COMMONWEALTH OF VIRGINIA

Information Technology Resource Management (ITRM)

TECHNOLOGY MANAGEMENT POLICY

Virginia Information Technologies Agency (VITA)

Publication Version Control

Questions related to this publication should be directed to the Enterprise Architecture (EA) Division in VITA. EA notifies Agency Information Technology Resources (AITRs) at all state agencies, institutions and other interested parties of proposed revisions to this document.

This following table contains a history of revisions to this publication.

Version	Date	Revision Description
GOV 2002-02.1	03/03/2004	Initial
GOV 105-03	08/03/2011	Complete revision—all content is new. Change markings not included.
GOV 105-04	12/02/2013	Section 3.4 added to define IT Program Management. Section 3.9.6 added to incorporate compliance into IT Governance and Oversight. Minor wording changes in Section 3.9 to clarify meaning.
GOV 105-05	07/09/2018	Complete revision—all content is new. Change markings not included.

Identifying Changes in this Document

- See the latest entry in the revision table above.
- Vertical lines in the left margin indicate the paragraph has changes or additions.
- Specific changes in wording are noted using *strikethroughs*, italics, and underlines; *strikethroughs indicating language that was deleted*; italics only indicating new/added language; and italics that is underlined indicating language that has changed.

The following examples demonstrate how the reader may identify updates and changes:

Example with no change to text – The text is the same. The text is the same. The text is the same.

Example with revised text – This text is the same. ~~This text was deleted.~~ *A wording change, update or clarification has been made in this text.*

Example of new section – *This section of text is new.*

Example of deleted section – ~~This section is deleted.~~

Review Process

Enterprise Solutions and Governance Directorate Review

Enterprise Architecture Division provided the initial review of this publication.

Online Review

All Commonwealth agencies, stakeholders, and the public were encouraged to provide their comments through the Online Review and Comment Application (ORCA). All

comments were carefully evaluated and individuals that provided comments were notified of the action taken.

Preface

Publication Designation
COV ITRM Policy GOV105-05

Subject
Technology Policy

Effective Date
July 9, 2018

Supersedes
COV ITRM Policy GOV105-04
December 2, 2013

Scheduled Review:
One (1) year from the effective date, then every two years thereafter.

Authority
Code of Virginia, §2.2-2007 (Powers of the CIO)

Code of Virginia § 2.2-2007.1. *(*Additional duties of the CIO relating to information technology planning and budgeting)

Code of Virginia, § 2.2-1115 (D) *(Procurement Violations)*

Code of Virginia, § 2.2-2699.6 (Powers and duties of the ITAC)

Scope
This policy is applicable to all Executive Branch agencies and institutions of higher education (hereinafter collectively referred to as "agencies") that are responsible for the management, development, purchase and use of information technology resources in the Commonwealth of Virginia. This policy does not apply to research projects, research initiatives or instructional programs at public institutions of higher education.

Purpose
The purpose of this policy is to establish guiding principles for creating optimal business value from IT-enabled business investments at acceptable cost and risk.

General Responsibilities

Chief Information Officer of the Commonwealth (CIO)
Develops and approves statewide technical and data policies, standards and guidelines for information technology and related systems.

Virginia Information Technologies Agency (VITA)
At the direction of the CIO, VITA leads efforts that draft, review and update technical and data policies, standards, and guidelines for information technology and related systems. VITA uses requirements in IT technical and data related policies and standards when establishing contracts; reviewing procurement requests, agency *IT programs and* projects, budget requests and strategic plans; and when developing and managing IT related services

Information Technology Advisory Council (ITAC)
Advises the Chief Information Officer of the Commonwealth (CIO) on the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems.

Executive Branch Agencies
Provide input and review during the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems.

Related COV ITRM Policies, Standards, and Guidelines
Information Technology Investment Management Standard (CPM 516-Current Version)

Project Management Standard (CPM112-Current Version)

Program Management Standard (CPM-301-current version)

Project Manager Selection and Training Standard (CPM111-Current Version)

Enterprise Architecture Policy (EA200-Current Version)

Enterprise Architecture Standard (EA225-Current Version)

Information Technology Security Policy (SEC 519-Current Version)

IT Information Security Standard (SEC501-Ccurrent)

Hosted Environment Information Security Standard (SEC525- Current)

IT Risk Management Standard (SEC520-Current)

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Diagram

1.0 Introduction

The Chief Information Officer of the Commonwealth (CIO) and the Virginia Information Technologies Agency (VITA) have a broad range of statutory technology management responsibilities. These assignments cover specific tasks related to technology security, reporting, budgets, sourcing and projects, and overarching responsibilities for technology policy, information technology (IT) strategic planning, value creation and leadership. The Commonwealth Technology Management (CTM) Policy is intended to provide overarching guiding principles for use by executive branch agencies and institutes of higher education for the management of IT. Standards are issued to implement this policy and provide specific direction and requirements on particular topics. Guidelines are issued to assist agencies with the execution of standards or this policy.

2.0 Glossary

As appropriate, terms and definitions used in this document can be found in the COV ITRM IT Glossary. The COV ITRM IT Glossary may be referenced on the ITRM Policies, Standards and Guidelines web page on the VITA website at:
https://www.vita.virginia.gov/media/vitavirginiagov/it-governance/psgs/pdf/COV_ITRM_Glossary.pdf

3.0 Policy Statements

3.1 Commonwealth IT Investment Management Principles and Strategy

The Commonwealth shall strive for continuous improvements in the quality of IT services and support to assure customer satisfaction and staff efficiency. This will ensure that IT:

> 3.1.1   Delivers services that support the business functions of government.
>
> 3.1.2   Builds and maintains excellent relationships with customers.
>
> 3.1.3   Effectively engages and responds to customers and other stakeholders.

Governance practices and functions do not occur in isolation but are dependent on other governance functions. The result is an ecosystem of integrated governance practices as illustrated in Diagram 1 below. The complexity of the Commonwealth's IT ecosystem requires strong processes and continuous communication to achieve the integrated approach to governance practices required in the Commonwealth.
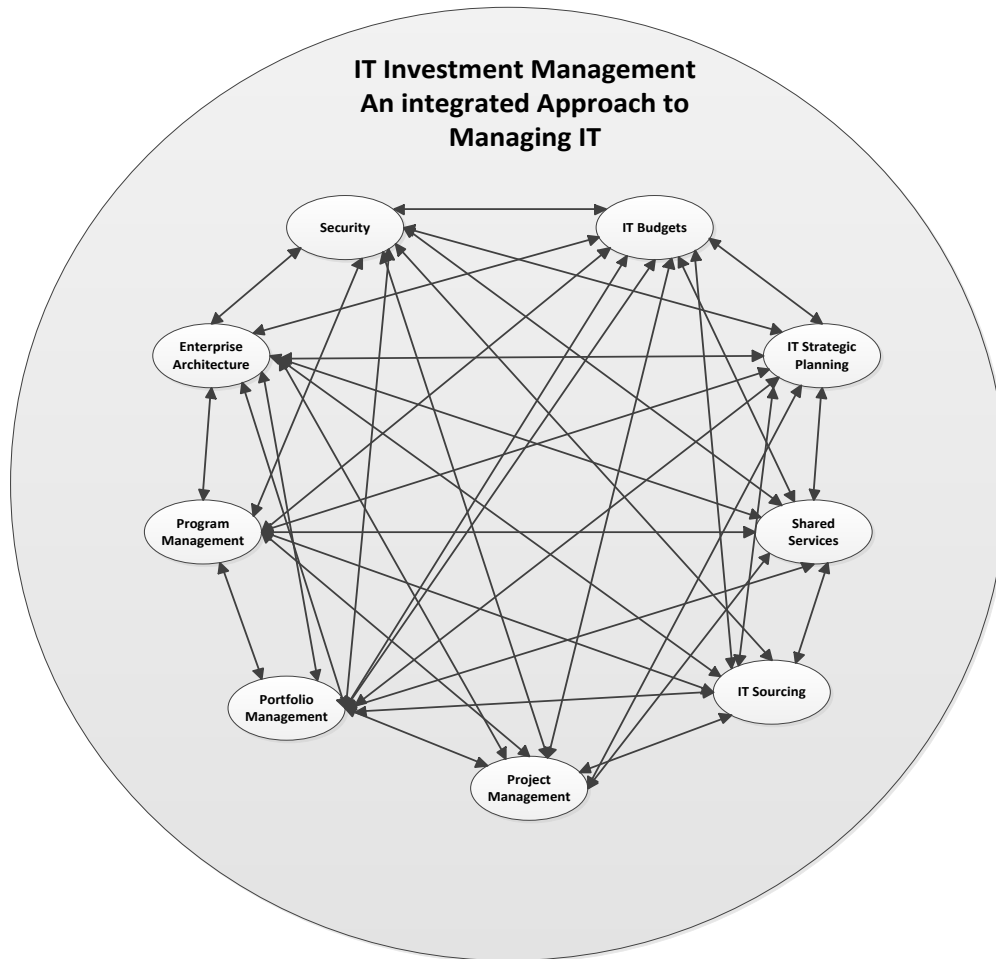
Diagram 1: IT Investment Management: An Integrated Approach to Managing IT

3.2   Information Technology Investment Management (ITIM)

A description of the business-driven lifecycle for the required practice of ITIM can be found in the ITIM standard.

The Commonwealth shall follow Information Technology Investment Management (ITIM) recommended practices that have been modified to fit the Commonwealth's business operations and technology management environment. The Commonwealth's ITIM methodology provides a global framework for the management of IT and includes:

3.2.1   IT Strategic planning which establishes future IT directions and guidance for funding and programmatic activities; identifies potential agency IT-enabled business investments; captures agency IT budget information; and provides a starting point for investment management built on business requirements and needs. Agency business-oriented performance measures to determine the effectiveness of operational IT solutions.

3.2.2 Enterprise Architecture (EA) is a strategic business capability that provides benefits to the business by utilizing a framework and knowledge base to establish and maintain the architectural vision and apply governance in support of the enterprise mission.

3.2.3 A recommended practice-base IT portfolio management methodology that is used to support both the selection of new agency IT investments and the evaluation of operational IT investments based on criteria established by the CIO.

3.2.4 Supply chain management which provides IT procurement oversight as well as enterprise contract vehicles for information technology.

3.2.5 IT program and project management to oversee the execution of all IT programs and Projects.

3.3 IT Strategic Planning and the Business Value of IT

The Commonwealth shall give priority to investments in IT that demonstrate measurable contributions to improved constituent service levels, agency operational efficiencies, and the strategic goals of the investing agency and the Commonwealth. Strategic and Operational IT plans shall be developed to direct and drive investment management activities within the Commonwealth.

3.3.1 Investments in IT shall support the efficient operation and consolidation of agency business functions under the central agencies responsible for those functions, and facilitate the elimination of redundant and unnecessary agency services, governing bodies, regulations and programs.

3.3.2 Investments in IT shall support the streamlining of constituent services by promoting cross-agency collaboration on self-service capabilities where appropriate.

3.3.3 Agencies with similar business should collaborate on IT investments that serve multiple agencies and promote standard business practices along functional lines across the enterprise of government.

3.3.4 Investments in IT shall directly support the goals and objectives identified through the Department of Budget and Planning's Agency Strategic Planning process, the Commonwealth of Virginia Strategic Plan for Information Technology, the Governor's Executive Orders and Directives, and the Commonwealth's Enterprise Architecture.

3.3.5 Investments in IT shall directly support transparency in government and the availability of data, information and government services to the citizens of the Commonwealth to the greatest extent possible.

3.3.6 IT shall maximize the business value of IT services and assets throughout their lifecycles

3.3.7 IT strategic planning requirements are outlined in the ITIM standard.

3.4 IT Portfolio Management

The Commonwealth shall maintain a Commonwealth Technology Portfolio (CTP), a repository for agency information technology (IT) investments in the Commonwealth of Virginia. The portfolio organizes agency inventory information from a business driven perspective. Information from the system will be used to:

3.4.1   Support both commonwealth and agency IT strategic planning

3.4.2   Capture a current or "as is" view of the commonwealth IT architecture

3.4.3   Facilitate migration planning towards a conceptual or "to be" commonwealth IT architecture

3.4.4   Allow agencies to share information about their current portfolios

3.4.5   Better inform the overall commonwealth IT management process

3.4.6   Portfolio management requirements are documented in the ITIM standard.

3.5 Enterprise Architecture

Enterprise Architecture (EA) is a strategic business capability that provides benefits to the business by utilizing a framework and knowledge base to:

- Establish and maintain the architectural vision; and

- Apply governance in support of the enterprise mission.

EA uses the framework and knowledge base to support the management, design and deliverance of strategic business and IT changes, align outcomes to strategies, and ensure successful business transformations.

EA also contributes to the mission by advising on critical issues such as cost reduction, process improvement, innovation, technology selection, performance management, potential new business models, and the research and analysis of other possibilities and opportunities.

3.6 Security

The Commonwealth shall adhere to security principles to promote the governance, management, and securing of its information assets.

For high-level guidance on securing information and implementing information security programs, please see the Information Technology Security Policy and standards.

3.7 IT Sourcing

A uniform approach shall be used to solicit, evaluate and engage suppliers of IT; improve and evaluate IT purchasing activities; and implement controls to reduce IT sourcing risks.

3.7.1 IT sourcing shall support an enterprise perspective by promoting both the Commonwealth's long-term strategy as well as the best possible achievement of current business objectives.

3.7.2 IT sourcing shall utilize thorough, business-centered, and legally compliant (including but not limited to the Virginia Public Procurement Act [VPPA]) evaluation processes to allow the selection of suppliers who demonstrate superior cost and quality performance, and excellent customer and citizen service.

3.7.3 IT sourcing shall engender public trust through transparency of action, fairness in all dealings, providing equal opportunities for all suppliers, and ensuring that all suppliers promote the equality and diversity of their workforce.

3.8 IT Program and Project Management

The Commonwealth shall follow a Commonwealth Program and Project Management methodologies for the execution of all IT programs and projects. These methodologies include establishment of:

3.8.1 Roles and responsibilities, processes, documentation, governance, and oversight for the execution of IT programs and projects.

3.8.2 Procedures, processes, requirements, and recommended practices used to execute and control IT programs and projects.

3.8.3 A process for assuring that program and project managers are selected to lead IT programs and projects.

3.8.4 The required practice lifecycles for Program and Project Management can be found in the Program and Project Management standards.

3.9 Centralization of IT

A technology management approach shall be adopted that continually assesses Commonwealth IT activities to determine if the Commonwealth can achieve increased efficiency and effectiveness through the centralization and consolidation of the activities, or through the promotion of appropriate competition for the performance of the activities.

3.9.1 IT infrastructure shall be centrally managed to provide for enterprise-wide, cohesive, secure, and efficient IT environments.

3.9.2 The Commonwealth shall adopt a solutions delivery approach that takes advantage of economies of scale, enables purchasing leverage, and ensures

information and system security in a state-controlled environment by building and hosting solutions within the Commonwealth managed infrastructure.

3.9.3 The Commonwealth shall promote an efficient shared services model that provides cost effective solutions for local governments and state agencies of all sizes.

3.9.4 The information needed for effectively managing operational agency IT assets shall be consolidated in a central repository for use by agency business leaders in the evaluation of IT solution performance and the planning of future IT investments.

3.9.5 Where appropriate, management of information shall be centralized to support the state and local government, acquisition, storage, use, sharing and distribution of information.

3.10 IT Governance and Oversight

As required by law, the Commonwealth shall establish IT governance and oversight designed to "support a unified approach to information technology across the totality of state government" (*Code of Virginia* §2.2-2007).

3.10.1 Policies and standards shall be promulgated by the CIO to ensure that Commonwealth IT resources are used and appropriately managed within the confines of this policy and the strategic direction of the Commonwealth.

3.10.2 All agencies, their staff, and agency contractors or suppliers with IT responsibilities shall comply with the policies and standards promulgated by the CIO.

3.10.3 All agencies, their staff, and agency contractors or suppliers who use Commonwealth IT resources or data from Commonwealth systems shall comply with the policies and standards promulgated by the CIO.

3.10.4 IT governance and oversight shall ensure that all IT activities in the Commonwealth are performed in compliance with the policies and standards promulgated by the CIO.

3.10.5 Agencies within the scope of this policy shall comply with the enumerated policy statements. Failure to comply with this policy may result in remedial actions by the CIO, as provided for or required by law (page iv), including but not limited to:

3.10.5.1 Requirement that an agency obtain additional approvals, including approval by the responsible Secretary or Chief of Staff.

3.10.5.2 Restriction or denial of delegated authority, including delegated IT procurement authority.

3.10.5.3 Modification, suspension, or termination of an IT program or project by the CIO.

      3.10.5.4 Limitations on the approval to initiate new IT programs or projects, including lack of approval.

      3.10.5.5 Termination of any IT procurement or contract by the CIO