Is Decision Analysis and Resolution (DAR) intended Only for Grand Decisions or is it for Everyday Use? Let’s use DAR to Decide

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What is DAR all about anyway?
Specific Practices of DAR

**SP 1.1 Establish and maintain guidelines to determine which issues are subject to a formal evaluation process.**

May be done in organizational guidance and/or at the basic unit level. If at org level, basic unit should at least consider whether the org guidelines need to be tailored.

CMMI text gives examples of guidelines along with examples of activities where a formal evaluation may be appropriate.

Examples?
Specific Practices of DAR

**SP 1.2** Establish and maintain criteria for evaluating alternatives and the relative ranking of these criteria.

For this decision, what are the important factors that we will evaluate and which are more important?

CMMI text gives types of criteria.

Changing the factors or weighting would change the outcome.
Specific Practices of DAR

SP 1.3 Identify alternative solutions to address issues.

Will be unique for each evaluation.

May go beyond the original proposed set.
Specific Practices of DAR

SP 1.4  Select evaluation methods.

Evaluating the same criteria across the same alternatives may have very different results using alternate evaluation methods, especially for subjective criteria.

Realizing that you have defined criteria that are very subjective may cause you to revise to more objective criteria.

CMMI text gives examples of typical evaluation methods.
Specific Practices of DAR

**SP 1.5** Evaluate alternative solutions using established criteria and methods.

This is where you do the analysis and come up with the values of criteria for each alternative.

If there is no clear winner, you may need to review your criteria and add to or revise them.
Specific Practices of DAR

SP 1.6  Select solutions from alternatives based on evaluation criteria.

This is where you document and communicate the results and recommendations.

The customer of your recommendation choosing another alternative does not invalidate your analysis.
Where should DAR be used?
Scope of Application

• Trade Studies
• ... um ...

Is that all? (It is in many organizations)
• The text in the CMMI suggests considering using DAR in:
  • SAM
  • RSKM
  • OT
  • TS and PI in DEV
  • IRP, SCON, and SSD in SVC
  • All four high-maturity PAs
Do a “DAR”
Overall Plan for DAR

SP 1.1 Establish and maintain guidelines to determine which issues are subject to a formal evaluation process.

Guidelines for usage of the Structured Evaluation process during sessions at the 12th Annual CMMI Technology Conference & User Group

Whenever decisions are to be made during sessions, the Structured Evaluation process should be used whenever any of the following conditions are present:
1. ...
2. ...
3. The Session Chair so advises
4. ...
Plan for our DAR

SP 1.2 Establish and maintain criteria for evaluating alternatives and the relative ranking of these criteria.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Cost of Implementation</td>
<td>1</td>
</tr>
<tr>
<td>B. Business Impact</td>
<td>1</td>
</tr>
</tbody>
</table>
# Plan for our DAR

**SP 1.3** Identify alternative solutions to address issues.

<table>
<thead>
<tr>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Only use DAR for large (customer funded) Trade Studies.</td>
</tr>
<tr>
<td>2. Expand usage of DAR to include all critical decisions in the organization.</td>
</tr>
</tbody>
</table>
## Plan for our DAR

### SP 1.4 Select evaluation methods

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Evaluation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Implementation</td>
<td>Evaluated by estimating hours using group opinion and using a loaded cost of $100/hr</td>
</tr>
<tr>
<td>Business Impact</td>
<td>evaluated by estimating the $ impact using group opinion</td>
</tr>
</tbody>
</table>
Perform our DAR

SP 1.5 Evaluate alternative solutions using established criteria and methods.

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<tr>
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<td>-$</td>
</tr>
<tr>
<td>B. Business Impact</td>
<td>+$</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>
Perform our DAR

SP 1.6 Select solutions from alternatives based on evaluation criteria.

Our proposed solution is:
GPs?

A good structured decision template can capture the following information which can contribute to satisfaction of the generic practices:

- When is the result needed? (GP 2.2)
- How many hours are allocated to do the DAR? (GP 2.3)
- Who is responsible for the DAR? (GP 2.4)
- Who else needs to be involved? (GP 2.7)
- When was it actually completed and how many hours were spent? (GP 2.8)
Where have you used it, or considered it for use?
DAR usage

- Is the usefulness reduced in a level 2 organization?
- What about on Agile projects?
- Your experience?
Tips or Questions?
Contact Info

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