



# **Toyota and eMoney Advisor choose Pure Storage to optimize their enterprise applications**

**SUHAS NAYAK**– DIRECTOR, PRODUCT AND SOLUTIONS MARKETING

# PURE STORAGE

A BETTER CUSTOMER EXPERIENCE THROUGH INNOVATION



**SIMPLE AND AUTOMATED**



**MOST EFFICIENT ARCHITECTURE**



**MISSION-CRITICAL RELIABILITY + SUPPORT**



**CUSTOMER FOCUSED CONSUMPTION MODEL**



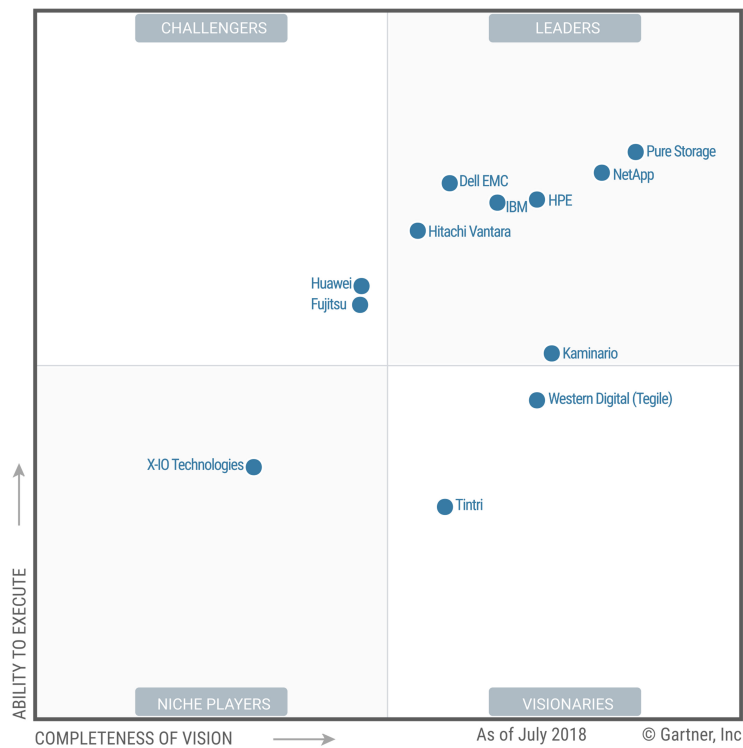
# INNOVATION = BUSINESS VALUE

LOWER TCO		LOWER RISK	DRIVE GROWTH								
<p><b>DATA REDUCTION</b></p> <p><b>80%</b></p> <p>5:1 DATA REDUCTION WITHOUT THIN PROVISIONING</p>	<p><b>EVERGREEN ESTATE</b></p> <p><b>100%</b></p> <p>NON-DISRUPTIVE TECH REFRESH</p>	<p><b>OPERATIONAL SOUNDNESS</b></p> <p><b>99.99999%</b></p> <p>UPTIME</p>	<p><b>REVENUE GROWTH</b></p> <table border="1"> <tr> <td>Better Insight</td> <td>Faster Response</td> </tr> <tr> <td>Faster New Applications</td> <td>No Investment</td> </tr> </table>	Better Insight	Faster Response	Faster New Applications	No Investment				
Better Insight	Faster Response										
Faster New Applications	No Investment										
<p><b>REDUCED ENVIRONMENTALS</b></p> <p><b>75%</b></p> <p>KWH THAN COMPETITION</p>	<p><b>LOWER OPERATIONAL COST</b></p> <p><b>75%</b></p> <p>THAN COMPETITION</p>	<p><b>RISK SHARE</b></p> <table border="1"> <tr> <td>Data Migration Services</td> <td>Utility Finance Pay-per-GB</td> </tr> <tr> <td>Data Reduction Guarantee</td> <td>5PB : 1FTE</td> </tr> </table>	Data Migration Services	Utility Finance Pay-per-GB	Data Reduction Guarantee	5PB : 1FTE	<p><b>INNOVATION</b></p> <table border="1"> <tr> <td>Customer Centric Support</td> <td>Evergreen Functionality</td> </tr> <tr> <td>Continuous Upgrades</td> <td>Evergreen Performance</td> </tr> </table>	Customer Centric Support	Evergreen Functionality	Continuous Upgrades	Evergreen Performance
Data Migration Services	Utility Finance Pay-per-GB										
Data Reduction Guarantee	5PB : 1FTE										
Customer Centric Support	Evergreen Functionality										
Continuous Upgrades	Evergreen Performance										

# A LEADER FIVE YEARS IN A ROW

## A MAGIC QUADRANT LEADER

Figure 1. Magic Quadrant for Solid-State Arrays



Source: Gartner (July 2018)

# Gartner®

Source: Gartner Magic Quadrant for Solid-State Arrays, Valdis Filks, John Monroe, Joseph Unsworth, Santhosh Rao, 23 July 2018.

This graphic was published by Gartner, Inc. as a part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from Pure Storage. Gartner does not endorse any vendor, product, or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including and warranties of merchantability or fitness for a particular purpose.

GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally, and is used herein with permission. All rights reserved.

**Download now:**

<https://www.purestorage.com/microsites/gartner-mq-2018.html>



86.6

2018 SATMETRIX NET  
PROMOTER SCORE,  
CERTIFIED BY  
OWEN CX

24

NATIONAL  
AVERAGE

IN THE

TOP

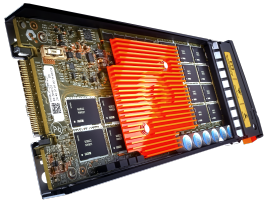
1%

OF B2B COMPANIES

# 4 CORE TECHNOLOGIES

THAT MAKE FLASHARRAY DIFFERENT

 DirectFlash™



INCREASE APPLICATION  
CONSOLIDATION BY 4X

 Metadata Fabric

512-BYTE VARIABLE  
METADATA POWERS  
EVERYTHING IN  
PURITY

- BETTER DEDUPE
- BETTER COMPRESSION
- NATIVE GC & FLASH  
MANAGEMENT

 Evergreen™  
ARCHITECTURE



ALWAYS UPGRADABLE  
KEEP PACE WITH FLASH  
& CPU ADVANCES

 Pure1 Meta™

THE AI ENGINE THAT  
AUTOMATES  
MANAGEMENT &  
SUPPORT

  
ISSUE  
FINGERPRINTS

  
WORKLOAD  
DNA

  
PROACTIVE  
RESPONSE

# FLASHARRAY BENEFITS

(SAS vs DIRECTFLASH)

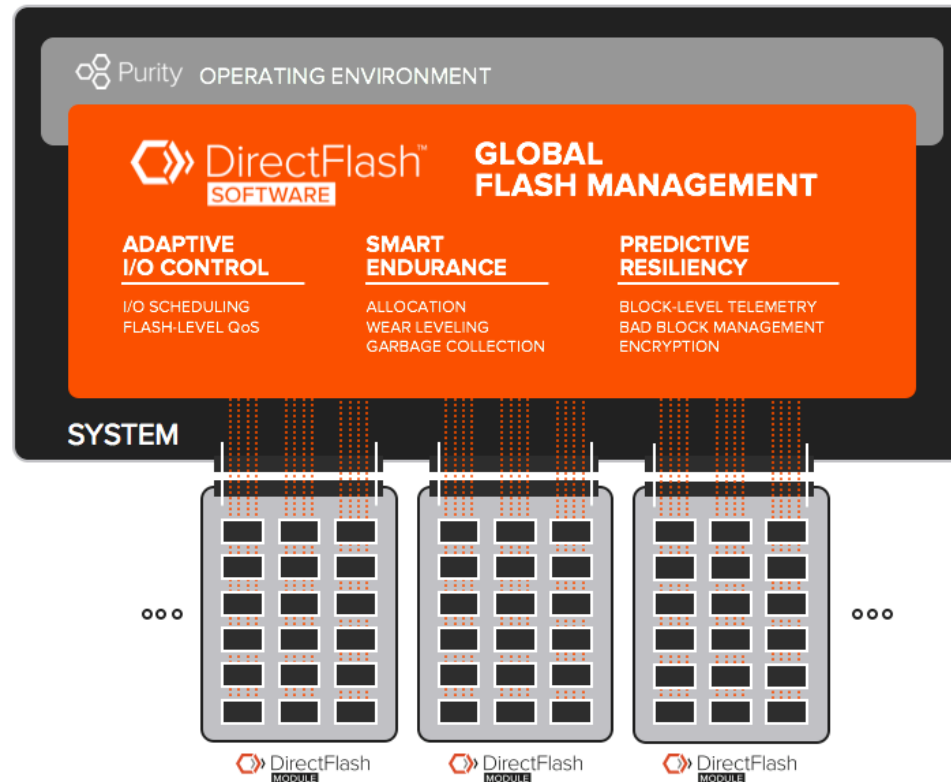
 DirectFlash™ **MODULE** +  DirectFlash™ **SOFTWARE**

# 4X

INCREASE IN  
IOPS PER GB

# 2X

TBs PER RU



Up to

# 20%

CAPACITY  
EFFICIENCY

# 3X

INCREASED  
WRITE BANDWIDTH

Purity **FA**

# ASSURE

Purity for FlashArray delivers **99.9999%** proven availability, inclusive of maintenance, failures, and generational upgrades.

## NON-DISRUPTIVE EVERYTHING

Active/Active High Availability



Mirrored NV-RAM



Hot-Swappable Components



Stateless Controller Architecture



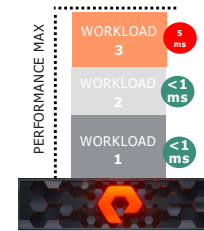
## DATA THAT'S ALWAYS PROTECTED



- ✓ Concurrent dual-drive failure protection, and re-builds around failures automatically within minutes.
- ✓ Checksums and dedicated parity to detect and heal around bit error issues.
- ✓ Consistent latency delivered and performance variability treated as failure, with parity used to work around potential bottlenecks.

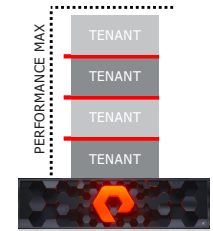
## WORKLOAD CONSISTENCY

Always-On QoS



No knobs, and nothing to configure: protects against noisy neighbors.

QoS Limits



Performance consumption limits to ensure a consistent experience for tenants.



Purity **FA**

# 2X BETTER DATA REDUCTION

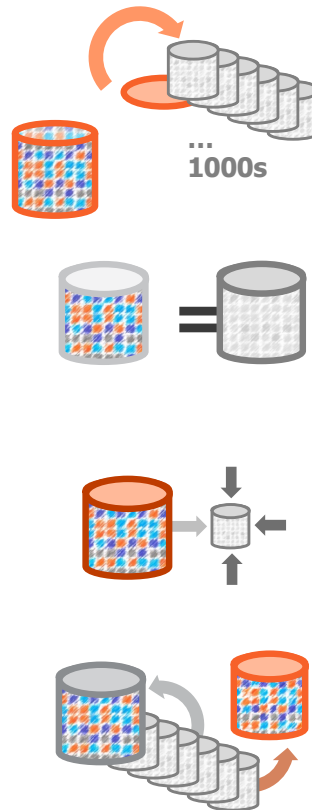
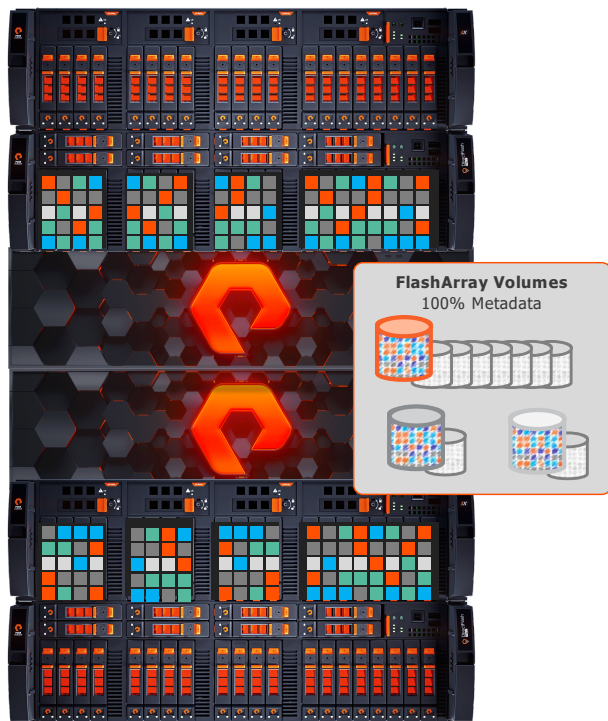
POWERS BEST IN CLASS POWER, COOLING, AND FOOTPRINT EFFICIENCY

**5:1 10:1**

**AVERAGE DATA REDUCTION RATE  
(COMPRESSION + DEDUPLICATION ONLY)**

**AVERAGE TOTAL REDUCTION  
(COMPRESSION + DEDUPLICATION + THIN  
PROVISIONING)**

# SIMPLE, LIMITLESS SNAPS



## INSTANTLY SNAPSHOT ANY VOLUME

- *Zero* reservations or planning required
- *Zero* performance overhead
- Flexible consistency groups

## SNAPSHOTS ARE JUST NEW VOLUMES, WITH FULL CAPABILITIES

- Mount, read, write, snapshot again, etc.
- *Zero* dependencies on one another
- All have full performance

## ALWAYS FULL YET SPACE SAVING

- *Zero* data duplication
- Always thin, deduped, compressed

## RECOVER ANYTHING TO ANYWHERE

- Instantly roll forward or backward
- Recovery ANY volume from ANY snapshot

**NEW**  
 **DirectFlash™**  
**FABRIC**

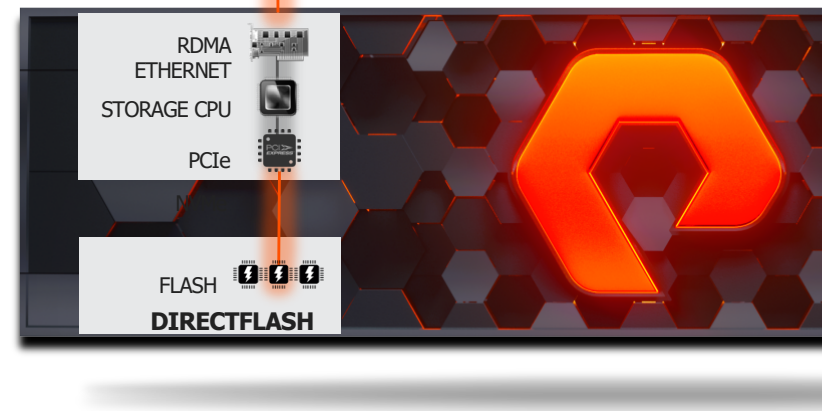
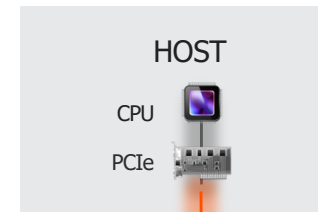
END-TO-END NVMe PERFORMANCE  
WITH ENTERPRISE CLASS DATA SERVICES

UP TO  
**50%**  
LATENCY REDUCTION  
COMPARED TO ISCSI

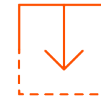
UP TO  
**20%**  
LATENCY REDUCTION  
COMPARED TO FC

UP TO  
**25%**  
HOST CPU OFFLOAD

NVME OVER FABRICS via RDMA over CONVERGED ETHERNET  
PURITY 5.2 + FLASHARRAY//X + RDMA ENABLED CARD



# CONSOLIDATE AND OPTIMIZE APPLICATIONS



**INDUSTRY-LEADING  
5:1 DATA REDUCTION**



**99.9999%  
AVAILABILITY**



**BUILT FOR  
MIXED WORKLOADS**



**NDU-  
EVERYTHING**

# PURE SHARED ACCELERATED ALL FLASH STORAGE FOR ORACLE

## POWER UP ORACLE DATA

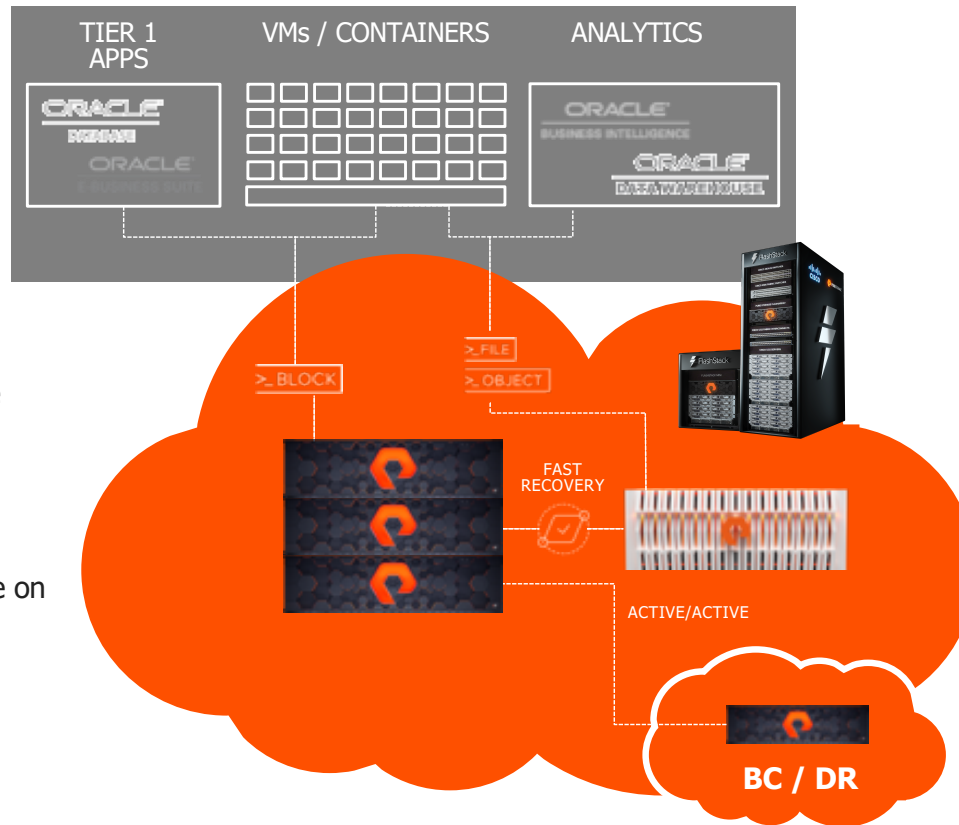
Extensive benefits across all data processing models: OLTP, Data Warehousing, and Analytics

## CONTROL LICENSING

Consolidate Oracle on Pure and reduce licensing costs and maintenance fees

## DEVELOP FASTER

Spend less time and operating expense on copy/clone activities with built-in automation for development



## ENHANCE AVAILABILITY

Make Oracle Data 99.9999% available with predictable performance for end users

## RUN SECURELY

Lock down data with always-on encryption and meet industry compliance regulations

**ORACLE** Gold Partner

**PURESTORAGE**

# SHARED ACCELERATED ALL FLASH STORAGE WITH PURE & MICROSOFT

**DO MORE WITH DATA**

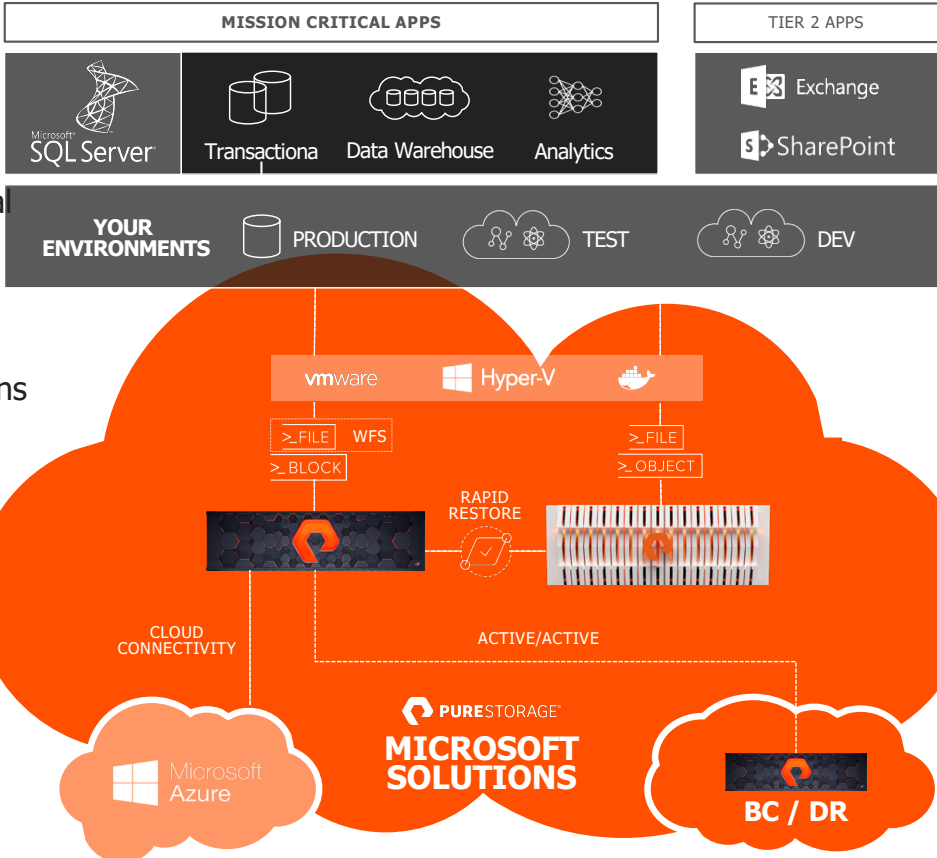
Resiliency and consistent performance for your mission-critical SQL Server Workloads.

**SCALE SEAMLESSLY**

System Center and Azure integrations to power your Private and Hybrid Clouds.

**INNOVATE FAST**

Empower DevOps with the Pure PowerShell SDK.



# TOYOTA FINANCIAL SERVICES

Toyota Financial Services is one of the largest motor vehicle finance companies in the world, offering a wide range of services, including vehicle financing and leasing, fleet management and insurance.



## CHALLENGES

- Legacy storage was too complex to manage and difficult to expand.
- Poor storage performance caused long delays in accessing key applications and files, impacting business productivity.



## RESULTS

- The time spent replicating systems has shrunk from eight hours to less than one.
- Spinning up services now takes seconds instead of minutes.
- The team has more time to spend on key business intelligence initiatives.

## USE CASE

- Virtualization – VMware
- Database – Microsoft SQL Server
- Asset management – Alfa



# eMONEY ADVISOR

eMoney Advisor is a cloud-based software-as-a-service (SaaS) platform that combines financial planning software, data aggregation, business analytics and other functions to help financial professionals build stronger client relationships, streamline business operations and drive revenue growth.



## CHALLENGES

- Growing volumes of data led to slowdown in database backups.
- Speed of application development was limited by ability to spin up database copies.
- Legacy storage systems burdened IT staff with complex management demands.

## RESULTS

- Faster access to data and applications improves the client experience.
- Snapshots mean application developers can test more ideas faster.
- Non-disruptive upgrades and capacity additions mean no downtime.
- Simplified management frees IT staff to work on higher-value projects.

## USE CASE

- Database – Microsoft® SQL Server®





The background of the image is a dark, futuristic, geometric environment. It features several angular, metallic-looking surfaces in shades of dark grey and black. Interspersed among these surfaces are glowing red and orange light sources, which appear to be emanating from recessed areas or narrow channels. The lighting creates a sense of depth and mystery, with the bright colors contrasting sharply against the dark background. The overall aesthetic is reminiscent of a sci-fi or cyberpunk setting.

**THANK YOU**