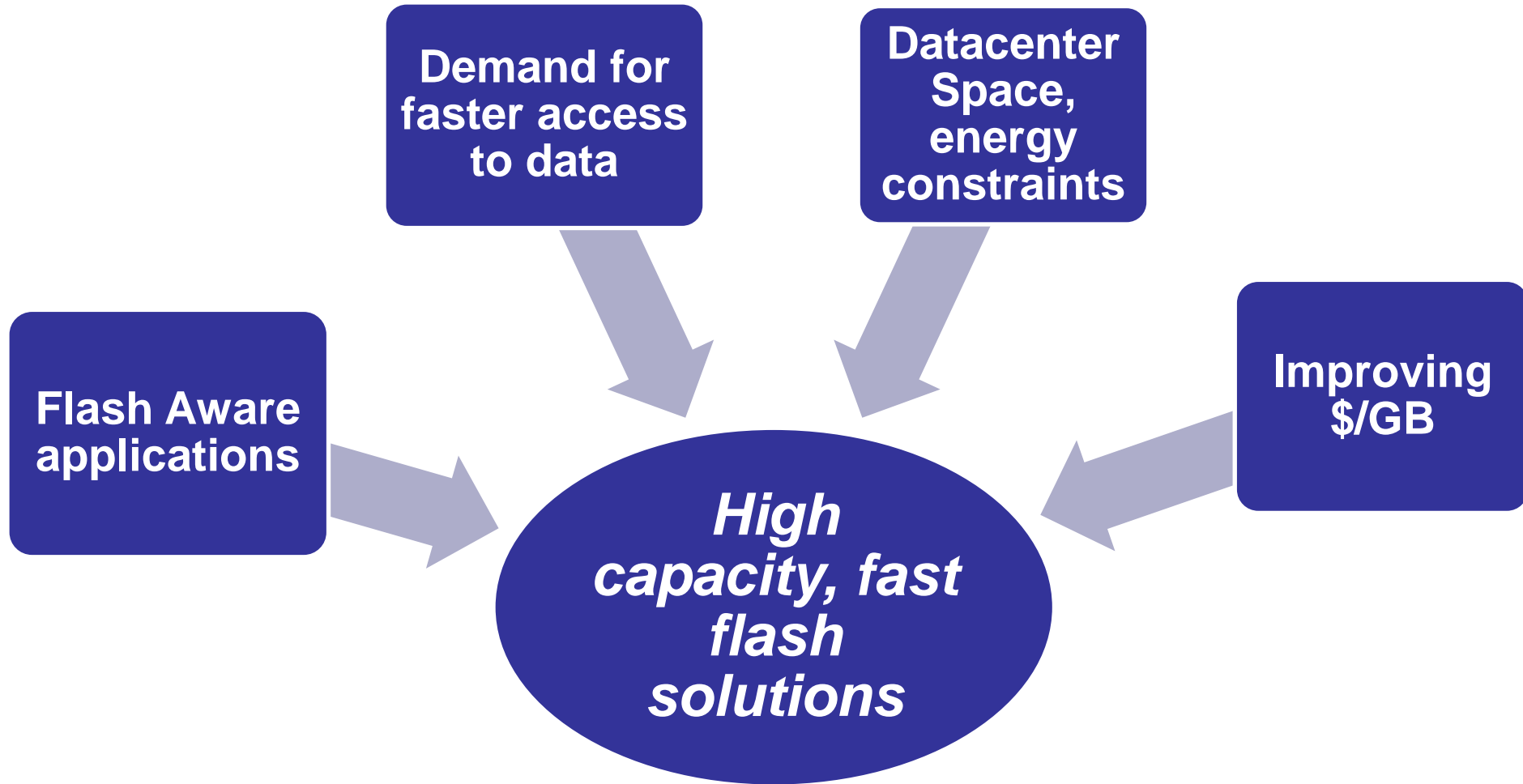


# SSDs for Enterprise Workloads

## How do I know when to use SSDs?

Swapna Yasarapu  
Director, SSD Product Marketing  
sTec, Inc.

# Flash at an Inflection Point





# More IOPs to More Applications, More Economically

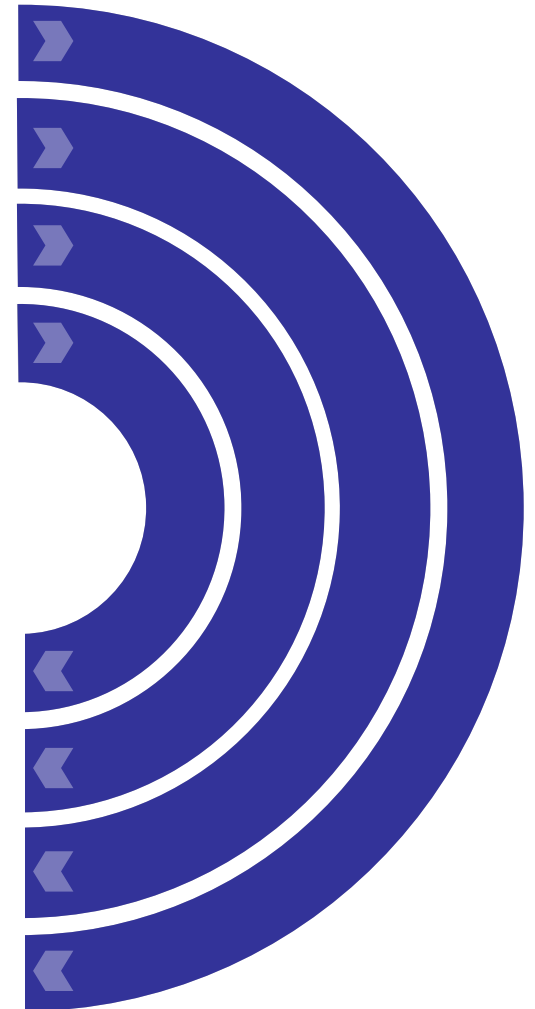
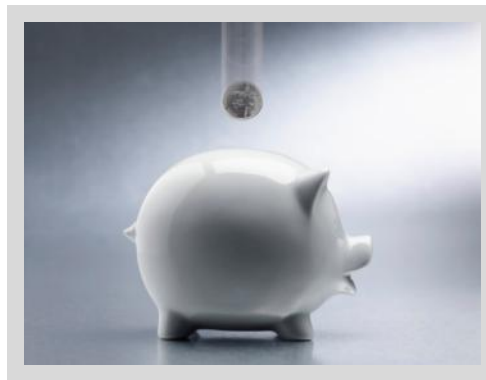
Higher Consolidation

Lower Power Consumption

Higher Performance

Lower Latency

**...without breaking  
the bank**



# *Fast access for applications*

**DATABASES**

Speed Access to financial, Web  
(MySQL, SQL Server, Oracle)

**CACHING**

Application Acceleration  
Fast access to data at the server level

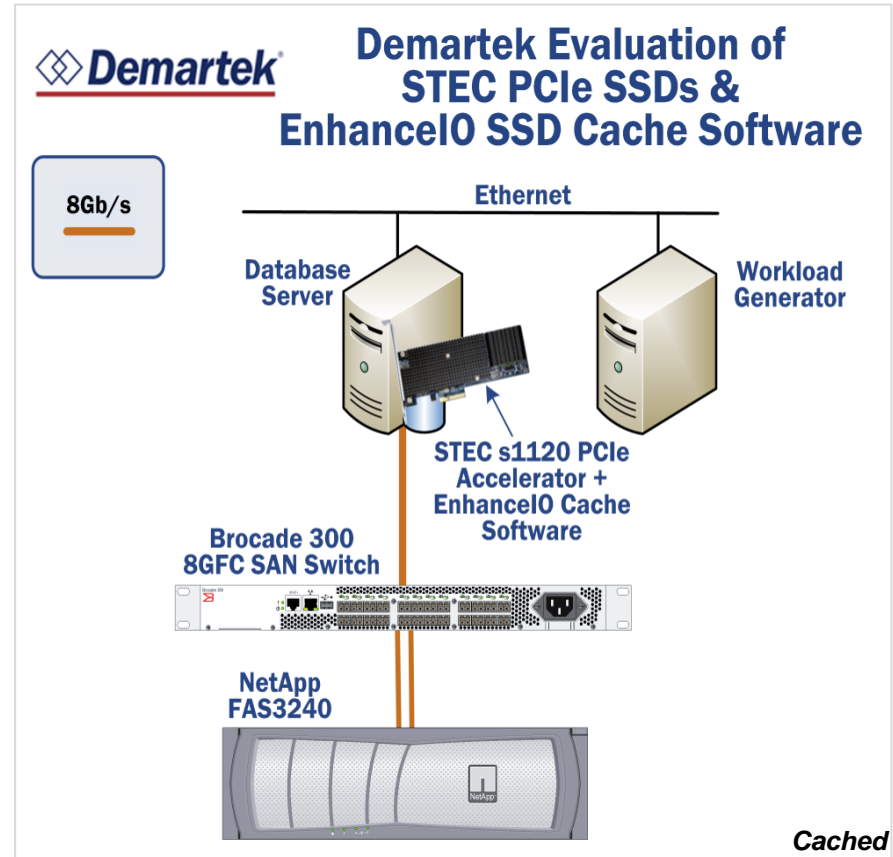
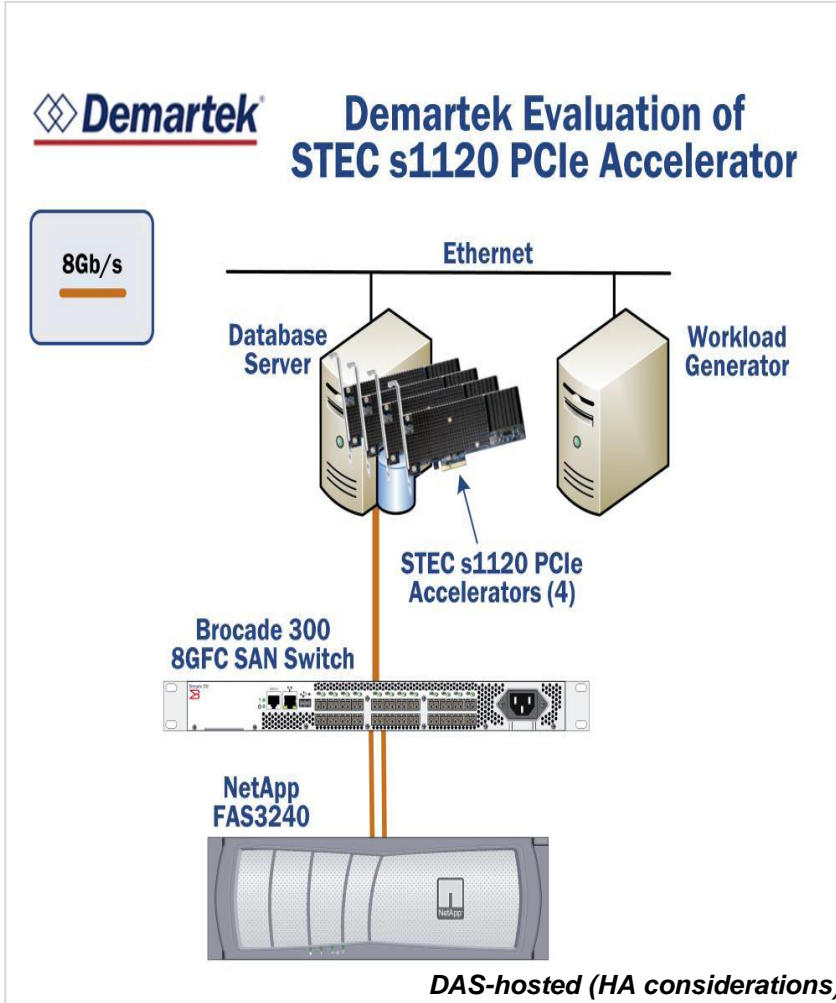
**VIRTUAL  
ENTERPRISE**

Increase Productivity  
Fast VDI Boot Time

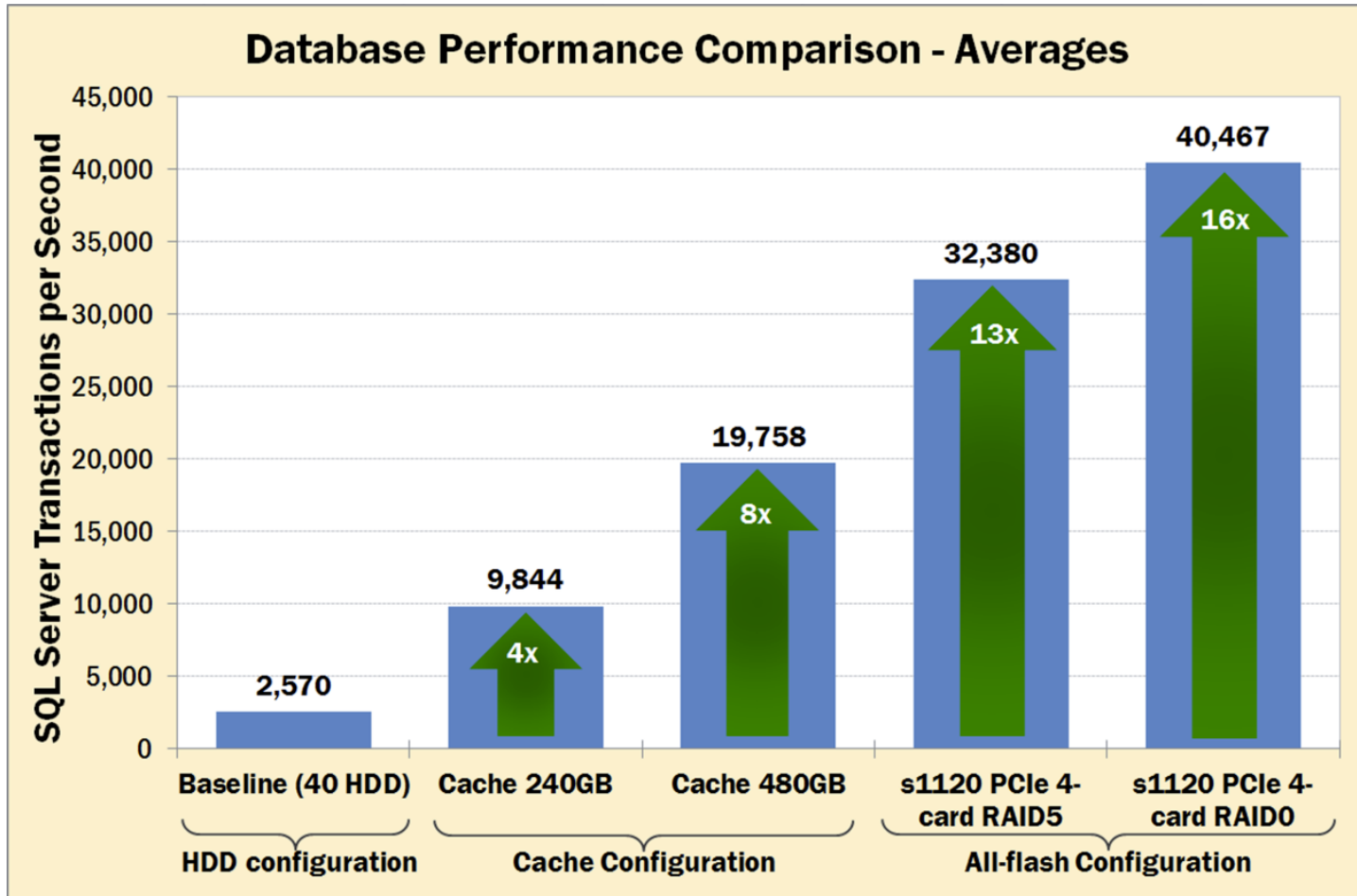
**BIG DATA  
ANALYTICS**

Make Faster Better  
Informed Decisions

# Database Acceleration

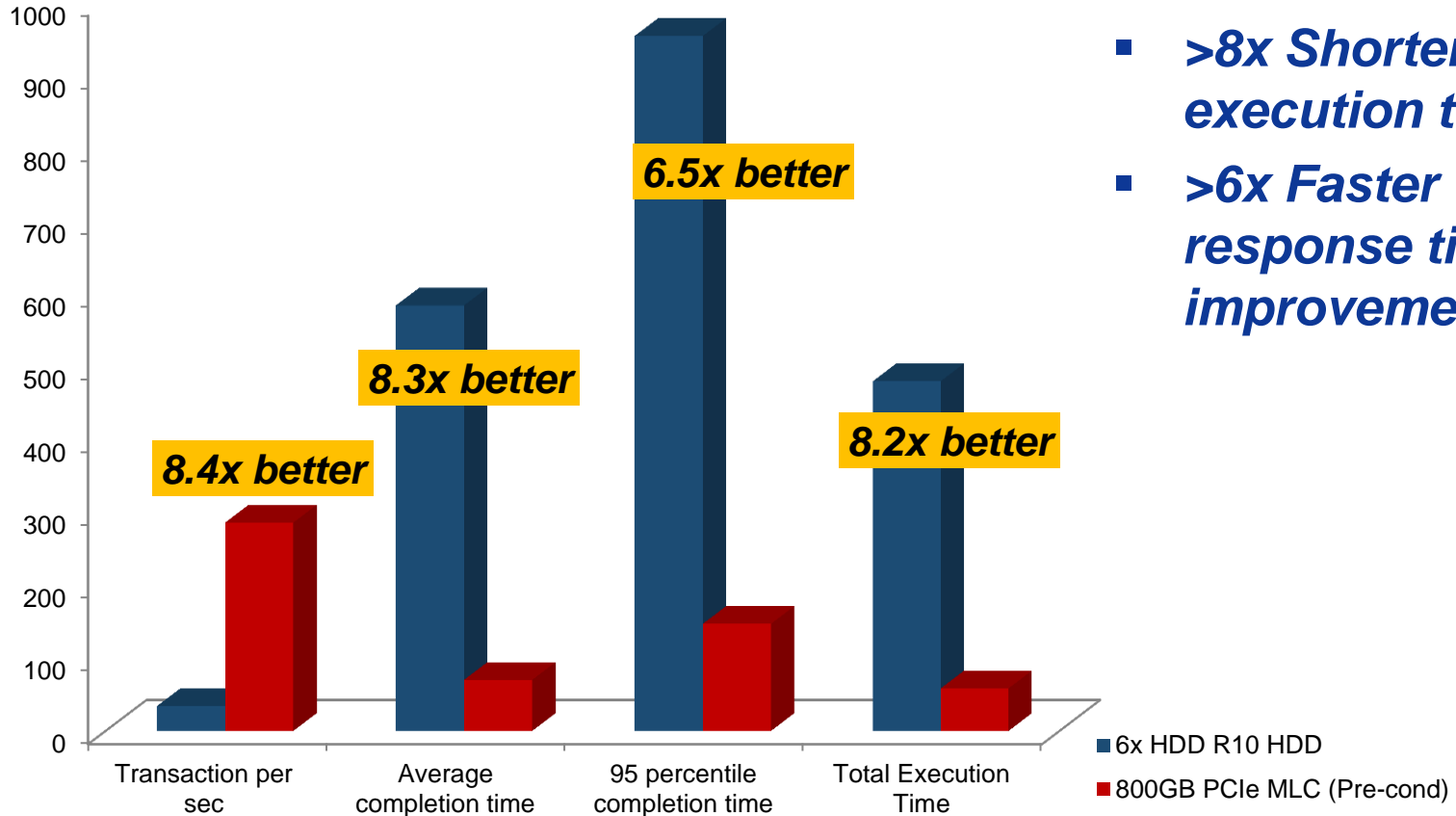


# Microsoft SQL Server



*Upto 16x Speed up of Microsoft SQL Server for transaction processing*

# MySQL Execution (*Databases*)

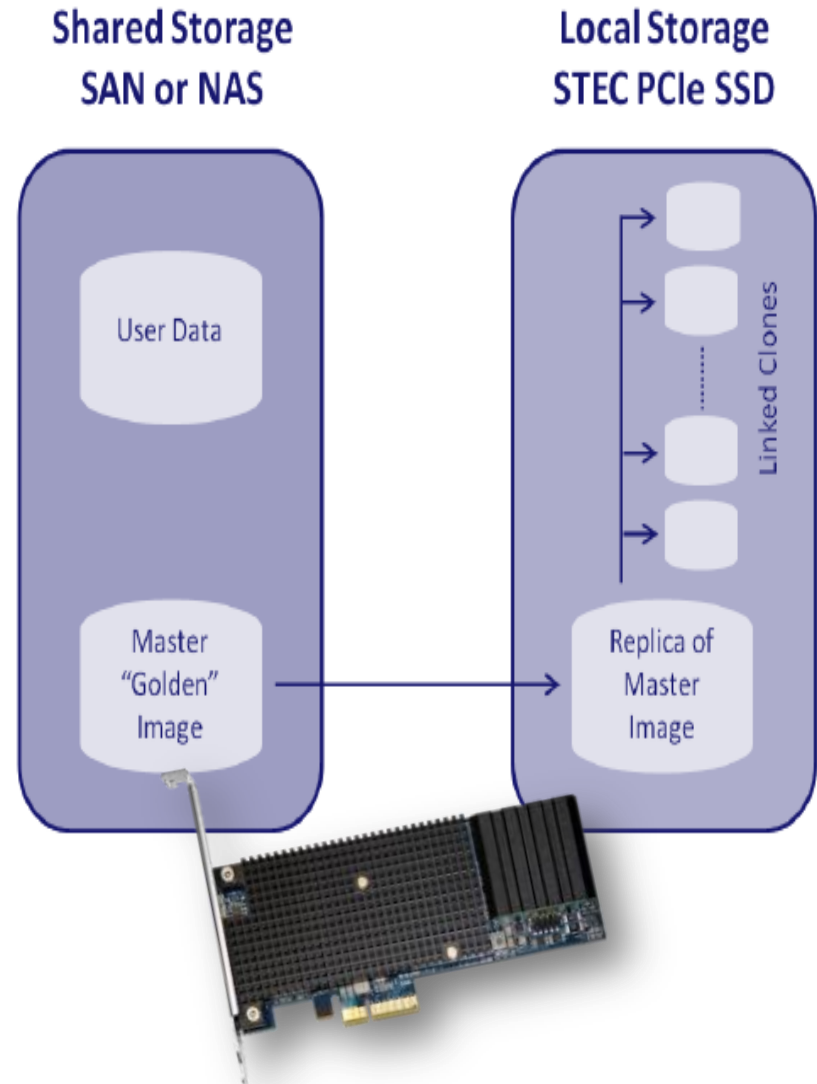


- **>8x Shorter execution time**
- **>6x Faster response time improvement**

**>8x Speed Up in MySQL Execution**

# Virtual Desktops

- Uses a single master or “golden” image
- Creates linked clones incrementally for all virtual desktops
- Relatively low storage space requirement
- Only master image requires full storage capacity







# s1120 PCIe Accelerators for Stateless Desktops



Boot time for  
100 Virtual Desktops:

Only	compared to:
<b>4</b>	<b>30</b>
Minutes	Minutes
w/ s1120	w/ HDDs

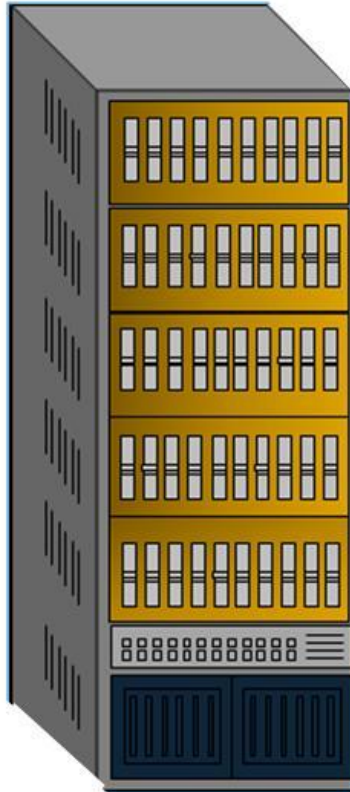
- x86 server with two 6-core processors @ 3.466 Ghz
- VMware vSphere ESXi 5.0
- (2) s1120 PCIe Accelerators

Save time - Save \$

# Customer Challenge: Slow I/O cost time & money

## Challenge

- Underutilized Server
- Low Transaction Count
- Low IOPS
- Slow SAN
- Many drives
- Slow Network
- Slow media



Eliminate  
Bottlenecks with  
sTec PCIe

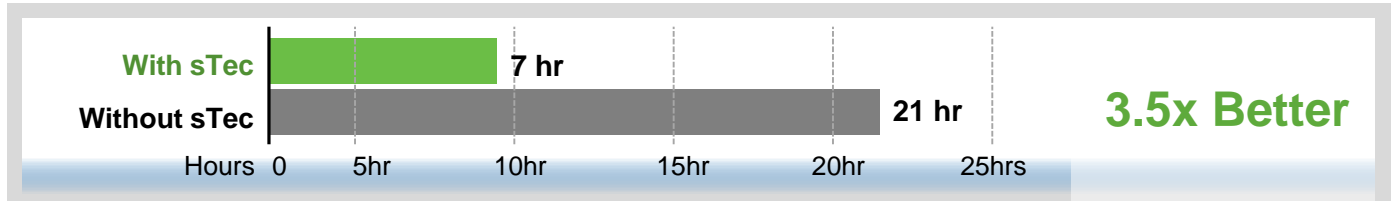


- ✓ Deliver Fast Access
- ✓ Eliminate Storage Network
- ✓ Increase Transaction Counts
- ✓ Reduce Response Times
- ✓ Reduce Query & Sort times

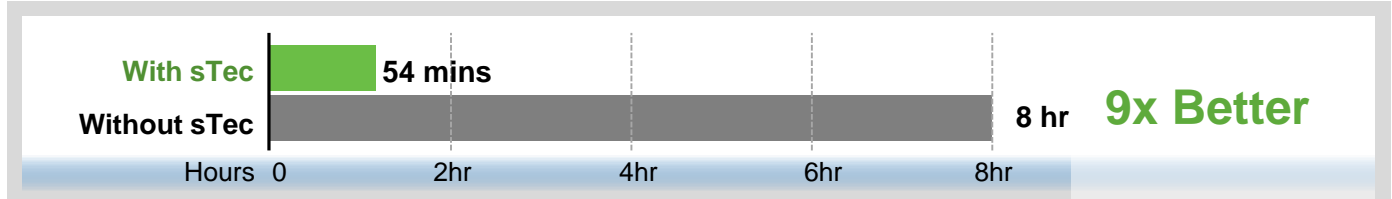


# PCIe SSDs: Enhancing the Speed of Applications

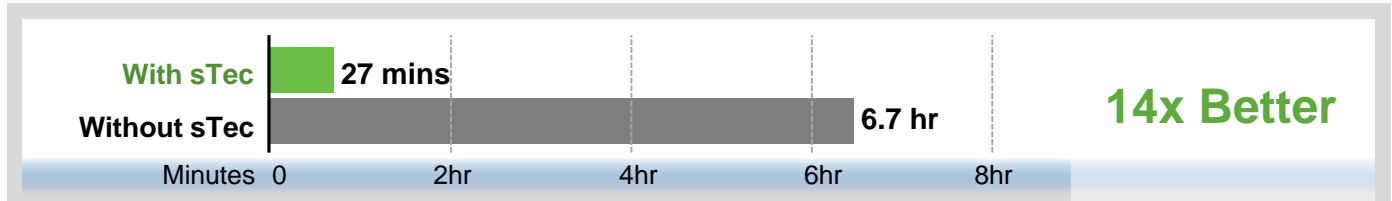
**Oracle  
Databases**  
*Faster Query Time*



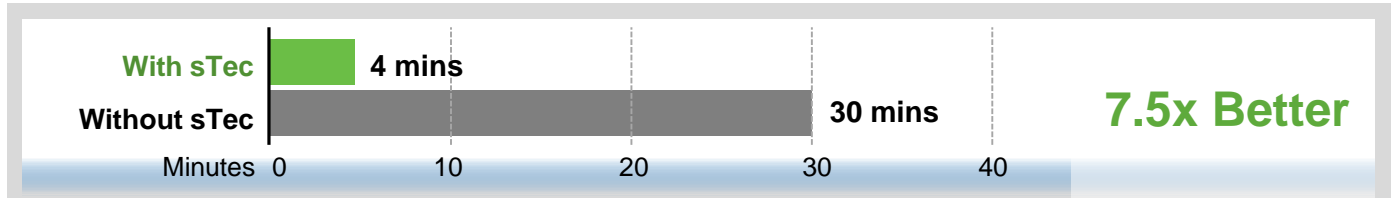
**MySQL  
Databases**  
*Shorter Execution Time*



**Big Data  
Analytics**  
*Faster Sort Time*

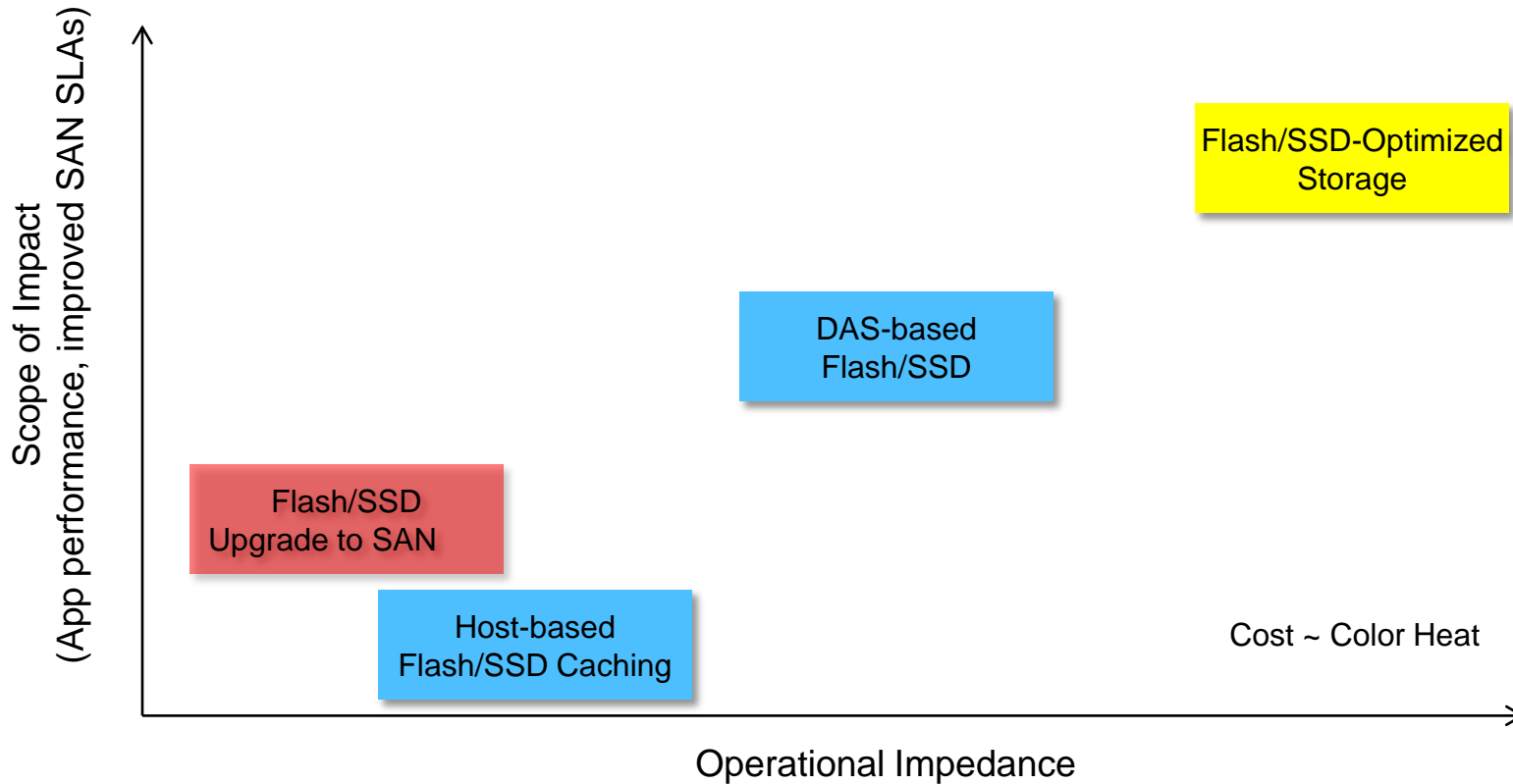


**Virtual Desktop  
Infrastructure (VDI)**  
*Faster Boot Time*



● **Sample test environments**

# Deployment Options and Operational Implications



- Migration
- HA
- New Management Tools
- New Operational Procedures (backup, replication)



**Thank you**

[www.sTec-inc.com](http://www.sTec-inc.com)