

Improvised Facilitation: A Third Leg on the Group Model Building Stool

Invited Presentation

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Abstract.

As practiced in our group at Albany, we envision Group Model Building (GMB) as a stool supported by three complementary legs, Teamwork, Scripts, and Improvised Facilitation. The first two of these clusters of principles and skills have been previously described in the published literature (Andersen and Richardson 1997, and Richardson and Andersen, 1995). Our purpose with this paper is to describe how we use improvisational principles and techniques to guide our facilitated interactions with teams of managers engaged in GMB.

Vennix (1996) presented a classic statement of the Group Model Building method for system dynamics models. Soon thereafter a special issue of the *System Dynamics Review* edited by Vennix et al (1997) gave an overview of the then state-of-the art of GMB. Richardson and Andersen (1995) first defined their approach to using teams to support GMG, the first leg on the stool. The second leg, basing GMB practice on pre-defined sets of scripted behavior was first described in 1997 by Andersen and Richardson. Luna-Reyes et al (2006) published a soup-to nuts description of how teamwork and scripted facilitation actually played out in a specific intervention focused on providing homeless shelters in New York State. More recently, Andersen et al (2006) presented a more comprehensive review of current research in GMB using system dynamics. Our presentation in Seoul begins by reviewing some of the classic GMB literature.

The novel contribution of this paper will be the description of improvisational principles and skills that we believe undergird our work facilitating GMB activities with client groups. We define a basic LERT (Lister-Evaluate, then Repeat with Transformation) that organizes much of our thinking about improvisational facilitation. In addition the paper presents a number of specific techniques that can be used by facilitators and modelers as they improvise and interact with client groups. This paper is abased on recent work in our group as described by Andersen and Richardson (2007).

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Attachment:

Draft of Slides to be presented at Seoul ISDRC, July 2010

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International System Dynamics Research
Conference: Seoul, Korea 2010

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ISDRC, Seoul 2010

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Outline of Remarks

- What is System Dynamics Group Model Building?
- The First Two Legs on the Stool
 - Teamwork
 - Scripts
- Improvisational Jazz as an Organizing Metaphor
- Improvisation within Roles and Scripts
- Improvisation that Ignores Roles and Breaks Scripts



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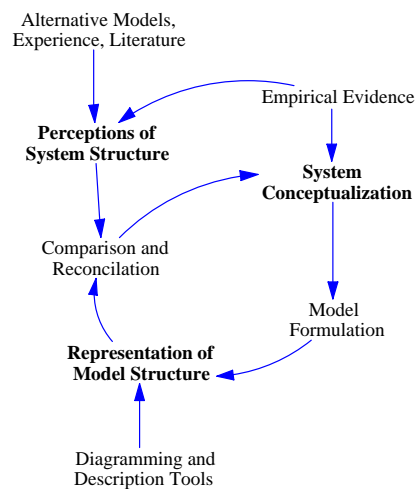
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What is Group Modeling?

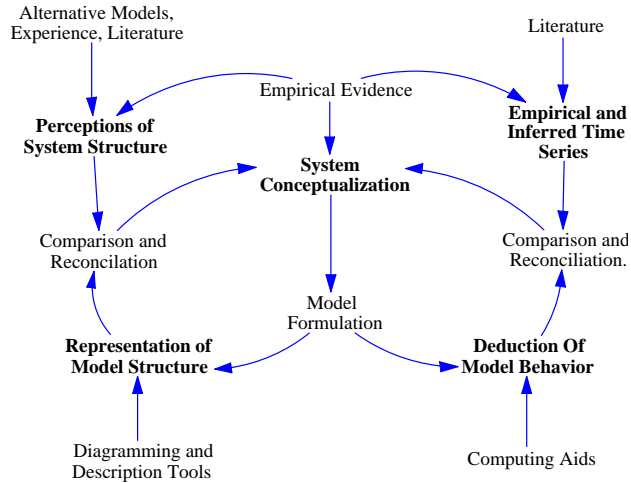
- A form of group decision support, involving a group of stakeholders with a complex problem
 - Group facilitation
 - Model building and refinement in public
 - Simulation of scenarios and strategic options
 - Extensive facilitated discussion and analysis
 - Facilitated policy design and decisions



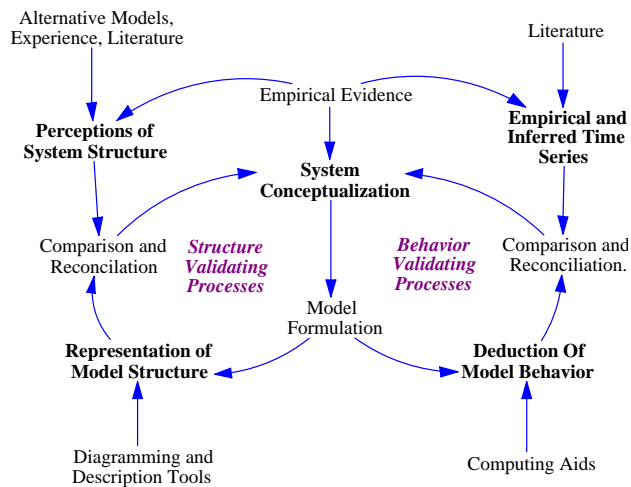
What is Group Model-Building? Modeling Dynamic Systems



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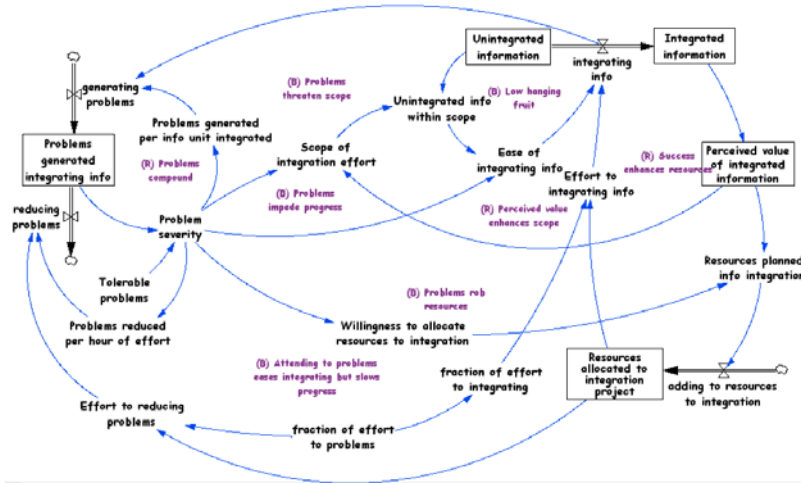


What is Group Model-Building? Modeling Dynamic Systems



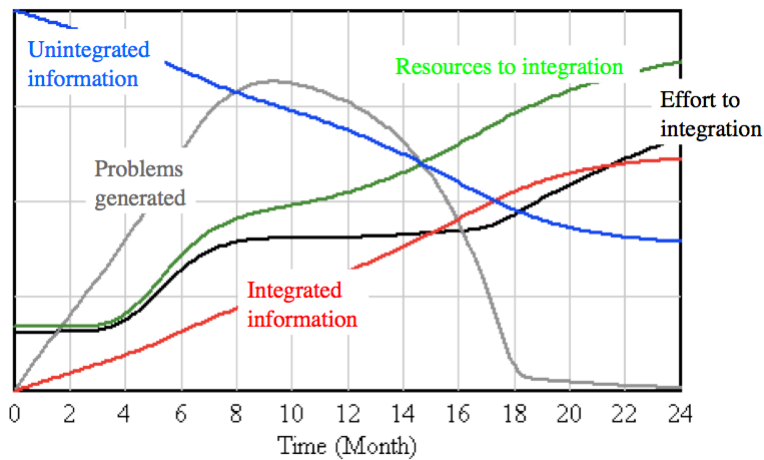
What is Group Model Building? Mapping Structure

Integrating Information Among Criminal Justice Organizations

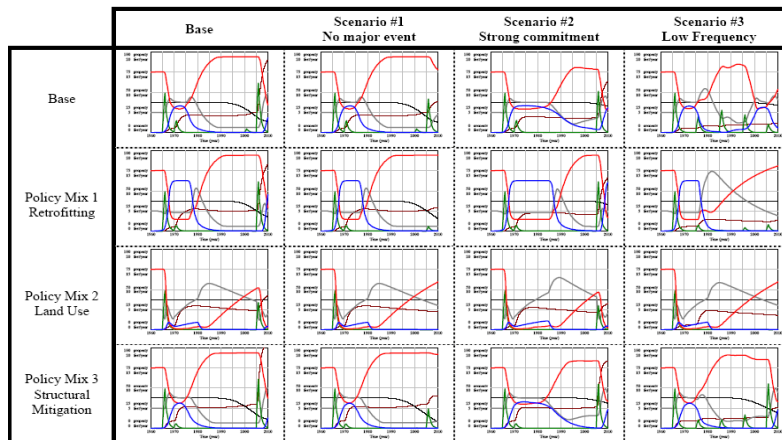


What is Group Model Building? Analyzing Behavior

Graphs over Time of Efforts to Integrate Information



What is Group Model Building? “What If” Scenarios and Policy Options Flood Mitigation



What is Group Model Building? A Typical Room GMB Session

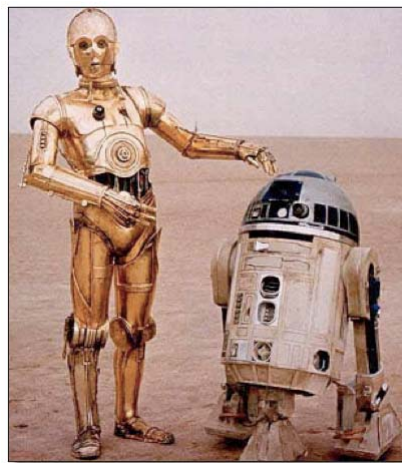


What is Group Model Building? Components of the Process

- Problem definition meeting
- **Group modeling meeting**
- Formal model formulation
- Reviewing model with model building team
- **Rolling out model with the community**
- Working with flight simulator
- **Making change happen**

The Albany Teamwork Approach The “First Leg” on our GMB Stool

- Facilitator / Elicitor
- Modeler / Reflector
- Process coach
- Recorder
- Gatekeeper



Scripts—Our “Second Leg” for GMB Typical First Group Model Building Scripts

- Introductions: Hopes and Fears
- Stakeholders
- Introduction to simulation: Concept models
- Client flow elicitation
- Policy resources and clusters
- Mapping policy influences
- Next steps for client group and modeling team

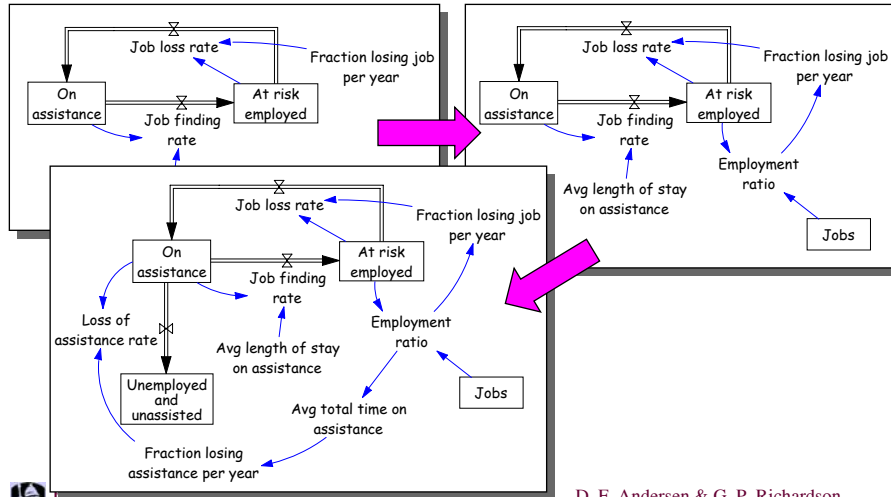


An Example of a Script “Concept Models” as Introduction to Simulation

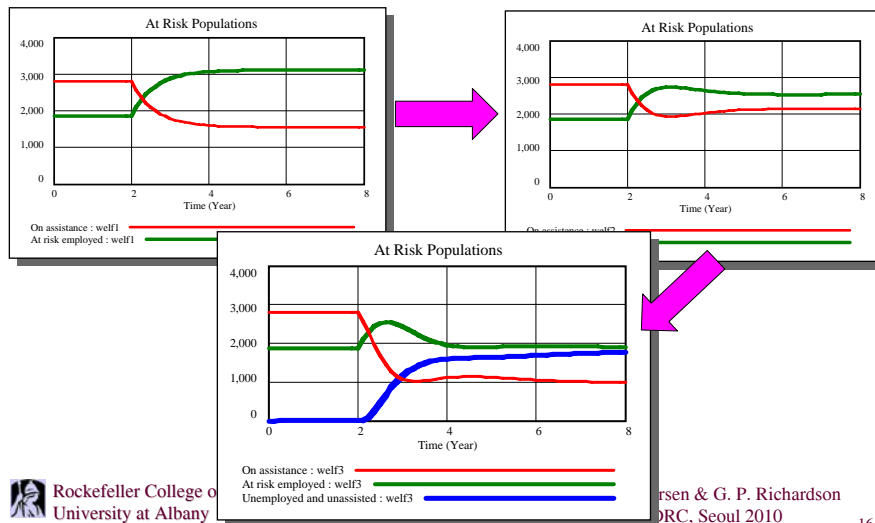
- Concept models
 - Introduce the stock, flow, and causal link icons used throughout the workshop
 - Demonstrate there are links between feedback structure and dynamic behavior
 - Initiate discussion about the structure and behavior of the real system
- Less than 30 minutes



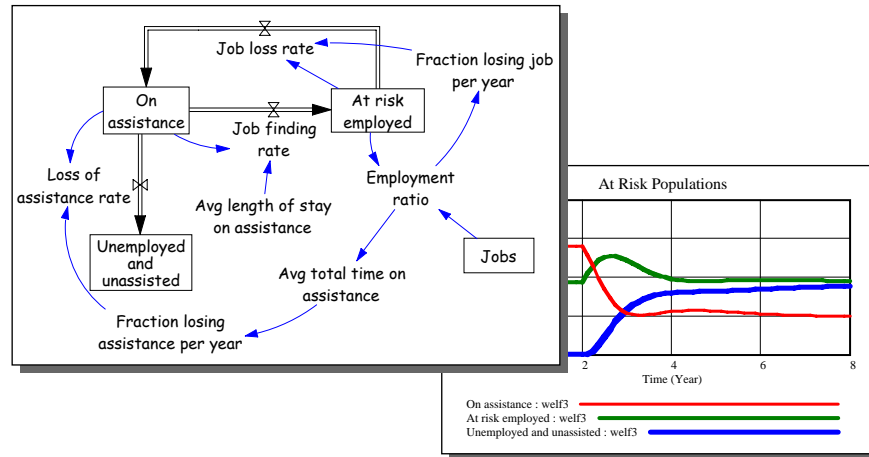
Concept Model Progression: “Models are ours to change and improve.”



Concept Model Progression: “Behavior is a Consequence of Structure”



Concept Models: Leave the Group with a “Starting Point”



Some Scripts Require a Lot of Improvisation

- Introductions: Hopes and Fears
- Stakeholders
- Introduction to simulation: Concept models

- Client flow elicitation
- Policy resources and clusters
- Mapping policy influences
- Next steps for client group and modeling team

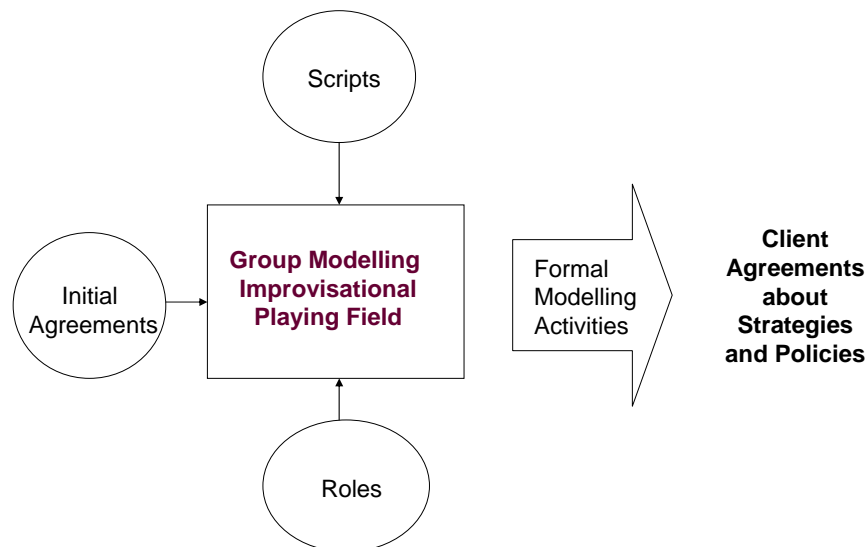
How do we manage these conversations?

Balancing Scripted with Improvisational Work

- Scripted routines
 - Richmond, *The Strategic Forum*
 - Vennix, *Group Model Building*
 - Andersen & Richardson, *Scripts for Group Model Building*
- Improvisation
 - Varying scripts “on the fly”
 - Creating new GMB processes “on the fly”
 - Reflecting on improvisations to create new scripts

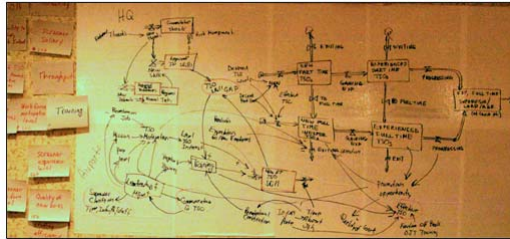


Improvisation as a Key Activity in Group Modelling



Understanding the Improvisational Playfield

- Four Dimensions of Tension in GMB Communications Processes
- Using Boundary Objects to Manage Communication Tensions—three uses
 - Remembering
 - Facilitating
 - Modeling



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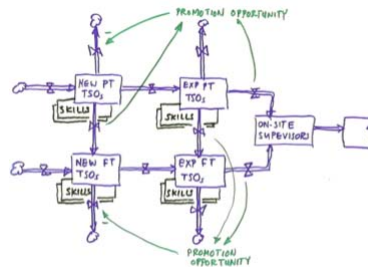


Tensions in Group Model Building

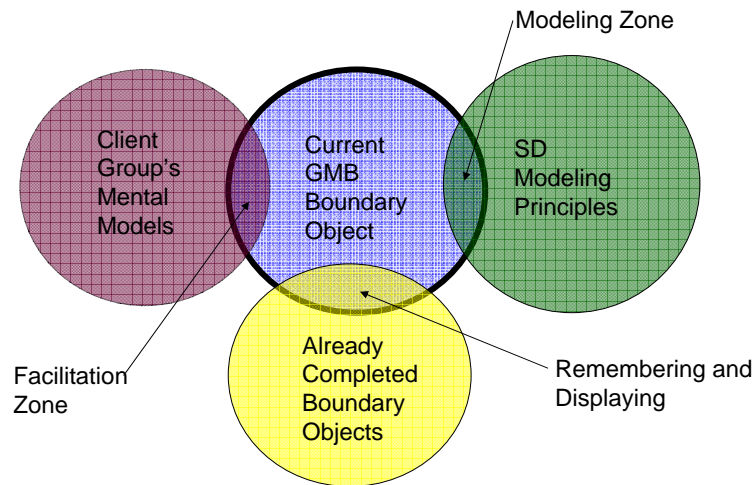
- | | | |
|------------------------------|---|---------------------------------------|
| • Client Mental Models | ↔ | • System Dynamics Modeling Principles |
| • Natural Language | ↔ | • Model Equations |
| • High Semantic Requirements | ↔ | • High Syntax Requirements |
| • Correspondence | ↔ | • Coherence |

Examples of Boundary Objects in SD GMB

- Client-Authored such as...
 - Variable Graphs Over Time
 - Stakeholder Power X Interest Grid
- Facilitator-Authored such as...
 - Sketches of Model Feedback
 - Structure on the White Board
- Modeler-Authored such as...
 - Refined Sketches of Model Structure in Modeler Feedback Script



Boundary Objects Manage Tensions Between Mental Models and Good Modeling Principles



First Improvisational Principle:

LERT

Listen, **E**dit, and **R**eport with **T**ransformations



LERT has two parts...

- Listen and Report Back
 - Use exact words, concepts, and phrases that client group uses
 - Faithfully record and display their thoughts and words
- Edit with Transformations
 - Find ways to “filter” clients’ speech — “less is more”
 - Add value by structuring speech around modeling principles
- These two components of **LERT** are at odds with each other.



Second Improvisational Principle: Unobtrusive Teaching

- About SD Modeling Syntax and Principles, e.g.
 - Concept Models
 - Modeler Feedback
- About Insights into the System Under Study, e.g.
 - Feedback while working in small groups
 - Modeler Feedback
 - Plenary Events that “ring a bell” for a potentially big idea within the project



Toward a Taxonomy of Improvisational Behaviors

	Live “On the Fly” Behaviors	“Off Line” Behaviors
Mostly Modeler Behavior		<ul style="list-style-type: none"> • Transform cause-and-effect to feedback • Propose “cleaned up” model geometry
Mostly Facilitator Behavior	<ul style="list-style-type: none"> • Select next concept to discuss • Move Ideas to the Parking lot 	
Joint Modeler & Facilitator Behavior	<ul style="list-style-type: none"> • “Banter” with the group in structured ways 	<ul style="list-style-type: none"> • Propose Seed Structures to discuss

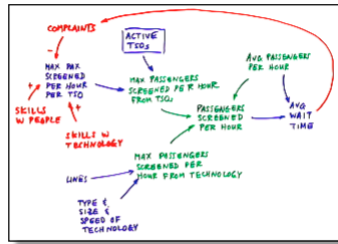
Key Facilitator Improvisational Behaviors

- | | |
|--|---|
| <ul style="list-style-type: none"> • On the Fly <ul style="list-style-type: none"> • Select next key concept of variable to discuss • Do not record on the board aspects of discussion • Park aspects of discussion for future use • Select words that create variables from verb phrases • Be alert to and draw out feedback loops | <ul style="list-style-type: none"> • Off Line <ul style="list-style-type: none"> • Add insights, comments to small working groups • Rehearse key variables and dynamic mechanisms from earlier boundary objects |
|--|---|



Key Modeler Improvisational Behaviors

- On the Fly
 - Challenge “Group Think” causal assertions
 - Provide “Expert Opinion” on aggregation or other modeling issues
- Off Line
 - Transform cause-and-effect to feedback
 - Clean Up Diagram Geometry
 - Add Operational Logic
 - Propose formulation-based restatements of key effects under discussion by group



Improvisation that Ignores Roles and Breaks Scripts

- Role Reversals and Other Unplanned Moves
 - Can lead to sudden break-throughs
 - Can have dangerous consequences
 - We have rules to constrain these behaviors!
- Creating New Scripts in “Real Time”
 - To resolve a current problem facing the group
 - Improvisations often become new scripts



Role Reversals and Other Unplanned Moves

- Improvised Conversations Between Modeling Team Members
- Four Basic Types:
 - Facilitator Seeks Assistance
 - Facilitator Steps Down
 - Modeler Steps Up to Offer Insight
 - Modeler Steps Up to Take Over the Meeting



Even Improvised Conversations Have Rules

- Rule #1: The person “holding the chalk” calls the shots
- Rule #2: Always know who is “holding the chalk”
- Rule #3: Always seek permission for improvised conversations
 - Facilitator initiates conversations with public requests
 - Modeler initiates conversations with a private signal



Creating New Scripts in “Real Time”

- Driven by a specific need or opportunity presented by current work
- Usually completed over a long break, before the start of a new day, or late at night (those early morning surprises!)
- Initially “crap detected” using small group working principles
- Extensive critique and re-design at end of session.

Small Group Principles in a Nutshell

- Divergent, brainstorming tasks
 - Individuals to pairs to small groups
 - Nominal group collection
- Ranking tasks
 - Sticky dots or software support
- Convergent, design tasks
 - Hardest – need most thought
 - Most risk.



Borrow or Steal Scripts from other Problem Structuring Approaches...

- Rohrbaugh
 - Decision Techtronics approaches
- Vennix
 - Workbook ideas and approaches
- Bryson
 - Stakeholder mapping
 - Leadership principles
- Eden and Ackermann
 - Decision and Group Explorer techniques
 - New direct software linkages



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