Technology Asset Management

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Introduction

***Objectives*:**

Confirm and document inventory practices and asset management program maturity for Council hardware and software.

***Scope*:** Technology hardware and software asset management from May 1, 2019, through December 30, 2020.

Methodology: Interviews, review of inventory databases, review of policies and procedures.

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Management Responses

- Management responses are pending, though all findings and recommendations have been reviewed with management.
- Follow-up on recommendations will be performed.

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OBSERVATIONS

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Criteria

- National Institute of Standards and Technology (NIST)
  - NIST Framework for Improving Critical Infrastructure Cybersecurity
- ISACA Guidance

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Procedures, Work Instructions, Job Aids

- **Observations:**
  - No procedures or instructions exist to standardize the use of service tickets for asset deployment and disposal.
  - Roles and responsibilities not defined or reviewed
  - Materiality threshold not defined.
  - No procedure or work instruction exists regarding loaner equipment distributed during pandemic.

- Council has taken actions to improve policy and procedure reviews.

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Procedures, Work Instructions, Job Aids

- **Risks:**
  - Materially important assets could go missing, be lost, be replaced before the end of its useful life, or may be left active past its useful life.
  - Institutional knowledge may be lost, which could cause further inconsistency and discontinuity.
  - Policies, procedures, and controls may not be reviewed to confirm best security practices.
  - Divisions or departments may implement procedures or work instructions inconsistently and/or control objectives may not be met

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Inventory Systems

- **Observations:**
  - Assets are tracked in seven different databases or systems across the Council
  - There are differences in the quality and completeness of attribute tracking between the inventory systems for technology assets.
    - *Core Attributes*: Asset name, asset number, asset type, location, and owner.
    - Supplemental Attributes:
      - Cost (replacement cost if an asset were lost);
      - criticality of the asset (impact of loss of an asset); and
      - sensitivity (does the asset include low, medium, or high-risk data)

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Inventory Systems

- **Risks:**
  - System Controls may not adequately track all core attributes and limit the integrity of attribute data.
  - Inventory data may not be sufficiently useful to inform decision-making or planning.
  - Lack of inventory audits may make inventory data unreliable, negatively impacting planning and lifecycle management.

Lifecycle Management

- **Observation:** Lifecycle management practices range from informal planning documents to relying on budget planning and institutional knowledge.

- **Risks:**
  - Potential physical and information security risks
  - Possible unanticipated costs with unexpected failures
  - Additional costs in maintaining older assets
  - Council may not be able to perform cost-effective strategic asset management planning.

Configuration Management
(at deployment)

- **Observations:**
  - Multiple approaches to managing baseline configurations
  - For baseline configurations that exist, they are based on technician's professional experience, and do not always follow established, documented checklists.
  - No documented reviews/audits to confirm settings are based on leading security practices.
  - Nothing to document roles and responsibilities to confirm separation of duties.

- **Risk:** Council is vulnerable to security threats

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Asset Disposal

- **Observations:**
  - The Council uses two vendors to dispose technology assets.
  - The Council used one vendor for several years prior the vendor obtaining a National Association for Information Destruction (NAID) certification.
    - NAID Cert good practice to meet Payment Card Industry Data Security Standards (PCI-DSS) and Health Insurance Portability and Accountability Act (HIPAA) compliance requirements
  - No formal documented process exists for technology asset disposal vendor management.

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Asset Disposal

- **Risks:**
  - Loss or misuse of sensitive, secure, or confidential data
  - Litigation
  - Reputation of the Council

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Software Licensure

- **Observations:**
  - Other than Microsoft 365, information about software license tracking is minimal.
  - Lack of documented processes related to software licensure management.
  - No audits performed on software licensure tracking.

- **Risks:**
  - Unintended use of more licenses or run out of licenses
    - Fines or unplanned costs
  - Licenses may not be purchased in cost-effective manner.

IT Sole Source List

- **Observations:**
  - Process exists for the Sole Source list, however maintenance of the list not clearly documented.
  - Sole Source Review Team (SORT) created in late 2020.
  - Unclear how cost reasonableness determined.
  - SORT processes not yet a standard Council procedure.
  - Some vendors could be approved via signature authority process.

- **Criteria:** Best practices from the Federal Acquisition Regulations (FAR).

IT Sole Source List

- **Risks:**
  - Inefficiencies and unnecessary expenses
  - Potential perception of or actual conflict of interest and accountability issues

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QUESTIONS?

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