Process Improvement Initiative Integration - PI³

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An Integrated framework for planning and implementing key initiatives:

- **Baldrige** - Structured framework for enhanced enterprise performance

- **Prog Management Best Practices (PMBP)** - Practices by which all S&C programs are managed

- **Lean** - Waste reduction and value creation opportunities and techniques

- **Boeing Quality Mgmt System (BQMS)** - Process performance and improvement standards, ISO and AS9100

- **CMMI** - Framework for defining product development processes

- **6-Sigma** - Methods for focused improvement

PI³ will reduce cost and footprint of these separate initiatives
- Each other initiative has intrinsic value
- Initiatives are related and overlap, but differ greatly in approach
- None should be the end; all are a means to improved Business Results

<table>
<thead>
<tr>
<th>Baldrige National Quality Program</th>
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</thead>
<tbody>
<tr>
<td>Leadership</td>
</tr>
<tr>
<td>Strategic Planning</td>
</tr>
<tr>
<td>Customer &amp; Market Focus</td>
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<td>Information &amp; Analysis</td>
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<td>Human Resource Focus</td>
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<tr>
<td>Process Management</td>
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<td>Business Results</td>
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Why Is Integration of Initiatives Important?

- Provide a sustainable environment for organizational process improvement
- Leverage information and resources across the enterprise
- Our customers demand it!

Efficiently and effectively achieve benefits of separate Initiatives
CMMI Is A Critical Component Of PI because of its up-front process focus

- CMMI addresses part of the business that has received little attention by other Demming-like activities.
- Value to customer is largely determined up-front.

![Diagram of Product Life Cycle](image)
### Focus Compatibility Between Lean and CMMI

<table>
<thead>
<tr>
<th>Maturity Level</th>
<th>Focus</th>
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<tbody>
<tr>
<td><strong>Lean</strong></td>
<td></td>
</tr>
<tr>
<td>5 Optimizing</td>
<td>Continuous Process Improvement</td>
</tr>
<tr>
<td>4 Quantitatively</td>
<td>Quantitative Management</td>
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<tr>
<td>Managed</td>
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<td><strong>CMMI Foundation</strong></td>
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<tr>
<td>3 Defined</td>
<td>Process Standardization</td>
</tr>
<tr>
<td>2 Managed</td>
<td>Basic Project Management</td>
</tr>
<tr>
<td>1 Performed</td>
<td>Initialization</td>
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- **Quality & Execution to Plan**
- **Risk & Rework**
Approach To Process Improvement
Integration

- Input specifications
  - Business case made
  - Redundancy gone
  - Words standardized

Baldrige  ISO  CMMI  Lean  PMBP  6 Sigma

Integrated System Specification

Gap Analysis

- Done once
- All gaps seen

Unify and Simplify HQ Process Arch

Align Site Process Architecture

- Site tailoring to business need

- Develop common system solution

Design Process Architecture

- Gaps filled
- Overlaps removed
- Integration plans made when appropriate

Implement
**Strategy**

**Address The Whole Process System**

- **Focus effort on rapid implementation**
  - Integrate Initiatives
  - Streamline Assessments
  - Maximize Inter-Site Collaboration
  - Leverage Selected Pilots
  - Develop a Common Process Architecture
  - Empower teams to innovate

**Systematic Approach**

- **Integrated Requirements**
- **How System used in Future**
- **Design of System**
- **Next Steps**
- **Do It**
- **Implement**
- **Action Plan**
- **Design**
- **Concept of Operations**
- **Spec**
- **PI³**
Thank You