



## Dell EMC Storage Portfolio

# Modern Storage All Flash, Hybrid, File and Object

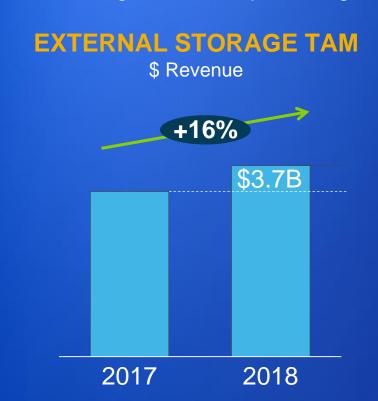


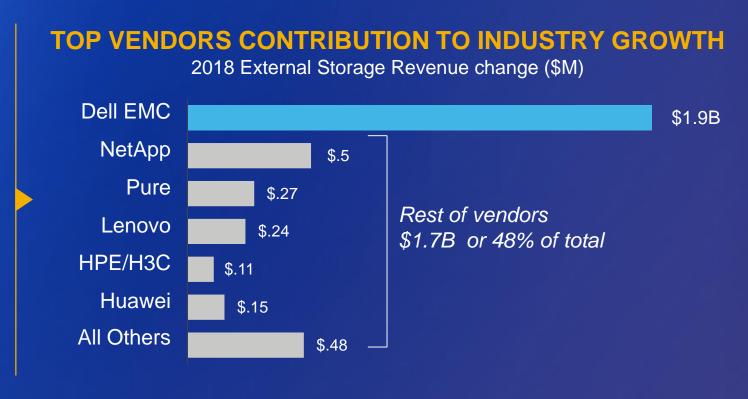


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## Dell EMC Storage Momentum

- For 2018 the storage industry grew 16% Y/Y to \$3.7B
- Dell EMC grew \$1.9B representing 52% of growth, 3.8X more than NetApp and 7X greater than Pure





Four straight quarters of share gain



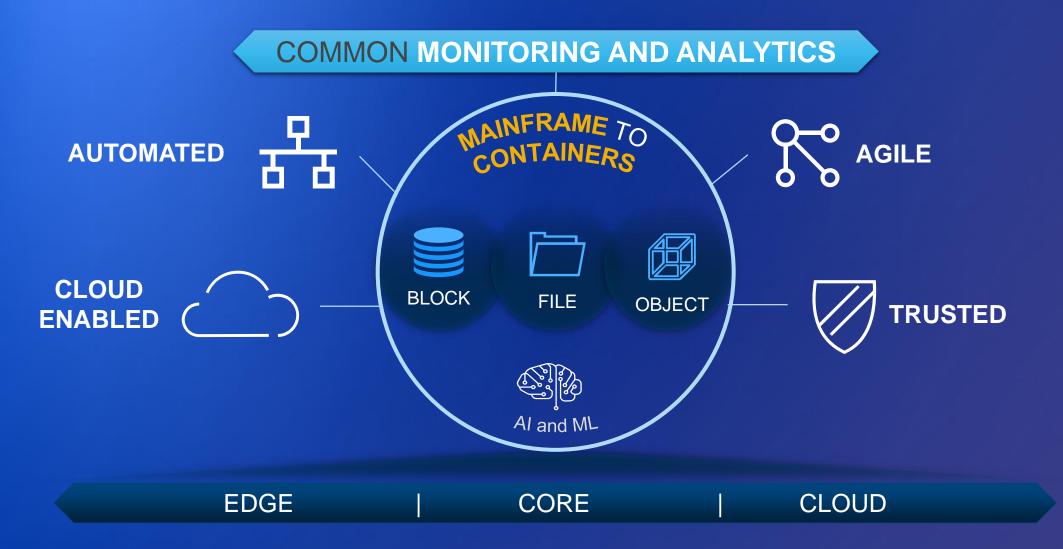
Share A

Revenue A



## Dell EMC Storage Vision

A Simple Interconnected Portfolio Architected for All Data at Any Scale



## What is Data Capital?

#### VALUE DRIVERS



**Human Capital** 



**Intellectual Property** 



**Operations** 



Infrastructure



DATA IS RAPIDLY BECOMING ORGANIZATIONS' MOST VALUABLE ASSET

## Unlock Data Capital with Dell EMC Storage

The right place | the right time | the right SLA









## **PowerVault**



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#### **Entry Level Affordable**

- Low cost starting configurations
- All-inclusive enterprise-class SW
- Flexibly deploy as DAS and SAN



FUTURE-PROOF

## Simple, Easy to Use

- New web-based (HTML5) management GUI
- Installs and configures in 15 minutes
- Integrated sizing and configuration

## **Fast and Powerful**

- 4 core Intel<sup>™</sup> processors per controller
- Up to 320K1 IOPs performance
- Performance @ scale via 12G
   SAS backend
- Ideal for video surveillance, HPC, ROBO and database applications

## Dell EMC Unity XT



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### **More Performance**

#### **Better Efficiency**

### **Multi-Cloud Options**

- NVMe-ready
- Up to 2X more performance, and 67% more tan competition

Up to **5:1** data reduction

Up to 28% SQL Server more transactions/sec

52%



more supported desktops without a performance impact



Proven operational simplicity

- Dell Technologies Cloud Platform
- Cloud Data Services
- Cloud Connected Systems
- Cloud Data Insights



## PowerMax



- Lead development partner to bring Optane Dual Port to enterprise storage market
- More than 2X bandwidth at 350 GB/sec
- Up to 50% better response times
- Machine learning automates data placement



#### Intel® Optane™ Dual Port Automation and Containers

- VMware vRealize Orchestrator Plug-in
- Ansible playbooks
- Container Storage Interface (CSI) Plug-in











Disaster Recovery and multi-

cloud Access

**Cloud Storage Services** 



## Isilon



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## Simplicity at Scale

- Scale up to 252 nodes
- 58 PB, 945 GB/s throughput per cluster
- 139 PB effective capacity with OneFS 8.2.1
- 75% more scalable





## **Workload Agility**

- New Node Performance of a hybrid with capacity of an archive node
- 800 TB, 6.4 GB/s in a 4U chassis
- Security enhancements

#### **Multi-Cloud**

- Dell EMC Cloud Storage Services
- Dell EMC Isilon CloudPools
- Dell EMC ClarityNow







## Dell Technologies Cloud-Enabled Infrastructure

Power your multi-cloud journey with modern storage



## Cloud Connected Systems

Connect on premises to the cloud

Storage



Dell EMC Unity Cloud
Tiering Appliance
Isilon CloudPools

On Prem

- Seamless tiering of data from on premises to cloud
- Leverage cloud as cost-effective storage tier
- Ideal for archiving and long-term retention

## **Cloud Data Insights**

Proactively Monitor and manage infrastructure and data



- Proactive, cloud-based monitoring and analytics from anywhere
- Report, predict, and prevent problems
- Broad data center visibility
- Unified view of unstructured data from on-premises to the cloud

## FUTURE-PROOF LOYALTY PROGRAM

Peace of mind No hidden costs or fees

Investment protection

Lowering the risk

of your investment

A path forward You will be ready for the future













UP TO 55:1 DATA PROTECTION DEDUPLICATION



FLEXIBLE CONSUMPTION MODELS



CLOUD MOBILITY, PROTECTION, SERVICES AND CONTROL



NEVER-WORRY DATA MIGRATION

**GUARANTEE** 

## Summary



**Strong Growth** 



Innovation and Investment



Multi-Cloud / Data Capital Strategy



## SC Series



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## **Performance**

- 2X maximum IOPS for every SC array model!
- Increased max capacity
- 100/25Gb iSCSI support



**SCOS 7.3** 

Largest performance boost in SC history!

## **Simplicity**

- Unisphere Web UI (HTML 5)
- CloudIQ support
- Data-in-place upgrades
- SCv2000 gets federation

## **Efficiency**

- Distributed Sparing
- HA enhancements
- Still low \$/GB and \$/IOPS for all-flash and hybrid

New product accolades





## ECS



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## **Streamline Object Storage**

- Scale-out architecture
- Software-defined and turnkey appliance options
- Shared, global namespace
- Enterprise security and compliance features

## **Gain New** Insights

- Native Grafana data visualization
- Capacity monitoring and custom alerting capabilities
- Event notifications
- Metadata search

## **Build Next-Gen Solutions**

- Multi-protocol (S3, NFS, HDFS, etc.) support
- Self-service APIs
- Broad ISV support
- Multi-site geo-replication built-in

#### **ENTERPRISE WORKLOAD SUPPORT**

**Tiered Archive** Cloud Backup





Video/Audio



**Cloud Gateway** 



**Cloud Native Apps** 

(web/mobile)







**Analytics** 

#### BY THE NUMBERS

59.5%

**Lower TCO than** public cloud<sup>1</sup>

8.6<sub>PB</sub>

In a single rack



## **XtremIO**

All-Flash design, built from the ground up



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#### Storage efficient architecture

Leading efficiency with deduplication & compression



#### Consistent high performance

Inline, all the time data services with no performance impact



Agile copy management
Rich application integration, no compromise copy services

**ALL-FLASH, SCALE-OUT ARRAY** WITH HIGH LEVELS OF EFFICIENCY, OPTIMIZED FOR **COPY DATA MANAGEMENT** 

>1 MIOPs @ 0.22<sub>ms</sub>

160 GB/s Maximum logical

cloning bandwidth

25%

Better data reduction

**2X** # of copies