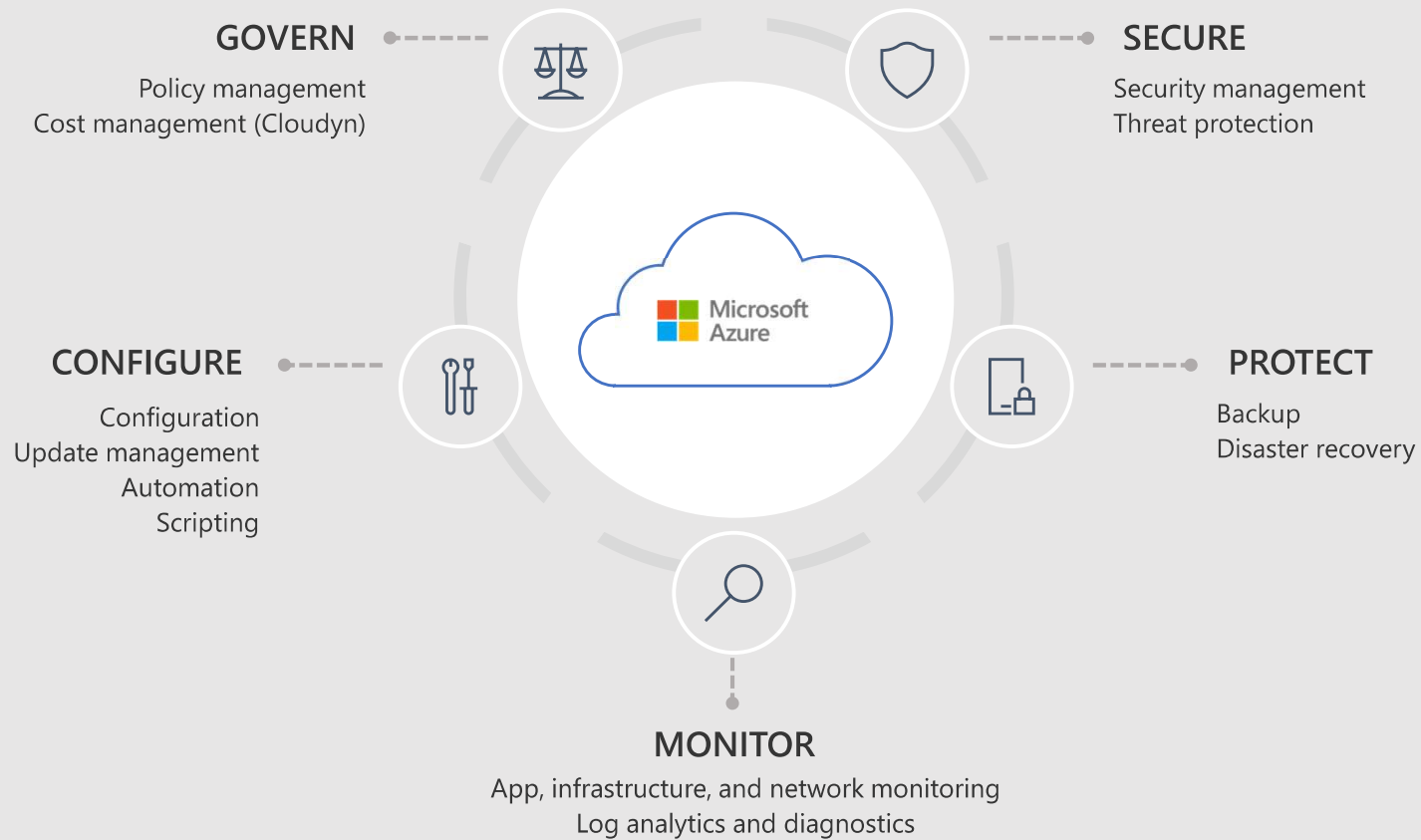
- **Seamless, end-to-end solution** for moving databases to the cloud
- **Near-zero downtime** as you migrate your business critical apps
- Migrate **at scale** from multiple sources to your target database

Moving data to Azure

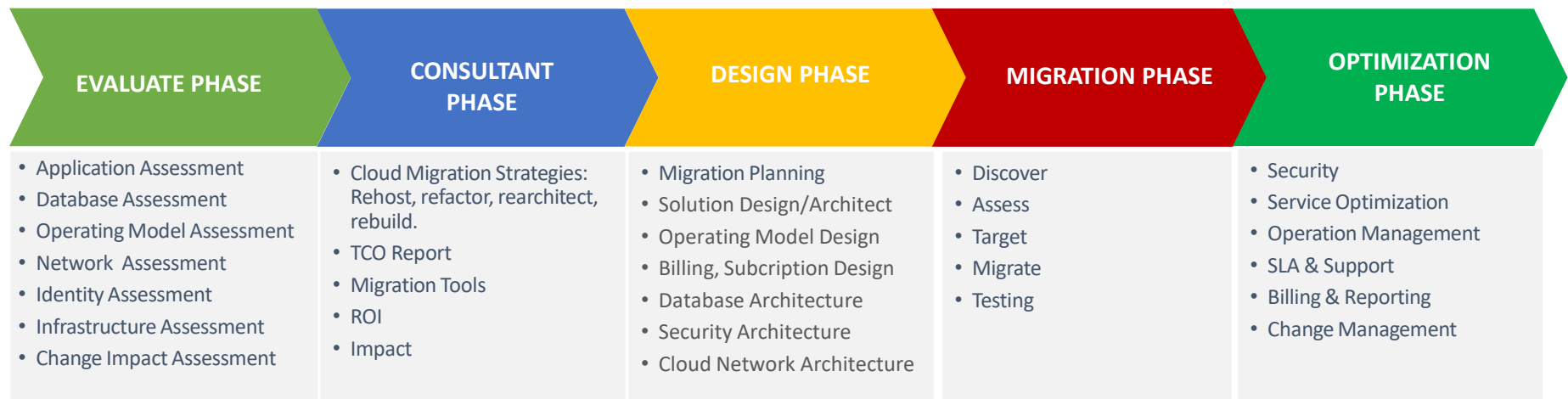


Regardless of your data migration requirements, there is *always* a path to Azure

Optimize: Stay secure, well managed, and cost-efficient after your move



Our cloud migration framework





TSG provides professional services:



Migration

TSG provides migration services to Azure Cloud.



Training

Provide training courses on Azure, M365, Power Platform, Power BI ...



Managed Services

Managing client azure resources of customer.



Optimize Cost

TSG provides cost optimization service to customers when using Azure Cloud.



Gold Cloud Productivity
Gold Data Analytics
Gold Small and Midmarket Cloud Solutions
Silver Application Development
Silver DevOps
Silver Cloud Platform



Azure Solutions Architect
Azure Devops Engineer
Azure Administrator
Azure Developer
Azure Security
Azure Data Engineer
Azure Data Scientist

Benefits of customers when choosing TSG



Free on-premise system survey package and conformance assessment to migrate

* This applies to all customers interested in migrate to Azure

Value
1000\$



Free customer support migrate to azure experience using azure trial account

* This applies to all customers interested in migrate to Azure

Value
500\$



Free license software backup and azure storage for 06 months

* This applies to all customers use azure migration service of TSG

Value
500\$



Free training package on operating and optimize resources on azure

* This applies to all customers use azure migration service of TSG

Value
300\$



free 3 business processes on Power Apps

* This applies to all customers using M365 and use azure migration service of TSG

Value
1500\$

Azure Migration Service Packages



Migrate

- Application & Database assessment
- Operating assessment
- Network assessment
- Security & Identity assessment
- Cloud Migration Strategies
- TCO Report
- Migration tools
- Migration planning
- Solution design/architect
- Cloud network architect
- Migrate
- Testing



Optimization

- Adjust the configuration according to the actual use
- Configure security after migrate
- Configure the system monitor
- Backup configuration
- Configure High Availability, Load Balancer...
- Cost optimization



Managed Service

- Support creating and deleting azure resources
- Monitor resources on Azure
- Analyze events and give a solution
- Security monitoring
- Backup & restore
- System upgrade consultant
- Handle the ticket upon request



Training

- Deployment resources on azure
- Security system on azure
- Identity system management
- Monitor on azure
- Subscription/billing/pricing model
- Cost optimization and cost management
- Design and Architect on azure

Case Studies



The Customer

A leading company in electronics manufacturing in Vietnam.

Key Figures

More than **3000 employees**
Turnover of more than **200 million USD**
Sold more than **16 million devices** in Vietnam

Key Achievements

- 70% of their corporate data center moved out (10+ apps).
- Projected savings of 300 thousands USD over 5 years.



The Customer

A leading gas producer in the world.

Key Figures

More than **400 employees**
Factory construction in **9 different locations**
Investing more than **200 million USD** in Vietnam

Key Achievements

- 50% cost reduction compared to the old system.
- Double access speed
- 20% off time for control engineers.



The Customer

VISION Entertainment is a Macau based global enterprise with diversified interests in the services and entertainment industry.

Key Figures

Active in many countries
about **100 employees** in Vietnam
Focused on servicing the Asia Pacific region.

Key Achievements

- Speed up reporting for marketing campaigns.
- Increased security for data on azure.
- 50% of their corporate data center moved out.