



Organizing the Mess

Designing Decision Solutions that Matter...

Steve Mack
Decision Management Group
Whitney, Bradley & Brown, Inc.
703.448.6081 x125
smack@wbbinc.com



Presentation Overview

- Defining the consulting challenge of messy problems
- Crafting effective discovery and framing exercises
- Description of Group Collaborative methods to enable quality front end processes
- Overview of some Group Collaborative software tools
- Observations on effectively fixing and exploiting the mess
- Audience participation
 - Questions
 - Accolades
 - Bricks



The Consulting Challenge...



I wish we had a way to...

Hold fewer meetings

Keep meetings focused

Collaborate effectively

Stop recycling issues

Confidently explain our decisions

Capture our knowledge



Collect and organize ideas

Prioritize objectives

Clearly identify objectives

Quantify risk

Encourage consensus



Common Decision Process Complexity

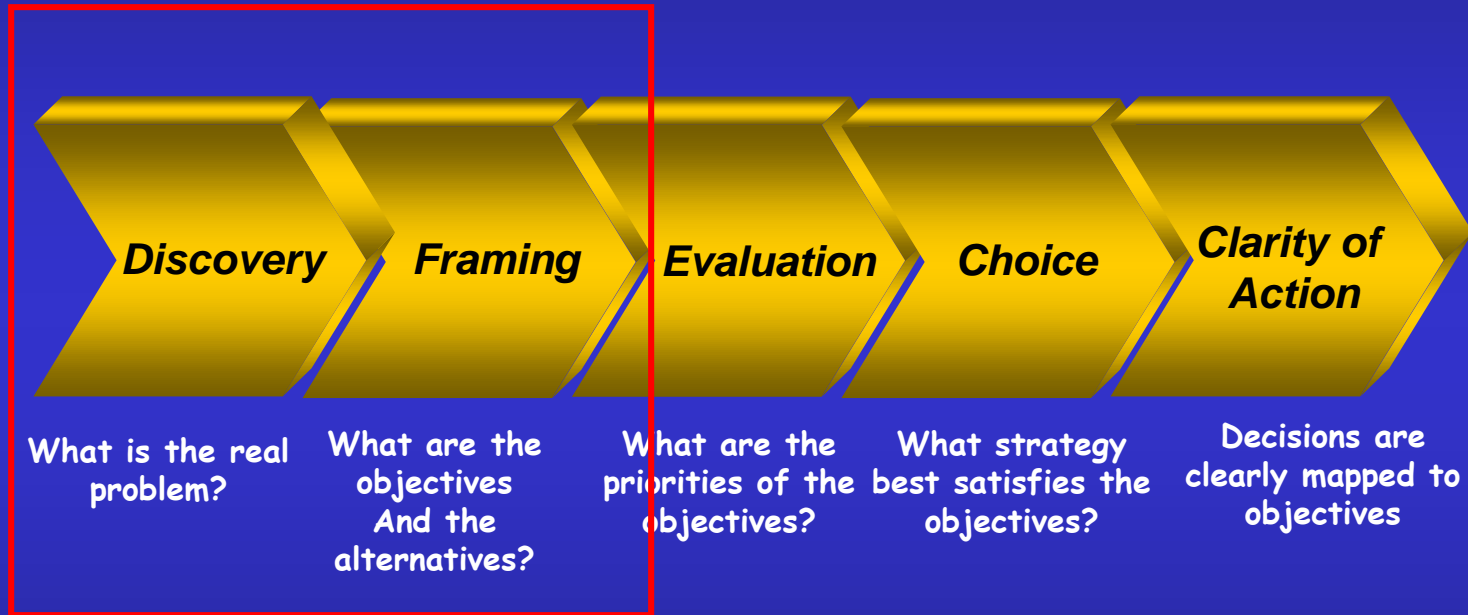
- **Multiple stakeholders are involved in the process**
 - Objectives are often unclear
 - Cannot isolate differences of opinion for resolution
- **Inefficient internal processes are a drag on progress**
 - Many unproductive meetings
 - Activity confused with progress
- **Rationally evaluating trade-offs is difficult**
 - Objectives not intelligently prioritized
 - Qualitative factors not properly factored into an assessment
- **Issues are “recycled”**
 - The same issues consistently resurface without resolution
- **Lack of collaborative commitment hinders effective action**
 - Time to do it over, but not do it right
 - Fire fights obscure strategic focus
 - Recommendations are not clear or actionable

Complex Decision Environment

- Interdependent decisions
- Multiple stakeholders
- Competing objectives
- Missing or incomplete data
- Many risks or unknowns



The Decision Cycle



- Complexity permeates the cycle
- But the decision drivers are identified in Discovery & Framing



Aphorisms

- "It is much better to plan for yourself badly than have someone else plan for you well." (Russell Ackoff)
- "The value of planning is actually engaging in it." (Thomas Saaty)
- "It's the process, not the product (most of the time.)" (Grum & Hesse)
- "Not everything that counts can be measured. And not everything that can be measured counts." (Albert Einstein)
- When someone says, "It's not the money...", it's "the money." (Everyman) But not always...



Analytical vs. Objectives Processes

- Empirical Analytics
 - Reduces uncertainty of measurable metrics
 - Content based - values neutral
 - Can be farmed out by the Decision Maker (DM)
 - Can be prescriptive
- Value Based Objectives
 - Implies judgmental trade-offs
 - Is inherently a subjective process
 - DM supply must supply the input



Decision Cycle First Steps



Discovery Process

- Purpose: Find out how messy the problem is
 - Can the problem elements be easily monetized?
 - Are there embedded contingent decisions
 - Are there multiple objectives/stakeholders?
- Sample Discovery questions*
 - What are the non-financial pros (cons) associated with this decision?
 - Are there any strategic impacts associated with this decision?
 - What other business functions are impacted by this decision?
 - Are other decisions dependent on the outcome of this particular decision?

* If a DA recommendation is rejected, it is often because these questions were not probed sufficiently



Consultant Response*

- Problem statement to validate the diagnosis
 - State the quantitative objective
 - Suggest a multiple-objective landscape if it exists
 - Identify the the active and passive stakeholders
- Map out a general solution strategy
 - Tactical plan for problem framing
 - Process for multi-objective determination & prioritization
 - Quantitative plan for resolving empirical uncertainty
- Establish roles and responsibilities of the decision process steps
 - Client/consultant relationship
 - Consultant/SME relationship
- These initial recommendations that will form the basis for a collaboration "contract" with client

* These initial recommendations that will form the basis for a collaboration "contract" with client



Framing Process

- Validate/adjust the diagnostic
- Develop a shared understanding of the decision context
- Capture the opinions, knowledge and intuition of all stakeholders
- Build a decision framework that recognizes cross-cutting objectives
- Secure collective commitment to closure and success



Collaborative Technologies



Software Supported Methods

GroupWare Collaboration
Idea & Process Mapping
Decision Modeling

The image shows two overlapping software windows. The top window is QuestMap [Map]: Product Marketing Example, displaying a conceptual map with nodes like 'Direct Mail', 'Low Impact', 'Full Detail', and 'Evoke mental imagination is more'. The bottom window is Expert Choice 2000, showing a decision model for 'Buy the best car' with a table of priorities and a bar chart.

Priority	Value
eee	.318
aaa	.255
ooo	.217
uuu	.210

Inconsistency = 0.37
with 0 missing judgments.

Value added by integrating skilled facilitation with decision analytics



More about GroupWare

- LAN/Web based collaborative software system
- Platform for problem framing, qualitative analysis and alternative evaluation
- Content management tool to collect group opinions/ideas
- Embedded functionality allows
 - Anonymous collection of ideas and feedback
 - Real-time classification and categorization of content
 - Polling and surveys to pin-point contention and uncertainty
 - Prioritization using weighing and scoring
- Encourage creative thinking & honest feedback
- Reach a shared understanding of issues and positions
- Launch pad for leveraging other group collaborative and quantitative modeling exercises
- Create a process history for continuity, accountability and control

The Collaborative Environment



GroupSystems® Technology

Brainstorming & Ideation

Polling & Surveys

Alternative Analysis

The screenshot displays three overlapping windows from the GroupSystems software:

- What are the risks of expanding our product line?**: Shows a brainstormed idea: "1. A new product line means new competitors" under the category "Short-term Risks".
- Evaluating the Session (Survey)**: A survey window with the text: "Please take a moment to evaluate the session in which you just participated".
- Vote Spread - Prioritize the proposals (Vote)**: A table showing the ranking of various proposals by eight voters.

Ballot Item	1	2	3	4	5	6	7	8	Rank Sum	Me
1. Develop new products to ear	4	3	4	1	0	0	0	0	82	1
2. Determine untouched market	4	4	2	0	2	0	0	0	80	2
3. Hire consultants to help	4	2	2	1	0	0	0	0	68	3
4. Purchase a competitor	3	3	3	2	1	0	0	0	66	4
5. Create powerful advertising	3	2	3	2	1	0	0	0	62	5
6. Open new sales channels	3	2	2	2	1	0	0	0	58	6
- Vote Graph - Prioritize the proposals (Vote)**: A horizontal bar chart showing the rank sum for each proposal, sorted in descending order.

Proposal	Rank Sum
Develop new products to ear	82
Determine untouched market	80
Hire consultants to help	68
Purchase a competitor	66
Create powerful advertising	62
Open new sales channels	58
Double the advertising budget	48
Hire an ad agency	38



Why/When to use GroupWare?

- Diagnosis & Framing - Build a decision context (face-to-face)
 - Brainstorm ideas
 - Identify objectives
 - Generate alternatives
 - Reconcile misunderstanding
- Work in Progress - (distributed-asynchronous)
 - Share analytical results
 - Collaborate remotely on technical questions/issues
 - Post and access supporting documentation
- Back End - Support actual decision making (face-to-face)
 - Capture rationale for value judgments
 - Identify risk elements for mitigation
 - Create an action plan for implementation of the decision

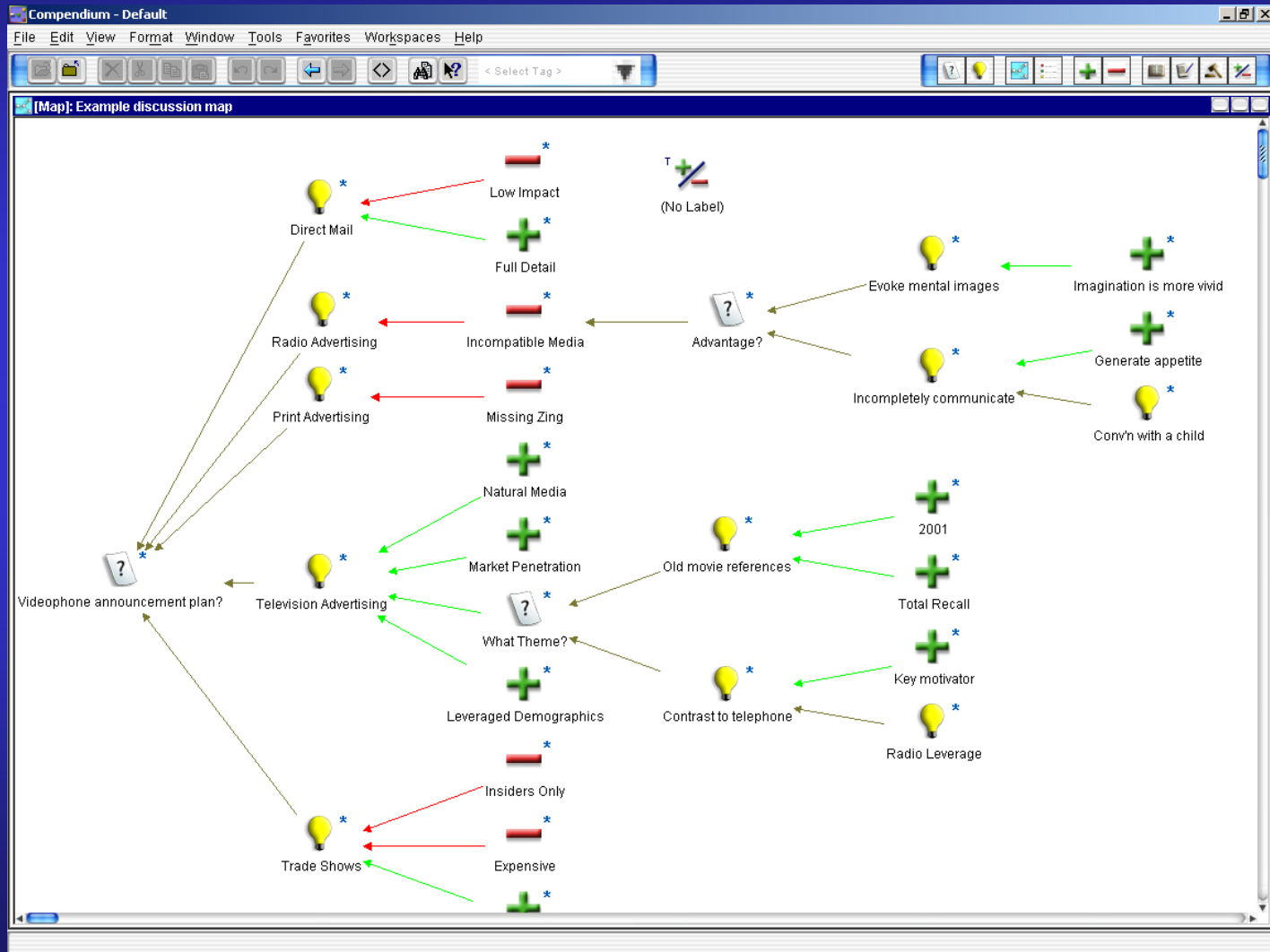


Dialogue & Visual Mapping

- Dynamically builds out a decision frame as a visual architecture
- Consultant selects a visualization construct
- Decision elements are annotated with with rationale to supply meaning
- Reference information linked to decision elements to support a position
- Maintained as a persistent visual workspace that is augmented over time

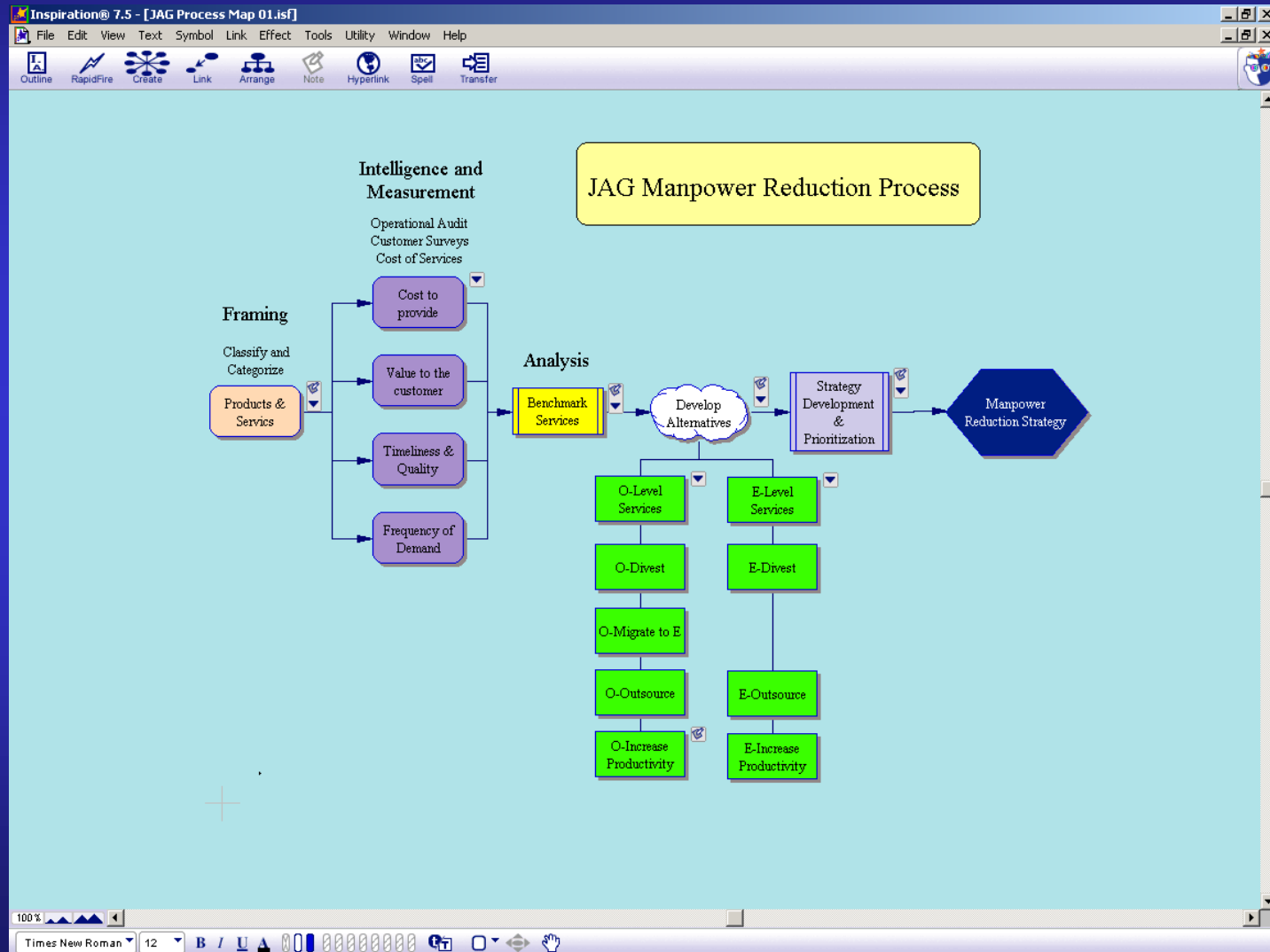


Dialogue Mapping with Compendium®





Visual Mapping with Inspiration®





Judgmental Modeling

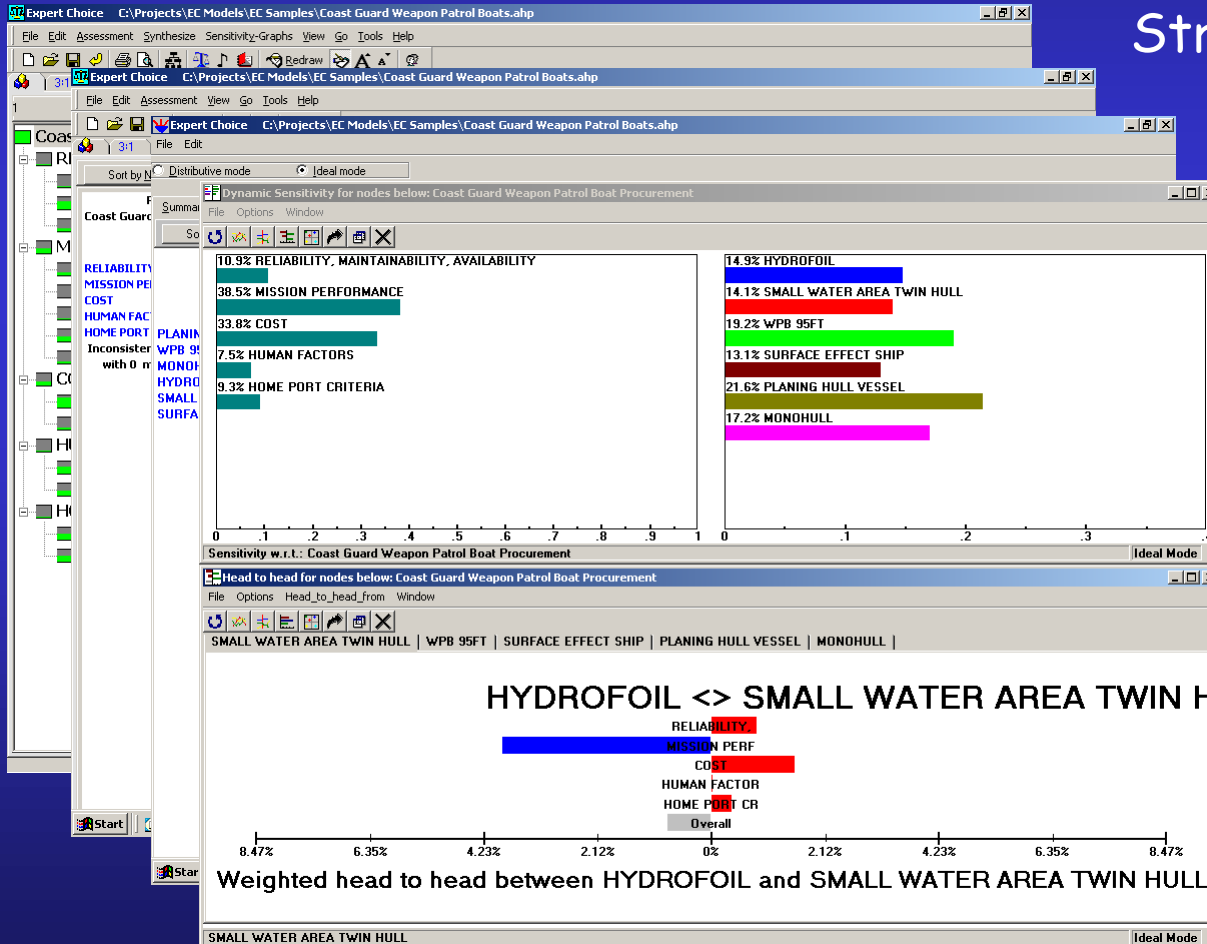
- Compensatory process
 - Transition tool from analysis to synthesis
 - Trade-off objectives to determine relative importance
 - Evaluate alternatives to determine relative value
- Most common techniques*
 - A. Gut feel using experience, insight and intuition
 - B. Ordinal ranking
 - C. Interval weighing & scoring (Kepner-Trego, Swing-Weighting)
 - D. Pairwise comparison to determine ratio weights (AHP)

*If you don't present the DM with an alternative compensatory process he/she will use A



Judgmental Modeling (Expert Choice®)

Structure the Problem
Prioritize Objectives
Evaluate Alternatives
Sensitivity Analysis



Group Enabled

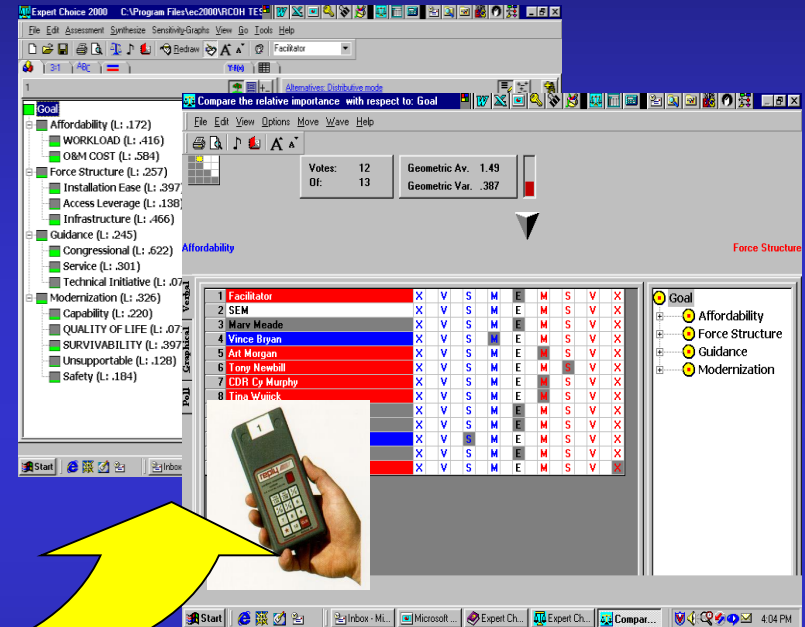
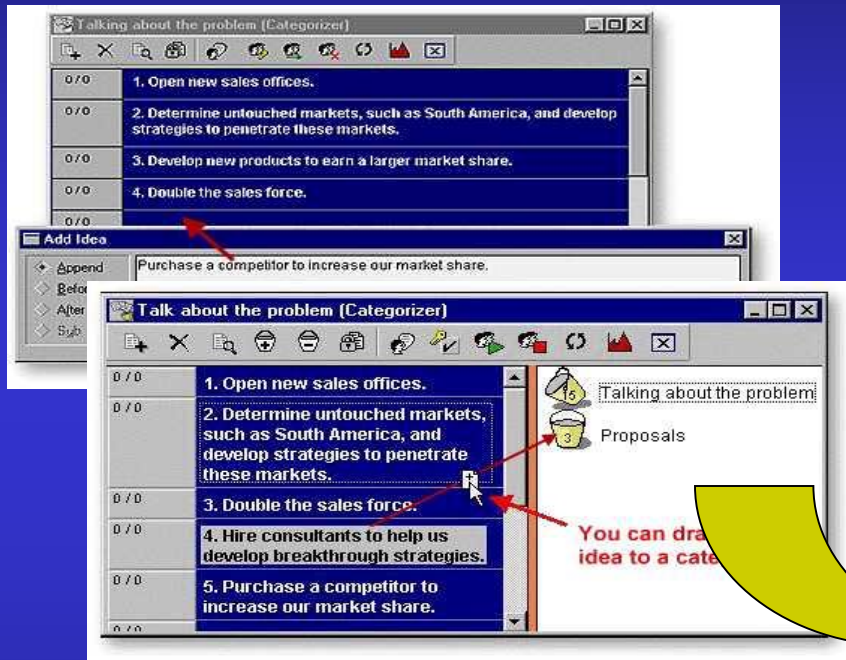




Notes on Expert Choice[®] and the AHP

- Rank reversal is not an issue with the EC implementation of AHP analysis
 - Enhanced algorithm introduced 8 years ago to preclude rank reversal
- The process is more intuitive for many users
- Group enabled EC builds individual traceable models for all participants
- Utility curves can be constructed for assessment
- The pair-wise process isolates specific points of contention
- It is not always necessary to complete an exhaustive pairwise process
- The axioms of AHP (and every compensatory method) are sometimes violated

GroupWare & Decision Modeling Integration



- GroupWare

- Structure problem
- Define objectives
- Create alternatives
- Capture rationale

- Decision Modeling
- Determine the relative importance of the objectives
 - Prioritize the alternatives for relative value
 - Sensitivity analysis of the critical objectives



Group Collaborative Applications

- SWOT Analysis
- Objectives Determination
- Decision Analysis Model Elements
- Qualitative Risk Assessment
- Strategy development
- Project Planning
- Information Exchange - Needs Analysis
- Issue Resolution
- Process Design / Redesign
- Process Improvement
- Vendor Selection



Collaborative Process Customer Value

- Provides a voice to all relevant stakeholders
- Inhibits the recycling of issues
- Establishes a shared understanding of objectives and goals
- Aligns the group's activities with organizational objectives
- Clearly maps strategies to objectives
- Transforms group uncertainty into goal oriented action
- Generates an audit trail of consensus, concurrence and dissent

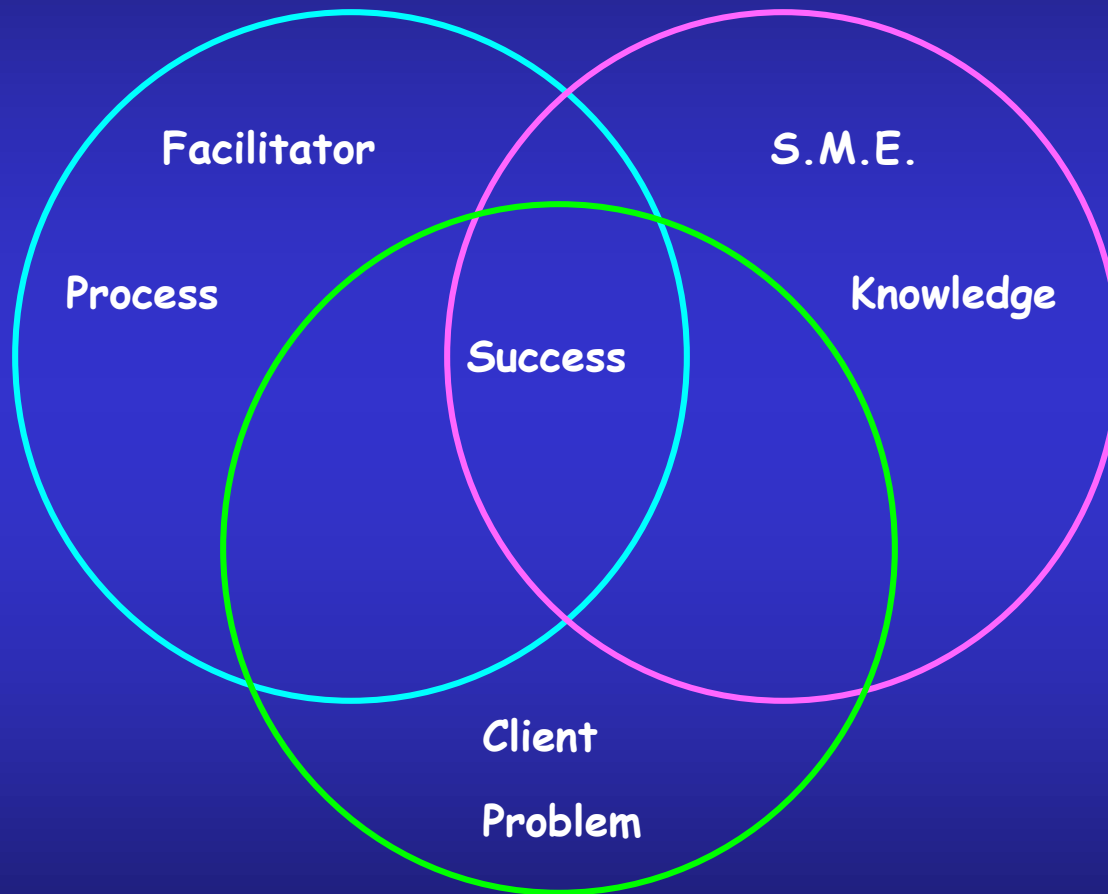


The Facilitator's Role

- Build an efficient collaboration strategy
 - Partner with the client
 - Plan to client objectives
- Facilitate discussions skillfully
 - Encourage creativity, participation, and ownership of solutions
 - Lead a group towards achievement of *their* collective objectives
 - Neutral to group decisions/conclusions
- Manage group dynamics and human behavior
 - Minimize conflict
 - Focus on objectives congruent with the problem boundary
 - Keeps discussions moving forward with a commitment to resolution
 - Focus on specific, actionable outputs



The Partnership Proposition





Group Collaborative Technology Vendors

- GroupSystems, www.groupsystems.com
 - LAN/Web Versions
 - Best content management capabilities
 - Aging interface
- WebIQ, www.webiqinc.com
 - Web based system
 - Hosted or end-user installation
- Expert Choice, www.expertchoice.com
 - AHP Methodology
 - Group Enabled
- Compendium, www.compendiuminstitute.org
 - Issue Based Information System (IBIS) construct
- Inspiration, www.inspiration.com
 - General visual mapping
 - Many templates and icon families



Observations

- Most important decision problems have objectives that cannot be easily monetized
- Trade-offs among objective (i.e., measurable) values are subjective
- Multi-objective recommendations are usually “approximate” and advisory - not normative and prescriptive

- Most groups do not self-facilitate very well
- Effective facilitation is an art not a science
- Face to face collaboration when framing is most effective

- Intervention flexibility increases consultant value
- Decision management interventions should be robust and scalable
- Seek out and model small internal problems to learn a qualitative construct
- Active selling/marketing decision management solutions should be a core competency of both internal and external consulting practices

- Partner with the client early in problem definition and solution design
 - The client wants a process that is temporally and intellectually accessible
 - Divide the labor based on your interests and competencies
 - Recommendations are rejected because something was left out



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