





Tiered Storage School

Lesson One

**Introduction
&
Business Requirements**

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Tiered Storage in 4 Lessons

Lesson 1 – Introduction & Business Requirements


Lesson 2 – Data Classification for Tiered Storage

Lesson 3 – Creating a Tiered Storage Strategy

Lesson 4 – Justifying the Strategy to Management

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What is a Tiered Storage Strategy?

- A tiered storage strategy places data on storage tiers that meet business needs at appropriate cost levels for each category of data
- Tiered storage delivers major benefits quickly
- ILM then addresses data movement over the life cycle

"ILM is comprised of the policies, processes, practices, and tools used to align the business value of information with the most appropriate and cost effective IT infrastructure from the time information is conceived through its final disposition. Information is aligned with business requirements through management policies and service levels associated with applications, metadata, and data."

- SNIA Data Management Forum, October 12, 2004

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Tiered Storage Benefits

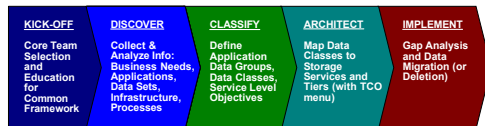
- Reduces storage costs
- Delivers better service levels on the most critical data
- Enables cost-effective compliance with data retention rules and regulations
- Reduces risk of data loss and litigation exposure

Reasons Why Tiered Storage Projects Fail and/or Cost Too Much

- Inability to get around "my data is too important to move off of Tier 1" user mindset
- Focusing on technology before business and legal requirements
- Not including process costs / liabilities in total costs
- Using the wrong storage technology
- Trying all-or-nothing approach instead of focusing on tactical wins based on a well designed strategy

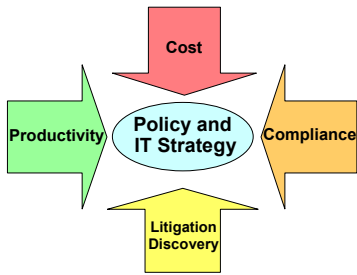
Start with the business requirements, not the technology

Tiered Storage Project Steps



- Establish a common conceptual framework for the core team: Tiered Storage School is a good start!
- Understand the business needs before focusing on the storage architecture
- Define data classes and service level objectives, then provision storage services and tiers to meet those requirements

Balancing Business Requirements



Focusing on one misses the others.

Kick-Off your Project for Success

- Select a small core team of key stakeholders
 - Operations Staff
 - Architects
 - Business Representatives (IT or Super users)
 - IT Management
- Educate your team with an initial kickoff
 - Introduction to storage tiering (lesson 1)
 - Definition of Terms
 - Discovery Goals (see lesson 2)
 - Necessary resources
 - Time frames and schedules

Data Growth Driving Storage Costs Higher

Over 93% of business information is in digital format
(UC Berkeley)

70% is never printed

Unstructured

File systems (Word, Excel,
PowerPoint, etc.)
Video, Audio, Photographs

Semi-structured

Email and instant messages
Medical images
Content repositories
Indexed data

Structured

Relational databases
ERP & CRM records



Digital data just keeps growing!

Example – Health Care Enterprise

- Company:** ABC Healthcare Services
- Challenge:** Infrastructure for email not meeting regulatory, litigation readiness, and corporate requirements
- Actions:** Email retention policy development, archive architecture definition, technology evaluation, RFP and vendor selection, message archive deployment
- Result:** Aligned infrastructure with corporate business and compliance needs, while improving service levels and reducing costs

Example – Retail Store Chain

- Company:** XYZ Retailing
- Challenge:** Immature storage infrastructure not meeting business requirements for DR, HA, SLA, and provisioning
- Actions:** Application / storage inventory, application data grouping, data classification, gap analysis and remediation plans – including tiered storage, HA clustered servers, and improved backup
- Result:** Higher service levels, reduced risks, lower costs

Conclusions

- The growth of electronic data is driving costs higher, even with the reduction in storage media costs
 - Tiered storage can enable cost-effective retention and management of electronic documents and data
 - Data retention requirements are increasing due to litigation discovery and compliance regulations
 - A strong kickoff is essential for success
 - Start with a business needs assessment to define the overall policy and service level objectives
- Next step: data classification
