Flash Storage drives a better bottom line

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The three waves of flash evolution

Workload acceleration
Hybrid arrays and tactical flash-based point solutions to provide a high performance tier to accelerate specific applications and services

Mainstream adoption
Flash becomes mainstream with the majority of applications and services deployed on flash for acceleration as well as density, power and cooling

Deployed by default
Flash is deployed not as an option but because it is largely the only primary storage medium widely available; spinning disks used in point solutions

Now we must go 'beyond the box'

Flash Memory Summit

ACCELERATE	SIMPLIFY	MITIGATE	OPTIMIZE
Apps	**Ops**	**Risks**	**Investments**
Acceleration of established and emerging apps	Seamless scale and automation for composability	Data integrity, app availability, and protection	Architectural and financial flexibility to go anywhere

DELIVER

The **Right Mix** of on-premises and off-premises access, control, and data mobility

What's happening in the market?

AFA is the fastest growing segment in the external storage market - 23% CAGR (2015-20)*

23.7% CAGR

76% of enterprises have adopted or planning to adopt AFA in next on year*

Rapid enterprise adoption

Reliability is a key driver
56% of respondents chose Reliability ahead of performance as the primary purchase criteria*

Flash costs will continue to decline
~10% from 2017 to 2020*

Case Study #1:

Stantec picks all-flash for
mission-critical environment

Background and challenges

- Stability and availability of Oracle ERP environment

- Apps: Oracle e-commerce suite, database

- Legacy infrastructure: 10 years old, HDD based solution
  - Frequent Oracle patches and upgrades required frequent snapshots and more storage space
  - Not being able to take snapshots at the times needed put the database and system at risk of being corrupted

Based in Edmonton, Canada, the firm provides architectural, engineering, and environmental services to clients across the globe. Stantec's projects range from road, rail and transit systems, to infrastructure for mining and the energy industry, to facilities for healthcare, education and commercial uses

How did all flash solve the problem

- **New solution:** 3PAR StoreServ 8450 all flash systems
    - **20% reduction** in batch processing times
    - **85% reduction** in storage space for Oracle data with high density SSDs

- **Business outcome:**
    - Easier SAN maintenance, lower cost of maintenance
    - Avoid significant cost increases as mature storage systems reached end-of-support
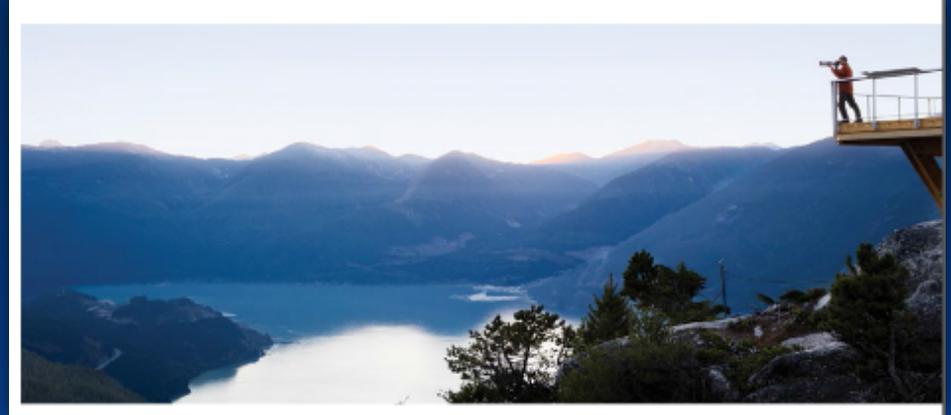
Case Study #2:

Riverside Healthcare speeds access to critical medical images with all-flash HPE 3PAR

Background and challenges

- Legacy HDD storage system could not keep up with the growing number of images and higher image resolution

- Apps: McKesson PACs, VMware, Epic HER

- Legacy:
  - HDD storage system
  - 1 to 2 min of average wait times for retrieving an image – sometimes as long as 8 to 9 min

Riverside Healthcare is a fully integrated healthcare system, serving the needs of patients across a broad region in northeastern Illinois, USA.

How did all flash help?

- New solution: 3PAR 8450 all flash
  - Average image retrieval times of **less than 10 seconds**
  - Higher capacity (with high density SSDs) and performance headroom means more consolidation - **reduced foot print from one and a half racks to half a rack**

- Business outcome:
  - Speeds radiologists' ability to diagnose and treat patients
  - Enhance overall patient experience
  - Reduced overall cost for the hospital
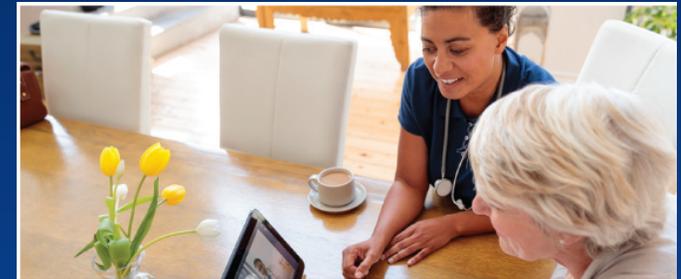
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The industry's **broadest** and **deepest** flash portfolio