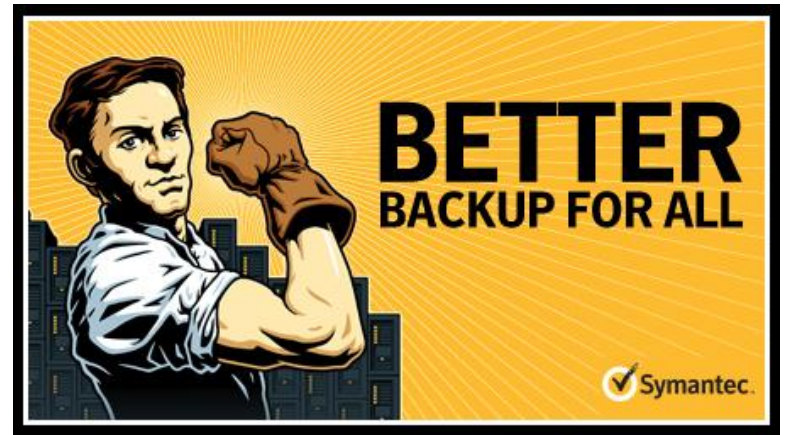


What's New in NetBackup: The Vision and Roadmap

Alberto Sigismondi

Sr. Product Manager, NetBackup



- Data Management Challenges
- NetBackup Platform Advantages
 - Total Cost of Ownership
 - Symantec Market Leadership
- The Portfolio Strategy

Agenda

The CIO agenda:

- 1 – Increasing Enterprise Revenue Growth
- 2 – Attracting and Retaining New Customers
- 3 – Reducing Enterprise Expenses
- 4 — Creating New Products/Services
- 5 — Delivering Operational Results

Source:

Gartner

Gartner, *Amplifying the Enterprise: The CIO Agenda January 2012*
2,335 CIOs, \$321 billion in IT Budgets, 37 Industries, 45 Countries

Technologies to meet the agenda:

Figure 2. CIO technology priorities concentrate on the customer experience

CIO technologies		Ranking of technologies CIOs selected as one of their top 3 priorities in 2012				
Ranking		2012	2011	2010	2009	2008
Analytics and business intelligence	1	5	5	1	1	
Mobile technologies	2	3	6	12	12	
Cloud computing (SaaS, IaaS, PaaS)	3	1	2	16	*	
Collaboration technologies (workflow)	4	8	11	5	8	
Virtualization	5	2	1	3	3	
Legacy modernization	6	7	15	4	4	
IT management	7	4	10	*	*	
Customer relationship management	8	18	*	*	*	
ERP applications	9	13	14	2	2	
Security	10	12	9	8	5	
Social media/Web 2.0	11	10	3	15	15	

Source:

Gartner

Gartner, *Amplifying the Enterprise: The CIO Agenda January 2012*
2,335 CIOs, \$321 billion in IT Budgets, 37 Industries, 45 Countries

So What's The Problem?

Grow Revenue



Attract/Keep Customers



Lower Expenses



New Products



Operational Results



Top 5
Strategic Initiatives

Bus. Intel/Analytics



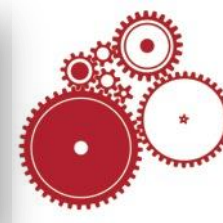
Mobile



Cloud



Collaboration (WF)



Virtualization



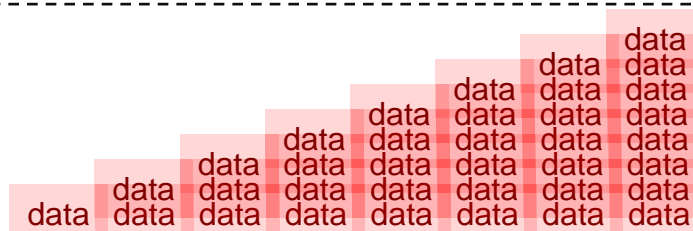
Top 5
Strategic Technologies

FOUNDATION:

Information

Protection/Management

Backend

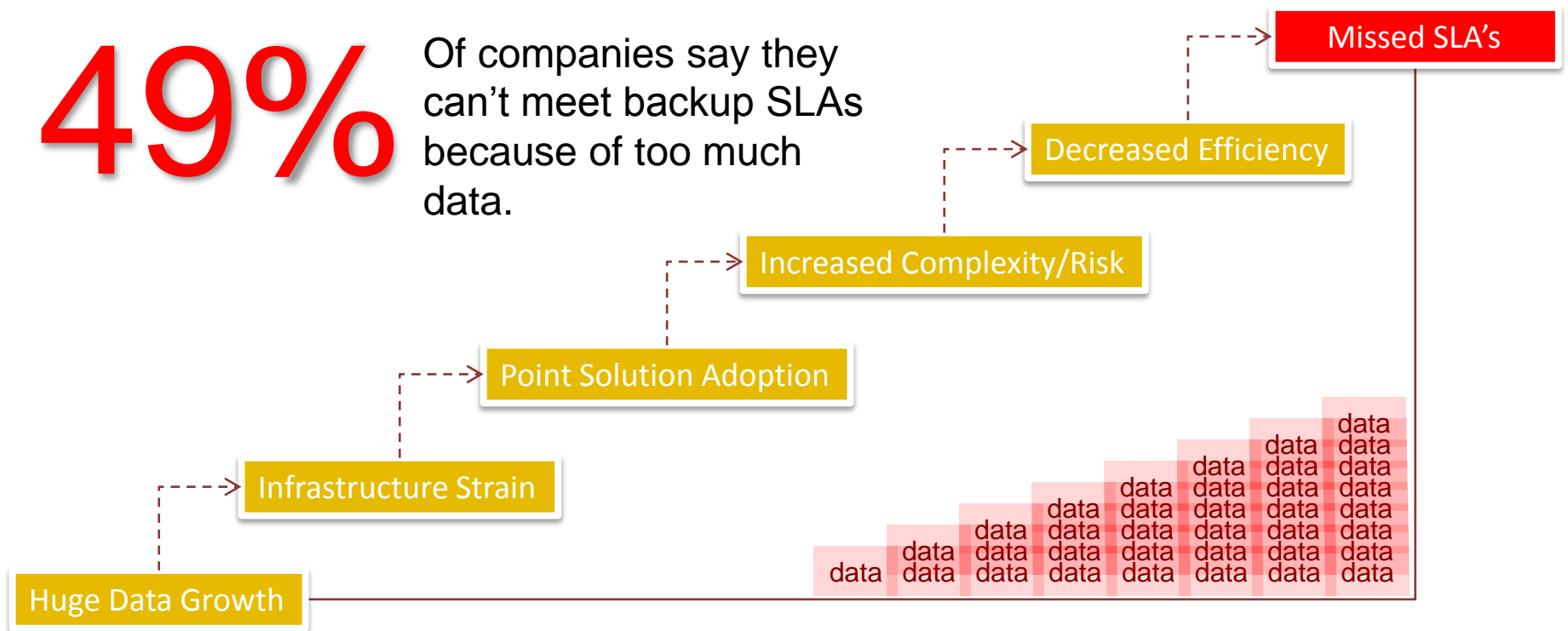


Focus Is Usually Here

A Weak Foundation:

49%

Of companies say they can't meet backup SLAs because of too much data.



Huge Data Growth

Infrastructure Strain

Point Solution Adoption

Increased Complexity/Risk

Decreased Efficiency

Missed SLA's

data

data

data

data

data

data

data

data

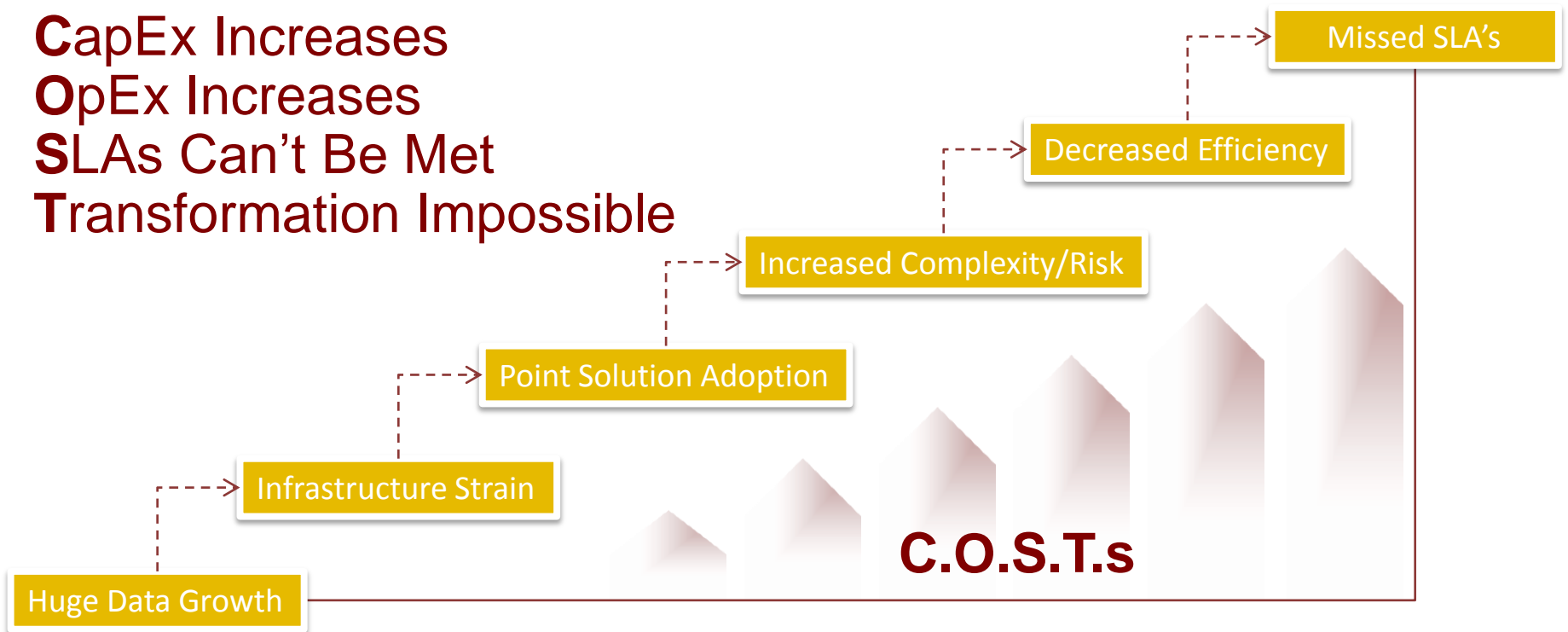
data

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A Weak Foundation:

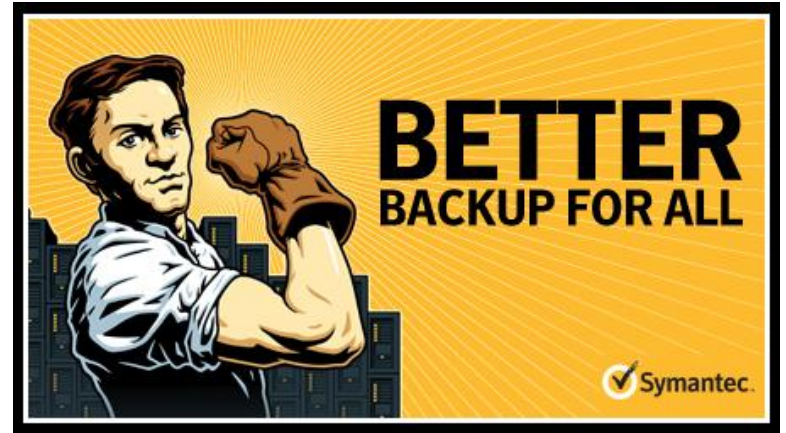
CapEx Increases
OpEx Increases
SLAs Can't Be Met
Transformation Impossible



A Change Is Needed:

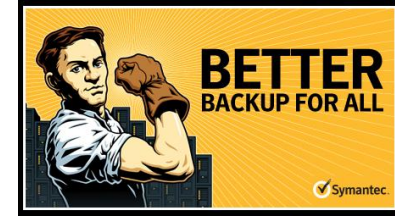
*“Organizations need a **holistic protection strategy, a single platform or solution**, to handle the variety of data types and workloads as opposed to integrating a number of **disparate point solutions**, which **proves** to be **costly** and **time consuming**.”*

Dave Russell
Gartner Vice President of
Storage Technologies and Strategies



- Data Management Challenges
- NetBackup Platform Advantages
 - Total Cost of Ownership
 - Symantec Market Leadership
- The Portfolio Strategy

Agenda



The Platform Approach:

This holistic protection strategy allows Symantec to provide you with a truly Enterprise-class solution at the lowest TCO possible.

 **NETBACKUP**
Symantec

**The lowest Total Cost of
Ownership**



Your Information

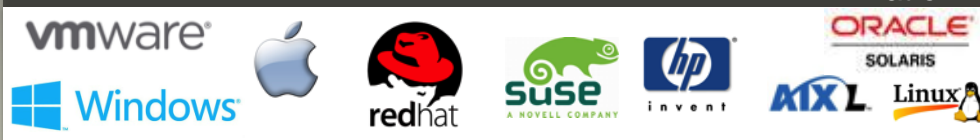
Physical Environment

Virtual Environment

Applications



Platforms



Storage



Unified Protection
& Recovery
Management

Advanced
Recovery for
Critical Apps

Data Archiving,
Migration, &
Retention

Service Level
Management &
Compliance

- Single view
- Single vendor
- Single solution
- Superior protection



The NETBACKUP Console

NetBackup Appliances: One Platform, One Turn-key Solution



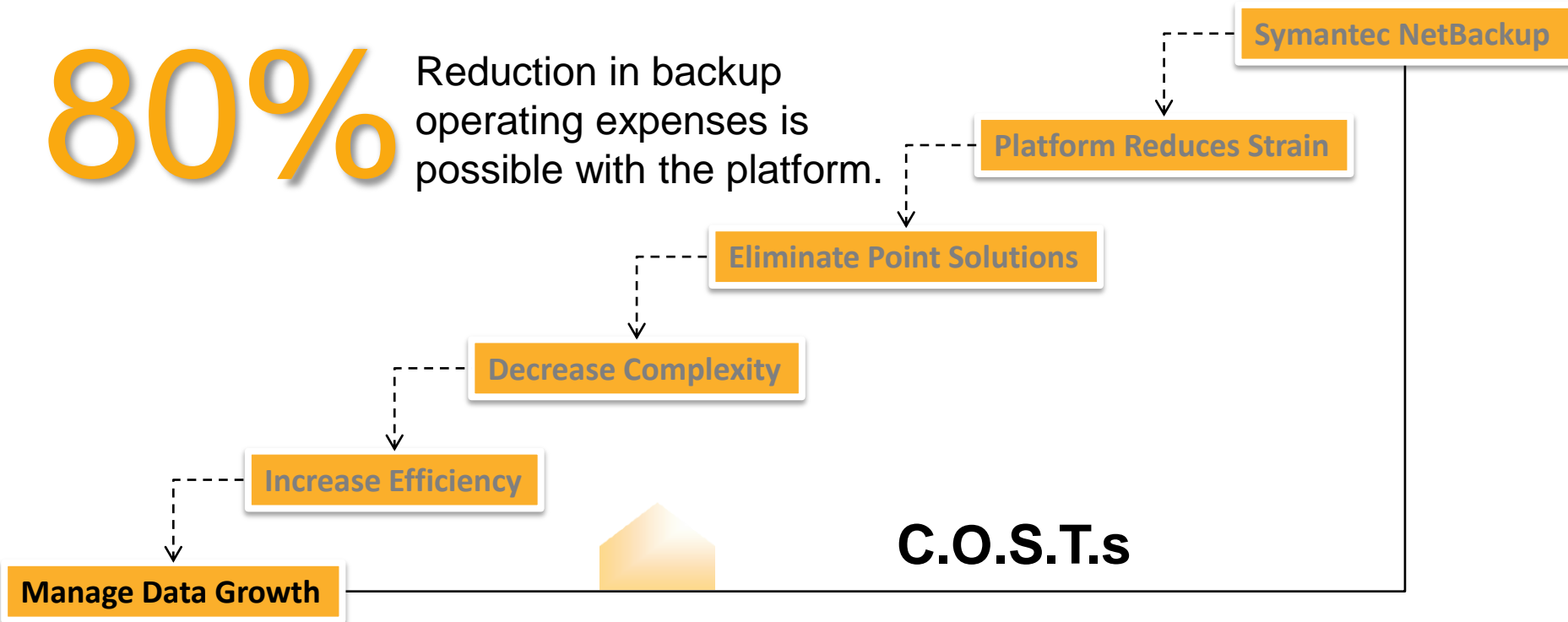
The NETBACKUP Console



The NetBackup Foundation:

80%

Reduction in backup operating expenses is possible with the platform.

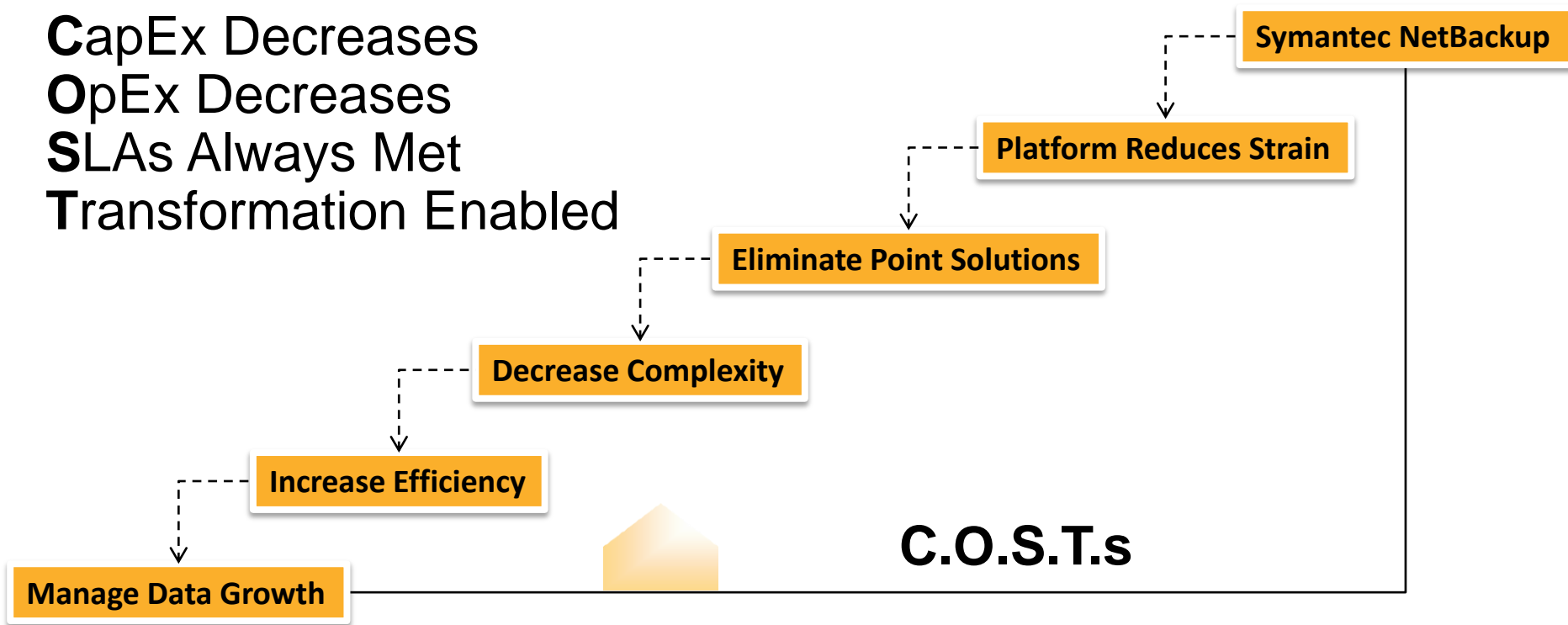


“We’ve reduced our maintenance costs by two-thirds by moving from EMC Data Domain to Symantec NetBackup Appliances. If you factor in the media server refresh we would have had to do, we’ve saved well into six figures.”

- Medical Industry Customer, 2011

The NetBackup Foundation:

CapEx Decreases
OpEx Decreases
SLAs Always Met
Transformation Enabled



NetBackup, with V-Ray Technology, Provides Market Leading Backup and Recovery

Fortune 100
89%

Leading
Financial Services
10 of 10

Leading
Telecom
10 of 10

Symantec is
#1
in VMware
Backup

Leading
Healthcare
10 of 10



4 Best of VMworld
Awards in 5 Years

Previous NetBackup Best
of VMworld Awards

GOLD

BEST OF
vmworld 2010

FINALIST

BEST OF
vmworld 2008

GOLD

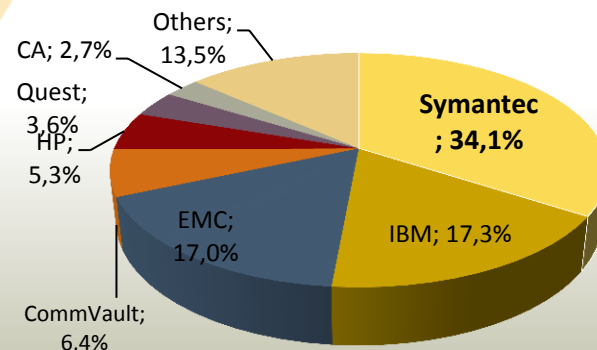
BEST OF
VMWORLD
2007

V-Ray

- Gartner Magic Quadrant and Backup and Recovery Market Share Leader
- Innovating with 75 patents & over 2,000 years of engineering experience
- “V-Ray gives NetBackup a competitive advantage today and into the future” - IDC
- *Won more Best of VMworld awards than any other vendor

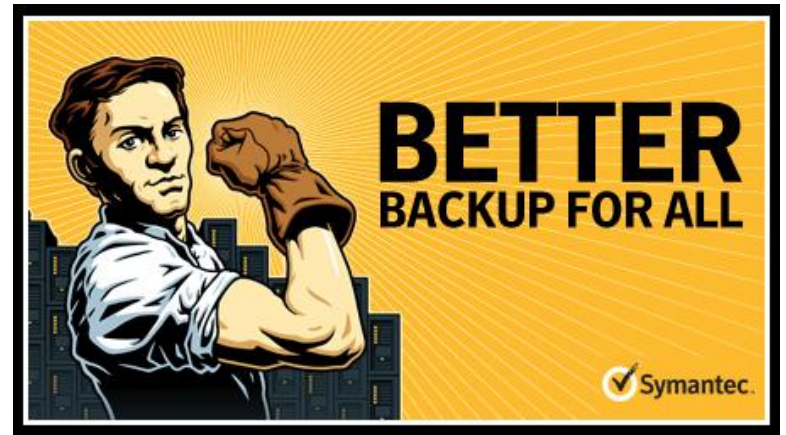
* Business Continuity and Disaster Recovery category

#1 in Backup & Recovery Market Share



Enterprise Distributed System Backup/Recovery
Revenue Market Share, 2011

Gartner



-  Data Management Challenges
-  NetBackup Platform Advantages
 -  Total Cost of Ownership
 -  Symantec Market Leadership
- The Portfolio Strategy

Agenda

Building the NetBackup Platform

3 Key Investment Areas

1. Optimize for Source Workloads



Physical

Accelerator



Virtual

V-Ray



Arrays

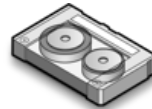
Replication
Director



Big Data

DB Agent
Support

2. Provide Freedom of Storage Choice



Tape



Disk



Appliances



Cloud

Drive out cost with in-line, non-rehydrating, mega-scale dedupe

3. Simplify the Operating Model

- Appliances
- Self-monitoring
- Auto-configuration
- IT Self Service
- Telemetry
- Search



Where We Are Today...

NetBackup VM Intelligent Policy

Introduced in NetBackup 7.1

Optimize for
Source Workloads

Challenge:

- Manual and time consuming process to ensure all VMs are protected

Answer:

- The ability to automate virtual machine protection on the fly, wherever they may reside
- Auto discovery and protection of virtual machines
- Auto load balancing to optimize backup performance



NetBackup Accelerator

Introduced in NetBackup 7.5

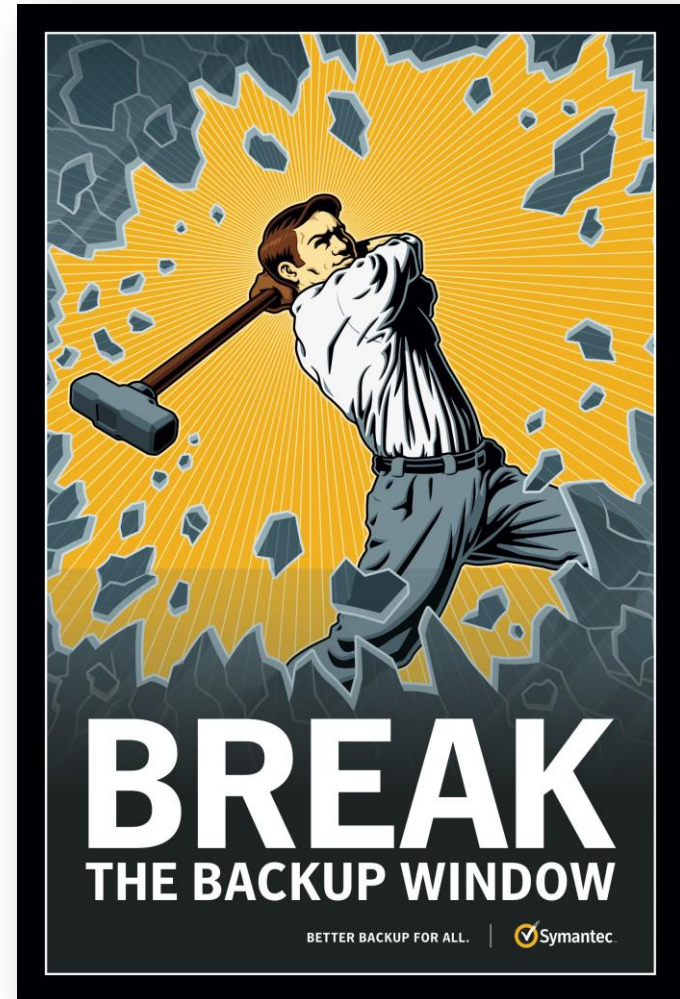
Challenge:

- Missed backup windows due to increased data growth

Answer:

- Speed up your backups by up to 100x or more!
- Reduce traditional full backups to the speed and cost of incrementals
- Meet the most demanding SLAs

Optimize for
Source Workloads



NetBackup Replication Director

Introduced in NetBackup 7.5

Optimize for
Source Workloads

Challenge:

- Complexity of managing snapshots being used as backup separately from other backups.

Answer:

- A solution that integrates the support of snapshot and replication technologies,
- Simplifies management and recovery of snapshots from a single console.





Where We Are Going Next

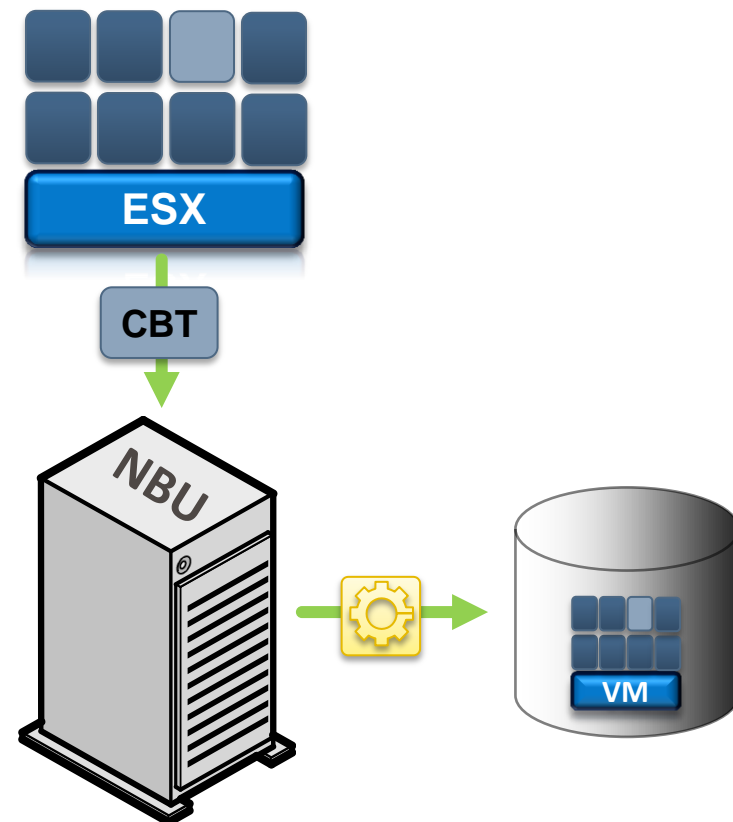
Disclaimer

This information is about pre-release software. Any unreleased update to the product or other planned modification is subject to ongoing evaluation by Symantec and therefore subject to change.

This information is provided without warranty of any kind, express or implied. Customers who purchase Symantec products should make their purchase decision based upon features that are currently available.

NetBackup Accelerator in NBU 7.6

- VMware Support using VMware Changed Block Tracking (CBT)
 - Full backups in the time similar to an incremental
 - Supports file and folder, SQL and SharePoint backups
 - Maximum Recovery: VM, File, SQL, SharePoint, GRT, Documents, Items from every Accelerator full backup
 - Accelerator incremental backups can also be used with VMware Instant Recovery, improving RPO
- Impact
 - Dramatically reduced backup times without sacrificing recovery



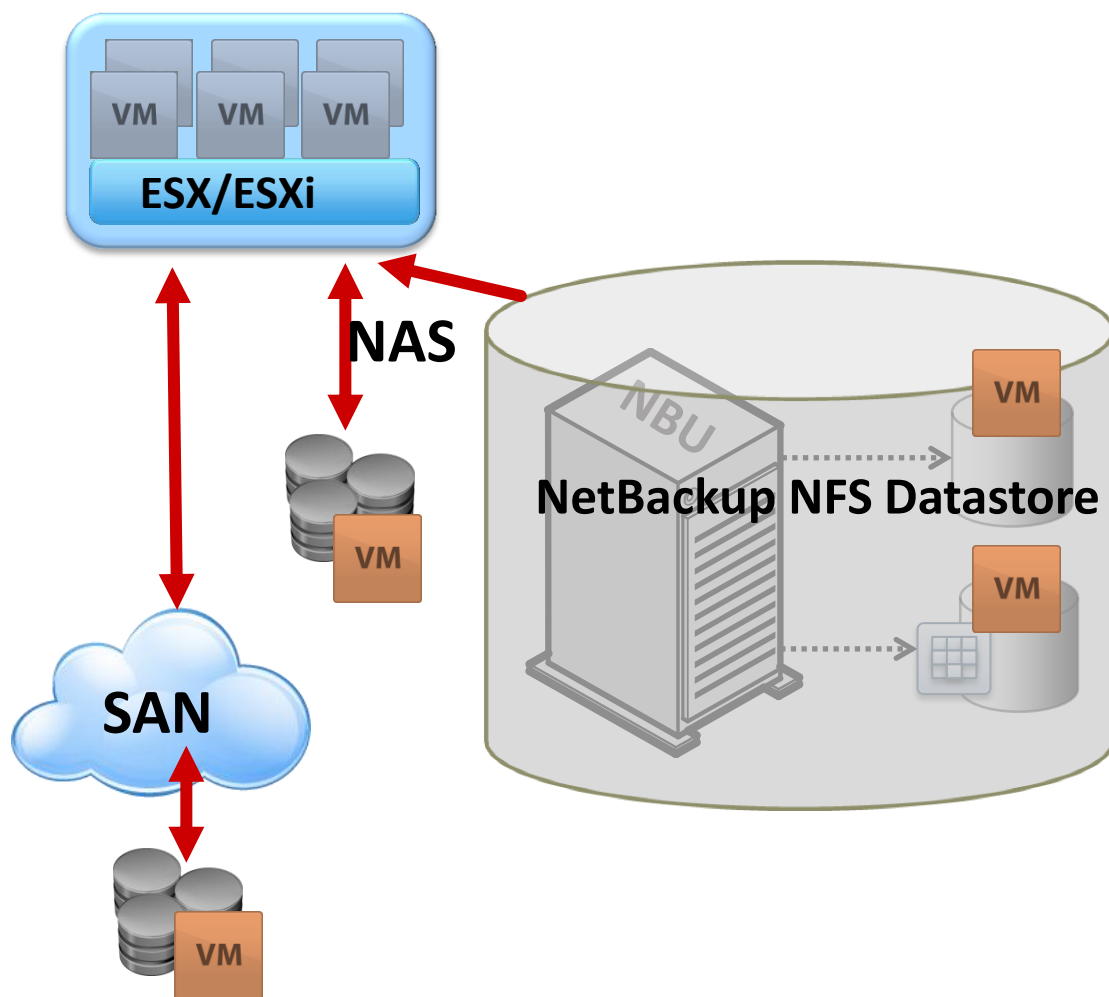
What's New in Replication Director 7.6

VMware, Application and Block Array Support

- Current: NetApp NAS -> Snapshot -> Index -> Solve Problems!
- New:
 - Block Support
 - NetApp -> nbuplugin -> OnCommand -> snapdrive
 - EMC -> SMIS -> ECOM -> “Solution Enabler”
 - VMware Support
 - Application Support
 - Exchange & SQL
 - VMware VMDK's on NAS datastores
 - Oracle on NFS
 - NDMP Policy Snapshot & SnapDiff & Wildcards

VMware Instant Recovery in NBU 7.6

- Instantly power on any protected VM from disk backup target
 - No need to restore VM first
- Uses standard NetBackup backup images
 - No need to change any backup process
- Support with all Symantec disk based solutions
 - Basic disk, Advanced disk, PDDO, MSDP, NetBackup appliance
- Once powered on, VM is 100% available
 - After power-on, VM disks transferred to ESXi storage (Storage VMotion)
 - Storage VMotion ensures no disruption of service

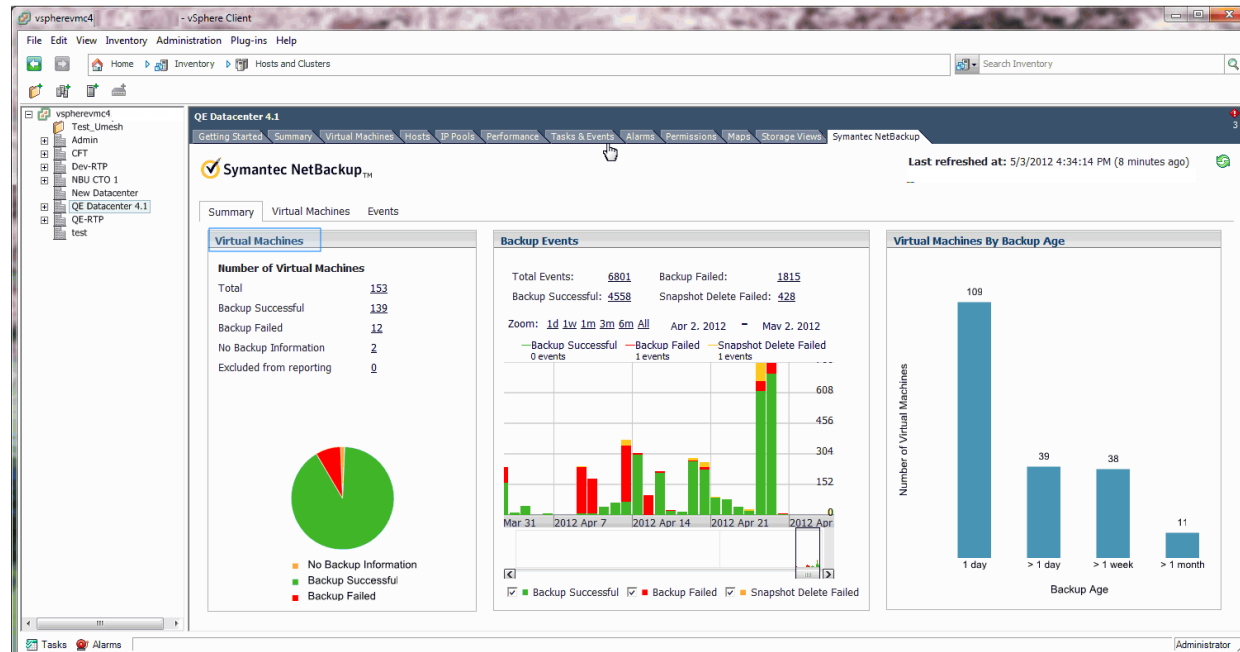


VMware vCloud Director Support in 7.6

- NetBackup automatically interrogates vCloud Director (vCD) to discover newly provisioned VM's
 - Automatically protects any newly provisioned VMs (vApps)
 - Select VM's based on vCD objects: Org vDC, vApp, vCD server
- NetBackup supports public and private vCD implementations
- Direct integration with vCD backup API
- Enhanced V-Ray restore options are supported
 - Recovery of vApp with 1 or more VMs

vCenter Integration in NBU 7.6

- NetBackup reporting and VM restores made available to the VM administrator via a vSphere plug-in
- Integrated using standard vSphere Client
- Reports include:
 - Most recent backup
 - Backup timeline
 - Success and failure reporting



Oracle Policy Framework in NBU 7.6

- Automatic discovery of Oracle instances requiring backup
- Improved/simplified backup scheduling
 - Single schedule operation, archive log schedule
 - Implements standard files system features like checkpoint restart and job activity reporting
- Dynamic backup script creation
 - No need to maintain scripts
- Supports data protection solutions outside of RMAN
 - ASM and crash consistent snapshots
- New policy management framework
 - Will be extended to other features and agents in future releases

Customer experience enhancements

- New/enhanced pre-upgrade checker
 - Available for UNIX/Linux as well as Windows
 - Checks installed EEBs and alerts if fixes are not included in the new version
- Expanded telemetry
 - operation and product usage reporting; job, policy, storage, etc.
- Improved error handling and logging
- Enhancements to diagnostic tools
 - NBCC/NBCCA/NBCCR - NetBackup Catalog Consistency “gather”, “Analyze” and “Repair”
 - nbclogs – “NetBackup Copy Logs”
 - nbdna – “NetBackup Domain Network Analyzer”
 - nbsu – “NetBackup Support Utility”

MSDP Enhancements



Reliability: Sustainable system performance over time with heavy workloads and increased backup success rates



Housekeeping minimized. Queue processing overhead dramatically minimized resulting in improved backup windows.



Performance: New multithreading enhancements improve single stream and client-side deduplicated backups. New lower memory footprint allows memory to be used for other backup operations.



Robustness: New self-healing process maintains data consistency without downtime. Network connection protection improves remote backups.



Availability: Faster deduplication service restart process increases system availability and improves troubleshooting: Hours -> Minutes

NetBackup 7.6 proliferations

Optimize for
Source Workloads

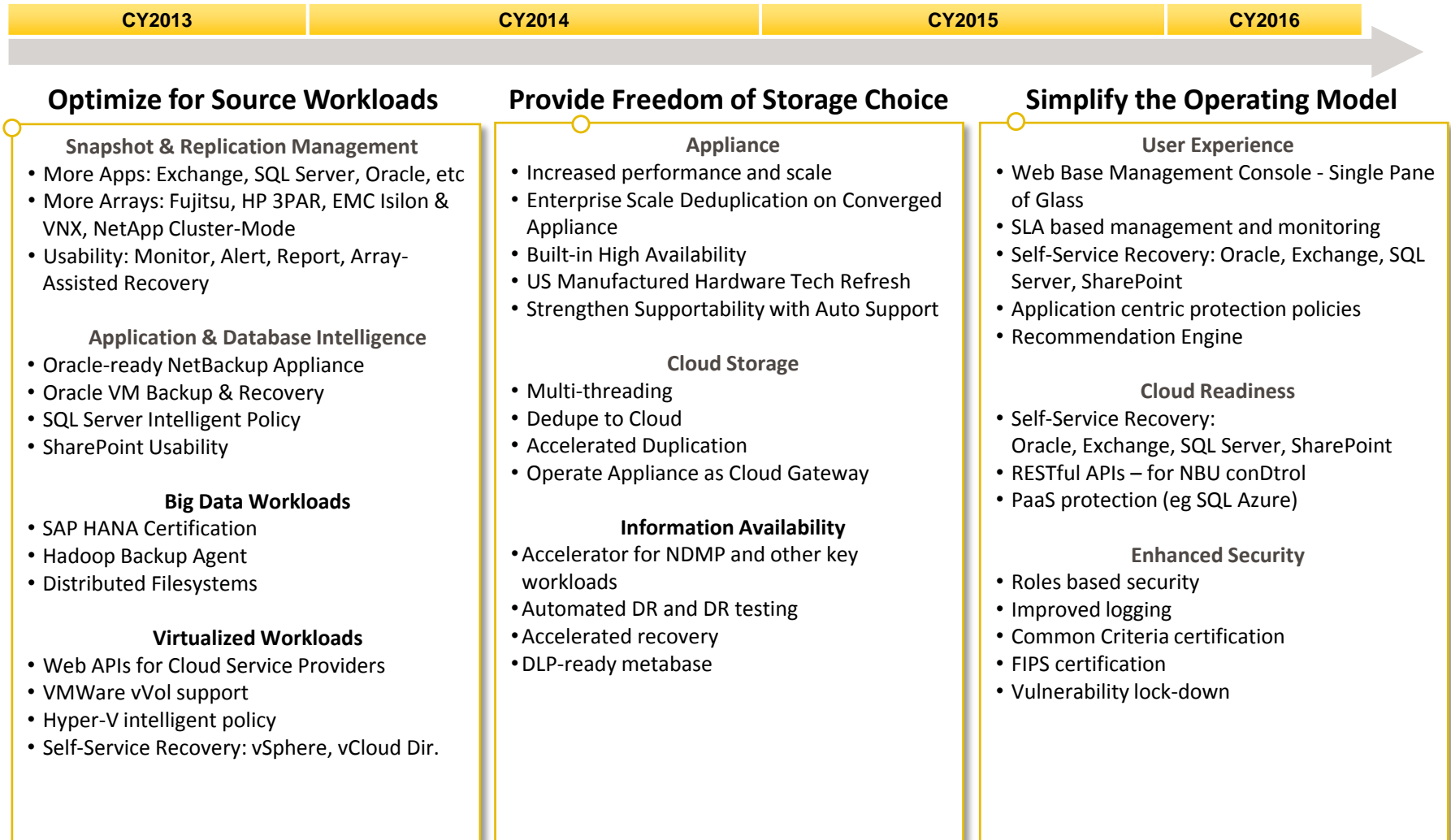
- Windows Server 2012/Windows 8*
 - Supported, with limitations
 - NetBackup client, including Resilient File System (ReFS) and NTFS deduplication
 - SharePoint agent
 - Exchange agent
 - NetBackup media server (Windows 2012 only)
 - Not supported
 - Active Directory agent
 - Master server, OpsCenter server and Search and Hold server
 - SAN Client
 - Console running on Windows 8
- Exchange & SharePoint 2013*
- VMware vSphere 5.1*
- Solaris 11 Master Server & Sun Cluster support
- Client support for VxFS 6 compressed files
- DB2 for zLinux
- BMR support for Solaris 11 (Sparc and x64)

*** Also supported in NetBackup 7.5.0.6**



Where We Are Going...

NetBackup Strategic Investment Priorities



**Optimize for
Source Workloads**

	Physical	Virtual	Arrays	Big Data
Workloads	Client Deduplication, NetBackup Accelerator ORACLE SYBASE vmware SAP hp	V-Ray Intelligence, vCenter integration, vCloud SharePoint CITRIX Novell Informatica NEXSA SQL Server suse Fujitsu redhat	Replication Director, NetBackup Accelerator for NDMP IBM DB2	Agent support for Big Data vendors, Hadoop agent, Accelerator for Oracle Greenplum 10gen

Simplify the Operating Model

- Appliances
- IT Self Service
- Search
- Auto-configuration
- Self-monitoring

NETBACKUP

PLATFORM

**Provide Freedom of
Storage Choice**

	Tape	Disk	Appliance	Cloud
Storage	Quantum SIEMENS	SEPARON rockwell Symantec HITACHI EMC	FalconStor Sun amazon web services atat	

Drive out cost with in-line, non-rehydrating,
mega-scale dedupe

Thank you!