centric
tech
event

centric

Microsoft

Building Your Cloud Strategy

Henk van de Crommert,
Cloud Solution Architect

A decade ago

Cloud Attributes

Pooled Resources

Self-Service

Elastic

Usage-based

Transform the Datacenter

45% of total IT spend will be cloud-related by 2020*

74% of enterprises expect their cloud service provider to move cloud offerings back on-premises if needed**

80% of the world's 2,000 largest companies will have more than 50% of their IT onsite by 2020**

* Forrester: "Prepare For 2020: Transform Your IT Infrastructure & Operations Practice, Oct. 24, 2012
** IDC: "Successful Cloud Partners: Higher, Faster, Stronger," IDC InfoDoc, July 8, 2013
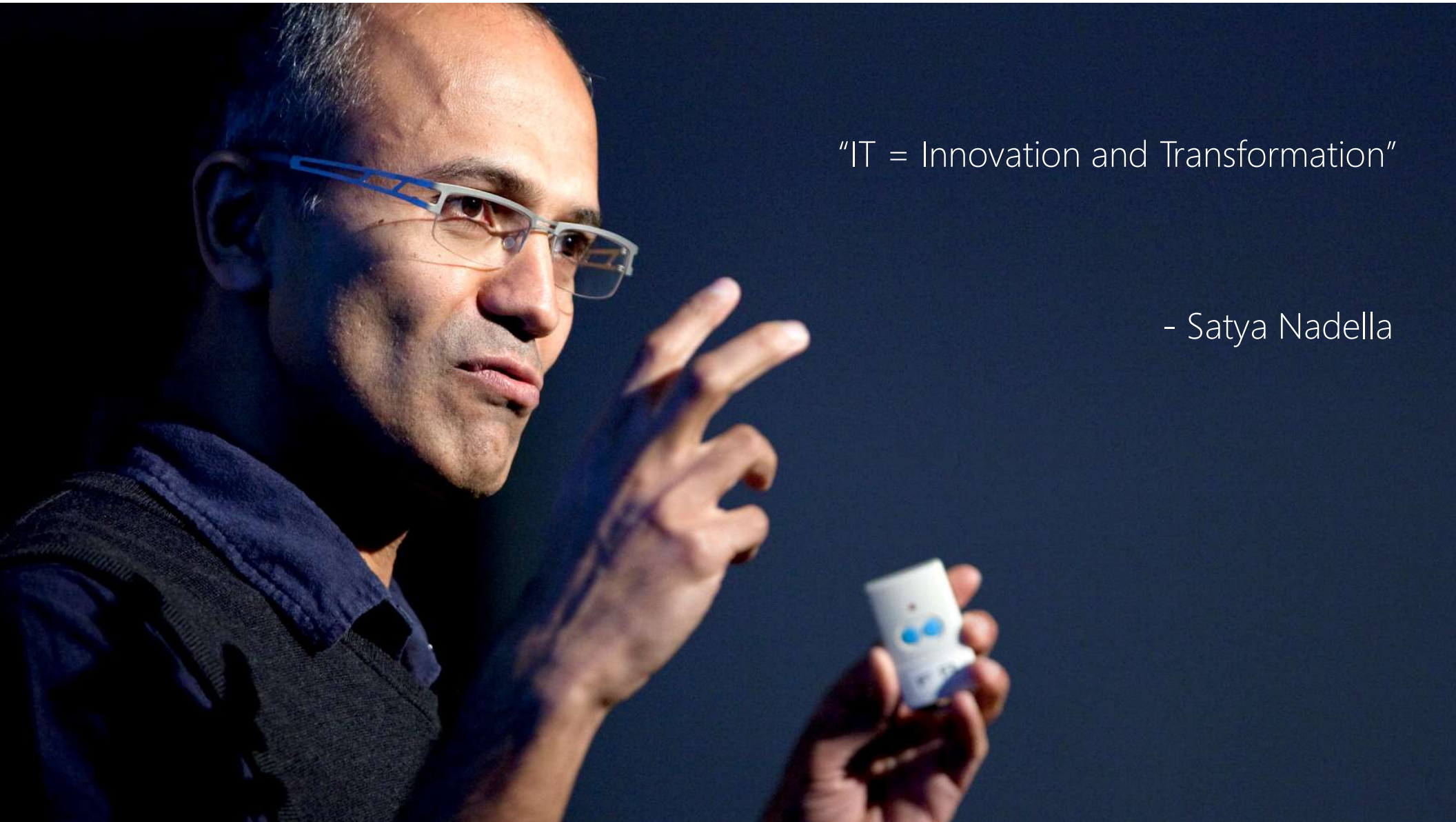
Cloud Types

Private Cloud
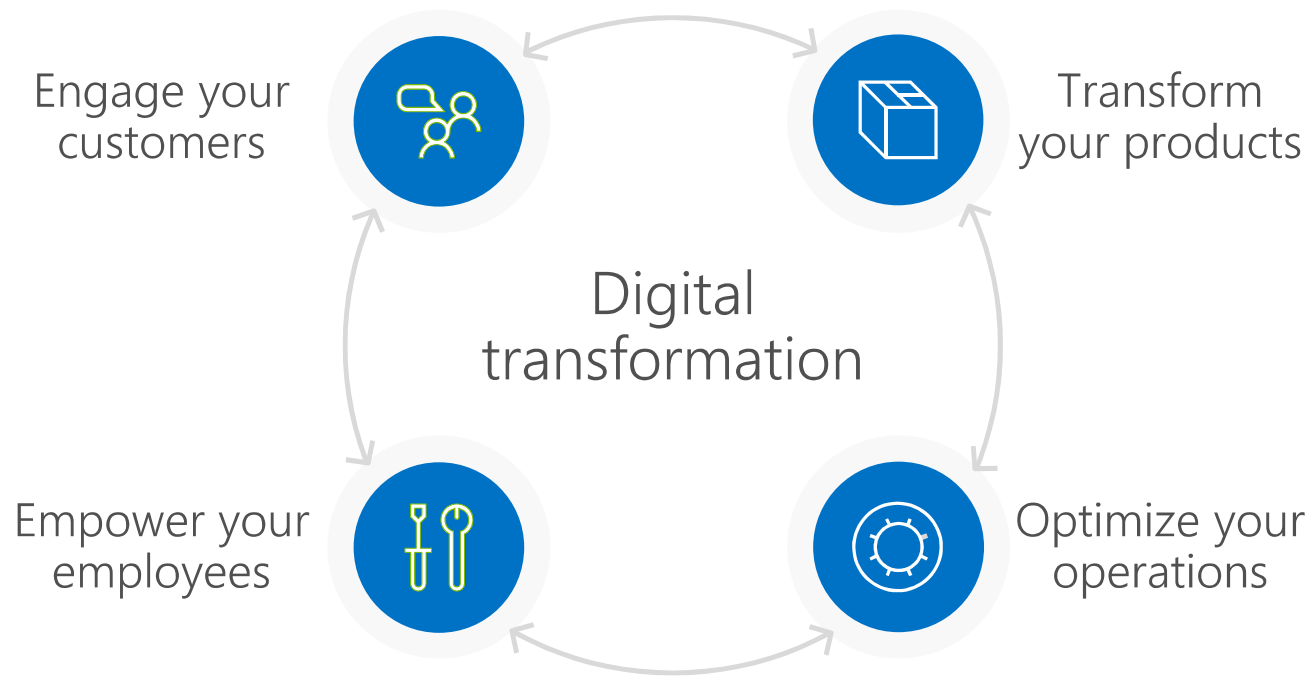
Public Cloud

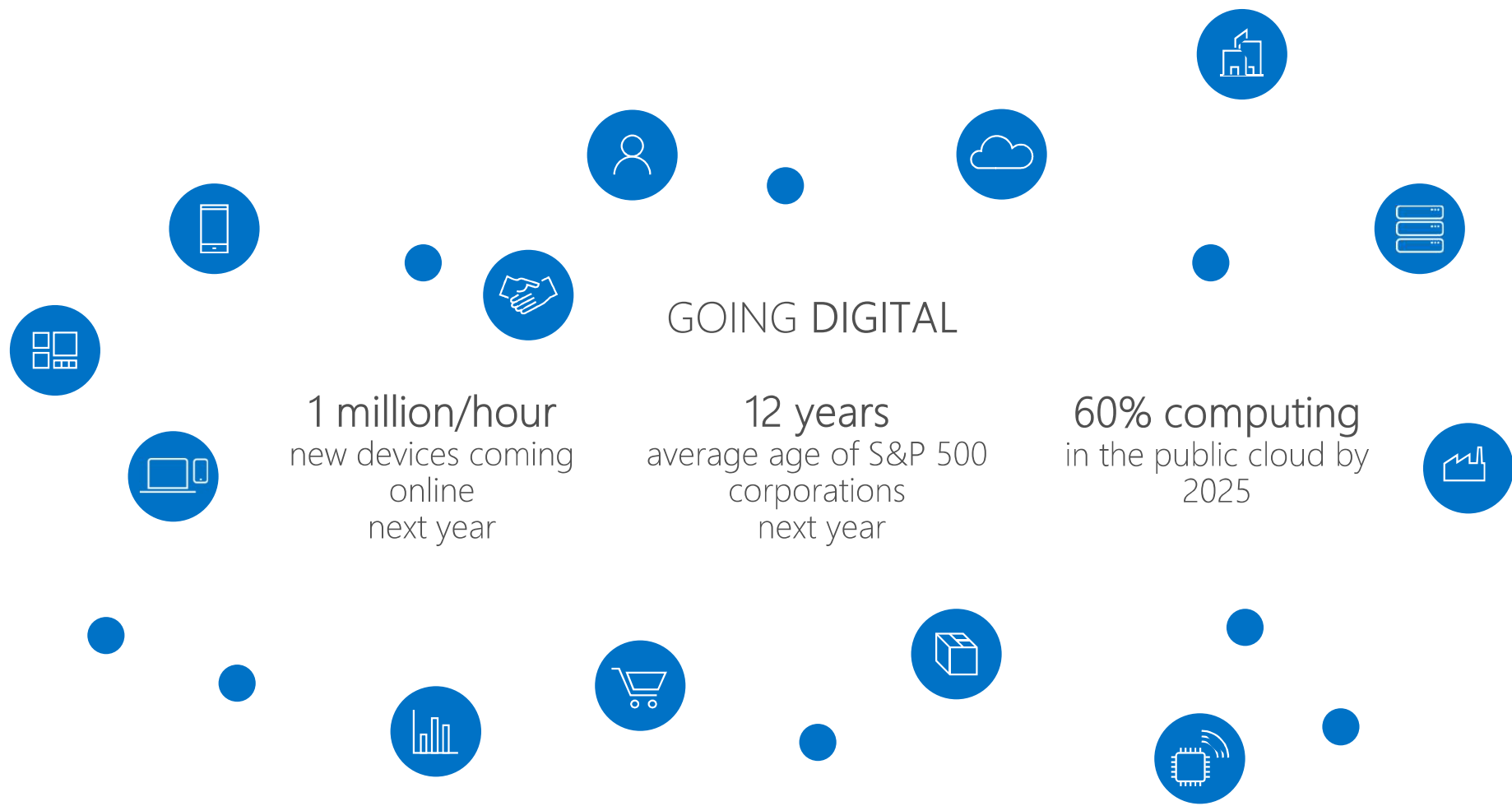Service Provider Cloud

Hybrid Cloud

The world today

"IT = Innovation and Transformation"

- Satya Nadella

Digital Transformation

Engage your customers

Transform your products

Digital transformation

Empower your employees

Optimize your operations

Going Digital

GOING DIGITAL

1 million/hour
new devices coming
online
next year

12 years
average age of S&P 500
corporations
next year

60% computing
in the public cloud by
2025

Cloud is at the center of Application Innovation

VALUE TO BUSINESS

EVOLUTION OF DATACENTER

EFFICIENCY

INNOVATION

APPLICATIONS AND SERVICES

INFRASTRUCTURE

How do you participate?

Cloud **Mobile** **Social** **Big data**

IT

How do you use technology innovation...

?

to architect business innovation?

Business

Engage your customers

Empower your employees

Transform your products

Optimize your operations
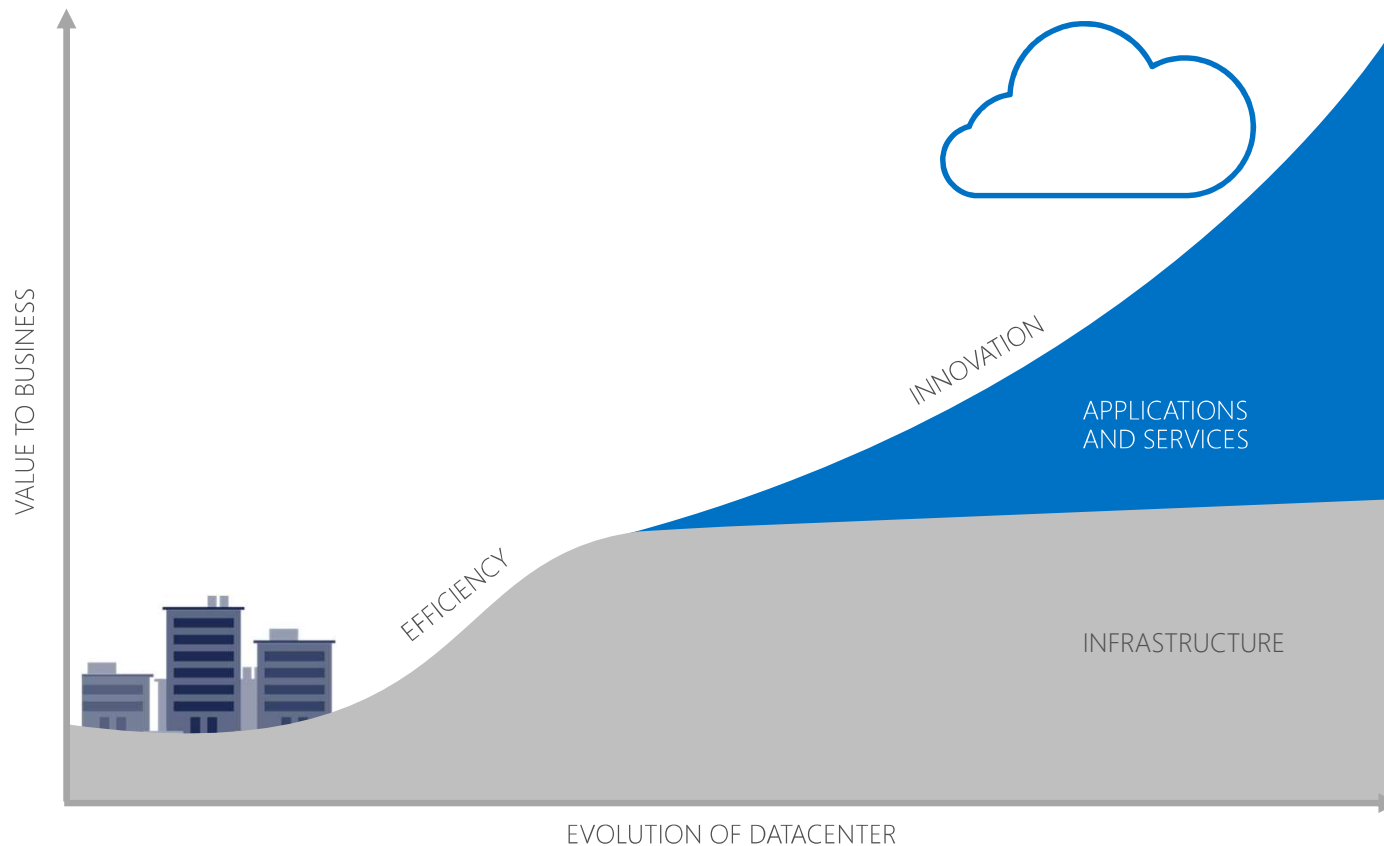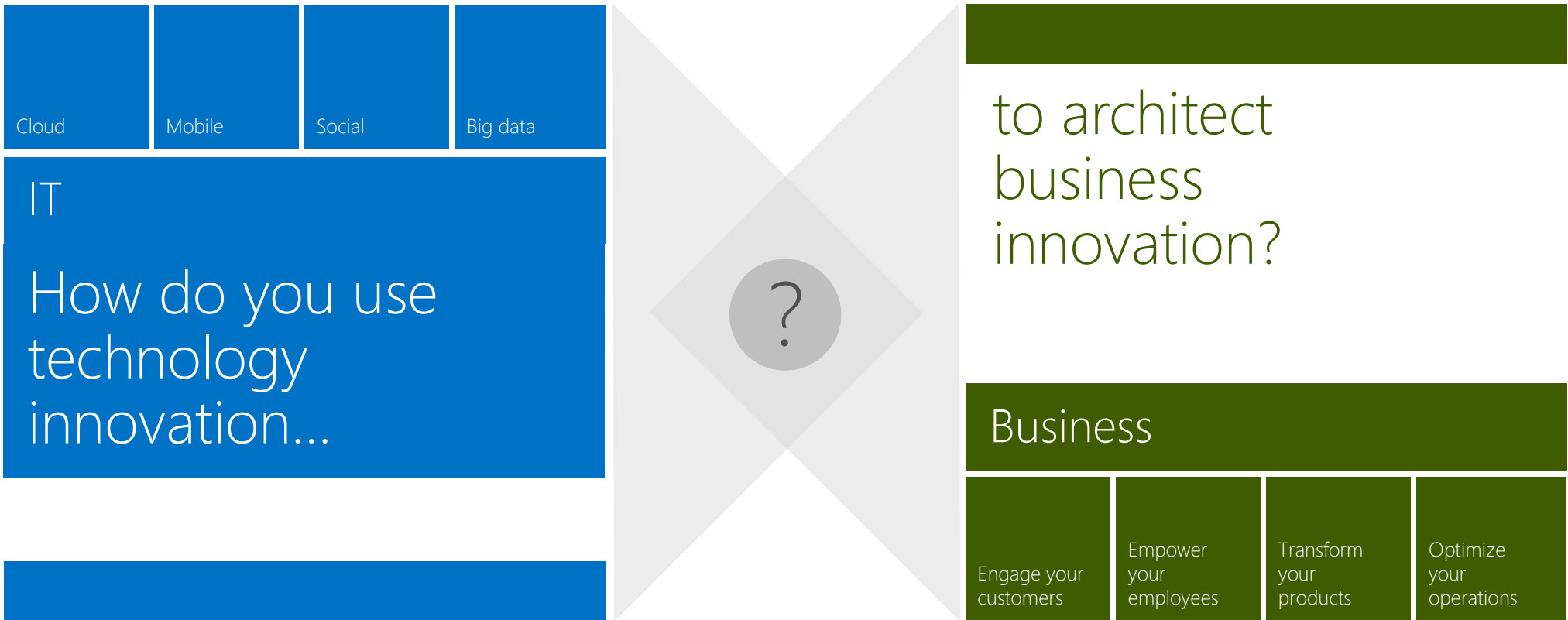
Define your vision

What are your cloud drivers?

- Software and hardware refresh
- Security threats
- Urgent capacity needs
- Compliance
- Mergers, acquisitions, divestitures
- Application innovation
- Datacenter contracts expiry
- Hardware or Software end of support

Cloud & IT Strategy

Public Cloud Platforms

PaaS
(Platform Services)

IaaS
(Infrastructure Services)

SaaS
(Software as
a Service)

Your Datacenter Infrastructure

?

Your Data Center

Platform Strategy

Public
Cloud
Platform

INNOVATION

Security & Management

Platform Services

Hybrid Operations

Cloud-inspired infrastructure
Powered by Windows Server, Hyper-V,
System Center, and Azure

Compute   Storage   Network

Your Datacenter Infrastructure

Continuous
Improvement Delivers
Rapid Innovation
Everywhere...

Security & Management

Platform Services

Hybrid Operations

Infrastructure Services

Compute   Storage   Network

Azure Global Datacenters

Microsoft Azure Stack
& Cloud Platform System

Microsoft Azure
Public, Global, Shared Datacenters

Decide on the ecosystem

54

Azure regions

90+

Compliance standards

Local or global regulations / certifications?

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

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

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

Us Gov	Moderate JAB P-ATO	High JAB P-ATO	DoD DISA SRG Level 2	DoD DISA SRG Level 4	DoD DISA SRG Level 5	SP 800-171	FIPS 140-2	Section 508 VPAT	ITAR	CJIS	IRS 1075

Creating a strategy

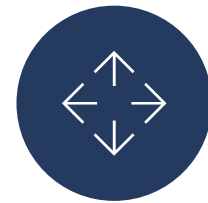# What is the most important to your business?

Innovation

- Focus on the applications
- Enable developers
- Deliver new and reliable services quickly
- More innovation at a faster pace

Economics

- Invest in competitive differentiators
- Reduce capital expenditure
- Take advantage of cloud scale and economics

Flexibility

- Choose where to deploy
- Decrease risk of vendor lock-in

A strategy should address ongoing challenges and opportunities

Foundation

- What are our architectural standards?
- What are our cloud policies?

Optimization

- How will we decide whether to replace, refactor, or leverage cloud for new and existing applications?
- How do we optimize our application design?
- When should we leverage SaaS vs. PaaS and IaaS?

Transformation

- Where are our opportunities to innovate and differentiate?
- What are the expected benefits and outcomes? How do we measure them?

Challenges for the organization

Developer	App owner	IT	CSO	CIO
Designing quickly, looking for more agility and support	Remotely using own cloud resources outside of IT to get the job done	Trying to maintain security, compliance, and meet Service Level Agreements (SLAs) while keeping the lights on	Managing security concerns across the organization	Needs to respond to business and CFO pressures by shepherding the next stage of transition

Assess existing applications / workloads

				Assessment Factors																			
				Performance				Architecture							Financial		Risk		Operations		Security & Compliance		
								UI	Application			Data		Infrastructure									
App ID	Application Name	Include	Capability Type	Elasticity	Scalability	Latency	Throughput	Complexity	Size	Complexity	Life Expectancy	Structured mag.	Complexity	Hardware Life Expectancy	Operating Cost	Business Value	Organizational	Technical	Business Continuity	Tools/Integration	Jurisdiction	Regulation	Encryption
1	App1	Yes		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
2	App2	Yes		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	App3	Yes		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

The foundation

Your strategy requires a cloud foundation

Infrastructure	Data	Code
"What your application runs on"	"What your application works with"	"What your application does"

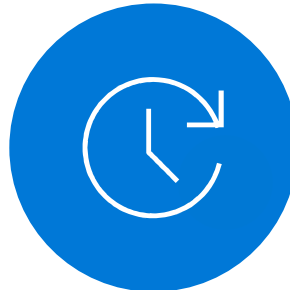## Migrate + Innovate

Security • Connectivity • Monitoring • Governance

Start with an identity foundation from the cloud
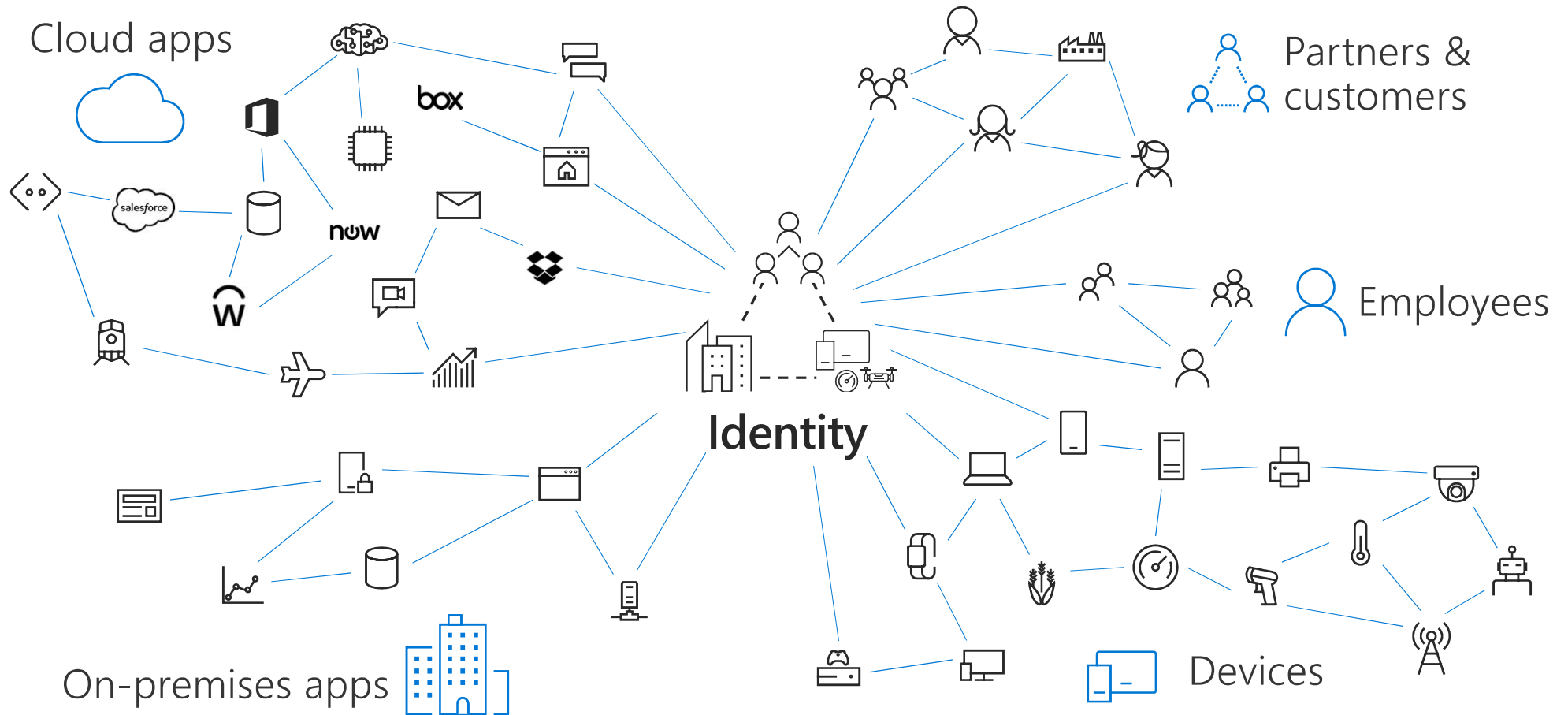
Seamless access to apps

Automated provisioning

Empower self-service

Identity is the new control plane

Cloud apps

Partners & customers

Employees

Identity

On-premises apps

Devices

Extend On-Premises Data & Apps to the cloud

Hybrid Use Cases

Application Availability

Bottomless Storage

Identity Management

Full hybrid applications
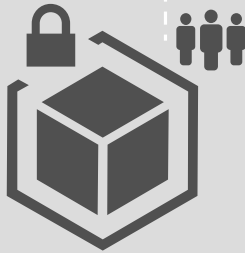
Seamless & secure across

INFRASTRUCTURE	Azure Backup
	Azure Site Recovery
DATA	Azure StorSimple
	SQL Server Stretch DB
USERS	Azure Active Directory
APPS	App Service Web | Mobile | Logic Apps | API Apps
MANAGEMENT	Operations Management + Security

Or... extend the cloud with on-premises Data & Apps

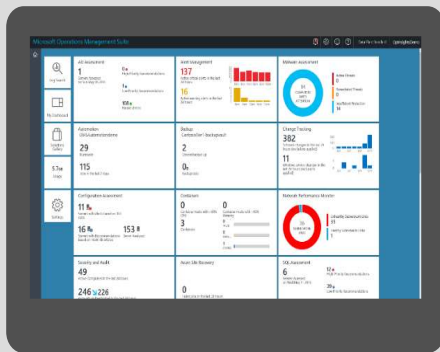|		
Performance	Latency	Data sovereignty
Security	Regulations	Disconnected
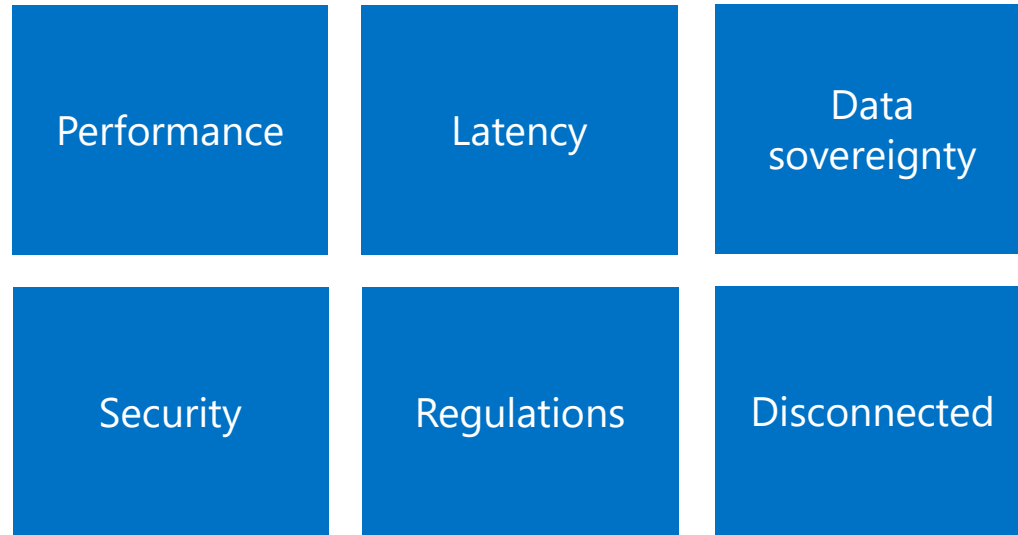
Monitor your environment proactively
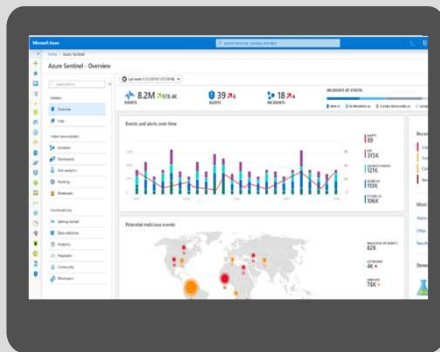
Azure Portal

Application Insights
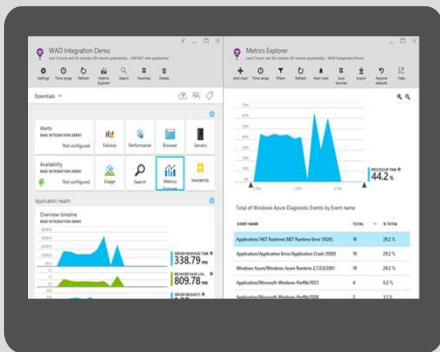
Log Analytics

Azure Sentinel

Governance for the cloud

The broadest governance portfolio of any cloud

| **Management Group**	**Policy**	**Blueprints**	**Resource Graph**	**Cost Management**
Define organizational hierarchy	Real-time enforcement, compliance assessment and remediation	Deploy and update cloud environments in a repeatable manner using composable artifacts	Query, explore & analyze cloud resources at scale	Monitor cloud spend and optimize resources
Hierarchy	Control	Environment	Visibility	Consumption

Organization / subscription modelling strategy
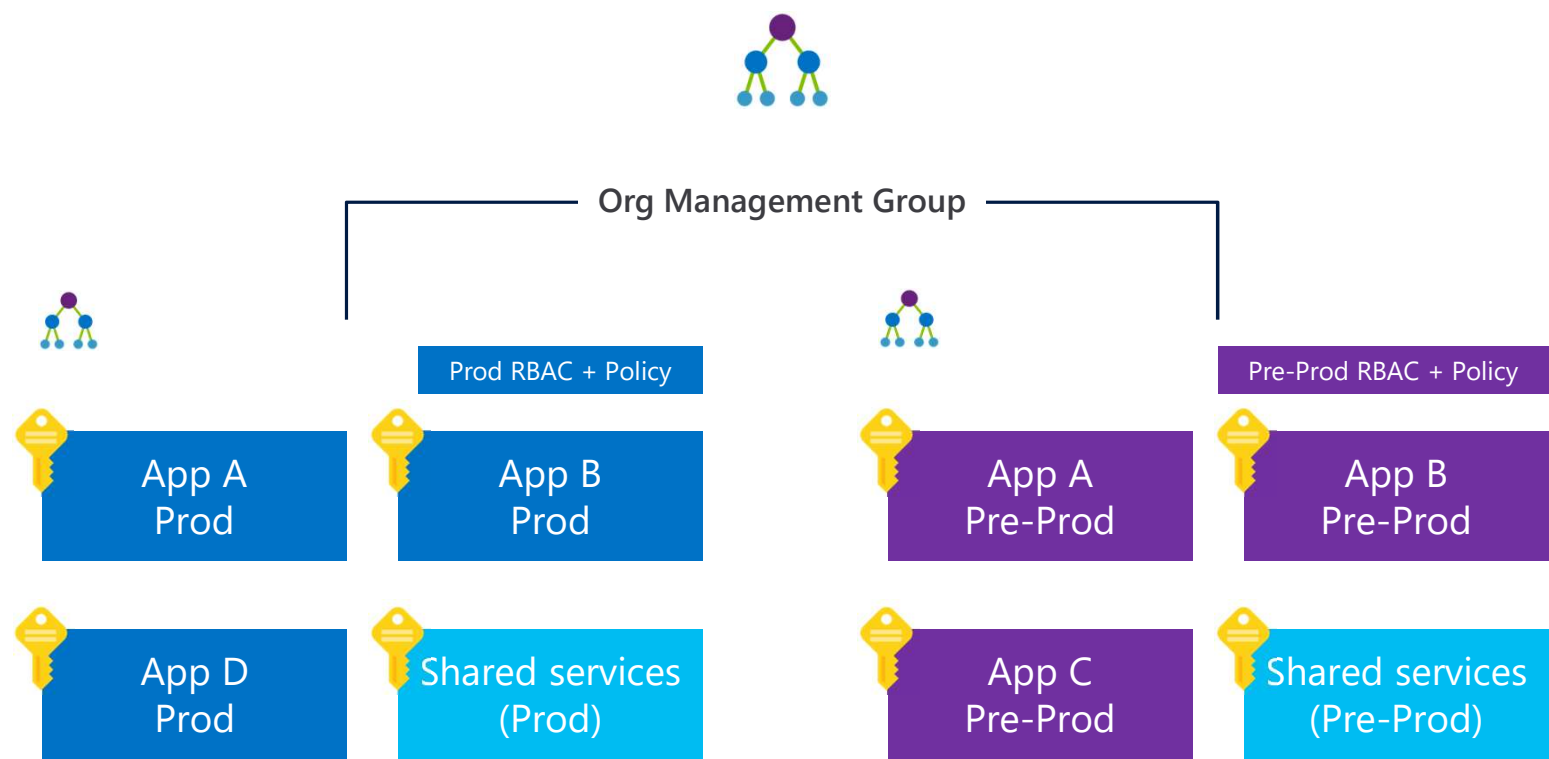
Migrate!

Lessons Learned

Culture

- Experiment
- Learn Fast, Fail Fast
- Learn by doing
- Belong to a community
- Build a strong architectural practice

Manage costs

- Accountability to cost drives the right behaviors
- When not in use, turn it off
- Manage Frozen/Cold assets

Simplify

- Rationalize your application portfolio, then evaluate the remainder – there is no one approach for all
- Maintain a continuous assessment process for applications
- Transform Ops to DevOps
- Right-size and continue to monitor

Microsoft

Thank You!

Building Your Cloud Strategy
Henk van de Crommert

Geef jouw feedback!

- Gebruik je mobiel
  Ga naar **bit.ly/ct19cloudstrat**

- Of start dit op met de QR code;