Tips for Leveraging Process Optimization (CMMI<sup>SM</sup> ML 5) with Strategic Planning

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Strategic Planning Question:

“Where are we now and where do we need to be to achieve our future performance goals?”

Issues & Concerns

1. What are the performance ranges can we expect from our existing key processes?

2. What resources do we need to “improve” our performance range to achieve future performance goals?

3. How much can we afford/must to invest to achieve our improvements?

4. What is our multi-stage campaign to implement our improvements?
Strategic Planning Overview:
- Key Factors Across the Organization -

Balancing of the investment versus potential profit of achieving performance goals.
Challenge: How do we leverage existing process performance equity during strategic planning?

Keys to leveraging equity include:

- Inventory organization’s existing management practices.
- Gain an “early” quantitative understanding of existing key processes performance across the organization.
- Set effectiveness goals for ALL of the organization (including SE/SI/SW technical services).
- Apply the CMMI model practices and SCAMPSM appraisal methods as a common framework to implement the effectiveness goals across the organization.
Overview: Three Tips for Leveraging Process Optimization Via the CMMI with Strategic Planning

<table>
<thead>
<tr>
<th>Tip</th>
<th>Major Process Areas (PAs)</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop Strategic Process Improvement Plan with Defined Key Process Performance Goals</td>
<td>CAR, DAR, IPM, M&amp;A, IT, OEI, OID, OPD, OPF, OT, PPQA, RD, RM, RSKM</td>
<td>Develop a team charter, analyze future information needs and develop appropriate key measurements.</td>
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<td>2. Maintain the Organization’s Understanding of Current Informational Needs</td>
<td>M&amp;A, IPM, OEI, OID, OPD, OPF, OPP, PP, PMC, PPQA, RSKM</td>
<td>The team conducts an inventory to establish the baseline of the Process Equity Profile (PEP) containing the current equity levels of process assets across the organization.</td>
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<tr>
<td>3. Prioritize and Schedule Organizational Re-alignment Targets</td>
<td>CAR, DAR, IT, IPM, OID, OPP, OT, PMC, PP, PPQA, QPM, RSKM</td>
<td>The team uses the PEP baseline to plan and launch pilot projects across the organization and leverage the transfer of technology using existing process assets.</td>
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Tip 1: Develop Strategic Process Improvement Plan with Defined Key Process Performance Goals

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<tr>
<th>Key Planning Activity</th>
<th>Major CMMI Process Areas* (PAs)</th>
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<tr>
<td>Develop governance processes.</td>
<td>DAR, IPM, OEI, OPD, OPF, PPQA, RD, RM</td>
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<tr>
<td>Develop Process Equity Profile baseline to document existing infrastructure and account performance analysis.</td>
<td>M&amp;A, OPP, QPM, RD</td>
</tr>
<tr>
<td>Develop multi-year performance goals and leading indicators.</td>
<td>IT, M&amp;A, OID, OIE, OPP, OT</td>
</tr>
<tr>
<td>Perform investment (technology) analysis.</td>
<td>CAR, DAR, IT, M&amp;A, OID, OPP, OPD, OT</td>
</tr>
<tr>
<td>Perform competency-based forecast.</td>
<td>CAR, DAR, IT, OID, OIE, OPP, OT</td>
</tr>
<tr>
<td>Plan for Sarbanes-Oxley compliance.</td>
<td>IT, M&amp;A, OIE, OPD, OPF, PPQA</td>
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*Capability Level (CL) 3 implementation highly recommended.
**Tip 2: Maintain the Organization’s Understanding of Current Informational Needs**

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<tr>
<td>Inventory current leading business indicators collected, reported and analyzed for infrastructure services and profit/loss centers.</td>
<td>M&amp;A, OPD, OPF, OT, PMC, PPQA</td>
</tr>
<tr>
<td>Populate PEP by inventorying existing policies, guidance and process descriptions for infrastructure services and line organizations.</td>
<td>IT, M&amp;A, OPD, OPF, OIE, RM</td>
</tr>
<tr>
<td>Develop gap analysis report and staff pilot projects to implement action plans.</td>
<td>CAR, M&amp;A, OEI, OID, OPD, OPF, OT, PP, PMC, RD, RM, RSKM</td>
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<tr>
<td>Prepare risk management plan, emphasizing mitigation activities, schedules and costs.</td>
<td>PP, RSKM</td>
</tr>
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Process Equity Profile for Infrastructure and Three Accounts for Four Leading Indicator Categories

- Current -

- Forecast -

* Revenue and profit N/A for services
Organizational Process
Equity Inventory

Gap Analysis Report

CMMI PAs

Major Accounts
Finance
Program Control
Contracts
HR

Legend (% gaps)

- Finance: 17%
- Program Control: 45%
- Contracts: 33%
- HR: 40%

Infrastructure
Tip 3: Prioritize and Schedule Organizational Re-alignment Targets

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<td>Plan the deployment campaigns of technologies from “effective” pilot projects across the organization.</td>
<td>CAR, DAR, IPM, M&amp;A, OID, OPP, OT, PP, PMC, QPM, RSKM</td>
</tr>
<tr>
<td>Conduct executive periodic reviews of deployment campaigns.</td>
<td>M&amp;A, OPP, PMC</td>
</tr>
<tr>
<td>Implement objective evaluation of deployment campaigns.</td>
<td>M&amp;A, PPQA</td>
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Planning the Outreach Campaign

- Key Factors Across the Organization -

- Quality
- Cash Flow Revenue
- Profit
- Cash Flow
- Enterprise Efficiency
- Rework (Scrap)
- Investments
- Market share
- Assets

Balancing of the investment versus potential profit of achieving performance goals
### Three Stage Outreach Campaign

1. **Stage Activities**
   - Resource multi-year outreach campaign
     - Account analysis
     - Multi-year performance goals
     - Investment (technology) analysis
     - Staff training & resources
     - Sarbanes-Oxley (SOX)
   - Resource & implement tactical plans
     - Identify pilot projects
     - Transfer technologies
     - Assess investments
     - Review & replan
   - Outreach campaign completion
     - Lessons Learned
     - Outreach Campaign Effectiveness
       - (quality, revenue, profit, customer satisfaction, efficiency)

Optimize Performance Intelligently across the Organization
**Stage 1: Resource Outreach Campaign**

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<tr>
<th>Key Planning Challenges</th>
<th>Major Activities</th>
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<tr>
<td>Understand business forecasts.</td>
<td>Focus on profit/loss centers for key customer accounts.</td>
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<tr>
<td>Set realistic multi-year performance goals.</td>
<td>Forecast growth goals by customer accounts and projected budgets.</td>
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<td>Evaluate best methods to invest in emerging technologies and standards.</td>
<td>Perform technology analysis by customer accounts; participant in technology thrusts via academia or acquisitions.</td>
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<tr>
<td>Focus on investments in improving human resources.</td>
<td>Identify human resource improvements (recruiting and retention) and technology infusions; equity plan for building cadre of expertise.</td>
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<tr>
<td>Select process improvement models.</td>
<td>Perform trade study of CMMI, ISO 9000, People CMM, Six Sigma, etc. for key customer accounts.</td>
</tr>
<tr>
<td>Compliance with Sarbanes-Oxley (SOX).</td>
<td>Plan for internal audits of standard processes.</td>
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