Measures and Metrics for PMO Success

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Also See Related Blog Articles
http://jimkendrick.blogspot.com
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Managing projects and portfolios without metrics is like sailing a ship without a compass!
Why PMOs need measurement and metrics

You already know …

• 63% of projects have schedule delays
• 49% of projects exceed budget or do not meet business objectives
• 45% of projects face cost overruns
• 23% of all projects FAIL

Data published by Standish Group International, Inc., as reported in Computer World, February 17, 2003
http://www.computerworld.com/printthis/2003/0,4814,78517,00.html
Most organizations have problems with their measures and metrics

- Too much data
- Measures aren’t useful
- Too much time to collect and report data
- Data quality is poor
- No baseline
- No time to analyze data
- Reports aren’t used for decisions or action
- Metrics don’t document the PMO’s accomplishments
- Executives don’t pay attention
RELAX!

My approach helps you solve PMO measurement and metrics problems in manageable steps.
Jim Kendrick, PMP, CMC

About the Presenter

40 YEARS OF PROGRAMS, PROJECTS, MEASUREMENT

Portfolio, Program, and Project Management
  Federal OCIOs and CFOs

Acquisition
  Executive Office of the President
  ATF
  FAA
  Federal Contractors and Grantees

COO of Small Federal Contractor
  Corporate Portfolio of 20+ Projects/Contracts

Program Evaluation & Survey Research
  Focus on Measurement & Analysis

Management Consultant to Programs/Projects/Grantees

Program/Project Planning & Execution

Market and Advertising Research
#1 Know what your PMO needs to accomplish
Each PMO is a different animal.

Cookbooks and software tools for measurement need to be tailored to each PMO.
**Who Are You?**

<table>
<thead>
<tr>
<th>TYPE OF PMO</th>
<th>FOCUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Enterprise PMO?</td>
<td>– Enterprise</td>
</tr>
<tr>
<td>– Program or LoB-Specific PMO?</td>
<td>– Program</td>
</tr>
<tr>
<td>– One of Multiple PMOs?</td>
<td>– Collection of Projects</td>
</tr>
</tbody>
</table>

**PROJECT MANAGERS**

| – Work for PMO?                                | • SPONSOR                                  |
| – External?                                    | • CHARTER                                  |
|                                                | • STAKEHOLDERS                             |
|                                                | • # of PORTFOLIOS                          |
|                                                | • FUNCTIONS                                |

**Tailor Metrics to Your PMO**
Your PMO Is Unique: So Are Your Metrics

“PMOs do not exist in a vacuum, rather they imbue the culture and context of their respective organizations. Accordingly no two PMOs are truly identical as each organization, itself, is unique. This is an important recognition since any future guidance regarding the implementation and maintenance of successful PMOs must always consider the organizational context in which each PMO resides.”

Edwin J. Andrews, VMD, PhD, PMP
PMI Manager, Research

Measurement and Metrics Must Be Tailored to Your PMO

*From Foreword, The Multi-Project PMO: A Global Analysis of the Current State of Practice
# Survey of PMO Functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Percentage</th>
<th>Function</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report project status to upper management</td>
<td>83%</td>
<td>Manage archives of project documentation</td>
<td>48%</td>
</tr>
<tr>
<td>Develop and implement a standard methodology</td>
<td>76%</td>
<td>Manage one or more programs</td>
<td>48%</td>
</tr>
<tr>
<td>Monitor and control project performance</td>
<td>65%</td>
<td>Conduct project audits</td>
<td>45%</td>
</tr>
<tr>
<td>Develop competency of personnel, including training</td>
<td>65%</td>
<td>Manage customer interfaces</td>
<td>45%</td>
</tr>
<tr>
<td>Implement and operate a project information system</td>
<td>60%</td>
<td>Provide a set of tools without an effort to standardize</td>
<td>45%</td>
</tr>
<tr>
<td>Provide advice to upper management</td>
<td>60%</td>
<td>Execute specialized tasks for project managers</td>
<td>42%</td>
</tr>
<tr>
<td>Coordinate between projects</td>
<td>59%</td>
<td>Allocate resources between projects</td>
<td>40%</td>
</tr>
<tr>
<td>Develop and maintain a project scoreboard</td>
<td>58%</td>
<td>Conduct post-project reviews</td>
<td>38%</td>
</tr>
<tr>
<td>Promote project management within organization</td>
<td>55%</td>
<td>Implement and manage database of lessons learned</td>
<td>34%</td>
</tr>
<tr>
<td>Monitor and control performance of PMO</td>
<td>50%</td>
<td>Implement and manage risk database</td>
<td>29%</td>
</tr>
<tr>
<td>Participate in strategic planning</td>
<td>49%</td>
<td>Manage benefits</td>
<td>28%</td>
</tr>
<tr>
<td>Provide mentoring for project managers</td>
<td>49%</td>
<td>Conduct networking and environmental scanning</td>
<td>25%</td>
</tr>
<tr>
<td>Manage one or more portfolios</td>
<td>49%</td>
<td>Recruit, select, evaluate and determine salaries for project managers</td>
<td>22%</td>
</tr>
<tr>
<td>Identify, select and prioritize new projects</td>
<td>48%</td>
<td></td>
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</tbody>
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#2 Get buy-in from stakeholders
These stakeholders are on the same page as the PMO about how to measure success!

Wow, the metrics show that the PMO is meeting our expectations!
Why stakeholders are important

• Everyone needs to share the same expectations
• PMOs must make tough decisions about investments and priorities
• Your PMO can be viewed as an asset or barrier to enterprise solutions
Prove the Value of Your PMO

...[T]he value of PMOs and the justification of the expenses they generate are often brought under scrutiny and questioned. Many PMOs are under pressure to justify their existence and show value for money.

#3 Map measures to your business environment

Map measures to …

- Governance levels
- Decision support requirements
- Project, program & portfolio needs
- Life cycle phases
- PMO operations
There’s an ocean of data, but you have to fish for measures that support your business processes.

What do I need to catch?
# Governance & metrics

#3 Map measures to your governance process

Evaluating

Identifying Capabilities & Gaps

Projects

Portfolios

Programs

Monitoring & Controlling

Authorizing & Funding

#3 Map measures to your governance process
Levels that may be important to your PMO

<table>
<thead>
<tr>
<th>Measurement Level</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Goals</td>
<td>Where does the enterprise want to go?</td>
</tr>
<tr>
<td>Strategy Map</td>
<td>What objectives get you there?</td>
</tr>
<tr>
<td>Balanced Scorecard and/or Strategic Indicators</td>
<td>How do you keep the enterprise on track?</td>
</tr>
<tr>
<td>Program Management Office</td>
<td>How does the PMO move the enterprise forward on a cost-effective basis?</td>
</tr>
<tr>
<td>Portfolios &amp; Programs</td>
<td>Are portfolios and programs achieving intended results?</td>
</tr>
<tr>
<td>Projects</td>
<td>How well are projects performing?</td>
</tr>
<tr>
<td>Operations &amp; Maintenance</td>
<td>Are your ongoing programs meeting expectations and enterprise needs?</td>
</tr>
</tbody>
</table>

Oops! Where does measuring statutory compliance fit in?
PMI Focus Has Been on Projects, Not Operations
Not So Fast!

- Over 70% of expenditures in capital investments may be for Operations & Maintenance (O&M)
- Many PMOs are responsible for the investment’s entire lifecycle … not just the “project” phases
- Measurement and metrics for operational analysis reviews can pay off for the enterprise and the PMO
- Your initial functional requirements and lifecycle cost estimates provide the baseline
PMO basic operations

- Projects
- Portfolios
- Programs
- PMO Process
- Output
- Outcomes
Map Measures & Metrics

PROJECTS

• Establish a Consistent, Complete Baseline!
• Include Project Profiles
• Monitor Project Time
  – Time Management Performance
  – Actual vs. Planned Duration
  – Total Time to Complete (by phase or task)
• Compare Costs
  – Actual vs. Planned Costs
  – Original Estimates
  – Baseline changes
• Product/Service Quality
  – Availability
  – Customer Satisfaction
  – Error Rates
• Risk Management
  – Risk Indicators
  – Incidents
  – Impact on Budget, Schedule or Quality
• Corrective Action Plans
  – Project Initiative to Fix?
  – Effectiveness of Corrective Action
• Build Knowledge Base
1. Define baseline ("As-is")
   - Programs & projects
   - Characteristics
   - Costs/resources
   - Strengths/weaknesses/risks

2. Set target (goal or "to-be")

3. Transition strategy

4. Identify performance improvement metrics

5. Measure performance
   - Programs & projects
     - Cost and schedule performance
     - Quality
     - Risk
     - Outputs and outcomes
   - Portfolio as a whole
     - Alignment, improvements, consolidation
     - Cost and schedule performance
     - Risk
     - Business outcomes

6. Take corrective action
Program: New, improved or continuing capabilities that meet a defined business need, often through multiple projects and/or operations

- Similar to Portfolio Method
- Focus and monitor all subordinate projects and expenditures
- Evaluate outcomes
- Optimize projects to move program outcomes forward
- Take corrective action
EVM integrates:

- Scope
- Schedule
- Cost
- Resources
- Technical milestones

**Measures** project performance

**Comparès** planned to actual costs and schedule

**Estimates** final project costs
EVM performance measurement

Defense Acquisition University Program Managers Tool Kit, April 2008, p. 32
Using EVM

- PM Monitors at Least Monthly, Plans Corrective Action when Off Track
- PMO and Executive Owner to Provide Oversight
- Project Results Can Be Rolled Up and Compared at Program and Portfolio Levels
- Various Chart Views Can Provide Visual Status
Visualizing performance

EVM Stoplight Chart, Kidasa Software

Standard EVMS Chart Layout

Dashboard, Decision Edge

Dashboard, Primavera

Measures & Metrics
Project & program benefits

Benefits in Millions

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</thead>
<tbody>
<tr>
<td>Benefits in Millions</td>
<td>2.23</td>
<td>11.84</td>
<td>13.19</td>
<td>5.29</td>
<td>0.51</td>
<td>10.61</td>
<td>132.56</td>
</tr>
</tbody>
</table>

FPAs Avoid System Duplication
ACH Debit Feature
Automated Enrollment
Enterprise Architecture
Web Online Training and Support
Eliminate Manual Processes
Anywhere Access (Internet)
Customer satisfaction

143. The Uniformed Services Employment and Reemployment Rights Act (USERRA) protects members of the National Guard/Reserve during military service. How many times have you been briefed about USEERRA?
   • Never
   • Once
   • Twice
   • Three times or more

144. Do you wish you had more information concerning any of the following USERRA topics? Mark “Yes” or “No” for each item.

   A. Discrimination against employees with military obligations
      Yes  No
   B. Reemployment rights with my employer
      Yes  No
   C. Seniority
      Yes  No
   D. Vacation
      Yes  No
   E. Pension
      Yes  No
   F. Health benefits
      Yes  No
   G. Other
      Yes  No

   Open Ended: Responses to “Other” summarized in Volume I.

145. Which of the following are good times to receive information concerning USERRA?

   A. During Inactive Duty Training (IDT)
      Yes  No
   B. Immediately prior to activation
      Yes  No
   C. About 2 to 3 weeks before demobilization
      Yes  No
   D. During out-processing
      Yes  No
   E. Upon return to civilian life
      Yes  No
   F. No specific time; make information accessible online
      Yes  No
   G. No specific time; make information accessible via telephone hotline
      Yes  No

146(?). Do you have any further suggestions for improving USERRA briefings?
   • Yes
   • No
#4 Simplify the data collection, reporting and analysis process
Squeeze your data collection and reporting processes down to the essentials.
# Stages of Measurement

## Diagram

- **Input Measures** → **Process Measures** → **Output Measures** → **Outcome Measures**

## Table

<table>
<thead>
<tr>
<th>Level</th>
<th>Business</th>
<th>Other External</th>
<th>PMO</th>
<th>Portfolio/Program</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business</strong></td>
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<tr>
<td><strong>Other External</strong></td>
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<td><strong>PMO</strong></td>
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<tr>
<td><strong>Portfolio/Program</strong></td>
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<td><strong>Project</strong></td>
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</table>
### Avoid Redundant Data Collection

- Streamlining saves money
- Judicious overlap of data elements will help validate findings

<table>
<thead>
<tr>
<th>Measures</th>
<th>Strategic Performance</th>
<th>Enterprise Architecture</th>
<th>PMO Process</th>
<th>Portfolio &amp; Program</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data #1</td>
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<td>Data #2</td>
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<td>Data #3</td>
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<td>Data #4</td>
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<td>Data #5</td>
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<td>Data #6</td>
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<td>Data #7</td>
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<td>Data #8</td>
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<td>Data #9</td>
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<td>Data #10</td>
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<tr>
<td>Data #11</td>
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</tbody>
</table>

**PHASES:** Projects break into initiation, planning, execution, control, closeout
Line-of-sight measurement

<table>
<thead>
<tr>
<th>Car Rentals</th>
<th>1. Maximize Revenue</th>
<th>Reservations</th>
<th>Specific Performance Goals</th>
<th>Performance Measures</th>
<th>Performance Targets</th>
<th>Performance Output</th>
<th>Performance Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.1. Reduce “No Shows”</td>
<td></td>
<td>Implement automated reminder and customer service system</td>
<td>.Number completed reservations</td>
<td>Reduce “No Shows from 5% to 3%”</td>
<td>Automated reminder and customer service system</td>
<td>Percent of “No Shows” Dollar value of “No Shows”</td>
</tr>
</tbody>
</table>

- What are the other data items you might want?
- How does the PMO measure its performance?
Analytics:
Metrics need comparisons to be useful!

- Baseline
- Projects within program or portfolio
- Projects within line of business segment
- Historic performance
- Industry benchmarks
- User populations
- Business units
Visualizing comparisons
Investments in a portfolio

Bubble Chart, Niku (CA)
#5 Use your metrics for action and results
Don’t just sit on your metrics. Use findings for action and results!
Corrective action

- Cut costs, accelerate schedule
- Change implementation plan
- Modify scope, requirements
- Hold contractor accountable
- Change personnel
- Reorganize
- Rebaseline
Change investment mix

- Rebalance portfolios and programs
- Accelerate or decelerate projects
- Terminate or replace weak investments
- Initiate new investments
- Consolidate projects and programs
- Update portfolio to match strategic priorities
- Fix or avoid problems
Performance reporting: Common data elements for a PMO reporting system

- General Information about Program
- Information about Project
- PM Information
- Baseline Information
  - Schedule
  - Cost
  - Milestones
- Earned Value Performance
  - Schedule
  - Cost
  - Milestones
- Enterprise Architecture Information
- Portfolio Identification
- Contract Information
- PM’s Assessment
- Corrective Actions
- Current Status
- Compliance Status
- Review/Approval Status
- Documentation Status
Software tools for portfolios

Evolve metrics that fit your PMO

**Measurement Architecture**

- Organize your measurement methods into a **metrics portfolio**
- Fit to your business architecture
- Avoid overlap and redundancy
- Streamline your processes
- Document “as is” architecture of measurement, reporting, and use
- Define a “to be” architecture for PMO metrics
- Develop a transition plan for orderly improvement

Metrics got our PMO an Achievement Award and a bonus!