



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

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::: Did You Buy One of These?



jr.
Volume 1 Number 1
February 1984 \$2.95

The Independent
Guide to the
IBM PCjr in
Education, Home
& Business

FIRST ISSUE!

**Hands On
IBM's
Junior!**

**First Look:
Software**

**Peter Norton on
ROM Cartridges**

**COLUMNS:
Education, BASIC, Games,
Communications**

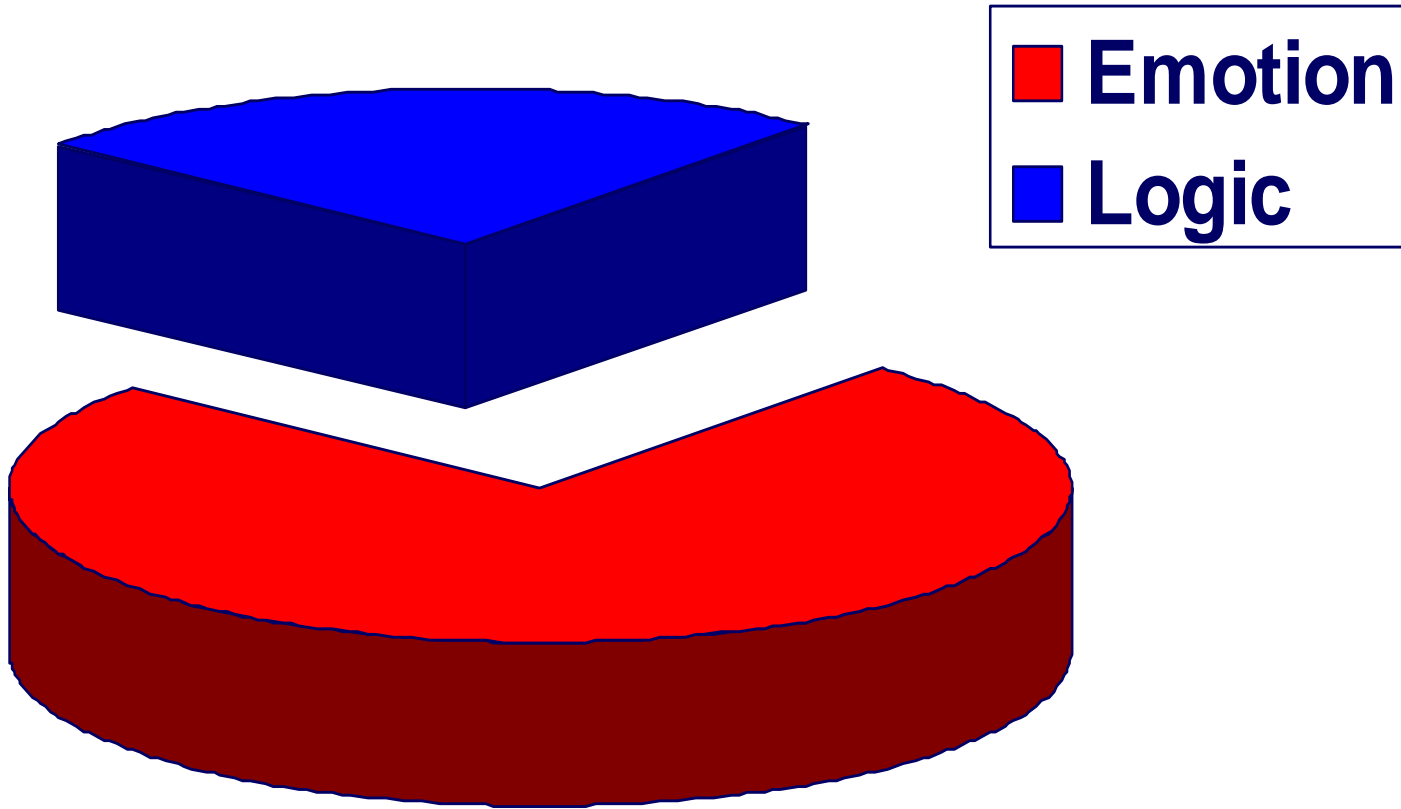
**Four
Cartridge
Games**

**What Works
on Junior?**

**Inside
CompuServe**



∴ Typical Decision Basis



⋮⋮ Some Dumb Decisions?

Picked wrong implementation approach

Chose wrong architecture

Budgeted for wrong investments

Hired wrong supplier

Released too early

Bought the wrong product

Evaluated performance
using wrong measurement

Promoted the wrong person

Tested wrong things

Chose wrong life cycle

Selected wrong improvement model

Built it – should have bought it

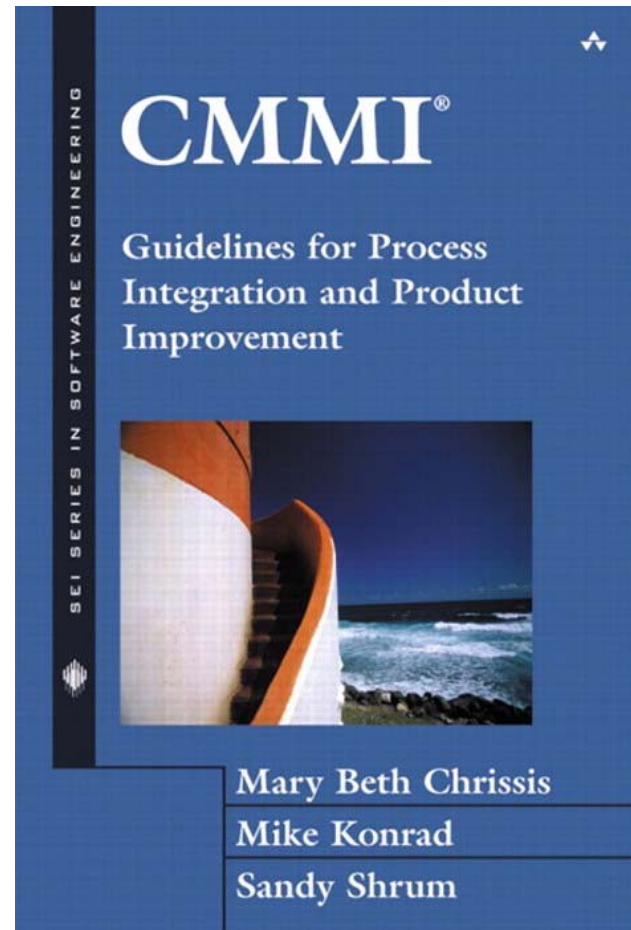
⋮⋮⋮ Agenda

To Do

- ✓ Understand why, when, how to
- ✓ 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?



⋮⋮ Decision Analysis and Resolution?

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)

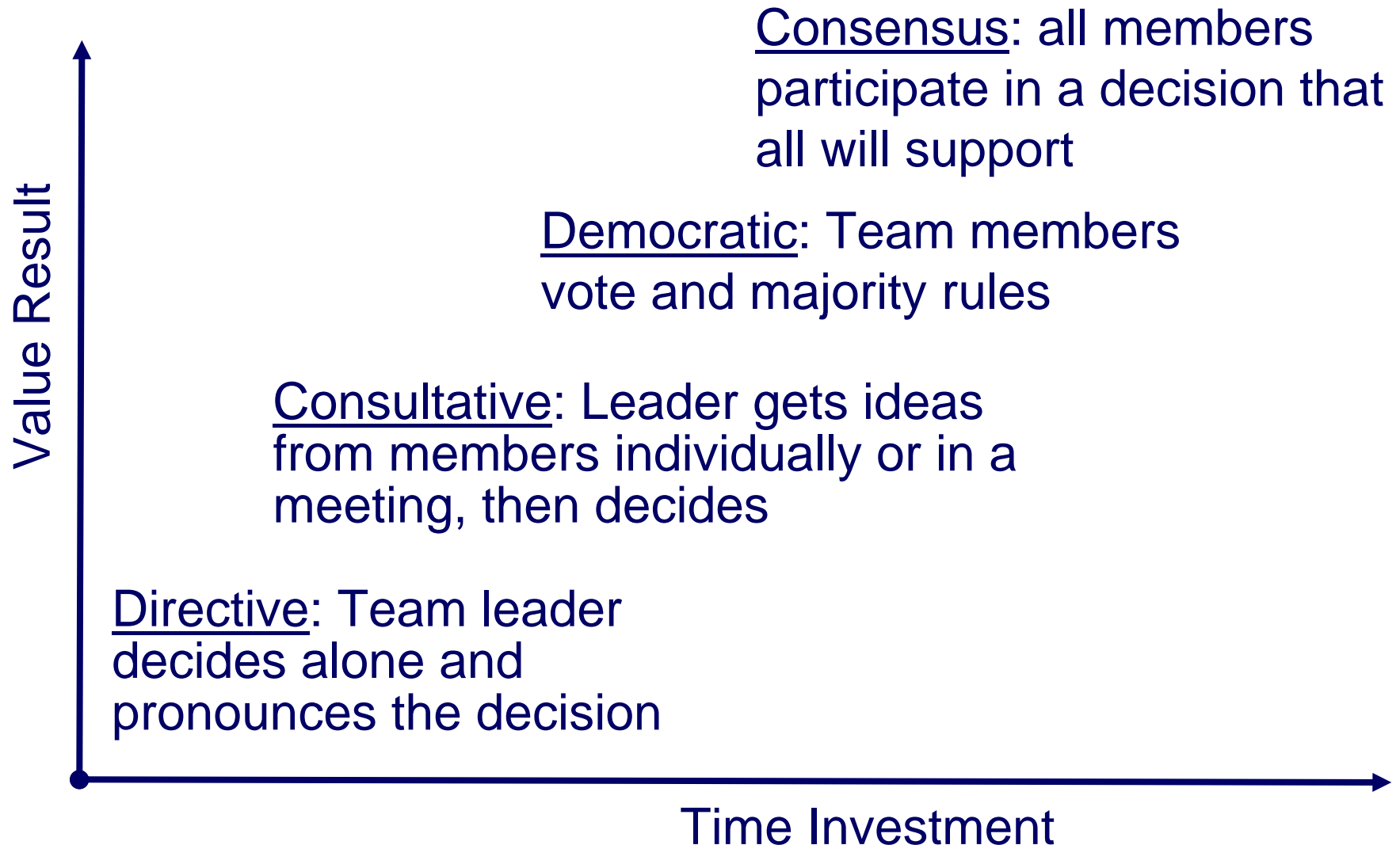
Business Decisions:

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



∴ A Basic Formal DAR Process



⋮⋮ Problem Solving Model

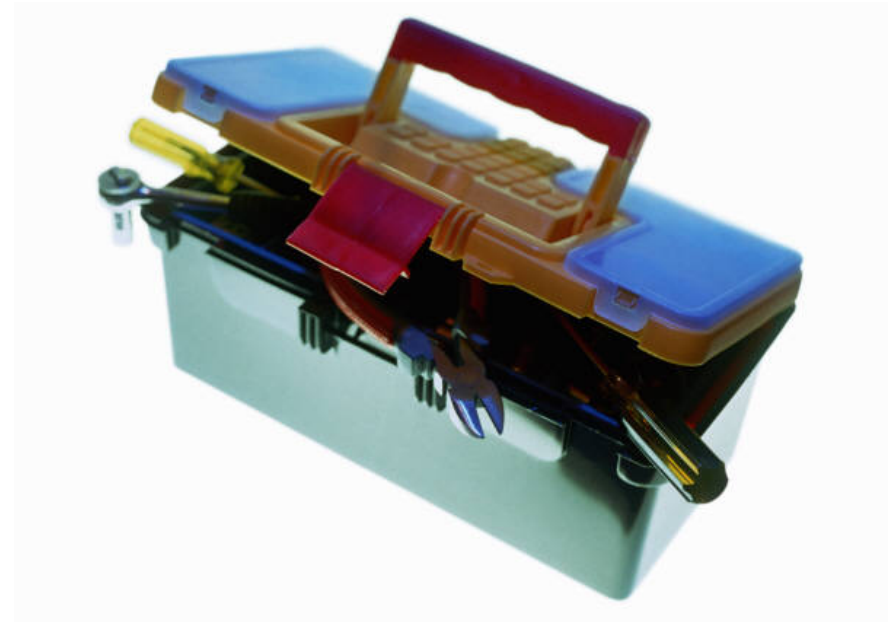
1. Accept the situation
2. Analyze
3. Define
4. Ideate
5. Select
6. Implement
7. Evaluate



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

Just DAR it!

DAR to be different!

Make a decision if you DAR

Random acts of DAR

Got DAR?

Questions



Thank you!

References

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CMMI® for Systems Engineering/Software Engineering/Integrated Product and Process Development, Version 1.1, Carnegie Mellon, Software Engineering Institute, 2002

Hastie, Reid, and Dawes, Robyn, Rational Choice in an Uncertain World: The Psychology of Judgment and Decision Making, Sage Publications, 2001

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



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