

# **Information Technology Policy** *Business Process Management Policy*

Number ITP-BUS010

Category

**Business** 

Effective Date May 16, 2008

Supersedes All Prior Versions

Contact

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## 1. Purpose

The purpose of this Information Technology Policy (ITP) is to establish enterprisewide standards for Business Process Management (BPM). Establishing BPM standards will provide guidance to agencies as they plan for new projects associated with business or IT automation initiatives (such as ITIL processes, new application development projects, or investments in existing applications).

## 2. Scope

This ITP applies to all offices, departments, boards, commissions, and councils under the Governor's jurisdiction (hereinafter referred to as "agencies"). Agencies not under the Governor's jurisdiction are strongly encouraged to follow this ITP.

Third-party vendors, licensors, contractors or suppliers shall meet the policy requirements of this ITP that are applicable to the products and services provided to the Commonwealth as outlined in the Responsibilities Section.

# 3. Definitions

**3.1 Business Process:** A series of steps or activities designed to accomplish a specific business outcome.

**3.2 Business Process Management (BPM):** A functional discipline that uses various tools and methods to discover, model, analyze, measure, improve, optimize, and better align Business Processes with business goals.

**3.3 Procedure:** A detailed set of instructions for performing a task.

**3.4 Material Decisions:** A decision that has a significant legal, financial, human resource, legislative, organizational, or regulatory impact. This includes but is not limited to, program eligibility, benefits determinations, and decisions impacting the health, safety, and welfare of Commonwealth citizens and/or employees.

**3.5 Process Analyst:** Process Analysts define processes and how tools for automation will support that process. This involves documenting existing processes, determining the root cause of process deficiencies, identifying opportunities to improve processes, and evaluating changes to processes and their effectiveness.

**3.6 Process Architect:** An individual who specializes in the design and integration of complex interdependent processes using a combination of mapping, modeling, and strategizing to develop or re-engineer processes that maximize efficiency and value.

**3.7 Process Manager:** The individual responsible for overseeing the execution of the process. Process Managers monitor the daily operations to ensure the process is executed properly and operating efficiently. They are also responsible for handling issues or exceptions that arise during the execution of the process.

**3.8 Process Owner:** The person with the authority to determine how a process should operate and the responsibility to ensure that the process meets ongoing operational needs.

**3.9 Process Practitioners:** The individual(s) who execute one or more of the activities of a process.

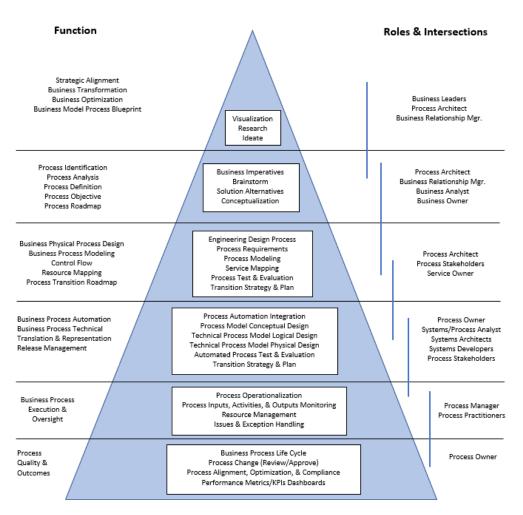
## 4. Background

Business Processes and Procedures are important assets of an organization and must be effectively managed. <u>BPM</u> is the management practice that emphasizes the control, management, optimization, and continuous improvement of Business Processes throughout the business process lifecycle.

The goals of BPM include minimizing errors, reducing waste, ensuring regulatory compliance, more quickly implementing changes, and improving productivity and efficiency. Additionally, BPM protects again the loss of institutional knowledge by identifying and formally documenting Business Processes and Procedures that otherwise may be known to only a small group of people.

BPM plays an important role in the development and modification of IT solutions as it helps ensure application development activities are aligned with the Business Processes.

The diagram below depicts roles and functions commonly involved with BPM:



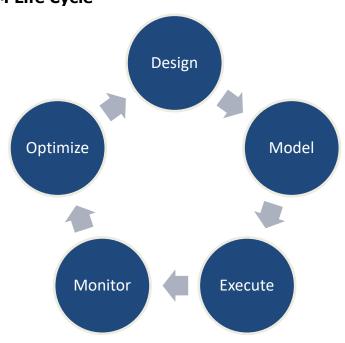
# 5. Policy

Agencies shall utilize a BPM framework anytime business or IT processes are being automated using technology. This includes new automation initiatives as well as changes or updates to previously automated processes. The BPM framework shall, at a minimum, include the following components:

## 5.1 The BPM lifecycle

- **a. Design:** The design phase includes the identification and documentation of the existing process as well as identifying the desired outcomes or results to be achieved as a result of BPM. Lean process improvement principals are utilized during the design phase to streamline processes, increase value, and reduce waste.
- **b. Modeling:** During the modeling phase the new process is defined. Typically, this involves a visual representation of the new process such as a process map or diagram. Once the process is defined, it should be tested to validate efficiencies/improvements. Based upon the test results and feedback, changes may be required. This cycle of testing and modifying the design may need to happen several times before the new process if ready to implement.
- c. Execution: Implementation of the new process.

- **d. Monitoring:** Performance indicators should be established for the new Business Processes. Once established, the measurement of these performance indicators should be implemented. Commonly used performance indicators are Time, Quality, Cost, and Capacity.
- **e. Optimization:** The concepts of Continual Service Improvement (CSI) are applied to the performance indicators and metrics collected during the monitoring phase. This data is analyzed in an effort to determine if the process changes had the intended effect and to identify additional areas for improvement. The process is then modified or redesigned to increase efficiency.



#### Figure: BPM Life Cycle

## **5.2 Well documented Business Processes and Procedures**

There are numerous tools and methods that can be used to document Business Processes and Procedures including but not limited to: Process maps, swimlane diagrams, SIPOC diagrams, value stream maps, manuals, checklists, and other procedural documents. OPD-BUS010B *Procedure Template* and OPD-BUS010C *Process Template* provide templates that can be used to document Business Processes and Procedures. Agencies should choose the format that best meets their need for the process they are documenting.

Regardless of the format, process documents and related artifacts shall be produced and maintained throughout the BPM lifecycle. These documents shall be kept up-to-date and readily available. It is the responsibility of Process Owner to regularly review the documentation and ensure the Business Processes and Procedures still align.

#### 5.3 Separation of duties

Separation of duties (SoD), sometime referred to as segregation of duties, is the principle that no individual or role should have sufficient access, information, or

privileges to commit fraud. The goal of SoD is to prevent or mitigate the risk of unauthorized, fraudulent, or damaging activities. SoD accomplishes this by dividing the critical tasks or functions of a process among multiple individuals, roles, or departments. SoD is especially important for processes relating to financial transactions, Material Decisions, the custody of assets, or other high-risk transactions.

When designing or redesigning Business Processes and Procedures agencies shall ensure separation of duties is adequately incorporated to protect the integrity of the process, transactions, and decisions. Where possible, logical and physical access controls should be used to enforce the separation of duties.

A separation of duties matrix is a useful tool to identify which tasks or functions should not be completed by the same individuals. GEN-BUS010A *Separation of Duties Matrix* provides a template that can be used to assist with identifying conflicting functions.

Documentation relating to separation of duties shall be updated regularly and be accessible in the event it is requested as part of an audit.

#### 5.4 Lean

Lean is a systematic approach to creating value through continuous process improvement with a focus on eliminating waste and reducing cycle times. The goals of lean include minimizing waste, inventory, and costs while simultaneously increasing quality, customer satisfaction, and productivity. This is accomplished in lean through the 5 lean principles:

- **Identify/Define Value** Identify from the customers perspective what value is being created by the process.
- **Map the Value Stream** Based on the value identified in the previous step, a value stream map is created that identifies all activities that are contributing to that value. Any activity that does not contribute to that value is considered waste. Any unnecessary waste should be reduced or eliminated.
- **Improve Flow** Once wastes have been removed from the value stream, the remaining steps in the process should be configured in a way that flows smoothly and efficiently.
- **Establish Pull** Rather than maintaining a large inventory or trying to predict demand, it is more efficient to produce products or outputs as they are needed and only in the quantity needed.
- Seek Perfection Also referred to as continual process improvement. The first 4 principles are repeated in a continuous process. The cycle repeats itself indefinitely by starting over and looking for new opportunities to reduce waste.

Agencies shall incorporate these lean principles into their overall BPM framework in an effort to iteratively optimize their processes.

#### **5.5 Other Considerations**

The following items shall also be considered when designing or improving Business Processes throughout the BPM lifecycle:

- Accessibility Processes, procedures, or output generated by those processes shall comply with the requirements of <u>ITP-ACC001 Information</u> <u>Technology Digital Accessibility Policy</u>.
- Legislative/Regulatory Requirements As Business Processes are redesigned, agencies shall ensure that the process remains in compliance with all applicable laws and regulations.
- **Competencies in Roles/Tasks** Skillsets and competencies required to perform specific activities within the process.

## 6. Responsibilities

#### 6.1 Agencies shall:

- Implement a BPM framework that meets the requirements of this ITP.
- Implement Separation of Duties for any processes where there is a risk of fraud or misuse.
- Utilize lean concepts when designing or redesigning processes.

#### 6.2 Process Architects shall:

- Re-engineer processes in a way that maximizes efficiency and value.
- Identify interdependencies with other internal and external processes.

#### 6.3 Process Analyst shall:

- Utilize a data driven approach to assessing processes.
- Document existing processing.
- Analyze and determining the root cause of process deficiencies.
- Identifying opportunities to improve processes.
- Evaluate changes to processes.

#### 6.4 Process Owners shall:

- Manage the process throughout the BPM lifecycle.
- Ensure processes are aligned with business goals and objectives.
- Ensure processes are in compliance with all applicable regulations and policies.
- Review and approve any changes to the process.
- Establish and monitor key performance indicators.
- Engage Process Analysts and Process Architects as needed.

#### 6.5 Process Managers shall:

- Oversee the inputs, activities, and outputs of the process.
- Monitor daily operations to ensure the process is being executed properly and operating efficiently.
- Identify opportunities for process improvement.
- Communicate process changes to process practitioners.
- Resolve issues related to the execution of the process.
- Coordinates with process architects and analyst.

#### 6.6 Process Practitioners shall:

• Execute the activities in compliance with applicable policies and established processes.

- Coordinate with Process Owners, Managers, Architects, and Analysts as required to support the lifecycle of the process and for continuous improvement initiatives.
- **6.7 Third party vendors, licensors, contractors, or suppliers** supporting business or IT automation, ITIL, Lean and/or Continuous improvement initiatives shall comply with the requirements outlined in this ITP.

## 7. Related ITPs/Other References

- Definitions of associated terms of this policy are published on the Office of Administration's public portal: <u>http://www.oa.pa.gov/Policies/Pages/Glossary.aspx</u>
- Commonwealth policies, including Executive Orders, Management Directives, and IT Policies are published on the Office of Administration's public portal: <u>http://www.oa.pa.gov/Policies/Pages/default.aspx</u>
- Additional information regarding process improvement is available from the Office of Performance through Excellence: <u>https://ope.pa.gov/SitePages/Process.aspx?web=1</u>
- <u>Management Directive 205.34 Amended Commonwealth of Pennsylvania</u> <u>Information Technology Acceptable Use Policy</u>
- <u>Management Directive 210.5 The Commonwealth of Pennsylvania State Records</u>
   <u>Management Program</u>
- ITP-ACC001 Information Technology Digital Accessibility Policy
- ITP-INFRM001 The Life Cycle of Records: General Policy Statement
- GEN-BUS010A Separation of Duties Matrix
- OPD-BUS010B Procedure Template
- OPD-BUS010C Process Template

## 8. Authority

Executive Order 2016-06 Enterprise Information Technology Governance

## 9. Publication Version Control

It is the <u>Authorized User</u>'s responsibility to ensure they have the latest version of this publication, which appears on <u>https://itcentral.pa.gov</u> for Commonwealth personnel and on the Office of Administration public portal: <u>http://www.oa.pa.gov/Policies/Pages/default.aspx</u>. Questions regarding this publication shall be directed to RA-ITCentral@pa.gov.

## **10.** Exemption from this Policy

In the event an agency chooses to seek an exemption from the guidance within this ITP, a request for a policy waiver is to be submitted via the enterprise IT policy waiver process. Refer to <u>ITP-BUS004 *IT Policy Waiver Review Process*</u> for guidance.

This chart contains a history of this publication's revisions. Redline documents detail the revisions and are available to CWOPA users only.

Version	Date	Purpose of Revision	Redline Link
Original	05/16/2008	Base Document	N/A
Revision	10/25/2010	ITP Refresh	N/A
Revision	04/10/2014	ITP Reformat; Merged STD-APP008A into ITP	N/A
Revision	07/03/2016	Migrate from APP ITP domain to BUS ITP domain	N/A
		Removed Retire Standards table Added Exemption	
		section	
Revision	06/27/2022	ITP Refresh	Revised IT Policy
		Utilizing accessible ITP template	<u>Redline</u>
		Added third parties to scope	<u>&lt;06/27/2022&gt;</u>
		Added definitions	
		Added minimum requirements for BPM framework:	
		BPM Lifecycle	
		<ul> <li>Well documented processes and procedures</li> </ul>	
		<ul> <li>Separation of duties</li> </ul>	
		• Lean	
		Removed product standards	