Enterprise AID and Public Sector Enterprise Performance Measurement

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Agenda

- The Problem
- The Vision
- The Enterprise AID Methodology
- Methodology Components
- Executing the Plan
- Example (America’s Pastime)
- Example (Public Health Agency)
- Lessons Learned
- Closing Thoughts and Questions
The Problem

- The past two decades have witnessed development and deployment of enterprise performance measurement systems, or PMSs, such as the Balanced Scorecard and Performance Prism notably superior to their predecessors in terms of scope;

- For example, the new systems respect notions such as customer satisfaction needed to complement the financial and related measures upon which many legacy systems have traditionally focused; however

- Most PMSs still emphasize an enterprise’s current and generalized performance, largely ignoring future-oriented perspectives and enterprise-specific characteristics.
The Vision

Much might be gained from an approach with which users can develop and deploy enterprise-specific PMSs needed to address enterprise-specific problems for any of the following purposes:

Enterprise Assessment, Improvement, and Design (AID) PMS Purposes

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Description</th>
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<tbody>
<tr>
<td>Assessment</td>
<td>Evaluations of current enterprise performance with respect to stakeholder intent.</td>
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<tr>
<td>Improvement</td>
<td>Enhanced performance, likewise with respect to stakeholder intent, generated by evaluations of current enterprise configurations and associated processes versus those of projected alternatives.</td>
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<tr>
<td>Design</td>
<td>Wholly new combinations of enterprise configuration and process generated in response to stakeholder intent.</td>
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The Enterprise AID Methodology

Planning

Phase 1: Establish the Evaluation Structure

Phase 2: Evaluate the Enterprise

Execution

Methodology Components (Overview)

Enterprise Problem

Critical Operational Issue 1 (COI₁) → COI₂

Measure of Effectiveness 1 (MOE₁) → MOE₂ → MOE₃

Measure of Performance 1 (MOP₁) → MOP₂ → MOP₃ → MOP₄ → MOP₅

Enterprise Utility

OT&E = Operational Test and Evaluation
MCDA = Multicriteria Decision Analysis
## Methodology Components (Systems Science)

<table>
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<tr>
<th>Key Elements</th>
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<tr>
<td><strong>Systems</strong></td>
<td>Collections of different elements that together produce results not obtainable by the elements alone.</td>
</tr>
<tr>
<td><strong>Complex Systems</strong></td>
<td>Sets of elements characterized by performance that emerges over time through interactions among the elements and between the system and its environment.</td>
</tr>
<tr>
<td><strong>Emergence</strong></td>
<td>A feature of systems that exhibit properties meaningful only within the context of the whole system, and not of its components.</td>
</tr>
<tr>
<td><strong>Emergent Properties</strong></td>
<td>Properties exhibited only by whole systems and not by any of those systems’ components.</td>
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# Methodology Components (OT&E)

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<tr>
<td>Critical Operational Issues</td>
<td>Stakeholder needs identified in problems and that must be satisfied for problem resolution; emergent essentials of capability without which posited problem solutions must be judged as unacceptable on functional grounds.</td>
</tr>
<tr>
<td>Measures of Effectiveness</td>
<td>Standards derived by stakeholders from critical issues, independent of solutions proposed for issue resolution but representing emergent properties that induce rank orderings on the problem solutions that are proposed.</td>
</tr>
<tr>
<td>Measures of Performance</td>
<td>Evaluations of intrinsic functions of solutions proposed to resolve COIs, as measured against independently established effectiveness measures.</td>
</tr>
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</table>

Methodology Components (MCDA)

A focus on the complex systems that are enterprises, as well as a strong dependence on eliciting the judgments of groups of individuals expert in particular enterprises and their needs, demands that the AID methodology respect certain pillars of what is broadly termed multicriteria decision analysis:

- **Scales of measurement** and, in particular, the ordinal and interval scales as classically defined by Stevens; and

- **Utility theory**, as originally codified by von Neumann and Morgenstern and later expanded with Savage’s allowance for subjective evaluations and Keeney’s endorsement of multiattribute utility functions.

Executing the Plan

- Once stakeholders agree to a PMS structure, attention can turn to its execution.
- A key Enterprise AID feature is its ability to diagnose any unresolved issues of enterprise performance.
- Diagnostics may identify resolutions necessary for:
  - True deficiencies in enterprise performance; or
  - Deficiencies in evaluation structure (PMS) design; or
  - Improperly executing the PMS.
Example (America’s Pastime)

Adapted from Hester, P. T., Meyers, T. J., & Lin, J. W. (2012). Top-down versus bottom-up measurement: Why building a baseball team (or acquiring a system) using bottom-up stats is a really bad idea. Defense AT&L, 41(4), 4-8.

The Problem

A baseball team’s rabid fan base wants a “winner!”

Has our team won the championship or has it at least displayed the “stuff of champions?”

Another possible critical issue…

Another possible critical issue…

Runs scored per game.

Team batting average.

Team chemistry.

Another possible MOE…

Another possible MOE…

Starting line-up.

Strength of Schedule. Contract(s) status.

Another possible MOP…

Another possible MOP…
The Problem

A state’s lead health agency must offer its citizens the greatest reasonable degree of mental health-oriented services.

COI

Do community-level procedures and venues reflect the degree of “person-centered” service called for with agency policy?

MOE

User satisfaction.

Facility-Community Ratio.

Proportion of non-coercive commitments.

Another possible MOE…

MOP

Service staff-user ratio.

User population densities.

Number of coercive commitments.

Another possible MOP…

Lessons Learned

- Problem statement identification and consensus is crucial;
- Number of performance measures being tracked should be monitored carefully;
- Visual aids are key to PMS development and situational awareness;
- Simply having a conversation about an enterprise is often as valuable as the associated results;
- PMSs require significant resources to set up and maintain; and
- Well-constructed PMSs will serve as guides for future enterprise activities.

Closing Thoughts and Questions

“I think you should be more explicit here in Step 2.”

Harris (2010)
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References


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