

Dell Technologies Cloud

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The Digital Future

A futuristic cityscape at night, featuring glowing skyscrapers, light trails from traffic, and digital data overlays. The scene is illuminated with vibrant blue and green lights, creating a sense of a high-tech, digital environment. The background shows a city street with a tall street lamp and a curved overpass. The overall atmosphere is one of a modern, digital city.

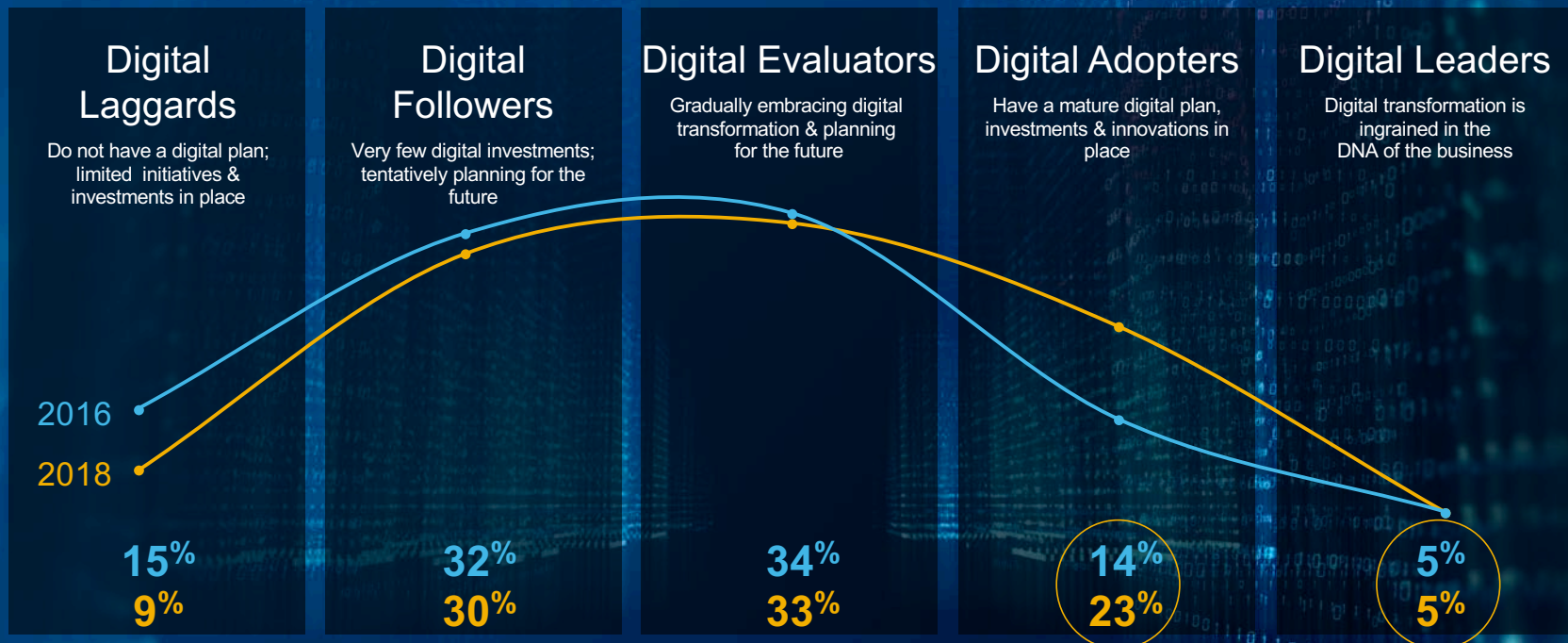
Every organization needs to be a digital organization, powered by data, running in a multi-cloud world.



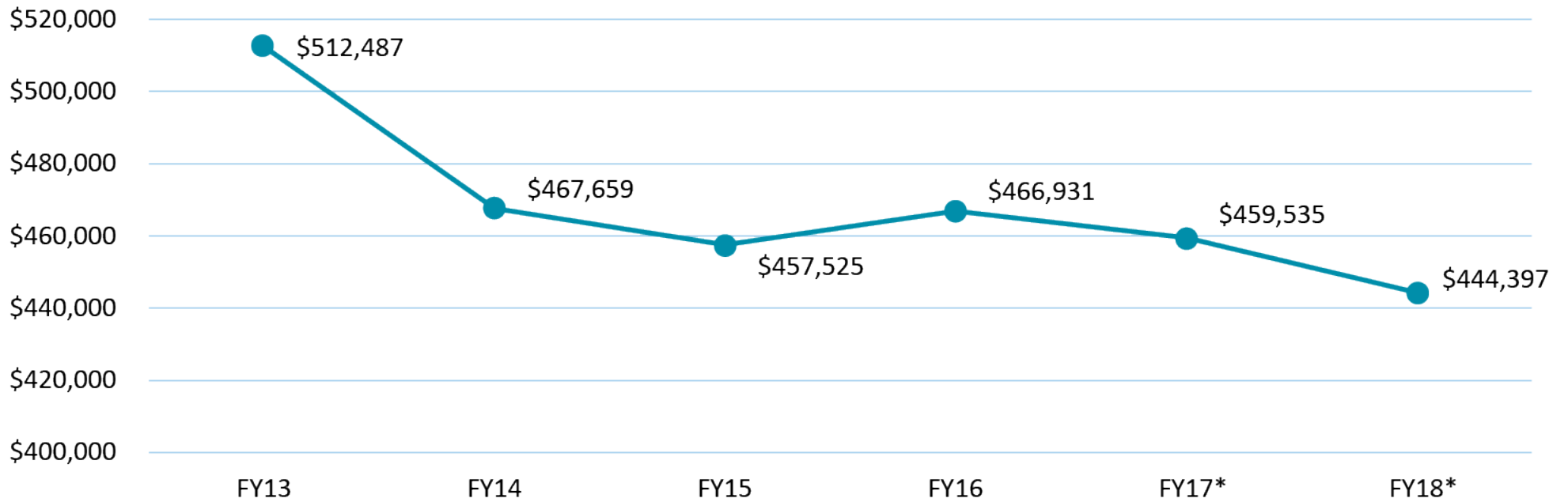
Over the next decade

The pace of transformation will only increase.

How ready is your organization?



MINNESOTA IT SERVICES



MINNESOTA IT SERVICES



Secure
Services



Connectivity



End User
Support



Infrastructure
as a Service (IaaS)



Software as a
Service (SaaS)



Platform as a
Service (PaaS)

State & Local CIO Priorities

NASCIO State & PTI Local Priorities



Security & Risk Management



Cloud Services



Legacy Modernization



Disaster Recovery & Business
Continuity



Agile & Incremental Software
Delivery



Business Intelligence & Data
Analytics

DELLTechnologies

DELL Technologies



IT
Transformation



Workforce
Transformation



Security
Transformation



Application
Transformation

People

Process

Technologies



DELL EMC

Pivotal

RSA[®]

Secureworks[®]

virtustream

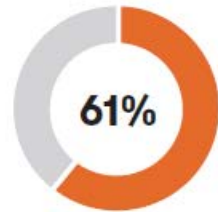
vmware[®]



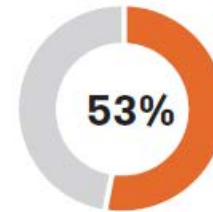
The Responsive State CIO: Connecting to the Customer

2019 State CIO Survey

What is your state's approach to cloud governance?



Agencies must obtain approval prior to using cloud services, but can contract externally as needed/desired



Usage of cloud applications and services is governed centrally for all agencies



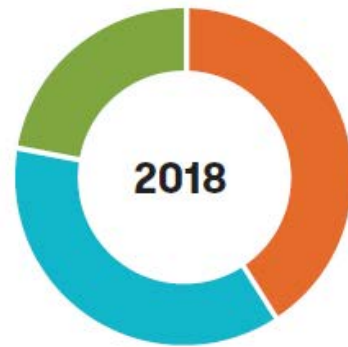
Cloud hosting services are provided by a centralized service organization



Agencies are free to contract for cloud applications and services as desired

Other | **10%**

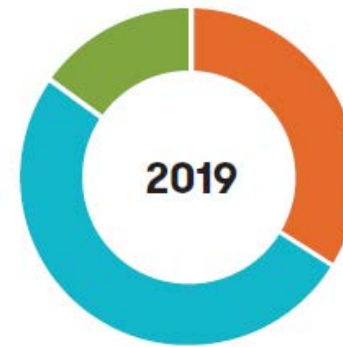
Does your organization have a strategy to migrate legacy applications to the cloud?



■ **41%** | Yes, cloud migration strategy in place

■ **37%** | No, but cloud migration strategy in development

■ **22%** | No cloud migration strategy planned



■ **34%** | Yes, cloud migration strategy in place

■ **51%** | No, but cloud migration strategy in development

■ **15%** | No cloud migration strategy planned

What categories of services are your top priorities for migration to the cloud? (select up to five)

Item	Overall Rank
Email and collaboration	1
Disaster recovery	2
Office productivity software (e.g. word processing)	3
Enterprise Resource Planning (e.g., finance, budget, procurement)	4
Program/business applications (e.g. licensing, unemployment insurance, workers compensation etc.)	5
Citizen relationship management	6
HR/payroll/time and attendance	7
Storage	8
Identity Management	9

Security services/monitoring	10
Open data	11
Business intelligence	12
Digital archives	13
Geographic Information Systems	14
Project and Portfolio Management	15
Learning Management Systems	16
Other (please list):	17
Electronic records	18
Imaging	19

NASCIO Top 10:
State CIO Priorities
for 2019

	FLEXIBLE CONSUMPTION	WORKSTATIONS & DESKTOPS & GATEWAY	LAPTOPS & TABLETS	END POINT SECURITY	SYSTEMS MANAGEMENT TOOLS	DISK & FLASH STORAGE	SERVERS & HPC	NETWORKS & FABRICS	DATA PROTECTION	CONVERGED & HYPER CONVERGED INFRASTRUCTURE	CLOUD & CLOUD SERVICES	VIRTUALIZE & AUTOMATE	DATA & CYBER SECURITY	PHYSICAL SECURITY	EMERGING TECHNOLOGIES	DATA ANALYTICS & INTEGRATION	AGILE APPLICATIONS & PaaS
1 Cloud Solutions	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2 Security Enhancement Tools	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3 Legacy Application Modernization	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓		✓	✓	✓
4 Business Intelligence & Analytics	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5 Identity & Access Management	✓	✓	✓	✓					✓		✓	✓	✓	✓	✓		✓
6 Collaboration Technologies	✓	✓	✓					✓	✓	✓			✓		✓	✓	✓
7 Data Management and Analytics	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8 Enterprise Resource Planning	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
9 Disaster Recovery	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
10 Networking	✓	✓	✓		✓			✓				✓	✓		✓		

*See also Education and Professional Services Resources on the reverse.

Source: As compiled by the National Association of State CIO's (NASCIO) — State CIO top 10 Priorities 2019 — www.nascio.org — Released November, 2018



DELL EMC

Pivotal

RSA

Secureworks

virtustream

vmware



Technology is changing every industry

THE ECONOMY IS GOING DIGITAL



Global GDP

60%

by 2022¹

COMPETITIVE ADVANTAGES



Data



Software

Success means delivering digital services, powered by data.
Running in a multi-cloud world.

¹ IDC FutureScape: Worldwide IT Industry 2019 Predictions Oct 2018 -- Doc #US44403818

Changing needs of workloads are driving cloud strategies

Cloud strategies must accommodate the needs of different workloads

Traditional Workloads

Cloud Native Workloads



Modernize

Optimize workloads using modern infrastructure



Utilize Hybrid Infrastructure

Infrastructure as a service across private and/or public cloud



Refactor

Modified workload leveraging cloud services



Develop for Cloud

New cloud native workload leveraging CaaS and PaaS



Replace

Move to SaaS version of packaged application

Cloud is not a destination, it's an operating model



Laws of physics



Laws of economics



Laws of the land

92%

Have cloud strategies inclusive of on premises data centers ¹

83%

Value consistency of infrastructure from data center to cloud ²

The Future isn't Public or Private. It's Both.

¹ ESG Research Hybrid Cloud Tipping Point, June, 2018
² VMware Cloud Market Study, January 2018

Your multi-cloud journey

Hybrid Cloud



Native Public Cloud



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vmware

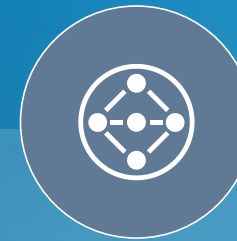
Hybrid cloud provides a simpler path



Private Cloud



Public Cloud



Edge

Consistent Infrastructure | Consistent Operations

Cloud sprawl creates complexity

Management and Operational Silos

Complex Workload Migrations

New Skills & Processes

Uncertain Security Postures



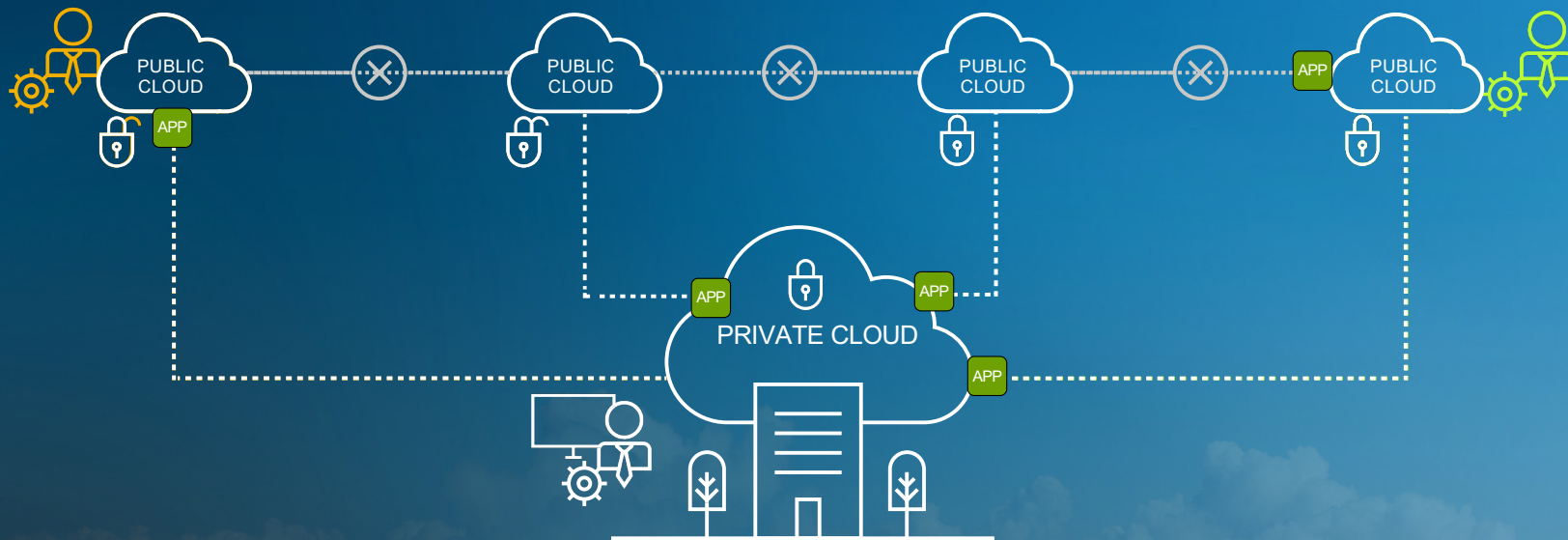
Consistent hybrid cloud can address these issues

Consistent management and operations

Simplified Workload Migrations

Leverage existing skills and processes

Consistent Security Policies



Introducing the Dell Technologies Cloud

Two leaders



ONE cloud experience

One cloud experience

Private Cloud



One cloud experience with consistency and choice

Dell Technologies Cloud



+



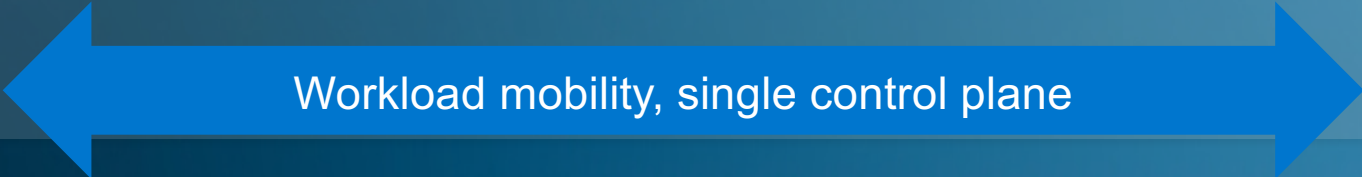
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DELLEMC
Infrastructure

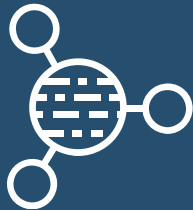
vmware
Cloud Foundation

Dell Technologies
Partner Clouds



Ways to consume Dell Technologies Cloud

TURNKEY



HCI

PLATFORMS

FLEXIBILITY



Best-of-breed storage,
compute, and networking

VALIDATED DESIGNS

FULLY MANAGED



VMware Cloud on Dell
EMC

DATA CENTER-AS-A-SERVICE



PARTNER CLOUDS

Available Now: Dell Technologies Cloud Platforms

Jointly engineered to be the simplest and fastest hybrid cloud to deploy



Full stack integration

ONE

Available single-vendor support



Automated lifecycle management



Frictionless path to public cloud



Network flexibility

Ways to consume Dell Technologies Cloud

TURNKEY



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EMC

DATA CENTER-AS-A-SERVICE



PARTNER CLOUDS

Dell Technologies Cloud Validated Designs

Bring more workloads to the cloud with best-of-breed Dell EMC storage, compute, and networking



Bring cloud capabilities to demanding workloads



Superior performance with independent storage and compute scaling



Faster time-to-value with pre-tested infrastructure and deployment guidance



vmware
Cloud Foundation

DELL EMC
Infrastructure

Storage



Server

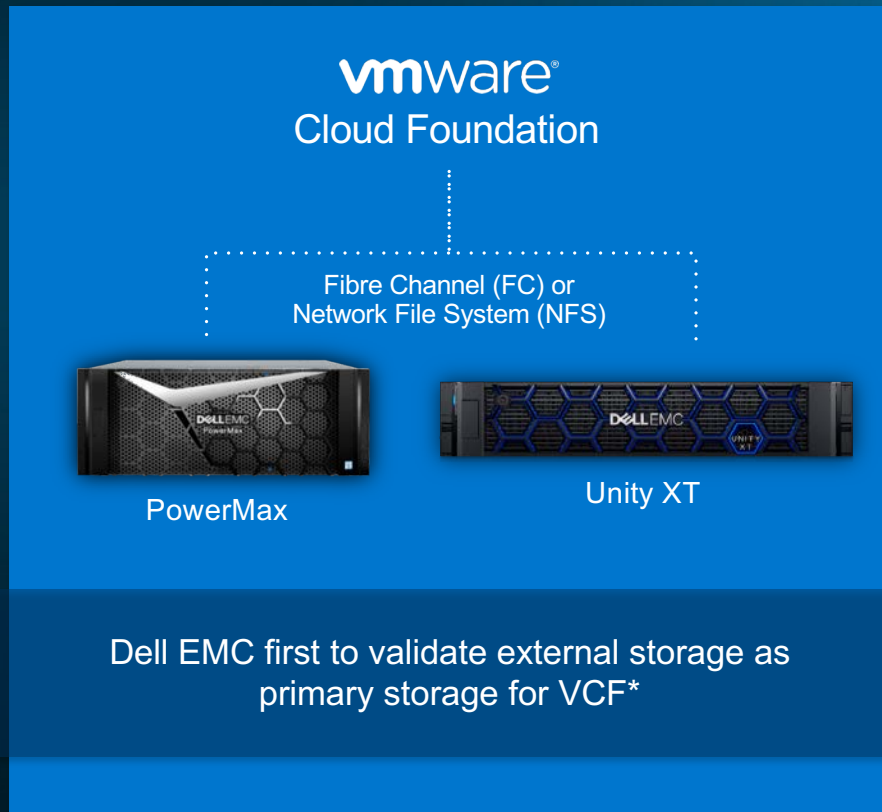


Networking



Enterprise storage meets cloud operating model

Deliver cloud capabilities for workloads with demanding storage needs



Deployment Flexibility

Ideal for storage-intensive applications with demanding throughput and capacity needs



Investment Protection

Bring existing storage investments to your hybrid cloud environments



Deployment Automation

Simplify and automate storage management with VMware's deployment tools

* Fibre Channel primary storage currently in Tech Preview, NFS available today

Ways to consume Dell Technologies Cloud

TURNKEY



HCI

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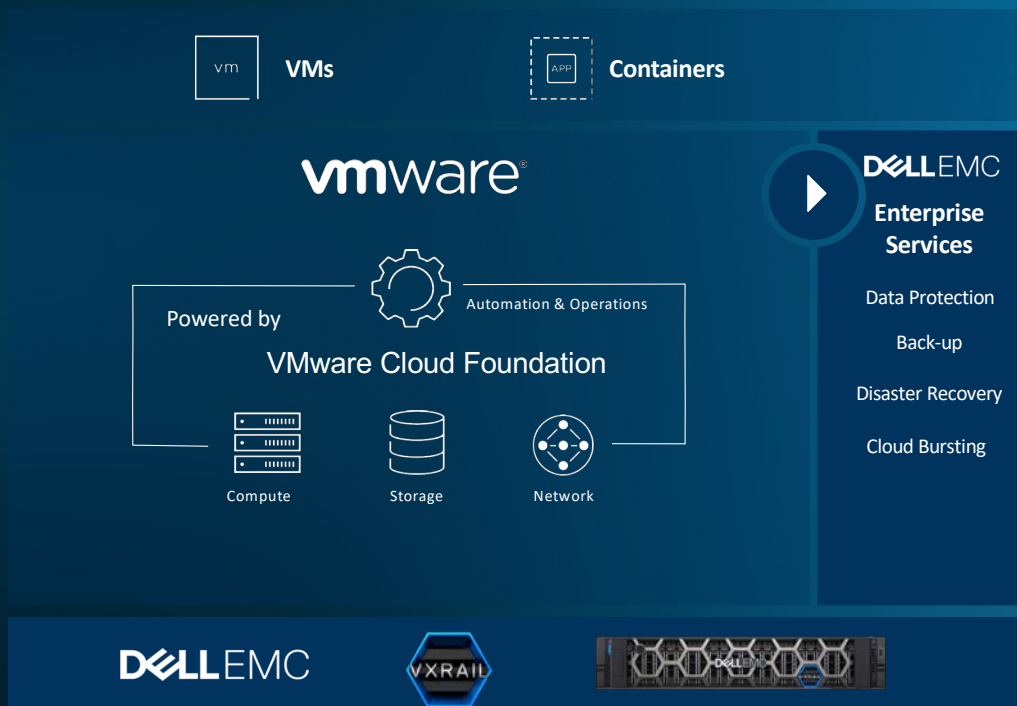
DATA CENTER-AS-A-SERVICE



PARTNER CLOUDS

Dell Technologies Cloud Data Center-as-a-Service

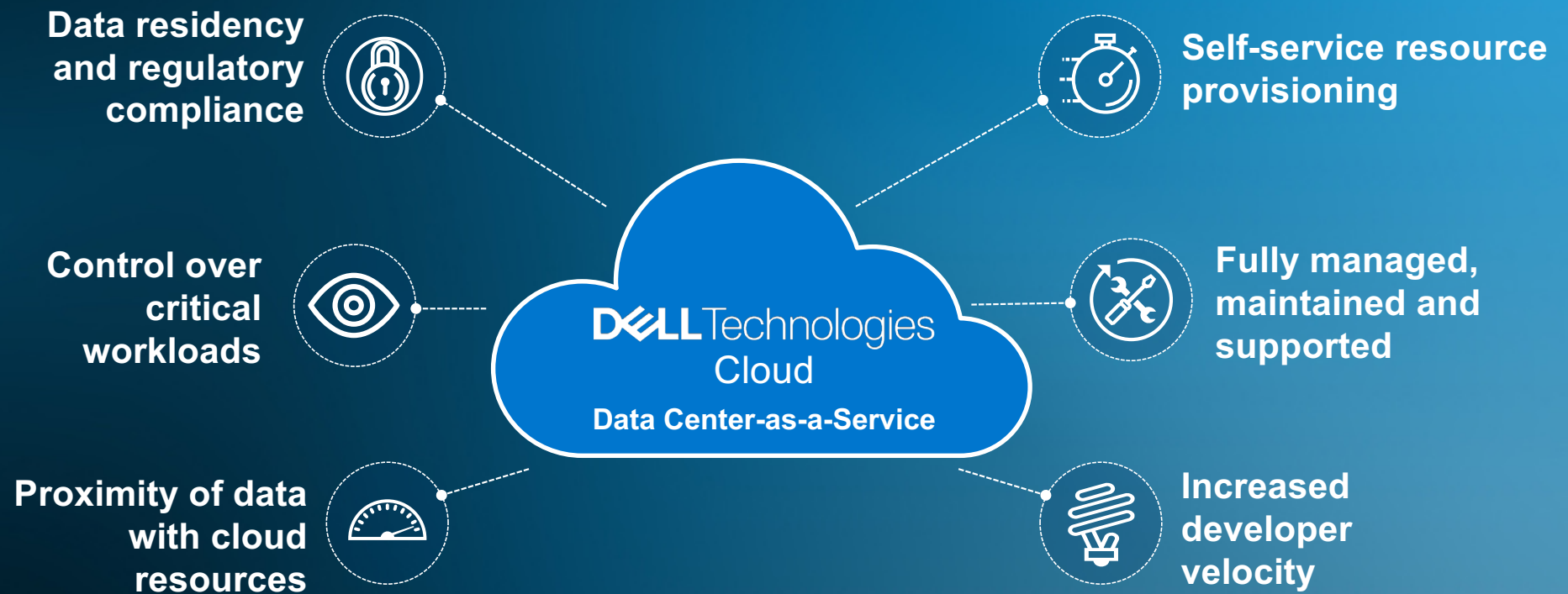
Introducing VMware Cloud on Dell EMC



- Deliver cloud model to core Data Center and edge locations
- Fully managed by Dell Technologies and VMware
- Hybrid cloud control plane to provision and monitor resources
- Monthly subscription model

Dell Technologies Cloud Data Center-as-a-Service

Bringing public cloud simplicity to your Data Centers



VMware Cloud on Dell EMC: How it works

Dell Technologies installs cloud infrastructure in your core and edge data centers



The system—hardware + software—is fully managed by Dell Technologies



The system will Self-configure and register with VMware Cloud servers



Customers provision resources through the VMware hybrid cloud control plane



Ways to consume Dell Technologies Cloud

TURNKEY



HCI

PLATFORMS

FLEXIBILITY



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FULLY MANAGED



VMware Cloud on Dell
EMC

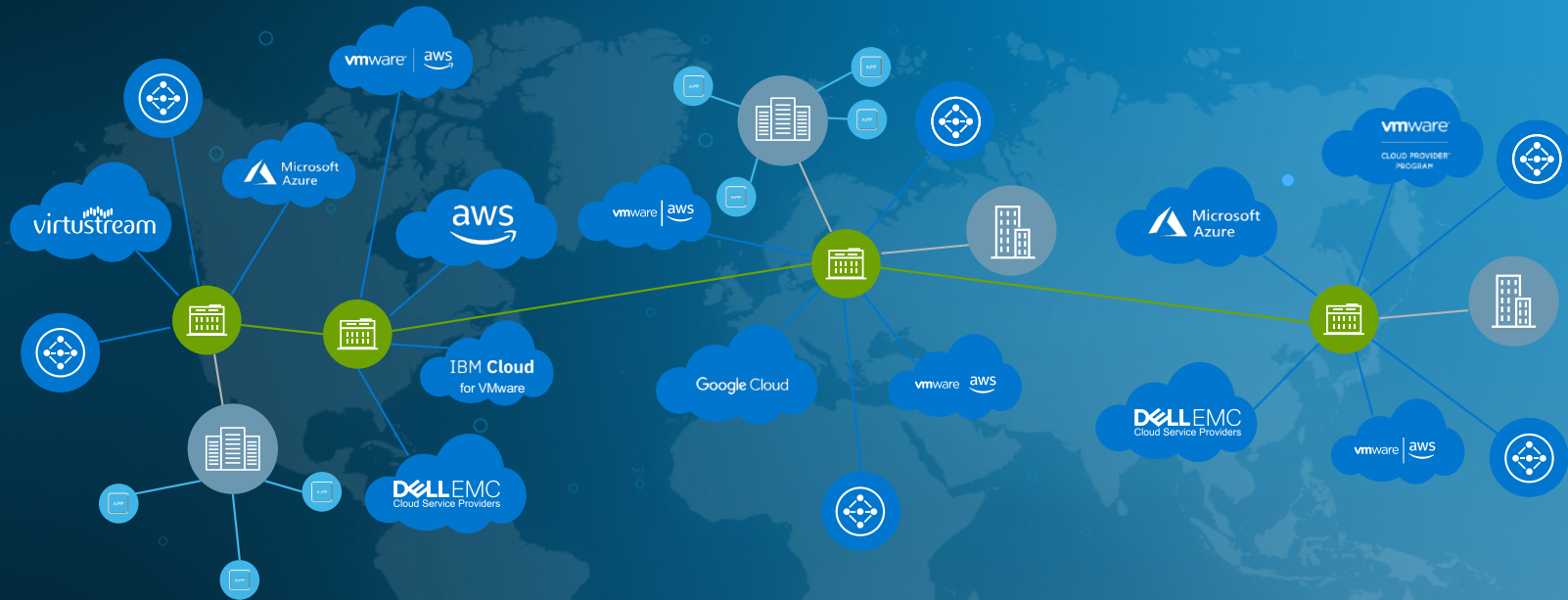
DATA CENTER-AS-A-SERVICE



PARTNER CLOUDS

Dell Technologies Cloud Partners

World's broadest cloud provider ecosystem



Google Cloud

4200+
CLOUD PARTNERS

Dell Technologies

New Flexible Consumption Options for Dell Technologies Cloud

Bring cloud economics on-premises



Elastic Capacity



**Simplified Infrastructure
Management**



**Predictable
Cost Model**

Why Dell Technologies Cloud?



Speed

Accelerate time-to-market by an average of **15%**¹



Cost

Up to **47%** lower TCO than native public cloud²



Choice

Scale up to **40%** faster¹



Trusted Operations

Reduce risk by an average of **13%**¹

¹ IDC - The Power of Hybrid Cloud Strategy: Addressing the Breadth of Enterprise Workloads Requirements May 2019 - - Doc #US45037719

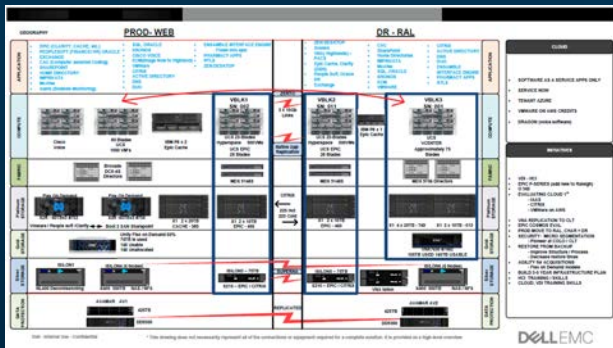
² IDC Study IDC White Paper, sponsored by Dell, 'Benefits of the Consistent Hybrid Cloud: A Total Cost of Ownership (TCO) Analysis of the Dell Technologies Cloud', April 2019
Cost benefits of the Consistent Hybrid Cloud: A Cost Benefits Analysis of the Dell Technologies Cloud

Dell Technologies can help with your cloud journey

DISCOVER



Your business priorities and existing environment



Tech Profile

ANALYZE



Existing infrastructure and application cloud suitability

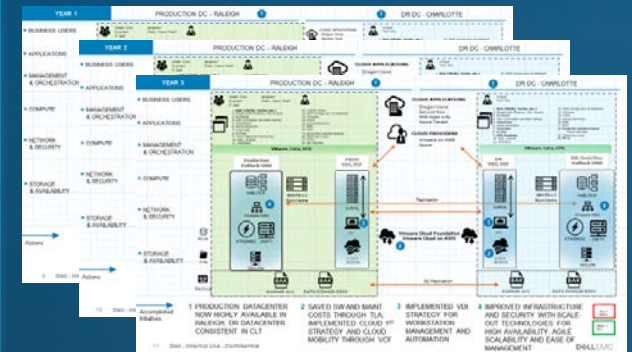


Tech Assessment

DESIGN



Build out cloud strategy and define infrastructure



IT Atlas

One cloud experience

Private Cloud



The logo for Dell Technologies, featuring the word "DELL" in a stylized font where the 'E' is composed of three horizontal bars, followed by the word "Technologies" in a sans-serif font.