

Migrate to Azure with confidence  
Start moving your applications, data, and  
infrastructure today



# Agenda

- ➔ Why migrate to the cloud?
- ➔ Why Azure?
- ➔ What is the lowest risk path to the cloud?
- ➔ How can Microsoft and <insert partner> help you?
- ➔ What are others saying?
- ➔ How do you participate?



There has never been a better time  
to migrate to Azure

# Cloud migration will continue to grow



IaaS is fastest growing subsegment, projected to grow **36.6% in 2017, 30.1% CAGR for next 5 years**

Gartner and IDC



**80% of CIOs** will be pressured by their business leaders to evaluate **migrating their datacenters** to IaaS

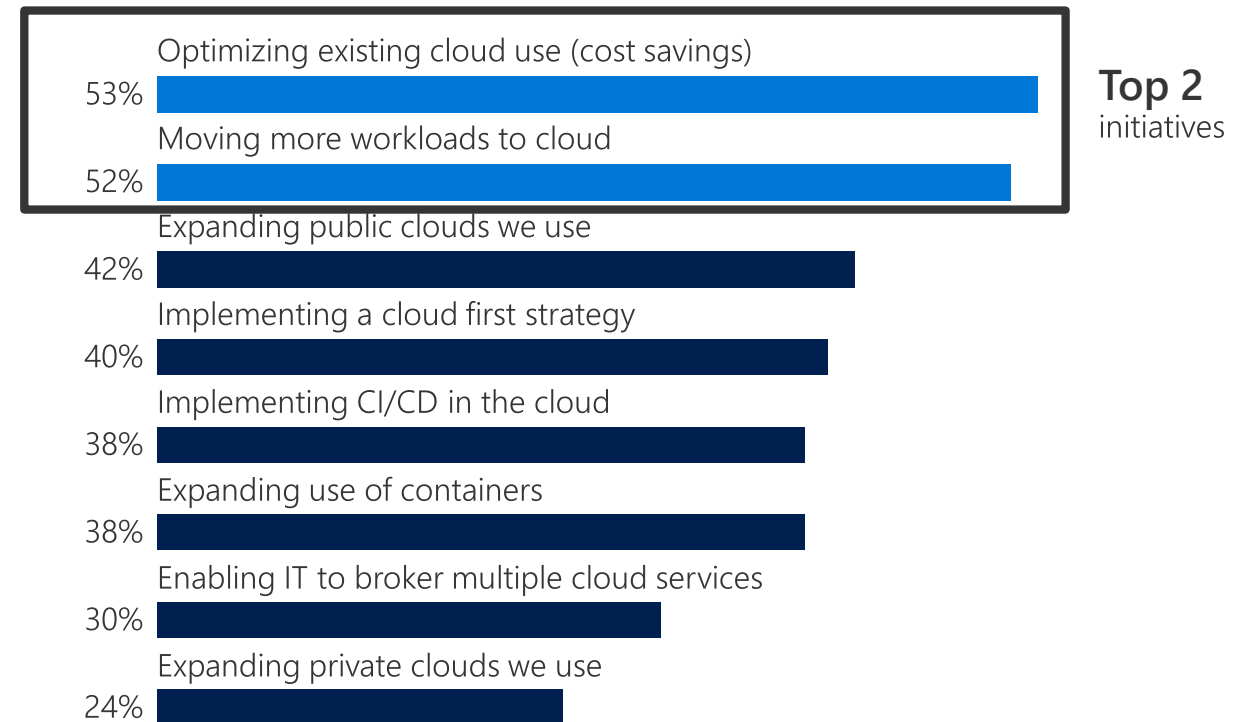
Gartner



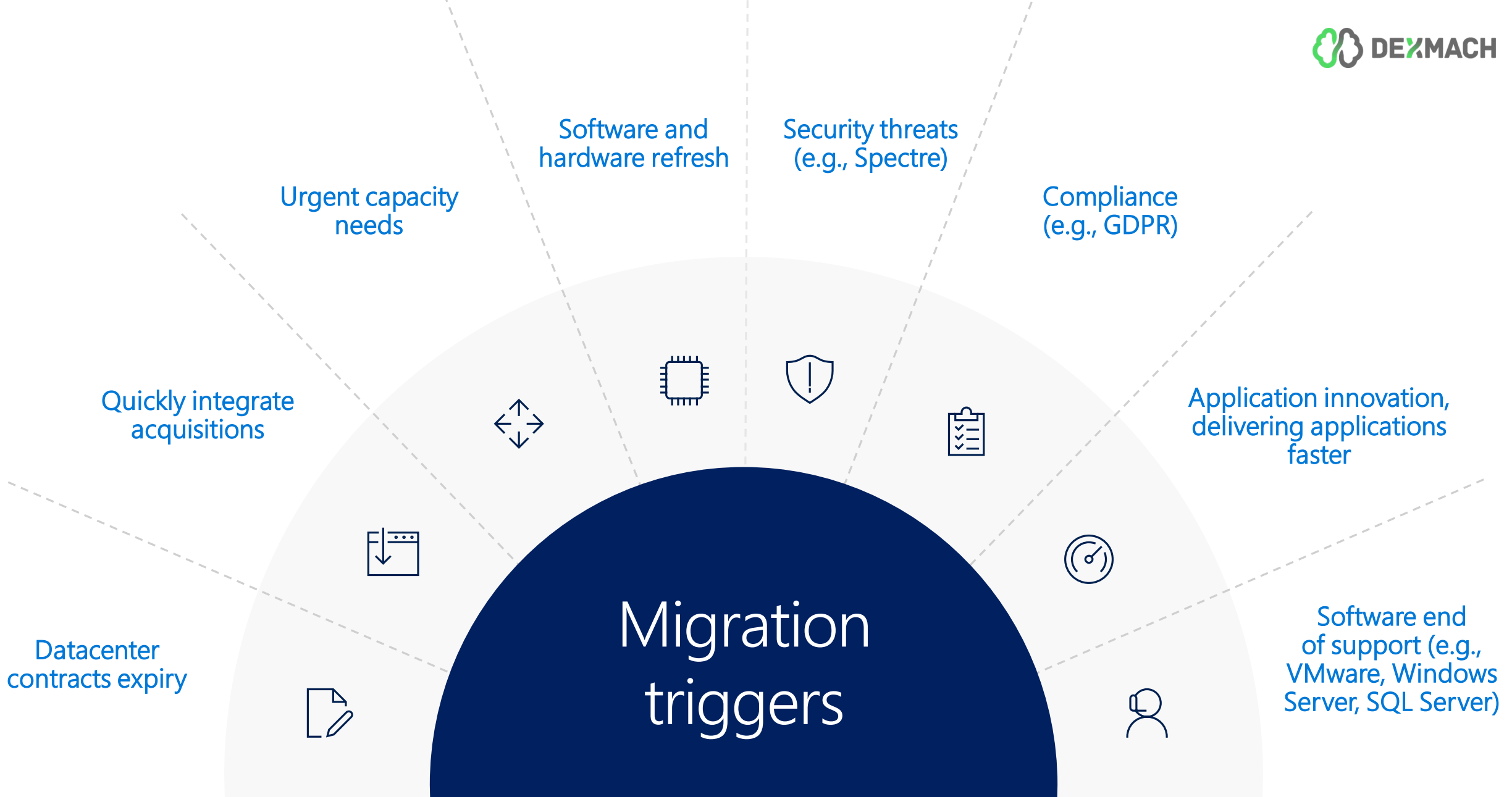
Azure PaaS reduces **time required to manage apps by 80%** and **time to deploy a new app by 50%**

Forrester

## Top cloud initiatives



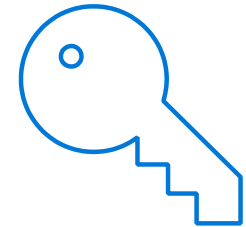
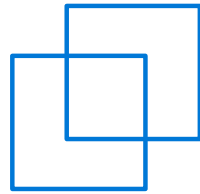




# Azure video



# Azure—cloud for all



Productive

Hybrid

Intelligent

Trusted



# Unparalleled developer productivity



# Productive



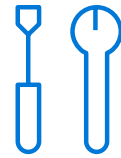
## Hybrid



Intelligent



Trusted



## Integrated tooling

Visual Studio  
third-parties | DevOps



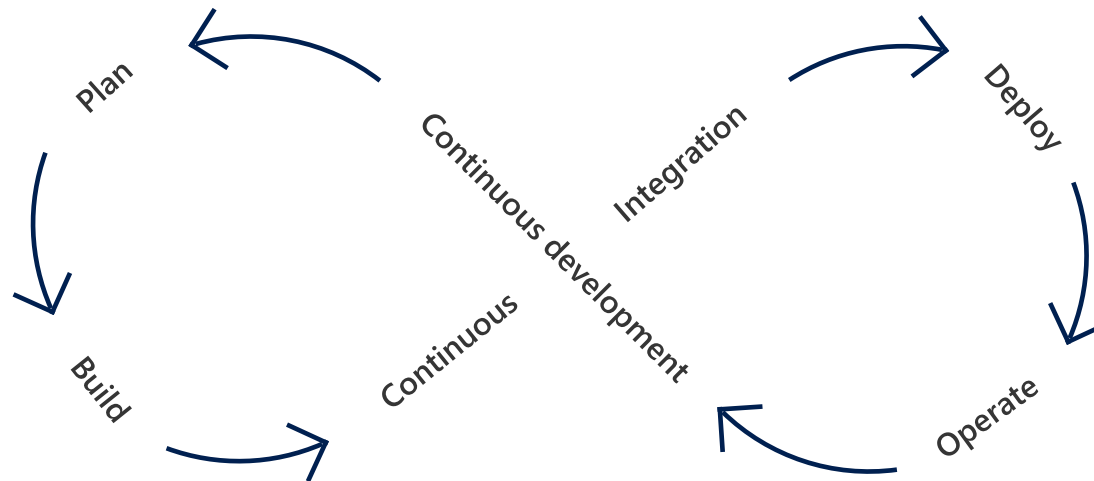
100+ services

Azure functions  
Kubernetes | Logic apps



## Unified management

## Single cloud | Policy and Governance



# Secure and well—managed for IT



Productive



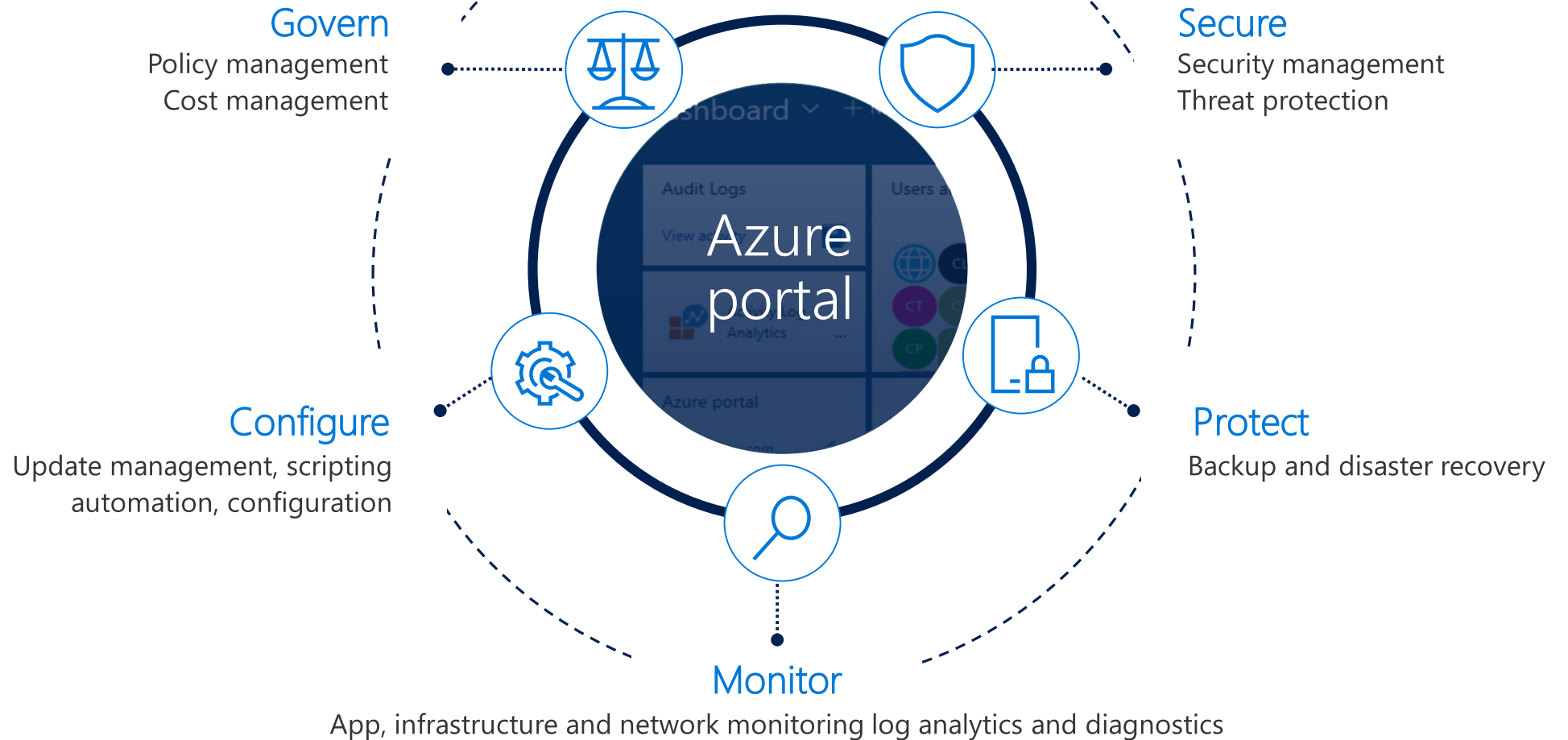
Hybrid



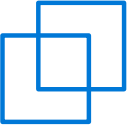


Intelligent



Trusted



# The only consistent, hybrid cloud

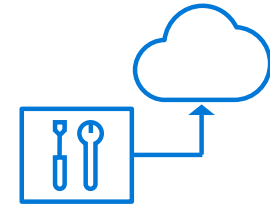
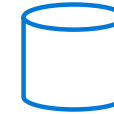
  
 Productive  
  
 Hybrid  
  
 Intelligent  
  
 Trusted

Azure active  
directory

Azure  
services

Azure  
data services

Azure security  
and management

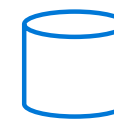


Common  
identity

Unified cloud  
platform

Data  
platform

Security and  
management



Active  
directory

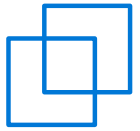
Azure  
stack

SQL  
server

On-premises  
infrastructure



Productive



Hybrid

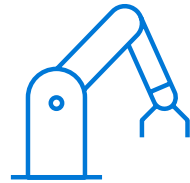


Intelligent



Trusted

# Azure Stack—an extension of Azure







At the edge  
and disconnected



Meet every regulatory  
requirement





Cloud application  
model on-premises


-   
Productive
-   
Hybrid
-   
Intelligent
-   
Trusted




# Comprehensive deep learning, machine learning as a service

  
Productive

  
Hybrid

  
Intelligent

  
Trusted



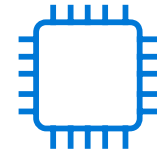
## Customizable services

VS, ML STUB, Tensor, Caffe



## Tools

Bots, Cognitive, ML



## Infrastructure & compute

CPU, GPU, FPGA



Azure

# More certifications than any cloud provider

Productive

Hybrid

Intelligent

Trusted

Global	 ISO 27001	 ISO 27018	 ISO 27017	 ISO 22301	 SOC 1 Type 2				
	 SOC 2 Type 2	 SOC 3	 CSA STAR self-assessment	 CSA STAR certification	 CSA STAR attestation				
Industry	 PCI DSS level 1	 CDSA	 MPAA	 FACT UK	 Shared assessments	 FISC Japan	 HIPAA / HITECH Act		
	 HITRUST	 GxP 21 CFR Part 11	 MARS-E	 IG Toolkit UK	 FERPA	 GLBA	 FFIEC		
Regional	 Argentina PDPA	 EU model clauses	 UK G-Cloud	 China DJCP	 China GB 18030	 China TRUCS	 Singapore MTCS	 Australia IRAP/CCSL	 New Zealand GCIO
	 Japan my number act	 ENISA IAF	 Japan CS mark gold	 Spain ENS	 Spain DPA	 India MeitY	 Canada privacy laws	 Privacy shield	 Germany IT Grundschutz workbook





Productive



Hybrid



Intelligent



Trusted



50+ Azure regions



Productive



Hybrid



Intelligent



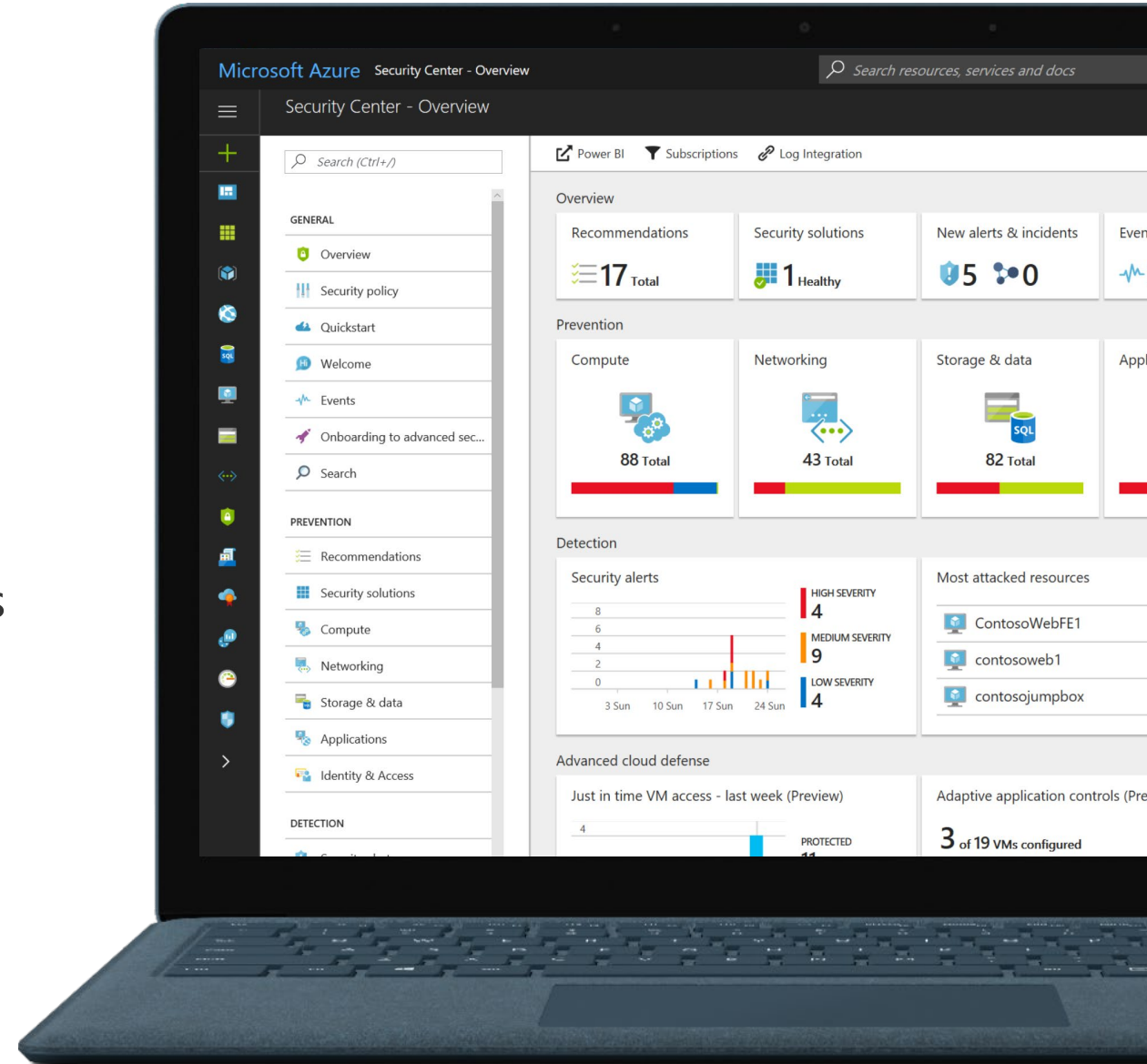
Trusted

# Azure security center

Protection through best practices

Detect threats and attacks

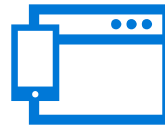
Remediate issues



# Uses of the cloud



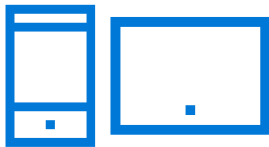
Keep your business secure  
and compliant



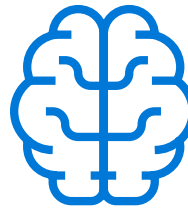
Create new applications  
and digital services



Store, back up,  
and recover data



Unlock the potential of  
connecting devices

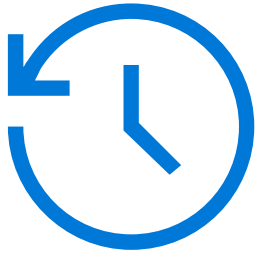


Take the next leap in  
artificial intelligence



Analyze data to  
make predictions

# Benefits of the cloud



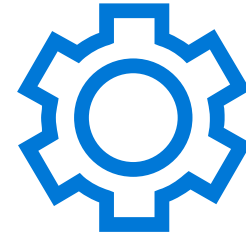
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Time



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Confidence



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Performance

# Benefits of the cloud



Time



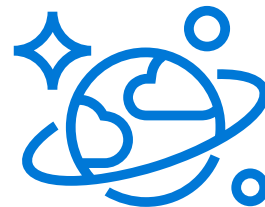
Confidence



Performance



New server availability  
from months to minutes  
with Azure virtual machines



Global, reliable scale  
with Cosmos DB



Reduce time-consuming  
IT chores with Azure  
monitoring and  
management tools

# Benefits of the cloud



Time



Confidence



Performance



Ensure business continuity  
with Azure Site and  
Disaster Recovery



Mitigate risks with Azure  
security center and  
compliance certifications



Choose from  
450 global regions

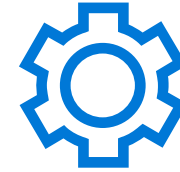
# Benefits of the cloud



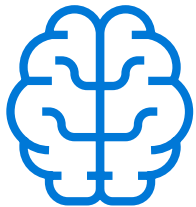
Time



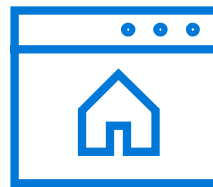
Confidence



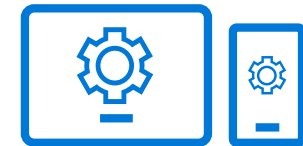
Performance



Engage your customers with  
a more human touch using  
Azure Cognitive Services



Stay current with the  
latest, up-to-date Azure  
portal



Simplify your devices  
with pre-configured  
Azure IoT solutions



# Tons of Azure platform innovation



Azure Migrate GA



Deeper Java/  
Tomcat support in  
Azure App Service



Azure Database for  
PostgreSQL/MySQL  
GA



Azure Security  
Center updates



Kubernetes on  
Azure



Azure SQL  
Database Managed  
Instance Preview



M series VMs  
(largest in Azure)



Cassandra/  
Mongo DB  
support in Azure  
Cosmos DB



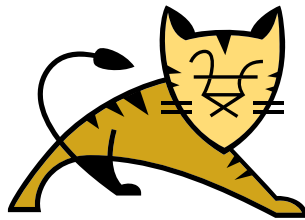
Azure Database  
Migration Service  
GA

And lots more innovation coming over the next 12 months!

# Migrate open source assets

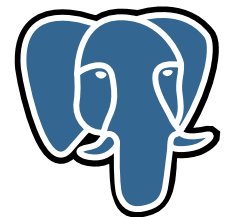


All major Linux distributions supported



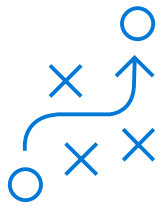
OpenJDK

Built-in support for Apache Tomcat and OpenJDK 8 in Azure App Service, making it easy for Java developers to deploy web applications to market-leading Azure PaaS



Azure database services for [MySQL](#) and [PostgreSQL](#) and Azure CosmosDB are generally available

# Confidently migrate your applications, data, and infrastructure to Azure

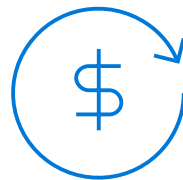


## Flexible migration options with hybrid support

Hybrid infrastructure  
(Windows Admin Center, Azure Security Center, Azure AD)

Hybrid apps and data  
(Azure + Azure Stack, common data platform)

On-premises server innovation



## Cost-effective throughout the entire migration experience

Azure Hybrid Benefit

Reserved VM Instances

Free tools to get started

Free cost management solution



## High confidence, lower risk migration

Decades of enterprise experience

Azure migration center

Rich partner ecosystem

# Azure is the most cost-effective for Windows Server and SQL Server

Azure Hybrid Benefit can help customers save 55%\* for SQL Server and up to 49%\*\* for Windows Server by bring their on-premises licenses (vs. pay-as-you-use)

Azure Hybrid Benefit and Azure Reserved Instances can help customers save up to 67%\*\*\* for Windows Server VMs (compared to AWS)

\*Pay a reduced rate on vCore-based options and save in highly-virtualized scenarios

\*\*Pay a basic compute rate for your Windows Server VMs in Azure

\*\*\*AWS r4.xlarge, Windows, US West (Oregon) convertible 3-year Term, all upfront vs. Azure E4 v3, Windows, West US 2, 3 Year Reserved with Azure Hybrid Benefit

Microsoft Azure < Create virtual machine > Basics Search resources

☰

+ New

Dashboard

All resources

App Services

Virtual machines

NoSQL (DocumentDB)

SQL databases

Load balancers

Virtual networks

Activity log

Security Center

Billing

Help + support

Azure Active Directory

Monitor

Resource groups

Azure Advisor

More services >

Create virtual machine

1 Basics

Configure basic settings

2 Size

Choose virtual machine size

3 Settings

Configure optional features

4 Summary

Windows Server 2016 Datacent...

Basics

\* Name

TestVM ✓

\* User name

TestUser ✓

\* Password

..... ✓

\* Confirm password

..... ✓

Subscription

TEST - Ibiza dev ▼

\* Resource group ⓘ

Create new

Use existing

Default-Media-WestUS ▼

\* Location

North Central US ▼

Save money

Save upto 50% with a license you already own.

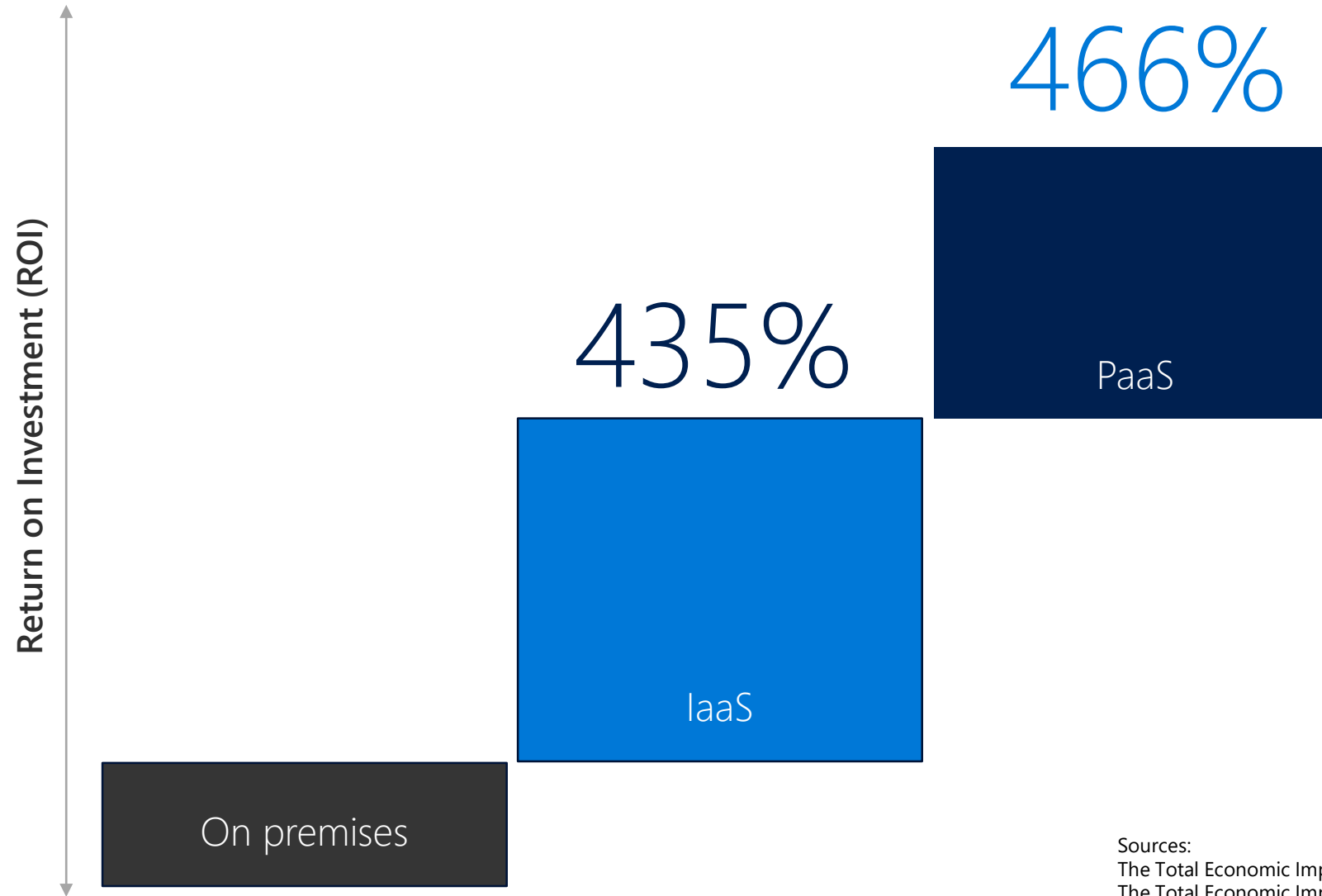
Already have a Windows Server license?

No

Yes

Next

# Customers are seeing significant ROI by moving to Azure



Sources:  
The Total Economic Impact Of Microsoft Azure IaaS, June 2017  
The Total Economic Impact of Microsoft Azure Platform-as-a-Service, June 2016

# Customers are betting on Azure

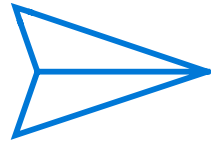


# Azure migration journey

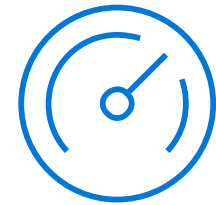
**Top-down buy in:** Business case | Executive sponsorship | Business and IT alignment



Assess



Migrate

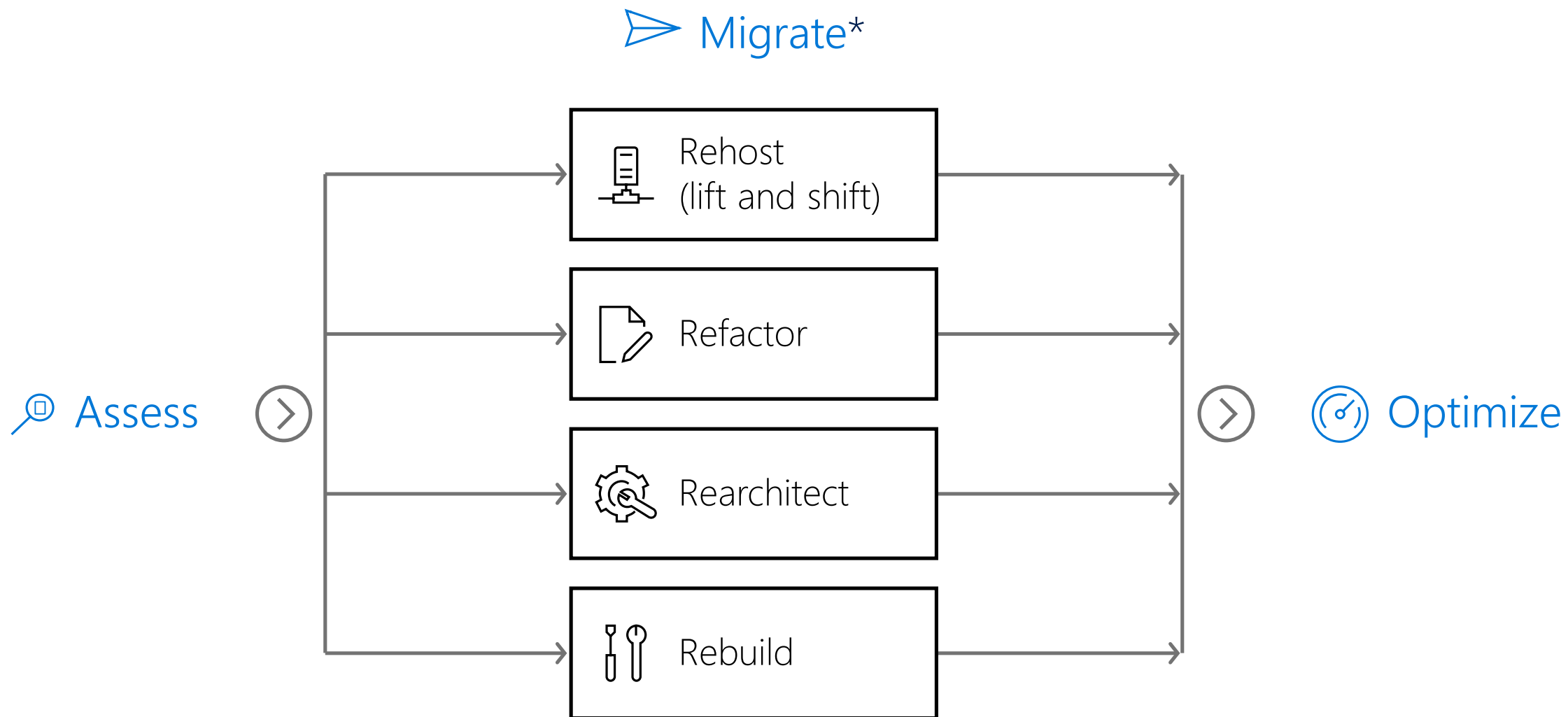


Optimize

**Foundational investments:** Technical | Process | People

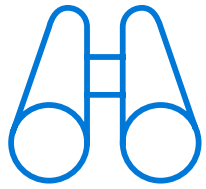


# Breaking down the Azure migration journey



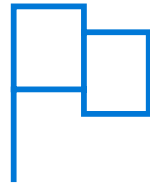
\*These migration strategies are adopted from Gartner research. Gartner also calls out a 5<sup>th</sup> strategy called "Replace" which is about SaaS. We won't focus on that here..

# Assess your applications, data, and infrastructure



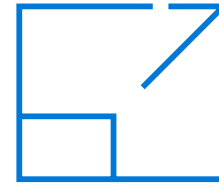
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Discover



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Map



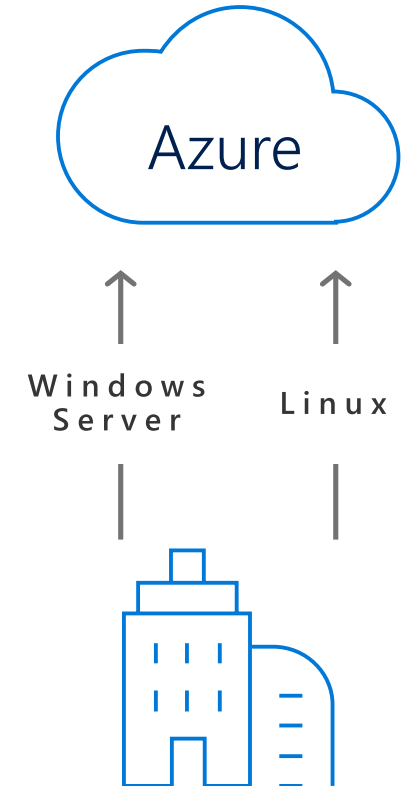
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Evaluate

# Azure Migrate



- Easily **discover** VMware VMs and applications, including rich service dependency maps
- Insightful workload **assessments**:
  - Right-sized Azure resources based on utilization history
  - Estimated monthly run costs in Azure
  - Migration risks and recommended tools
- Hyper-V and physical environment assessment coming soon



Get started at no cost today: <https://aka.ms/azuremigrate>



# Assessment guidance

## Using Azure tools with third party tools

### Use Azure Migrate when...

### Use 3<sup>rd</sup> party tools when...

1

Environment

Your on-premises environment is VMware only

Your on-premises environment includes Hyper-V, physical, or other non-VMware hosts

2

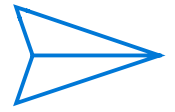
Cost & experience

You are looking to get started at no additional cost

You prefer a Microsoft solution that's built into the Azure portal

You are already using and comfortable with an ISV tool

Customer wants an integrated experience across assessment and migration activities



# Migration strategies: Rehost app (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

## Example

Move a line of business application to Azure VMs

## On-premises

Application tier



Data tier



SQL Server  
(on Windows Server)

Application tier



Data tier



Azure Site  
Recovery



Azure  
Database  
Migration  
Service

## Azure

Application tier



Azure IaaS VMs

Data tier



Azure SQL Database  
Managed Instance

Application tier



Azure IaaS VMs

Data tier



Azure Database for  
PostgreSQL/MySQL

# Confidently lift & shift Windows Server to Azure



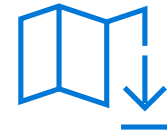
Hybrid flexibility  
with Windows Admin  
Center and Azure  
Security Center



Rich development  
experience for  
existing and  
new applications



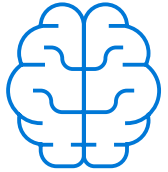
Most cost-effective with  
Azure Hybrid Benefit +  
Azure RI, (up to 67%\*  
lower than AWS)



Comprehensive  
support from a  
single source

# Confidently lift & shift SQL Server apps to Azure

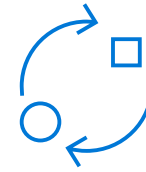
## Azure SQL Database Managed Instance



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

Use Azure Hybrid Benefit for SQL Server to save up to 55%\*



# Azure Database Services for MySQL & PostgreSQL

More choices and full integration into Azure ecosystem and services

Managed community  
MySQL, PostgreSQL



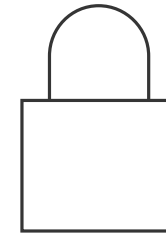
Languages & frameworks  
of your choice



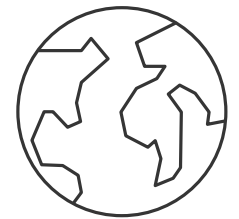
Scale in seconds with  
built-in high availability



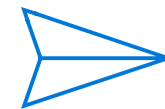
Secure  
& compliant



Industry-leading  
global reach



← Lift and shift → ← Enterprise ready →



# Confidently lift & shift your databases with Azure Database Migration Service



**Seamless, end-to-end solution** for moving relational databases to the cloud

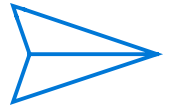
**Near-zero downtime** as you migrate your business critical apps

**Migrate at scale** from multiple sources to your target database

## Scenarios

Source	Target	Status
SQL Server	Azure SQL Database (single/elastic)	Generally Available
SQL Server	Azure SQL Database Managed Instance	In preview
SQL Server	SQL Server in Azure VMs	In preview
MySQL	Azure Database for MySQL	In preview
PostgreSQL	Azure Database for PostgreSQL	In preview
MongoDB, Cassandra	Cosmos DB	In preview
Oracle	SQL Server in Azure VMs Azure SQL Database	In preview

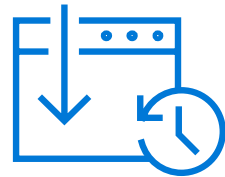
Database migration guide: <https://datamigration.microsoft.com/>



# Confidently lift and shift Team Foundation Server to Visual Studio Team Services



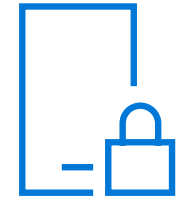
Global, highly available,  
hosted service



Immediate access to  
latest features  
Upgraded every 3 weeks



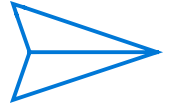
Scalable for teams  
of any size  
From tens to thousands



Compliant and  
secured by design

See the migration guide & tool <https://aka.ms/vstsmigrationguide>

# Demo: Rehost application (lift & shift)



# Migration strategies

## Refactor application ( repackaging)



Rehost  
(lift and shift)



Refactor



Rearchitect



Rebuild

### What is it?

Minimally alter application code or configuration changes necessary to optimize the application for Azure PaaS and take better advantage of cloud

### Example

Refactor your existing app to Azure App Service or Azure Container Services (AKS), refactor your SQL Server to Azure SQL Database Managed Instance.

### On-premises

Application tier



Web application

Data tier



SQL Server  
(on Windows Server)



### Azure

Application tier



Azure App Service

Data tier



Azure SQL Database  
Managed Instance

# Migration strategies: Rearchitect application



Rehost  
(lift and shift)



Refactor



Rearchitect



Rebuild

## What is it?

Rearchitecting is to modify or extend the existing application's architecture / code base, and optimize it for cloud platform and better scalability

## Example

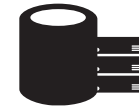
Decompose a monolithic application into microservices that work together and readily scale on Azure; rearchitect SQL Server to a fully managed Azure SQL Database

## On-premises

Application tier



Data tier



SQL Server  
(on Windows Server)



## Azure

Application tier



Azure Container Service  
(AKS)

Data tier

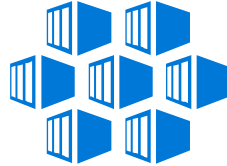


Azure SQL Database

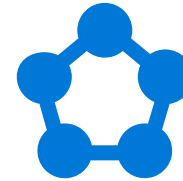
# Azure container technologies



Azure Container  
Instances



Azure Container  
Service (AKS)



Azure Service  
Fabric



Azure App  
Service

Check out these ebooks

<https://aka.ms/azuredevebook>

<https://aka.ms/modernizeappebook>

<https://aka.ms/microservicesebook>

# Demo: Refactor application



# Migration strategies: Rebuild application



Rehost  
(lift and shift)



Refactor



Rearchitect



Rebuild

## What is it?

Rebuild the application from scratch using cloud-native technologies on Azure PaaS

## Example

Build greenfield applications with innovative cloud native technologies like Azure Functions, Logic Apps, Cognitive Service, Azure Cosmos DB and more

Azure

Application tier



Azure Functions



Azure Logic Apps

.....  
Data tier

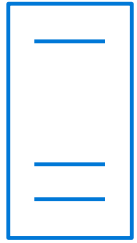
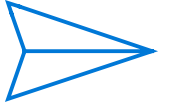


Azure SQL Database



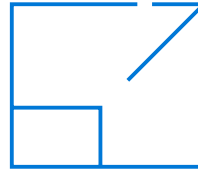
Azure Cosmos DB

# Build new apps using Azure Functions (Serverless)



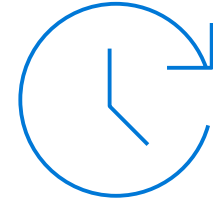
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Server abstraction



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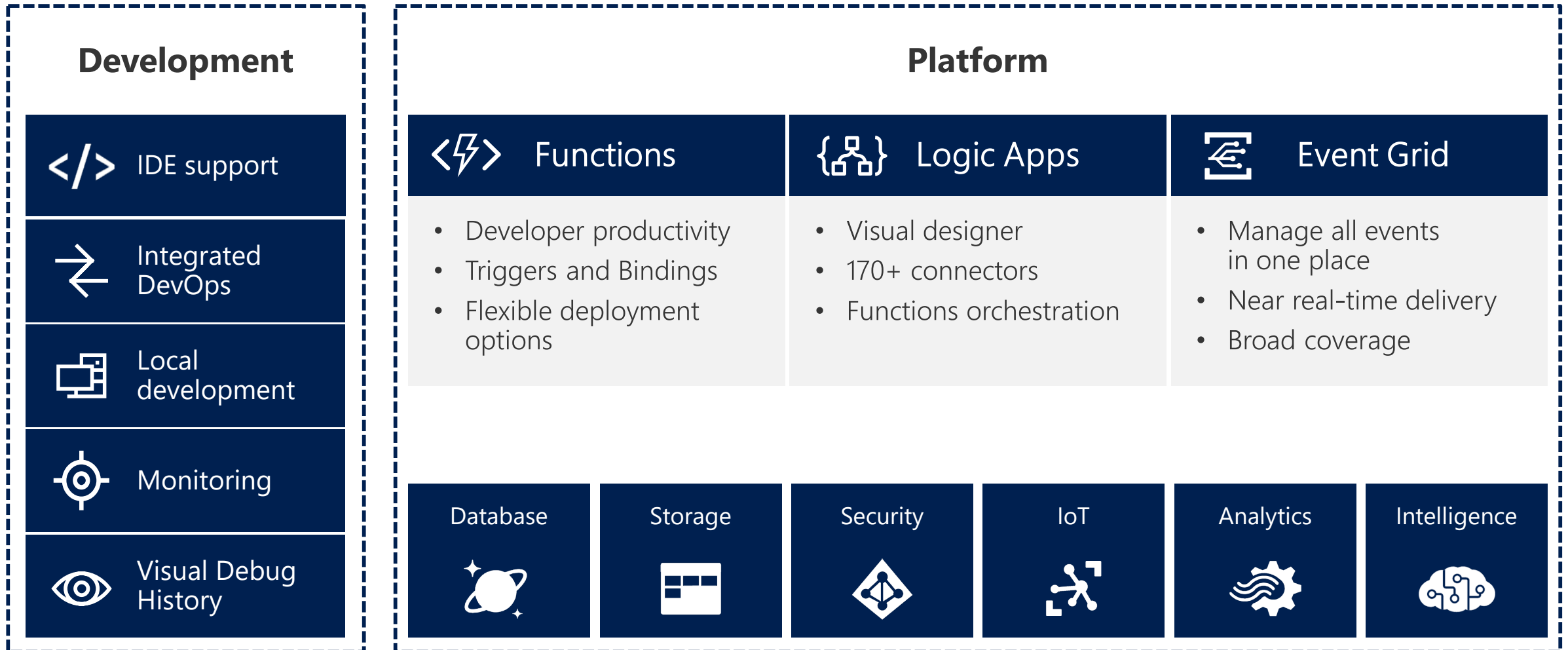
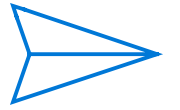
Event-driven



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Micro-billing

# Serverless app platform components in Azure



# Azure Cosmos DB transforms how you build new cloud applications



Multi-model data with your favorite API

Elastically scale storage and throughput

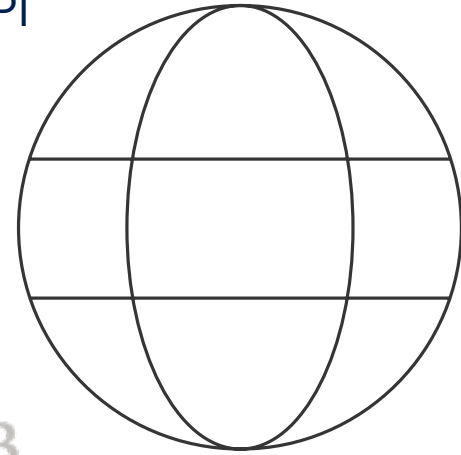
Multiple, well-defined consistency levels

<10ms latency guarantees at the 99<sup>th</sup> percentile

Industry-leading SLAs across performance, latency, availability, and throughput



Table API



Globally distributed apps

Highly responsive apps

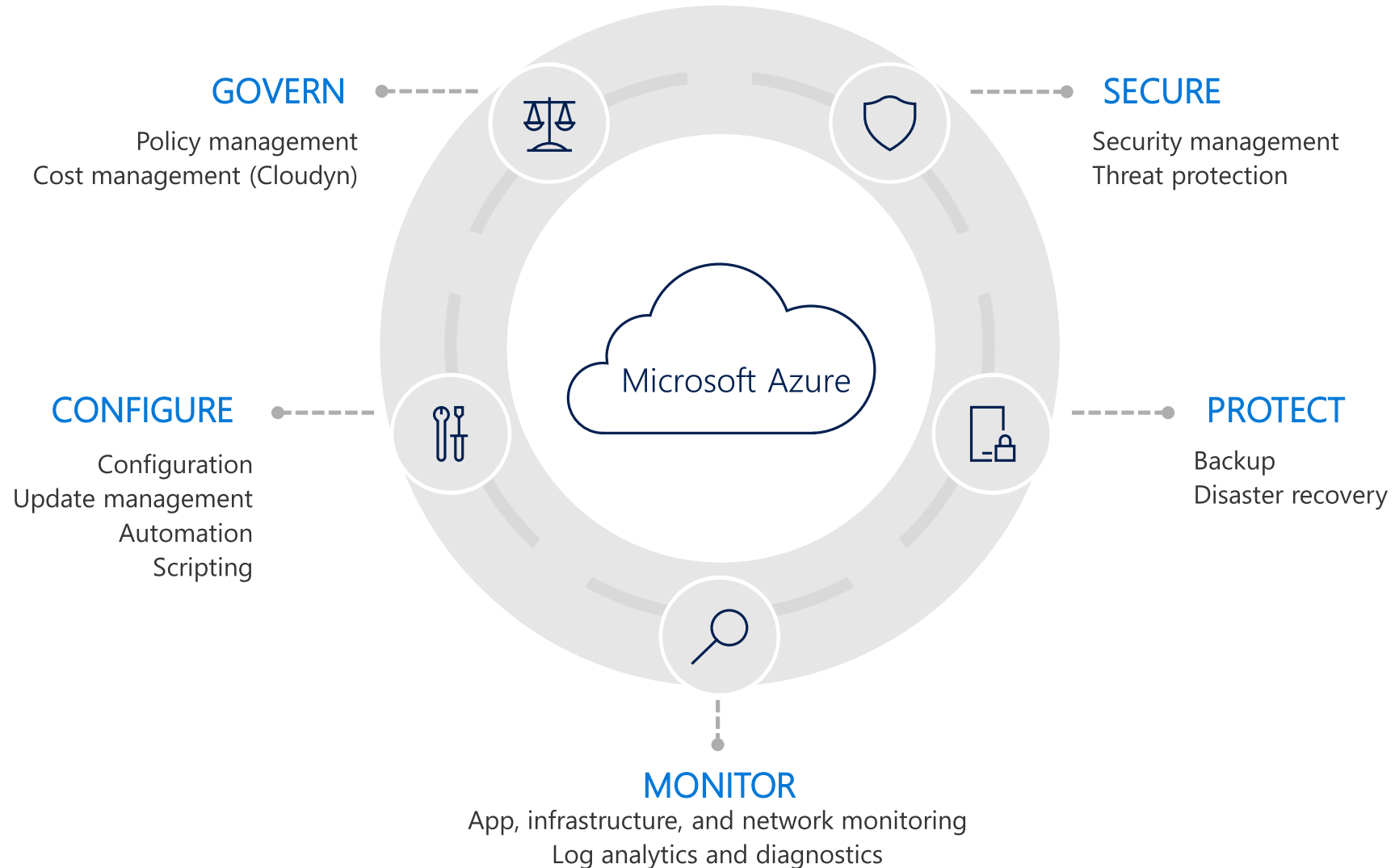
"Always on" apps

IoT and eCommerce apps

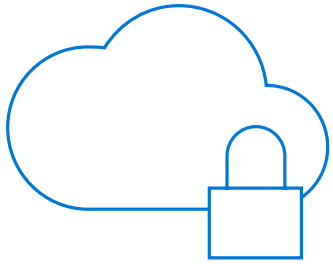
# Demo: Rebuild application

# Optimize

Stay secure, well managed, & cost-efficient after your move



# Steps to start securing and managing your cloud



Secure your  
cloud resources

Azure Security Center



Protect your data  
in the cloud

Azure Backup



Monitor your  
cloud health

Azure Log Analytics

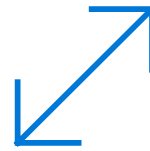
# Lower your TCO by migrating to Azure

Save up to **78%**



Datacenter migration TCO  
vs. on-premises

Save up to **68%**



Rehost app to Azure  
(lift and shift)

Save up to **63%**



Rebuild app  
on Azure



# Get started at no cost: Built-in tools at each stage

Pre-migration



Azure Migrate

During migration



Azure Site Recovery

Post-migration



Azure cost management

# Azure migration center

## Single destination for all things migration

Provides guidance and tools for migration

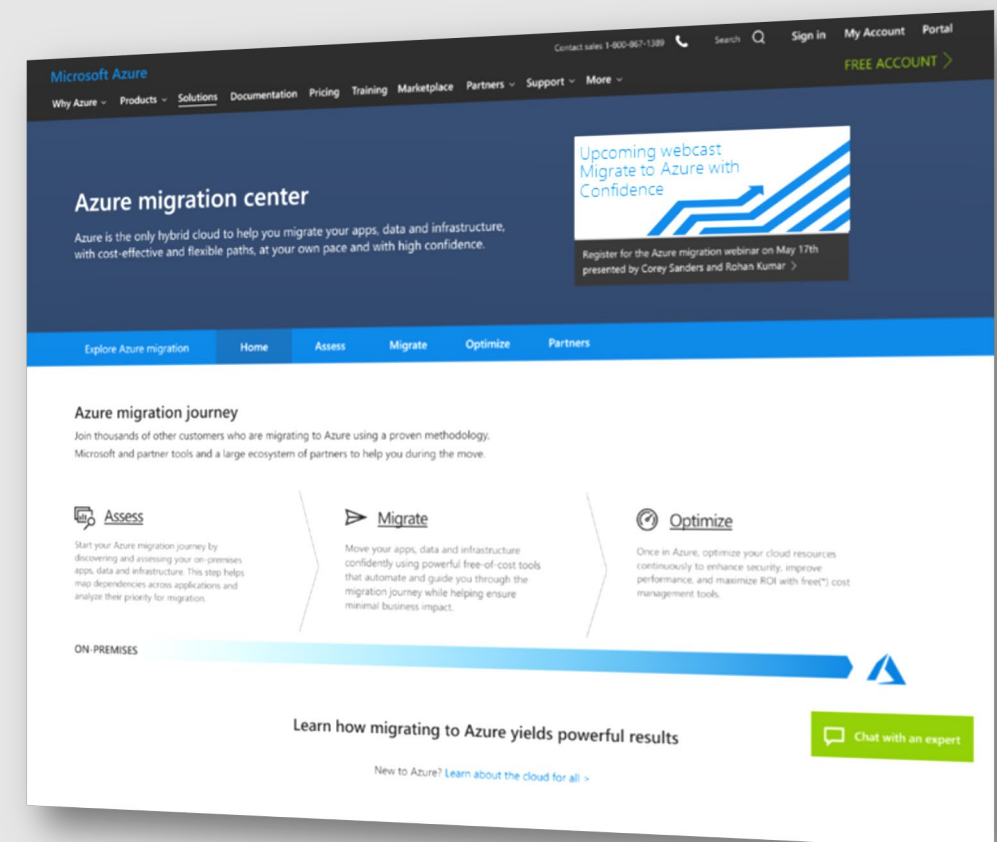
Enables you to:

- Build your case, find others like you
- Assess your environment
- Identify the right migration strategies
- Optimize your cloud resources

Connects you to a migration expert

- Chat enabled, backed by engineering resources
- Guides you to FastTrack, partner, seller, or DIY outcomes

[Azure.com/Migration](https://azure.com/Migration)



# Choice of tools for every stage & every requirement

Microsoft

 Assess

Azure Migrate

Database Migration Assistant

SQL Server Migration Assistant

 Migrate

Azure Site Recovery

Azure Database Migration Service

Azure Data Box

 Optimize

Azure security and management

Partners

 **MOVE**

 **Cloudamize**

**VELOSTRATA**

**CloudAtlas®**

 **BitTitan**

**STRATOZONE®**

 **turbonomic**

 **CloudEndure®**

 **Ispirer**

 **Corent**

 **intigua**

 **stiim<sup>eu</sup>**

 **ATTUNITY**

 **DATOMETRY**

 **MORPHIS**

 **Informatica**

 **QuerySurge**

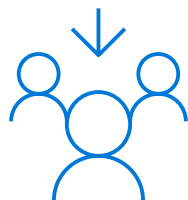
Use the mix of tool(s) that best meet your requirements, our goal is to help you adopt Azure successfully

# Accelerate your Azure migration initiatives with skilled migration expertise



**<Insert partner name>**

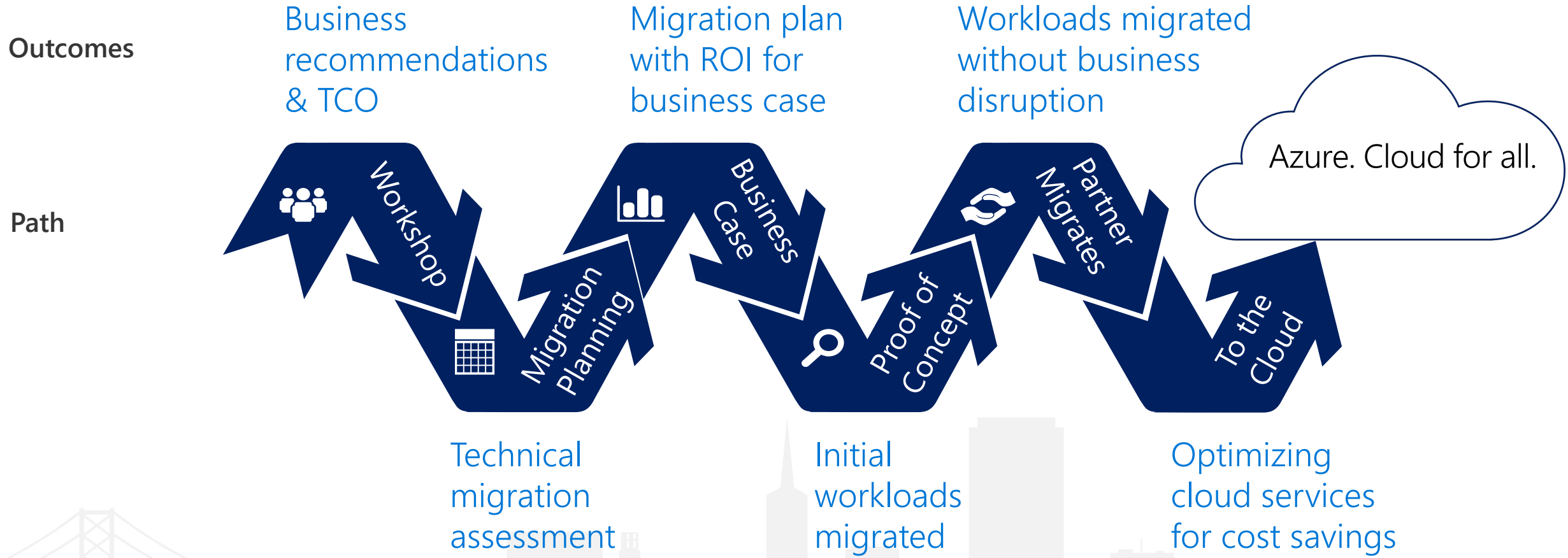
can help you drive migration initiatives and also manage your resources once they're in Azure







**<Insert partner name>**

can help you drive migration initiatives (incl. project management, technical consulting and execution, industry skills)

# What is the lowest risk path to the cloud?



# How can <Partner name> help?

	Azure Workshop 	Migration Plan + Business Case 	Proof of Concept 	Migration 
What we do	<ul style="list-style-type: none"> <li>Identify business and IT requirements, priorities and constraints</li> </ul>	<ul style="list-style-type: none"> <li>Assess your current IT environment architecture, and portfolio of applications</li> <li>Identify apps to migrate and those requiring refactoring</li> </ul>	<ul style="list-style-type: none"> <li>Participate in a Proof of Concept</li> </ul>	<ul style="list-style-type: none"> <li>Participate in a seamless cloud migration</li> </ul>
What you receive	<ul style="list-style-type: none"> <li>Business recommendations</li> <li>Azure Total Cost of Ownership (TCO) and value to your business</li> </ul>	<ul style="list-style-type: none"> <li>Quantify ROI of migration for business case</li> <li>Receive recommendations, ROI, and detailed migration plan for your business case</li> </ul>	<ul style="list-style-type: none"> <li>Proof workloads can be migrated without disruption</li> </ul>	<ul style="list-style-type: none"> <li>Migrated workloads</li> <li>Optimized environment</li> <li>Cost savings</li> <li>Increased productivity</li> </ul>
Commitment	Duration: 2 hours	Duration: Variable, based on project size	Duration: 5 days – 2 Months	Duration: Variable, based on project size

# Accelerate migration with Partner offers

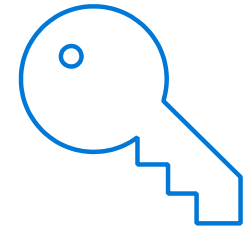
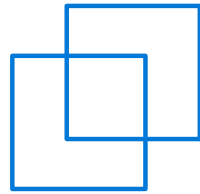
Envision	Evaluate	Onboard
<p><b>Free Azure</b> Get started with 12 months of free services</p> <p><b>Customer Immersion Experience</b> Interactive hands-on user experience for real-world, everyday business situations</p>	<p><b>Assessments</b> Cloud Assessment &amp; ADS POC &amp; Pilot</p> <p><b>Hands-on Workshops</b> Cloud Workshop Cloud Hackfest</p>	<p><b>Deployment Support</b> Partner assistance to deploy custom solutions quickly and confidently</p> <p><b>FastTrack for Azure</b> Microsoft engineers and partner onboarding assistance</p>

# Learning Objectives

- ✓ Understand the value of migrating to the cloud
- ✓ See why Azure delivers the best cloud value
- ✓ Learn how <Partner name> can help you to migrate your apps, data and infrastructure to Azure
- ✓ Discover what tools, guidance and offers are available to help you migrate with confidence



# Azure—cloud for all



Productive

Hybrid

Intelligent

Trusted

# Get started today

1

Assess cost savings by  
moving to Azure

[Azure.com/tco](https://azure.com/tco)

2

Check out the Azure Migration  
Center for tools, guidance, & experts

[Azure.com/migration](https://azure.com/migration)

3

Start your migration project,  
leverage our expertise

[Azure.com/essentials](https://azure.com/essentials)

# How do you participate?



## Contact Information

<Partner Contact Name>  
<Partner Company Name>

<Partner Address>  
<Partner Phone>  
<Partner Email>

Please feel free to update  
this slide with your  
information before  
presenting to customers.

# Accelerate your move to the cloud



## Save and reduce risk as you move to the cloud



Contact me if you would like to participate in  
our special Azure Migration offers.



Q&A

