Topics

- Storage Strategy Defined
- Need for Storage Strategy
- Responsibility for the Strategy
- Strategy Contents
- Starting Development of the strategy
Storage Strategy - Defined

Strategy is the long-term direction for storing and managing information

- Must consider current situation and future demands
- Information has a long life – recognize implications on strategy
- Horizon includes plans for 3 to 5 years
Storage Strategy - Defined

- Development of the strategy is a process
  - A start and an end point
  - Includes IT team to develop strategy and constituents – business owners and users
  - Regularly evaluated and updated according to the process
  - Highly visible across the organization
Strategy is about storing and retrieving information

- Addresses concerns about
  - Availability
  - Data protection
  - Integrity
  - Longevity
  - Security, compliance
  - Cost – operational and capital
Storage Strategy - Defined

Strategy is about storing and retrieving information

- Inclusive of
  - Physical systems and devices
  - Infrastructure
  - Management and utilities
  - Applications
Storage Strategy - Defined

- A trap that must be avoided - Tendency to think of devices
  - Image of a box for data
  - Details about device attributes
    - Capacity
    - Performance (speeds and feeds)
    - Per TB cost
- Storage Strategy is a much bigger picture
Storage Strategy - Defined

- Must consider new requirements / demands
- New technologies
  - Better, cheaper, faster
  - Costs
  - Software with data services and control
- Demonstrate continuous improvement
Need for a Storage Strategy

Information is critical

- Must be available
- Must have integrity – assured
- Operational considerations for access
  - Who, how fast, record of access, serialization
  - Data protection and business continuity
Need for a Storage Strategy

- Strategy can be incremental – specific area strategy developed
  - Deal with unstructured data
    - Object storage for content repository
    - Archives
  - Transition to all flash primary storage
  - Use of commodity platforms with storage software for services and control
Need for a Storage Strategy

Storage has become the over-arching identity term for information access and management

- Storage architecture
  - Plan for meeting business needs for information access and management
  - Encompasses the management of equipment and data

- Includes infrastructure
  - Methods and elements to store and retrieve data
Need for a Storage Strategy

- **Business impact when needs are not met**
  - Problems that occur
  - New demands not being met

- **Career jeopardy**
  - Individual
  - Organization
Context about Information

- **Raw**
- **No association / organization to give meaning**

- **Has CONTEXT to give meaning**

- **Understanding of information due to analytical process, experience**

- **Future action / plans**
Need for a Storage Strategy

➤ Perception vs. Reality

- IT is viewed as overhead in many environments
- Viewed as impediment or hurdle to overcome by many business owners, users

➤ Counter the perception by being proactive

- Have a strategy
- Make other groups part of process
Need for a Storage Strategy

Strategy is survival

- Demonstrated actions and plans
- Inclusion
- Remove / dampen enthusiasm for alternatives to IT
- Reduce rogue/shadow IT operations
Responsible for the Strategy

- Generally – IT director or Storage Director or VP of storage or …
  - May be different person based on organization differences
- Reality – needs to be inclusive
  - Group with responsibility for developing
  - Constituents – as a group with planning input, review, and consultation
Ultimately a team with a leader

Responsibility is beyond technical
  ➢ Must be visible
  ➢ Able to communicate

Cross organizational boundaries
Responsible for the Strategy

- Business Strategy
- Current Operations
- Best Practices
- Requirements
- IT Strategy Planning Team
- Tactical Plan
- Implementation Plan
- Process
Is this a new effort?

What was done before?

- Regular process
- Out-dated plan from long ago
- Cuneiform on parchment from a storage architect or consultant – may be long gone
Starting Strategy Development

- Assume the process will be “re-engineered”
- Start with assessing the current situation
  - Implies many areas
  - Initially – team assessment and production of strategy document
  - Add constituent group with their “independent” assessment
  - Requires interviews / discussions
  - Do not be misled with surveys
Areas to consider

- Understand current operations
  - Most have evolved because of changes that occur in real time
  - Difficult to make changes
    - Time, training, etc.
    - Risk
  - Identify limitations from current operations
Areas to consider

- Overall business strategy can dictate change, magnitude of storage needs, etc.
- Includes economic situation – staffing, capital, operating cost
- Executive direction – regardless of whether optimal
Starting Strategy Development

- Areas to consider
  - Competitive environments usually look at what others are doing
  - Best practices is subjective, but…
    - Does provide new ideas to consider
    - May have to justify chosen strategy vs. what competition does
Starting Strategy Development

- Background work – preparation
  - Education on storage strategy development for team
  - Systems and technology
    - New developments since last evaluation
    - Maturity level – risk vs. reward
    - Transitional efforts required
Developing the Strategy

Preparation – Understand the requirements overall and for each application – information needs:

- Performance – access
- Capacity – how much, growth rate
- Access – what software will access the information, access method – block, file, object, physical paths for access
Developing the Strategy

- Preparation – Understand the requirements
  - Security needs
  - Compliance necessary
  - Availability / business continuity
  - Data protection
    - RTO, RPO
    - Probability of access change over time
Developing the Strategy

Evaluation of technology

- Which technologies will fit requirements
  - Differences for file, block, and object access
  - Performance differences
  - Availability / reliability differences
  - Infrastructure and support implications
Developing the Strategy

- Evaluation of technology
  - What technology transitions will occur
    - Improvements over lifespan of data
    - Longevity of technology
    - Transitions
      - Seamless or impactful
      - Gains from transition – cost reduction, performance improvement, availability, etc.
Developing the Strategy

Create targets

- What is needed (and when)
  - Long list
  - Across current and new information needs

- Incremental steps to get there
  - Factors to consider
  - Cost estimates – gross at this point
Developing the Strategy

- Develop plan for each step
  - Solutions to deploy
    - Vendors
    - Technologies
    - Sequence
    - Interdependencies
    - Timeline
    - Resources, training, procedures
    - … it’s a project …
Developing the Strategy

- **Identify sources of funding for each project**
  - From savings – need calculations to confirm
  - As part of new deployment costs

- **Project value at end point for each project**
  - Will use projection for ongoing measurement comparison
  - Iterative improvement is ultimate reason
Developing the Strategy

Factor the operational process changes required

- Procedures to be written
- Test of conditions
- Method of transition from current environment
First Assembly of Strategy Element

Information Strategy

- Business Strategy
- IT Strategy Planning Team
- Current Operations
- Best Practices
- Requirements
- Tactical Plan
- Implementation Plan
- Process
End of Part 1

Part 2 continues
After break