“Championing DA: The Front End of CPDEP

Steve Woodruff
General Manager, Project Resources

Decision Analysis Affinity Group Mtg.
April 1-3, 1998
San Francisco Room
Don't squat with yer spurs on!
MISSION:
- Select the right projects by improving decision-making.
- Improve project outcomes through excellence in execution.

VISION:
The goal is to achieve “Better than the Best” performance in all segments of our business by year end 1998.
<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
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<tbody>
<tr>
<td>Opportunity Identified</td>
<td>Generate &amp; Select Alternatives</td>
<td>Develop Preferred Alternative</td>
<td>Execute</td>
<td>Operate</td>
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**CPDEP Impact on Value**

- Open Framing
- Creative Alternatives
- Technology
PHASE 6 - Refine & Detail Development Plan, Improve Quality of Information

PHASE 7 - Implement Development Plan

PHASE 8 - Operate & Evaluate

Moran Roadmap

Other Key Decisions

Decision Makers

Upstream Decisions

Operations

And Deliverables At Major Reviews

Work Team

Focus Items

Resources

PHASE 4 - Delineation Plan Assessment

PHASE 5 - Development Plan Alternatives

PHASE 6 - Refine & Detail Development Plan, Improve Quality of Information

PHASE 7 - Implement Development Plan

PHASE 8 - Operate & Evaluate

Moran Project Team & Joint Venture

Moran Project Team

Operations Team

• Agree on Well Objective
• Well Location
• Well and/or Sidetracks
• Cellar
• Pad Size
• Rig Availability
• Decision Analysis Study
• Seismic interpretation
• Resources
• Design 3X and 4X Completion
• Plan for Next Phase

• Update Reserves
• Run Seismic
• Landowners
• Establish Landowner Boundaries
• Assess EWT Results
• Reservoir Model
• Update D.A. Study
• Drill 3X & 4X
• Deviating in Darvoid
• Assess Govt Resources
• Preliminary Scoping
• Preliminary Economics
• Phase 2 Delineation Plan
• Interwell Testing
• Review PDL Long Lead Items

• Concept Screening Study
• Develop GACA Strategies
• Develop Unit Agreement
• Depletion Plan
• Reservoir Model
• Simulation
• Gas Handling Plan
• Reserves
• Update Economics
• Compression Requirements
• Preliminary Engineering Studies

• Plan for Next phase

29-Jan-1997
What is Decision Analysis?

- A conversation to bring about **clarity of action**
  - a systematic process for all types of decisions - to make decisions logically consistent with our beliefs.

- **It is not** a numeric or mechanical exercise to generate an EV for project approval (a pre-determined decision).

- **It is** A toolbox of “quality tools” that help bring clarity and aid in decision making.
Decision Analysis is a major component of CPDEP Phases 1-3. In Phase 1, it helps set the decision framework: purpose, perspective, & scope.
In Phases 2-3, Decision Analysis helps incorporate risk, evaluate the alternatives systematically, and enable choosing the optimum project.

Determine the critical uncertainties, model them, and gain insights to make the decision.
The Performance we’re getting is perfectly aligned with the consequences in place.

Ned Morse
### CPDEP LEADERSHIP QUESTIONS

**IDENTIFY & ASSESS OPPORTUNITIES**

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**GENERATE & SELECT ALTERNATIVE(S)**

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**DEVELOP ALTERNATIVE(S)**

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**EXECUTE**

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**OPERATE & EVALUATE**

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**Questions Asked Anytime:** 1, 4, 5, 8

1. What phase of CPDEP are you in?
2. Do you understand the CPDEP role in helping achieve your business plans?
3. Have any phases been skipped or “fast-tracked”?
4. How can I help in supporting you in the CPDEP process?
5. Who are the decision makers?
6. What VIP’s have you used?
7. How do these facilities benchmark with industry?
8. What barriers are you experiencing in applying CPDEP?
9. What’s your FEL index?
10. What are you doing differently to achieve Pacesetter performance?
11. How did each stakeholder’s issues and concerns affect the frame?
12. Describe the givens and explain how this opportunity fits business strategy?
13. Describe the uniqueness of the different alternatives considered?
14. How much engineering have you done to define the Phase 3 scope?
15. How are specialists being integrated into your project?
16. What is the plan for the project completion review, Part IV, G-36?
17. What are the safety behaviors you are recognizing on the project?
18. What is the plan for maintenance, technical support, operations training?
19. When does CSQIP/Alliances play a role in your project?
20. What was the criteria you used to establish the project contingency?
21. What is the plan for the Project Business Review, Part V, GO-36?
22. How are you including contractors, operations, partners, stakeholders?
23. Describe the critical uncertainties.
24. Why did you select the recommended alternative and under what conditions is it not the best?
25. How does the decision model serve as a roadmap for project execution decisions?
26. How are contingencies and flexibilities accounted for in the economic analysis?
## PROJECT EXECUTIVE ROLES

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<th>Identify &amp; Assess Opportunities</th>
<th>Generate &amp; Select Alternative(s)</th>
<th>Develop Alternative(s)</th>
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### Accountability
1. Accountable for the financial outcome of the project and the post project Business Plan Review.
2. Making certain that project assumption, plan, and economics are consistent with the Business Units plans and strategies.
3. Assess the potential outside impacts that could affect the project’s financial successes, e.g., cultural, environmental, political, market, etc.
4. Include CPDEP as key business strategy and frequently reference it.

### Accessibility
5. Personal participation in CPDEP quality viability reviews (QVR) and decision review boards.
6. Have open lines of communication the project team.
7. Approve any major project variation.

### Leadership
8. Establish clear project expectations/objectives and assure focus throughout each phase.
9. Clearly articulate values for decision making, i.e., scope, cost, schedule tradeoffs.
10. Assist team in focusing on the A/R scope (minimize urban renewal).
11. Set expectations for Pacesetter project performance.
12. Set standards and role model behaviors for achieving zero incidents.
13. Focus on obtaining the lowest total cost of ownership.
14. Assure the team is following the CPDEP process, utilizing VIPs, and building in decision quality.

### Resources
15. Provide resources, e.g., funding, operating representatives, use of specialists, etc.
16. Select the key people, assure they are trained, have proper skills, and maintain team continuity.
17. Remove barriers for the project team.
18. Drive training for operations/maintenance/technical support prior to startup.

### Behaviors
19. Visibly provide positive consequences for following the CPDEP process (encourage “Lessons Learned” for any variance).
20. Role model CPDEP on projects you are working on.
21. Use positive recognition for “killing bad projects” as well as “Pacesetter projects”.
22. Demonstrate visible support by attending forums, symposiums, workshops, training, etc.
23. Seek upward feedback as CPDEP role model.

**Applicable Anytime:** 4, 6, 7, 12, 14, 15, 17, 19, 20, 21, 22, 23
Vision of Success

**Critical success factors**

- DA is used by business planning community to set strategies
- CEO and top level management of Chevron will have a complete understanding and buy-in of DA and demand its appropriate use
- DA is sued as a core competency in job selection

**Metrics**

- Percentage of projects that have an effective DA done
- Number of projects that had a change in decision from the going-in position
- Percentage of top management asks insightful questions bout the analysis performed
- Number of job description that requires DA as a competency
- Number of job selections that actually use the above criterion
- ROCE is consistently at the top of industry (long-term)
Always drink upstream from the herd.