

Why Storage Infrastructure Management?

We're Living in Exponential Times

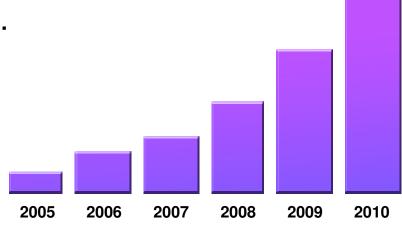
- 4 Exabytes of information was created in 2008
 - More than was created in the past 5000 years, combined
- 200 million users on MySpace
 - Would be the 5th largest country in the world
- 31 billion searches on Google every month
 - Was 2.7 billion / month in 2006
- The # of text messages sent every day exceeds the total population of the planet

"We're training our children for jobs that don't yet exist, to solve problems we don't yet have, using technology that hasn't yet been invented" – Karl Fisch, Educator

Source: Karl Fisch, http://thedigitalblur.com/2008/11/08/did-you-know-shift-happens-by-karl-fisch/

The Tidal Wave of Data Continues ...

- The amount of digital information continues to grow exponentially ...
- And we need to keep more of it, longer ...
- And the costs of losing data are unacceptable ...
 - Lost revenues
 - Lost customer confidence
 - Embarrassment in the market
 - Fines from contracts, government agencies
 - CEO and CFO could go to jail

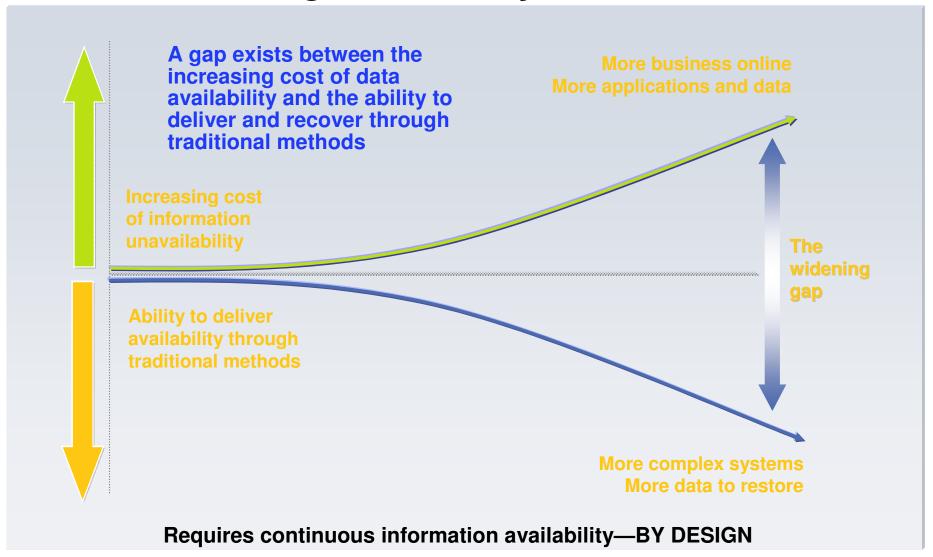


Data created and copied is expected to grow at 57% CAGR through 2010

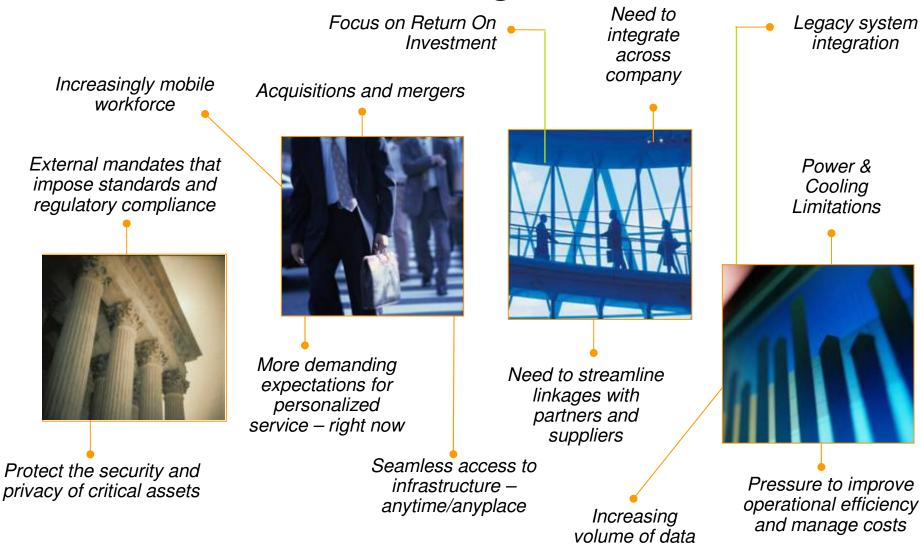
We Need to do More with Less, and we need to do it smarter

Source: Various external consultant reports

More Data = Longer Recovery Times



Market Trends are Stressing the IT Environment



The Pressures on your Storage Admins are Mounting

- **Data growth**
 - It takes longer to back it up
- **Higher service level requirements**
 - You can't afford down time
 - You can't afford to lose any data, anywhere
- Longer retention periods for more data
 - Need more capacity; need to manage it
- Mergers and acquisitions
 - Need to integrate systems, processes
- **Security requirements**
 - Need to protect your customers' data as well as your own
- Remote/branch offices
 - creating and storing more business-critical data



Yesterday's data protection may not be good enough!

Admin Challenges

Recovery takes too long, I need to recover data more quickly

Recovery from last night's tape backup leaves too much data at risk

Our offsite data must be secure

My business applications are 24x7, I need to protect my customer's data without taking the application down

My IT budget is flat while my operational expenses are increasing



Advanced disk to disk technologies

Effective disaster recovery and business resiliency

Enhanced information and data security

Advanced replication technology, application data protection, CDP

Increased productivity



And, the infrastructure is bursting at the seams

Admin Challenges

Controlling out-of-control storage growth

Minimizing performance bottlenecks

Planning for capacity upgrades

Minimizing outages & keeping up with changes in the SAN

Simplifying the management of multi-vendor storage devices

Data migration

<u>Needs</u>

Data reduction technologies

Better utilization of existing resources

Performance analytics with root cause identification

Capacity management

Change configuration management based on best practices policies

Common tools across many systems

Non-disruptive data movement