Agenda

- Introduction
  - PIR Definition
  - Why Perform a PIR?
  - When to conduct a PIR

- PIR Stages
  - Stage 1: Stakeholder Engagement
  - Stage 2: Requirements / Metrics Identification
  - Stage 3: Data Gathering
  - Stage 4: Analysis and Findings

- The PIR Report
  - Lessons Learned – More than a collection
The Capital Planning and Investment Control (CPIC) process consists of three main phases: Select, Control, and Evaluate.

**Select Phase**
Most if not all organizations use a formal process to determine which projects are funded (i.e., *THE BUDGET PROCESS*).

**Control Phase**
Most organizations require some means for assessing a project's development progress—(Performance Metrics, EVM, Project Schedules, etc.).

**Evaluate Phase**
Once a project is released, it becomes an afterthought (keep it running until it’s replaced).
In the private sector, systems/projects earn a profit, or they are replaced

Private Sector
- Revenues and costs tracked
- ROI calculated
- Customers counted
- Profit measured

Public Sector
- Resources focused on current development
- No urgency to replace systems (only when required)
- Legacy systems can last for years (“If it ain’t broke….“)

In the public sector, profit not an issue – focus is often on Lessons Learned
A Post Implementation Review (PIR) is a formal review of an investment to determine if the original goals were met.

- Determine if the performance and financial benefits anticipated in the business case were realized
  - Objectivity is the goal
- Analyze outcomes from a stakeholder perspective
- Provide lessons learned for the future
PIRs are required by OMB, and are conducted after a system is deployed and stable

- Two main reasons for conducting PIRs:
  1. The rationalization: The systematic review process allows project teams to identify successes and improvement opportunities for better planning and overall project delivery
  2. The truth: It’s required!
     Several key authorities require a PIR after the implementation of an IT investment, including:
     - GAO’s Information Technology Investment Framework
     - OMB Guidance – OMB A-11 (One page)
     - Clinger-Cohen Act

- PIRs should be conducted after the system is stable and part of the day-to-day operations of an organization, usually 6-18 months after deployment
  - Allows performance data to accrue
  - Minimizes the effect of learning curves and bugs endemic in new system releases
PIR Approach
The PIR process is performed in stages; each workstream builds upon the results from prior stages.

### Four-Stage Framework for Conducting a PIR

<table>
<thead>
<tr>
<th>PIR Stage</th>
<th>Description</th>
<th>Workstream Flow</th>
</tr>
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<tbody>
<tr>
<td>Stage 1: Stakeholder Engagement</td>
<td>Enable information sharing and feedback from program stakeholders</td>
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<tr>
<td>Stage 2: Requirements / Metrics Identification</td>
<td>Determine service requirements, desired outcomes, and metrics used to satisfy requirements</td>
<td>Determine Measures of Effectiveness (MoE) → Identify Metrics (Proj Kickoff) → Identify Stakeholders → Conduct Interviews</td>
</tr>
<tr>
<td>Stage 3: Data Gathering</td>
<td>Collect data needed for metrics</td>
<td>Collect Data (Dev Data Collection Plan)</td>
</tr>
<tr>
<td>Stage 4: Analysis and Findings</td>
<td>Analyze data and report findings to program stakeholders and leadership</td>
<td>Analyze Data → Create Final Report → Prepare Executive Brief(s)</td>
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Stakeholder engagement provides opportunities to gather information and comprehend perspectives.

### Stage 1: Stakeholder Engagement

**Description:** Enables information sharing and feedback from program stakeholders.

**Workstream Flow:**
- Project Kickoff
- Identify Stakeholders
- Conduct Interviews

### Workflow Action Items

**Inputs**
- Program Manager, Program Leads
- Initial documents review

**Processes**
- Introduce Program Manager, Program Leads and review project objectives
- Identify stakeholders with program involvement and Points of Contact (POCs)
- Schedule and conduct interviews to identify roles, requirements and metrics

**Outputs**
- Project Kick-off Brief and Presentation*
- List of involved Stakeholder POCs*
- PIR Meeting Minutes, Action Items, and Lessons Learned*

*: Artifacts and/or templates recommended to retain data collected during execution of this step

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PIR Framework - June 2010
Stakeholder groups include people who share similar expectations for a project

**Stakeholder:** A person or organization with a vested interest in the successful outcome of the project

- Stakeholders vary in both size and importance, and may include:
  - beneficiaries of the project or program
    - Internal (staff, Field Office personnel, etc.)
    - External (citizens, companies, other agencies, etc.)
  - organizations providing funding
  - groups responsible for supporting the project or program once it is deployed
  - strategic organizations who set long-term direction for the Agency

**Stakeholder Group:** One or more Stakeholders who share similar expectations for the project

- Stakeholders groups may include:
  - Project Originator(s) – stakeholders instrumental in obtaining funding or leading development
  - Funding/Oversight – stakeholders who provide/release funds to support the project and/or are responsible for project oversight (e.g. OMB)
  - Internal Support – stakeholders responsible for deploying, supporting and maintaining the project
  - Outreach – stakeholders whose primary role is to interface with other organizations, or who are responsible for marketing the project to external beneficiaries

- Each stakeholder should be part of one stakeholder group only. Select the group that is most appropriate for each stakeholder
Mesures of Effectiveness (MoE) and metrics are determined to support key Stakeholder requirements

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<td>Stage 2: Requirements / Metrics Identification</td>
<td>Determines service requirements, desired outcomes, and metrics used to satisfy requirements</td>
<td>Document Key Requirements</td>
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### Workflow Action Items*

<table>
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<th>Document Key Requirements</th>
<th>Determine Measures of Effectiveness (MoE)</th>
<th>Identify Metrics</th>
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<tr>
<td>- Artifacts from Stage 1</td>
<td>- Stakeholder Requirements Lists</td>
<td>- Stakeholder MoE for each Requirement</td>
</tr>
<tr>
<td>- Key project documents (project charter, scope, etc.)</td>
<td>- Determine Measures of Effectiveness (MoE) for each stakeholder requirement</td>
<td>- Identify Metrics for each MoE</td>
</tr>
<tr>
<td>- Project schedules/performance metrics</td>
<td>- Stakeholder MoE for each Requirement*</td>
<td>- Metrics documented by MoE*</td>
</tr>
<tr>
<td>- Other information (e.g. Internet searches)</td>
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*: Artifacts and/or templates recommended to retain data collected during execution of this step
Associating metrics to specific MoEs assures objectivity

Requirements
The objectives of the project or program – “What do you want?”
- High level, often strategic
- Unique
- Qualifiers often used (increase, decrease, faster, etc.)

Example:
Increase Internet-Based application submissions

Measures of Effectiveness
Determines if a requirement was achieved – “How will I know?”
- At least one MoE for each requirement
  - May be more than one
- May vary by stakeholder
- Qualifiers often used (increase, decrease, faster, etc.)

Examples:
- Internet-based applications received are increasing
- Awareness of Internet-based applications process increasing

Metrics
Validates the result of an MoE – “Was the result achieved?”
- Objective
- Specific results or calculations
- At least one metric per MoE
- May vary by stakeholder
- No qualifiers

Examples:
- Internet-based applications as a percent of all applications
- Survey results - How users found out about iClaim
In Stage 3, the data required to develop the metrics defined in Stage 2 is documented and acquired.

**Stage 3: Data Gathering**
Collects and interprets data needed to develop metrics

**Workstream Flow**
- Develop Data Collection Plan
- Collect Data

**Workflow Action Items**

1. **Develop Data Collection Plan**
   - PIR Meeting Minutes, Action Items, and Lessons Learned*
   - Stakeholder Requirements Lists (requirements, MoE, metrics)*

2. **Collect Data**
   - PIR Facilitator(s)
   - Points of Contact (POCs)
   - Data Available/Obtained
   - Data Requests*

**Inputs**
- Define project baseline
- Determine amount of data needed (timeframes)
- Determine data sources

**Outputs**
- Completed Data Collection Plan*
- Data Requests*

*Artifacts and/or templates recommended to retain data collected during execution of this step*
The PIR Data Collection Plan provides a detailed approach to identifying and gathering data from sources.

The Data Collection Plan:

- Defines the performance baseline
- Maps all data to associated metrics, MoEs, and requirements
- Details timeframes for which data is required
- Identifies the source of data
- Documents potential issues acquiring data
The final stage of the PIR summarizes findings and documents lessons learned for future program efforts.

**Workflow Action Items**

**PIR Stage**
- **Stage 4: Report Results**
  - Description: Communicates findings to program stakeholders and leadership
  - Workstream Flow:
    - Analyze Data
    - Create Final Report
    - Prepare Executive Brief(s)

**Workflow Action Items**

**Inputs**
- Key Stakeholder Requirements, MoE, and Metrics
- PIR Meeting Minutes, Lessons Learned*
- Data

**Processes**
- Calculate metrics
- Determine degree to which metrics validate MoE
- Compile lessons learned *

**Outputs**
- Graphs, tables and analysis for final report
- Final project assessment
- Final project assessment

**Workstream Flow**
- Analyze Data, Create Final Report, Prepare Executive Brief(s)

**Workstream Flow**
- Final Report and Appendices
- Senior Leadership
- Program manager, Program Leads

**Workstream Flow**
- Draft Executive Brief(s)
- Schedule meeting(s) with leadership
- Obtain feedback from leadership
- Incorporate feedback and finalize briefs

**Workstream Flow**
- Final Executive Brief(s)*
- Conduct Executive Brief(s)
- Participate in follow-up meetings as needed
The Final PIR Report articulates how the project delivered against the original baseline goals

<table>
<thead>
<tr>
<th>PIR Report Section</th>
<th>Section Content</th>
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| Executive Summary  | • **Background** – Identifies investment purpose, scope of the release, PIR selection process, who conducted the review and the PIR approach.  
• **Summary of Major Findings** – Summarizes how the release impacted the customers and stakeholders.  
• **Performance Goals** – Discusses how the project delivered against the performance goals  
• **Customer Service Findings** – Describes customer satisfaction level and the reasons supporting it.  
• **Scope, Cost and Schedule** – Summarizes how the project delivered against the original scope and life cycle cost and schedule baselines.  
• **Risk** – Summarizes how effectively risks were mitigated and managed on the project. |
| Project Performance| |
| Project Conformance| |
The PIR Report summarizes the *business value* delivered and the lessons that can be applied to future investments.

### PIR Report Section

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<tr>
<td><strong>Benefits</strong> – Identifies the achievements and business value realized during the release. As appropriate, examples and/or specifics are provided.</td>
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<tr>
<td><strong>Lessons Learned</strong> – A summary of “what went right” and “what could be improved” that can be applied to future investment efforts.</td>
</tr>
<tr>
<td><strong>Observations</strong> – Identifies observations of the project management processes and practices and provides recommendations for improvement.</td>
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Charts and graphs should be used to emphasize key PIR findings – combining two or more graphs can be an effective technique.

An immediate, sustained increase in on-line applications

Negligible growth since deployment

Graph Presentation Tips:
- Title is most important part of the graph – no such thing as a title that is too long
- Use the graph that most effectively illustrates the finding
- Source all data
- Document the Requirement, MoE, and Metric displayed (helps reader understand why graph is important)
- Only use data and metrics identified in data collection plan
Each lesson learned should include a recommendation

**Lessons Learned** – A summary of “what went right” and “what could be improved” that can be applied to future investment efforts.

<table>
<thead>
<tr>
<th>Event / Incident</th>
<th>Lesson Learned</th>
<th>Recommendation</th>
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<tr>
<td><em>Example:</em> Each iteration of the application was reviewed by a focus group prior to deployment</td>
<td><em>Example:</em> The focus groups enhanced user buy-in by identifying wording and interface issues</td>
<td><em>Example:</em> Adjust project plans and budgets for future applications to include focus group participation during prototype development</td>
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An effective PIR is usually written in a tone that mirrors a project’s general acceptance within the organization

- Know your audience and understand the project
  - Write so the readers will listen
  - Think about how to most effectively present findings

- Stakeholder cooperation is a function of project success
  - The more successful the implementation, the more cooperative the stakeholders

- Look beyond systems development
  - Include all stakeholders
  - Work with the PM to obtain feedback from external stakeholders and beneficiaries

- Review project performance metrics
  - Performance metrics may point to MoEs that were not considered

- Stick to the facts
  - Avoid judgments
  - Only present conclusions that can be borne out by the data