SEC Partner Teleconference

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Extending the Life of Electronic Equipment

What is the Problem?

- Computer hardware is expected to last 7 years
- Equipment purchased by institutional and commercial buyers is used for an average of 3 years
- New products require raw materials and energy for manufacturing and transportation
- Old products must be disposed of properly, which may be time consuming and costly
- Used equipment may still be useful or valuable

Process for Extending the Life of Equipment

- Evaluate practices
- Revise policies or procedures
- Prevent problems and maintain equipment
- Extend usefulness for individual or organization
- Educate users

Evaluate Practices

- Review long-term policies, procedures and plans

- Conduct life-cycle analysis

  - Inventory equipment in use and current lifecycle

  - Assess hardware and software needs

  - Understand acquisition processes

- Remember

  - All users are not equal

  - All equipment is not equal

- Look for culture issues

Revise Policies and Procedures

- If possible and necessary, change policies, procedures and plans
  - Define IT and user roles and responsibilities
  - Specify a four year, or more, refresh rate

- Notify IT, acquisition and procurement, and end users

Prevent Problems and Maintain Equipment

- Security can lead to longevity
  - Regularly update virus/spyware/malware protection and schedule regular scans
    - Remember equipment not regularly connected to the network
  - Apply operating system and software updates
    - Immediately apply critical updates
    - Schedule non-critical updates
  - Block users from administrative functions

Prevent Problems and Maintain Equipment

- Manage software
  - Inventory software in use
  - Manage software installation
  - Remove unused programs
  - Limit or eliminate autostarting programs

- Manage hardware
  - Check, fix and defragment drives
  - Consider regular physical cleaning

Extend for the Individual

- Add memory (RAM)

- Replace broken components

  - Damaged cables

  - Peripherals

  - Drives

- Replace problematic components

  - Upgrade just the desktop computer or monitor

Extend for the Organization

- Implement a "bumping" or "trickle-down" policy for electronics
- Assess used equipment
  - Future use
  - Condition
  - Age
- Utilize property/asset management software to track available equipment
- Keep an inventory of peripherals and components

Educate Users

- Provide information about policies, procedures and plans
  - Highlight requirements and benefits
    - Environmental benefits can be calculated using the Electronics Environmental Benefits Calculator

- Protect hardware
  - Maintain air flow
  - Clear clutter
  - Use a surge protector or power strip

Educate Users

- Clean up electronic clutter
  - Clean out temporary files
  - Empty trash bin
  - Free storage space

- Save smart
  - Encourage saving on network or external drives and media
  - Backup

Leasing and Seat Management

- Set technology refresh rate to four years

- Require maintenance or extended warranties to keep equipment running for four years

External Reuse

- If you can't use it, someone else may be able to:
  - Within your organization
  - Within your regional / local government
  - Within your community

Assess Used Equipment

- Future use
  - Internet browsing, e-mail, word processing, spreadsheets, presentations, and finances
  - Educational software
- Condition
  - Operational
  - Safe
- Age
  - Less than five years old
  - Exceptions: laptops, laser printers, flat panel monitors

Preparing to Donate

- Collect all peripherals, cables, manuals, and any transferring software media and documentation
- Complete media sanitization of internal and external media
- Remove property decals
- Remove external media (disks, CDs, DVDs, USB drives, paper)
- Properly package equipment to reduce breakage
- Include fact sheet on end-of-life options for the recipient
- Complete necessary documentation

Know When to Recycle

- Obsolete or broken equipment should be recycled
- Equipment that is not donated or sold should be recycled

Resources

- SEC website, Extending Product Life
  - http://www.stateelectronicschallenge.net/operations.html#life
- FEC website, Extending the Life of Equipment
  - http://www.federalelectronicschallenge.net/resources/opmain.htm#three
- Electronics Environmental Benefits Calculator
  - http://isse.utk.edu/ccp/projects/benefitscalculator/elecbenecalc.html

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