



Microsoft Azure.

Securing Your Data in a Cloud First World.

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Agenda:

- Moving data into *Azure*
- Cloud Adoption Framework
- Secure your data in *Azure*



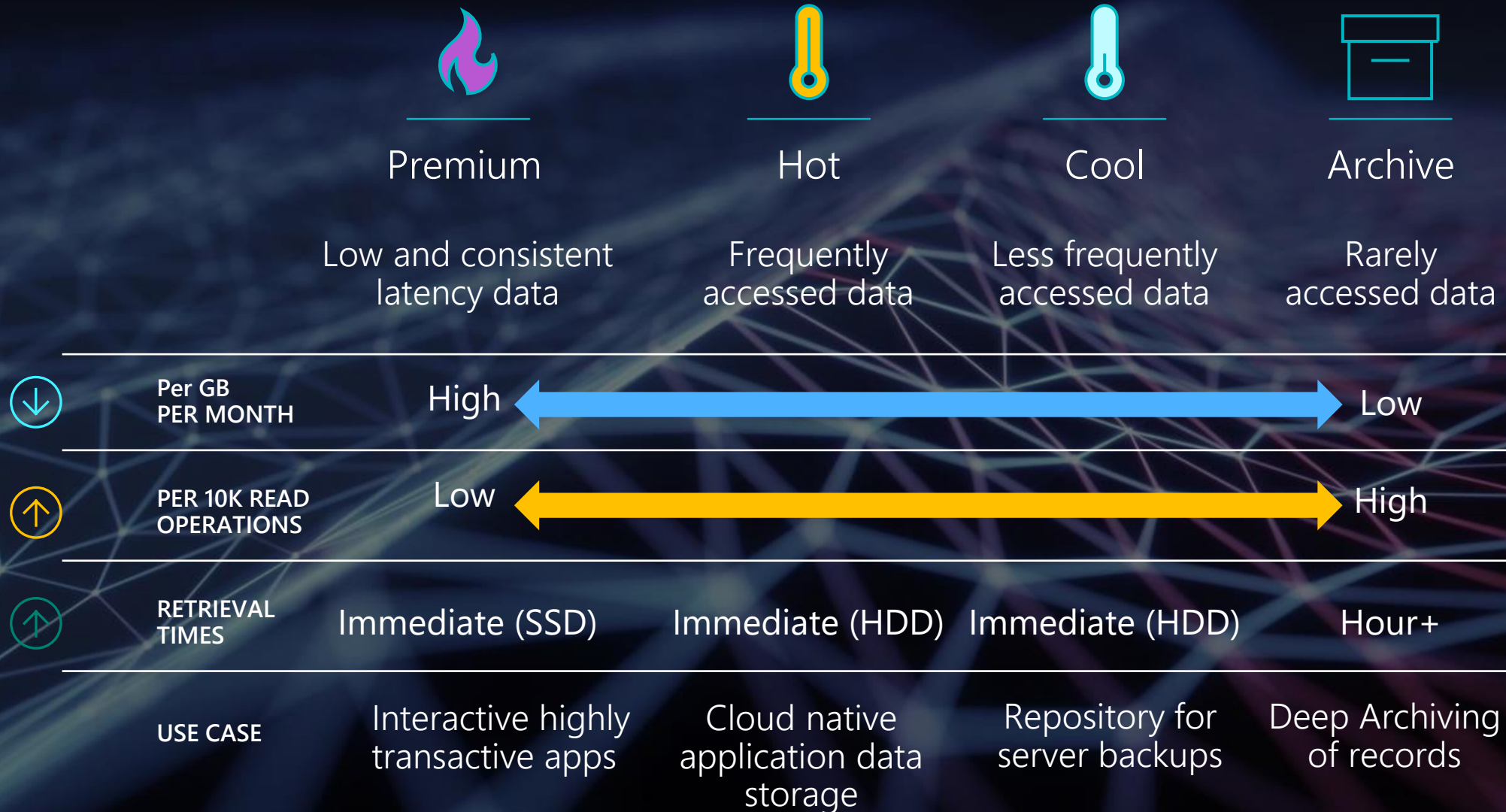
Microsoft
Azure

Move your data
into Azure

The Challenge – Moving On-Premise Data into Azure

- How do I get my on-premise data into Azure?
 - Migrate data over the wire into Azure storage using Zerto.
 - Send your data into use using your own drives via Azure Import/Export.
 - Once in Azure, select the correct storage tiers for your data

Access Tiers for every workload



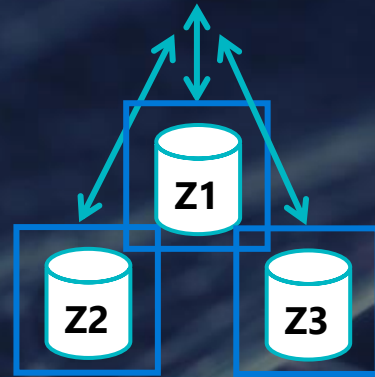
Azure Storage Durability Options

Single Region



LRS

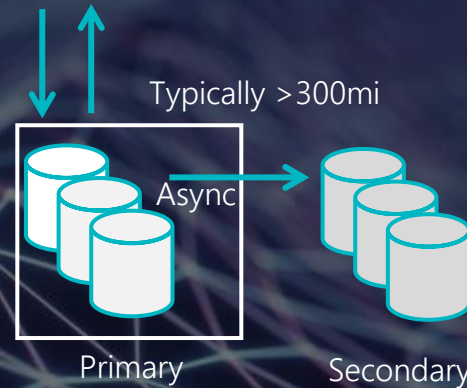
3 replicas, 1 region
Protect against disk, node, rack failures
Write is ack'd when all replicas are committed
Superior to dual-parity RAID



ZRS

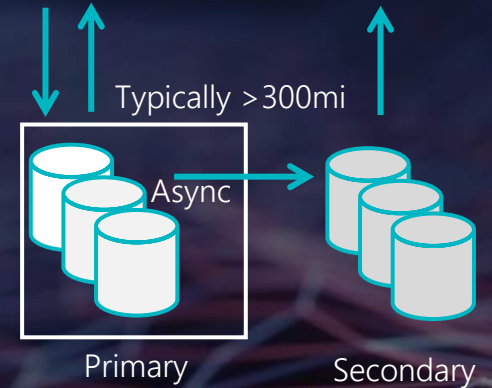
3 replicas, 3 zones, 1 region
Protect against disk, node, rack and **zone** failures
Synchronous writes to all 3 zones

Dual Region



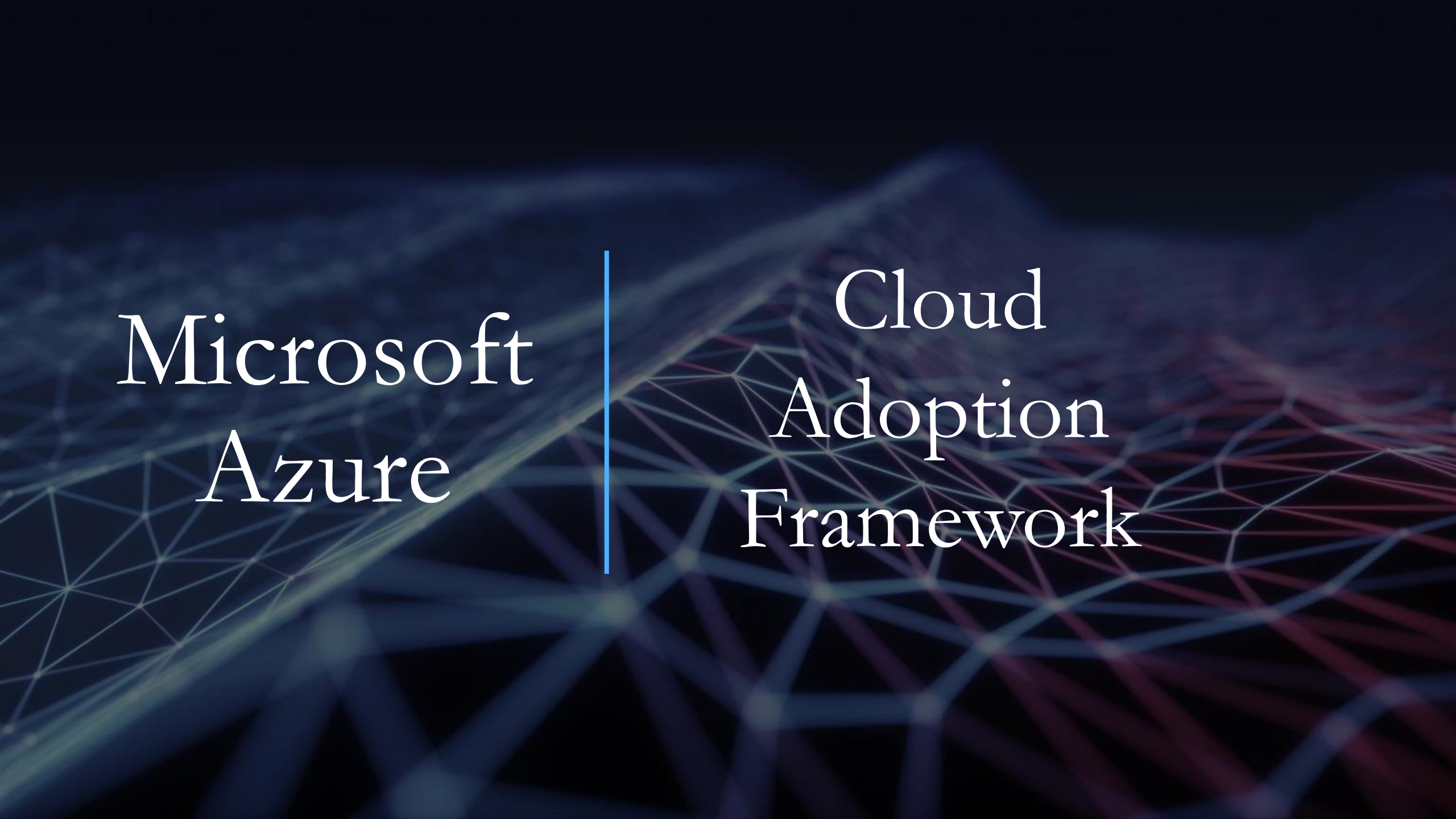
GRS

6 replicas, 2 regions (3/region)
Protects against major regional disasters
Asynchronous copy to secondary



RA-GRS

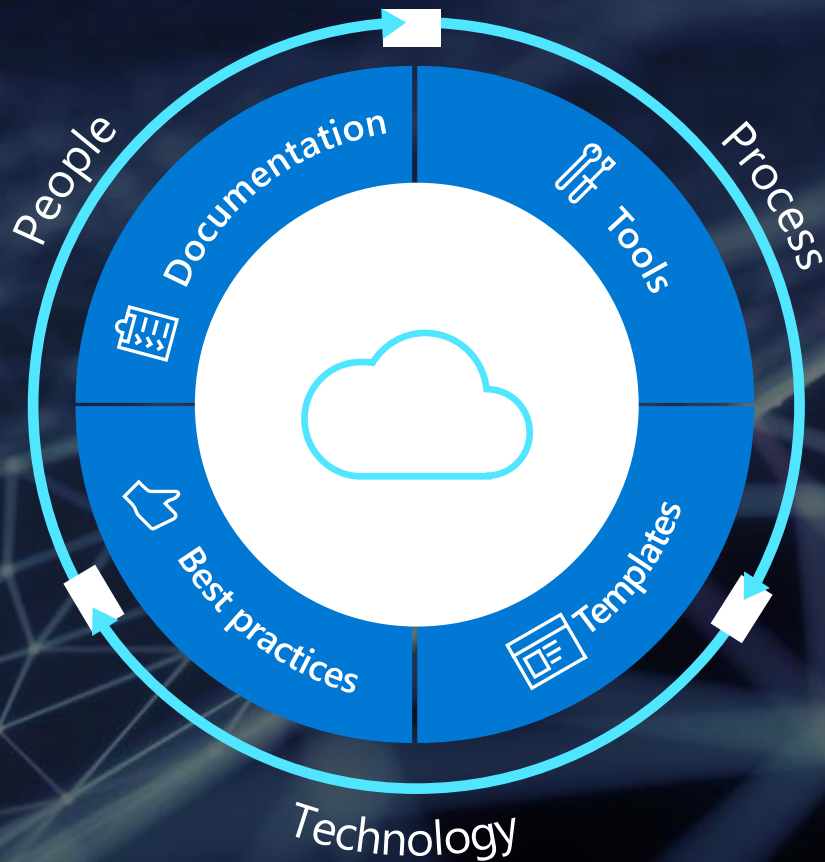
GRS + Read access to secondary
Separate secondary endpoint
RPO delay to secondary can be queried



Microsoft
Azure

Cloud
Adoption
Framework

Microsoft Cloud Adoption Framework for Azure – Plan



Align **business, people and technology strategy** to achieve business goals with **actionable, efficient, and comprehensive** guidance to deliver fast results with control and stability.

Azure Cloud Adoption Framework



Define strategy

Documenting the cloud strategy will help business stakeholders and technicians understand the benefits the organization is pursuing by adopting the cloud.

Define strategy

Plan

Ready

Adopt

Govern

Manage

Motivations

- Executive mandate
- DC Exit
- Merger and acquisitions
- Cost savings
- Optimization
- Agility
- Tech capabilities
- Market demands
- Geo expansion
- Migration
- Innovation

Business outcomes

- **Fiscal:** revenue, cost, profit
- **Agility:** time to market, provisioning,
- **Reach:** global access, sovereignty
- **Customer engagement:** cycle time, from request to release
- **Performance:** SLAs, Downtime, operations, reliability

Business justification

- **Business case:** the cloud is not always cheaper, mirroring is not cloud.
- **Financial model:** Capex/Opex, ROI, gain, cost avoidance/reduction
- **Cloud accounting:** cost center, procurement, profit center, revenue generating, chargeback

First project

- **Business criteria:** workload supported by a BDM
- **Technical criteria:** minimum dependencies and test path, no governance
- **Qualitative analysis:** Current Team analysis

Govern

Policy definition ensures consistency across adoption efforts. Alignment to governance/compliance requirements is key to maintain a well-managed cross-cloud environment.

Define strategy

Plan

Ready

Adopt

Govern

Manage

Business risk

- Document evolving business risk
- Document risk tolerance based on **data classification**, and **application criticality**

Policy & compliance

- Convert risk decisions into **policy statements**
- Establish cloud adoption boundaries

Processes

- Establish processes to **monitor violations**
- Adhere to corporate policies
- **Cloud Center of Excellence**

Cost management

- Evaluate and monitor cost
- Limit IT spend
- Scale based on business demand
- Create cost accountability

Security baseline

- Compliance with IT Security requirements
- Apply security baseline to all adoption efforts

Resource consistency

- Consistency in resource configuration
- Enforce on boarding, recovery and discoverability practices

Identity baseline

- Enforce identity and access baseline
- Apply role definitions and assignments

Deployment acceleration

- Centralize templates
- Drive consistency and standardization

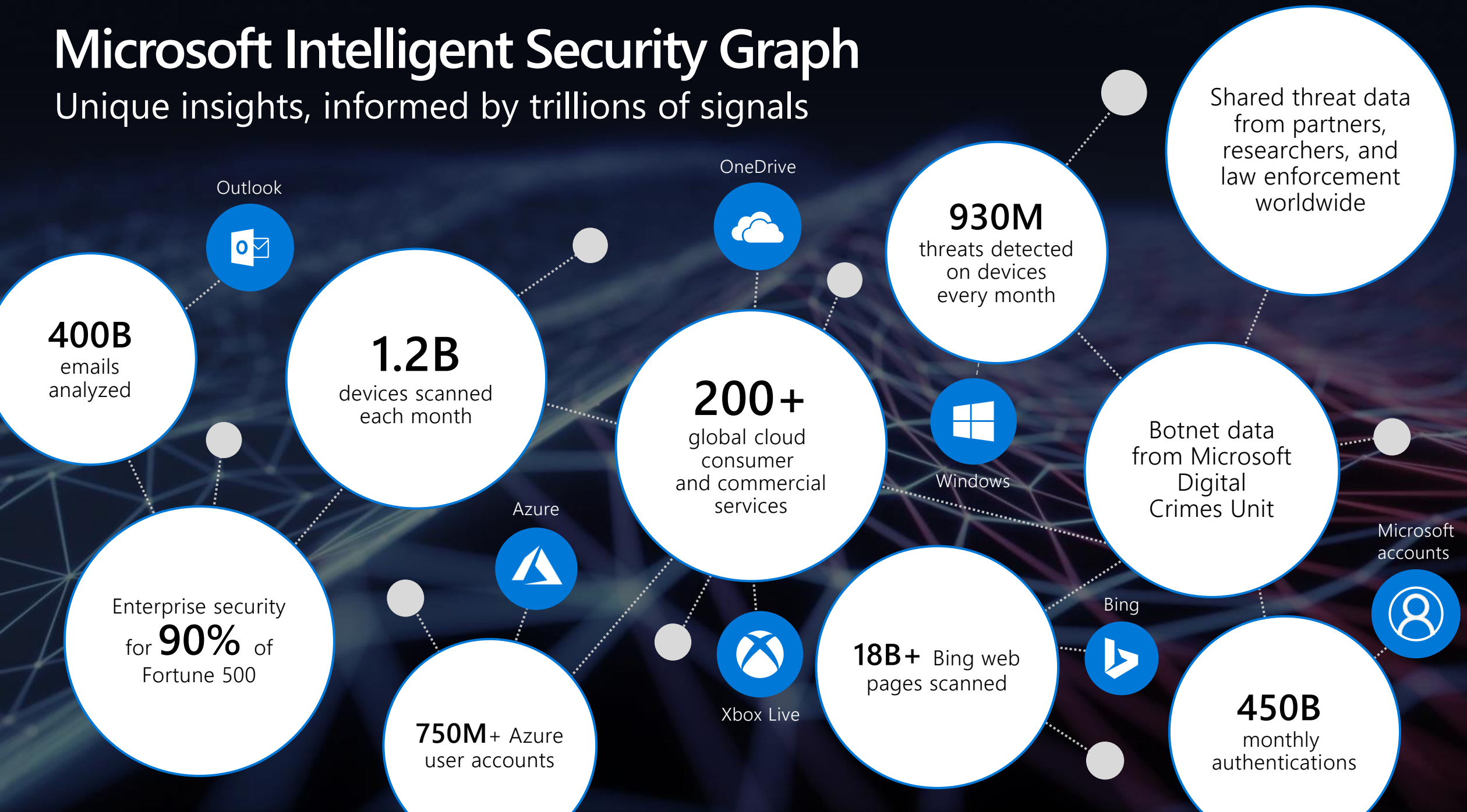


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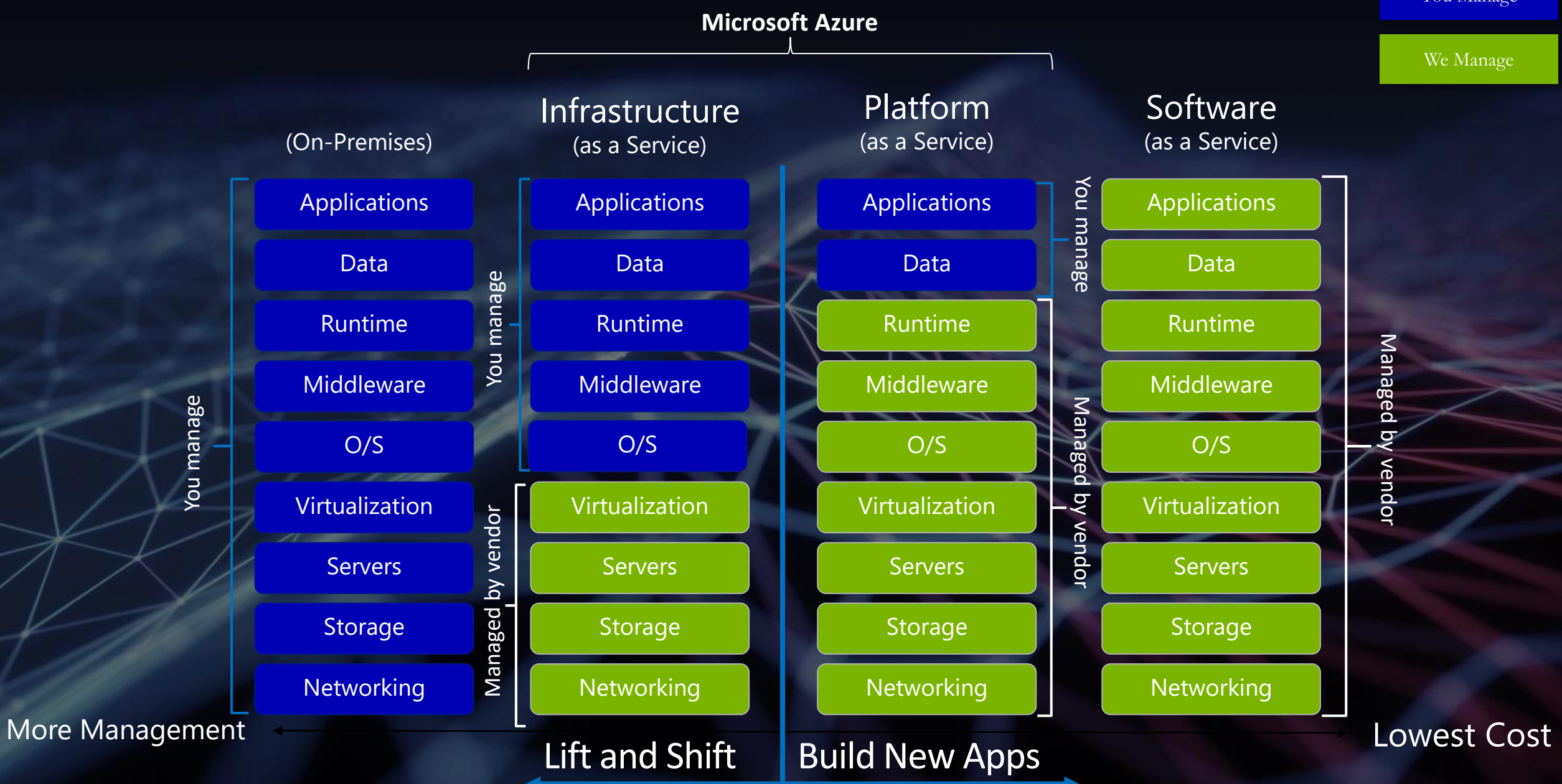
Secure your
data in Azure

Microsoft Intelligent Security Graph

Unique insights, informed by trillions of signals



Microsoft Azure : Shared Responsibility



The Most Trusted and Compliant Cloud

<https://www.microsoft.com/en-us/trustcenter/compliance/complianceofferings>

GLOBAL



ISO 27001



ISO 27018



ISO 27017



ISO 22301



ISO 9001



SOC 1
Type 2



SOC 2
Type 2



SOC 3



CSA STAR
Self-Assessment



CSA STAR
Certification



CSA STAR
Attestation

US GOV



Moderate
JAB P-ATO



High
JAB P-ATO



DoD DISA
SRG Level 2



DoD DISA
SRG Level 3



DoD DISA
SRG Level 4



SP 800-171



FIPS 140-2



Section 508
VPAT



ITAR



CJIS



IRS 1075

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

A Secure Foundation at a Global Scale

Each **physical datacenter** protected with world-class, multi-layered protection

Global cloud infrastructure with custom hardware and network protection

Over 100 datacenters across the planet

Secured with cutting-edge **operational security**

- Restricted access
- 24x7 monitoring
- Global security experts





Thank you

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