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**

- **DATA REDUCTION**
  - 80%
  - 5:1 DATA REDUCTION WITHOUT THIN PROVISIONING

- **REDUCED ENVIRONMENTALS**
  - 75%
  - KWH THAN COMPETITION

- **EVERGREEN ESTATE**
  - 100%
  - NON-DISRUPTIVE TECH REFRESH

- **LOWER OPERATIONAL COST**
  - 75%
  - THAN COMPETITION

**LOWER RISK**

- **OPERATIONAL SOUNDNESS**
  - 99.9999% UPTIME

- **RISK SHARE**
  - Data Migration Services: 5PB : 1FTE
  - Utility Finance Pay-per-GB

**DRIVE GROWTH**

- **REVENUE GROWTH**
  - Better Insight
  - Faster Response
  - Faster New Applications
  - No Investment

- **INNOVATION**
  - Customer Centric Support
  - Continuous Upgrades
  - Evergreen Functionality
  - Evergreen Performance

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A LEADER FIVE YEARS IN A ROW
A MAGIC QUADRANT LEADER


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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)

4X
INCREASE IN IOPS PER GB

2X
TBs PER RU

Up to 20%
CAPACITY EFFICIENCY

3X
INCREASED WRITE BANDWIDTH

FLASHARRAY BENEFITS (SAS vs DIRECTFLASH)

DirectFlash™ + DirectFlash™
MODULE SOFTWARE

SYSTEM

Purity OPERATING ENVIRONMENT

Global Flash Management

Adaptive I/O Control
- I/O Scheduling
- Flash Level QoS

Smart Endurance
- Allocation
- Wear Leveling
- Garbage Collection

Predictive Resiliency
- Block-Level Telemetry
- Bad Block Management
- Encryption

Operating Environment

4X INCREASE IN IOPS PER GB

2X TBs PER RU

Up to 20% CAPACITY EFFICIENCY

3X INCREASED WRITE BANDWIDTH
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.

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2X BETTER DATA REDUCTION
POWERS BEST IN CLASS POWER, COOLING, AND FOOTPRINT EFFICIENCY

5:1

1:110:1

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
**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

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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®
THANK YOU