

New Sellers Market



# Dr. Scott M. Shemwell

CEO,  
Strategic Decision  
Sciences, Inc.

Optimizing Scarce Resources using  
Project Simulation

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# Scott M. Shemwell, Strategic Decision Sciences

- Dr. Shemwell is the Founder and CEO of Strategic Decision Sciences. The firm provides its clients with Quantitative and Qualitative analysis and insight throughout the major decision process.
- For over 25 years, Dr. Shemwell has led the turnaround and transformation process for global S&P 500 organizations as well as start-up and professional services firms. His specific experience includes Executive Management, Information Management, Mergers and Acquisitions, Change Management, and International Business.
- He was business unit head with P&L responsibility and member of the Executive Leadership Team for Halliburton Energy Services. He had led or been a key individual in over \$5 billion in mergers, acquisitions, and divestitures. As the Managing Director for major consulting firm, he assisted clients transform themselves throughout the globalization process.
- He is leading authority (frequently quoted & referenced) on information management, business processes and industry change, as well as organizational structure analysis with over 200 publications. Shemwell holds a Doctorate of Business Administration, a Master of Business Administration and a Bachelor of Science (Major in Physics).

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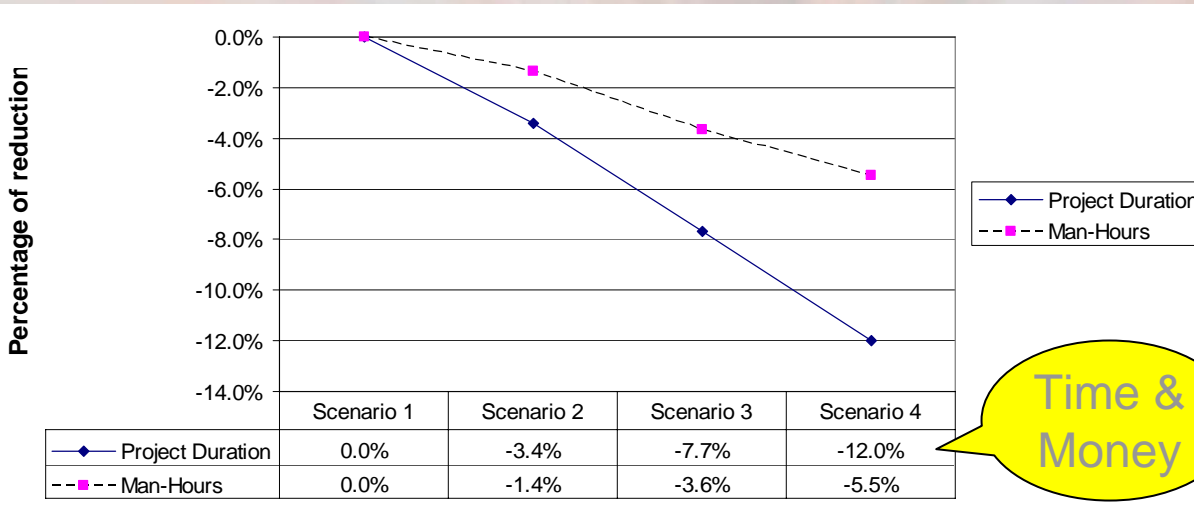
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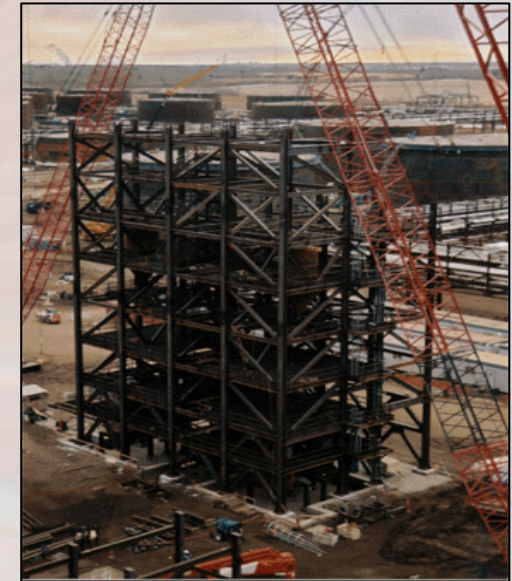


# Case Study: Refinery Simulation Remediation Solution

Percentage of reduction in man-hours and project duration



Time & Money

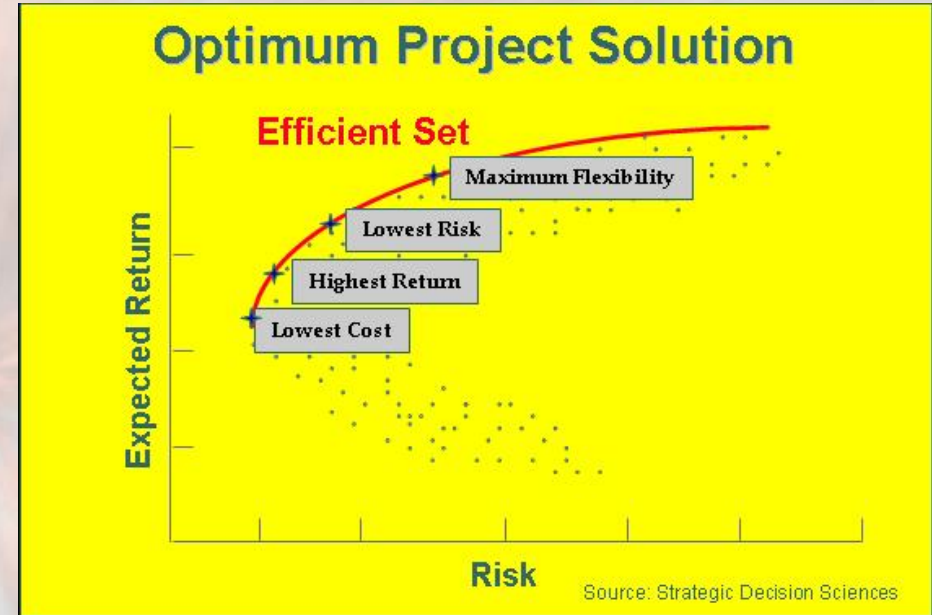


- Refinery Fabrication & Module assembly
- Fabrication of 100,000 dia. Inches of pipe spools & assembly of 244 pipe-rack modules
- Drafting hours: 10,000 / Fabrication hours:120,000 / Module assembly hours: 500,000

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# Changing the Way Projects are Done

- Risk Management
- Do it on the Computer  
“Before Cutting Steel”
- Task & Resources Feed to Project Plan Software
- Optimize Scarce Resources
  - People, Equipment, Material, Capital



Similar to War Gaming  
or Flight Simulators

Immediate High Value Impact on the Project

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# Innovative Business Model

- Risk Management / Mitigation Examples

- Drilling Risk Assessment
  - Capital Allocation
- Disaster Planning & Recovery
  - Hurricane Ivan
    - Subsea Survey
  - Corporate
    - Organizational Planning
  - Refinery
    - Security Scenarios
  - Military
    - Operation Plan Scenarios

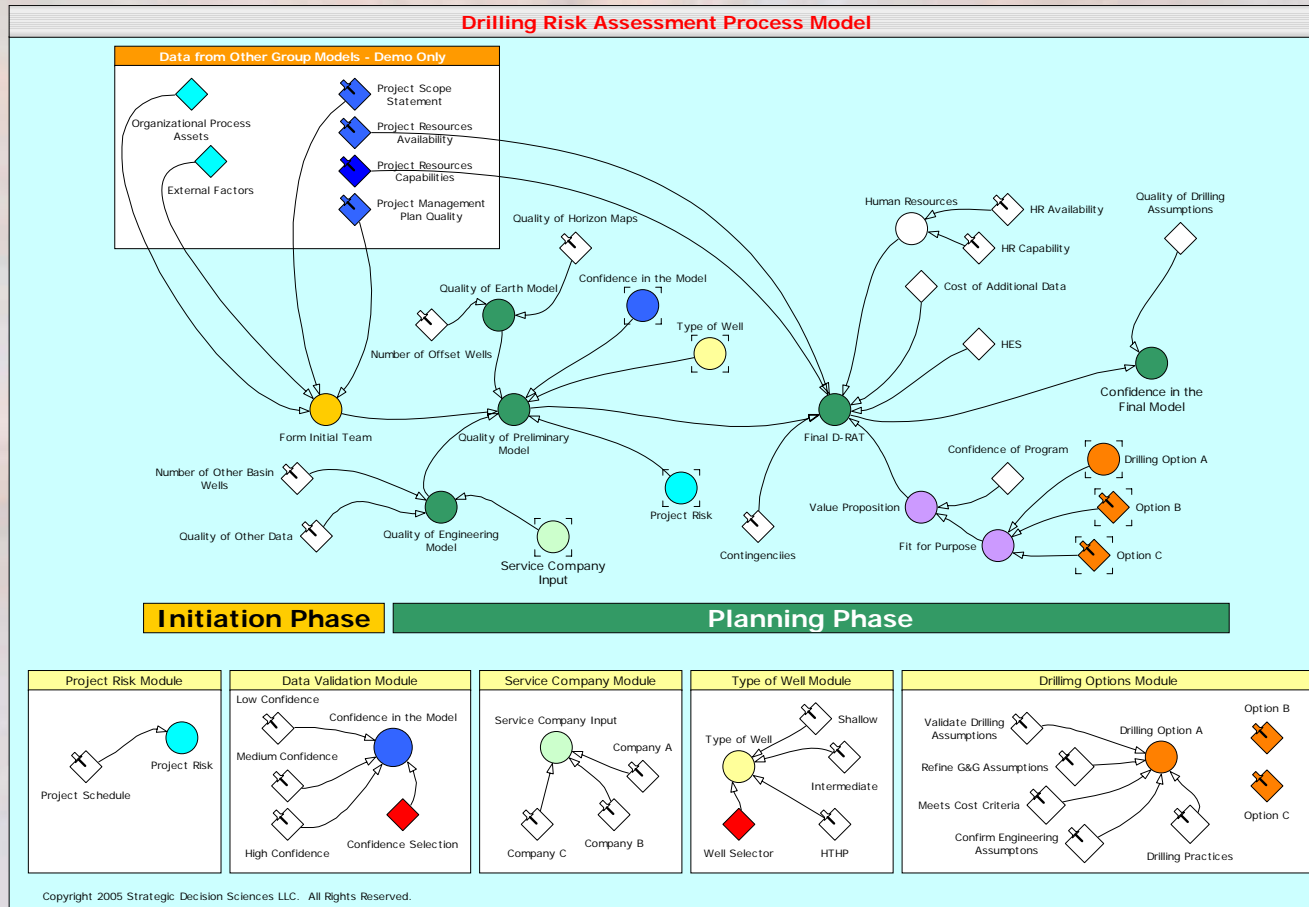
- Project Management Examples

- Submarine Fiber Optic
  - Reduce Time (Weather Window)
- Heavy Oil Extraction
  - Energy Services Innovation
  - Shorten Duration

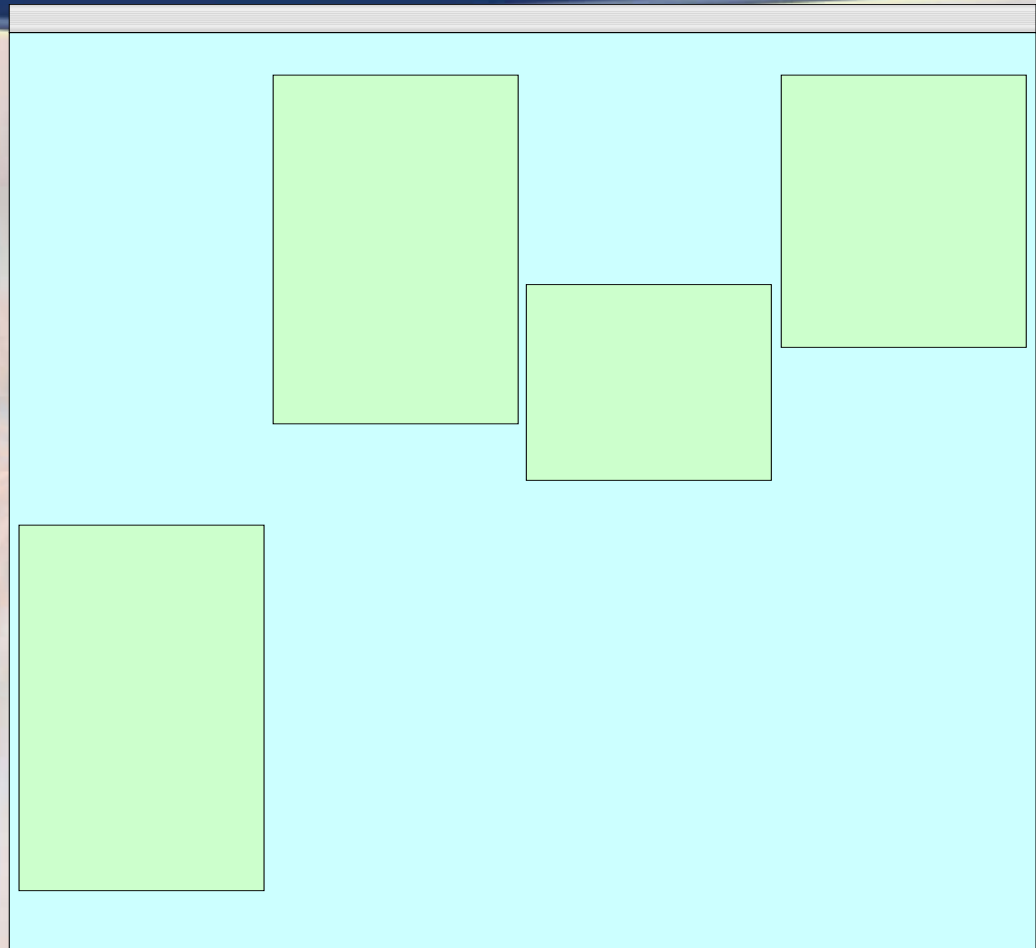
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# What is Simulation?

## Model of a precise set of mathematical relationships



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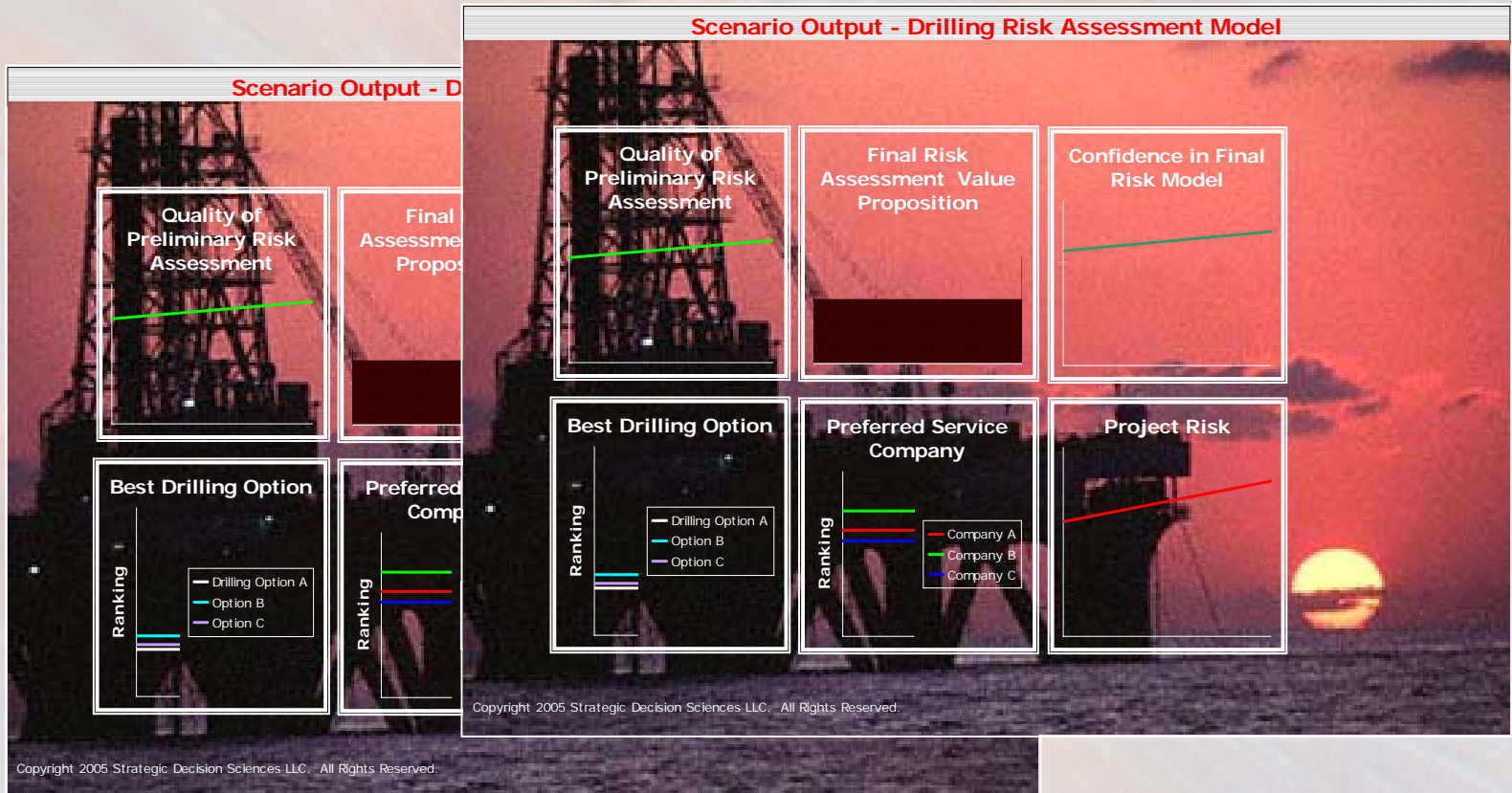
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# Output of Model - Sensitivity Scenarios



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