DAR to be More Effective: Applying Decision Analysis and Resolution with Good Sense

Bill Phifer
EDS

March 9, 2005
Did You Buy One of These?
Typical Decision Basis
Some Dumb Decisions?

- Picked wrong implementation approach
- Chose wrong architecture
- Bought the wrong product
- Evaluated performance using wrong measurement
- Chose wrong life cycle
- Selected wrong improvement model
- Hired wrong supplier
- Budgeted for wrong investments
- Released too early
- Promoted the wrong person
- Tested wrong things
- Built it – should have bought it
Agenda

To Do

- Understand why, when, how
- Learn to use DAR effectively
- Build a DAR toolbox
- Hear how to implement DAR
- Ask questions
DAR and the CMMI

What did the authors intend?
Definition:

CMMI: The Decision Analysis and Resolution process area involves establishing guidelines to determine which issues should be subjected to a formal evaluation process and then applying formal evaluation processes to those issues.

In other words – a process to define and make key decisions in your organization more objectively and wisely.

…but what is formal?
Not Using DAR (Much)?

Would you leave this in the driveway?
When Should I use DAR?

(Examples)

Business Decisions:
1. Prioritize requirements
2. Personnel – hires, promotions, transfers, layoffs
3. Budget Prioritizations
4. Evaluate risks on acquisitions, divestitures, investments, IP, projects
5. Strategic sourcing
6. Any business problem

Technical Decisions:
1. Architectures
2. Products, features (cost-benefit, build/buy)
3. Designs, platforms
4. Process tailoring (including life cycle selection)
5. Technical Solutions
6. Testing approaches
7. Any technical problem
Basic Decision Making Approaches

- **Directive**: Team leader decides alone and pronounces the decision.
- **Consultative**: Leader gets ideas from members individually or in a meeting, then decides.
- **Democratic**: Team members vote and majority rules.
- **Consensus**: All members participate in a decision that all will support.

Adapted from D.H. Stamatis, Six Sigma and Beyond: Foundations of Excellent Performance
A Basic Formal DAR Process

1. Draft Decision Statement
2. Establish Decision Objectives
3. Objectives: Required or Desired?
4. Value the Desired Objectives
5. Develop the Alternatives
6. Test Alternatives against Required Objectives
7. Score Alternatives against Desired Objectives
8. Calculate Value Score
9. Total the Value Score
10. Determine Risks
11. Select Best Alternative
Problem Solving Model

1. Accept the situation
2. Analyze
3. Define
4. Ideate
5. Select
6. Implement
7. Evaluate

Koberg & Bagnall, 1981
DAR Toolbox

- Decision Trees
- Six Thinking Hats
- Grid Analysis
- Pareto Analysis
- Cost/Benefit Analysis
- Matched Pairs
- Brainstorming
- Nominal Group Ranking Technique
- One Half Plus One
- Weighted Multivoting

- Weighted Tables
- Modified Delphi Technique
- Force Field Analysis
Implementing DAR

1. Provide sponsor messages
2. Train organization on formal and informal DAR processes and tools
3. Create a DAR toolbox
4. Ensure that all decision making follows a process
5. Create and populate a DAR log/database
6. Evaluate DAR implementation
7. Reinforce, look for further improvements

DAR Log
- Date
- Project Name
- Context
- Decision made
- Approach taken
- Duration
- Result
- Contact
Action Items

✓ Think differently about DAR
✓ Implement DAR to last in your organization

Did you DAR today?
Dare to DAR
DAR to be different!
Make a decision if you DAR
Random acts of DAR
Got DAR?
Just DAR it!
Questions

Thank you!
References


MindTools™ website (www.mindtools.com) has an excellent selection of tools on decision making (Decision Trees, Six Thinking Hats, Grid Analysis, Pareto Analysis, Cost/Benefit Analysis)

Stamatis, D.H., Six Sigma and Beyond: Foundations of Excellent Performance, St. Lucie Press, 2002

Sutcliffe, Kathryn, and McNamara, Gerry, Controlling Decision-Making Practice in Organizations, Organization Science, 2001
Bill Phifer
EDS
Global Processes & Methods
bill.phifer@eds.com
(610) 269-7595
SEI-authorized Lead Appraiser