

# Conceptual Framework for Adaptive Project Management in the DoD

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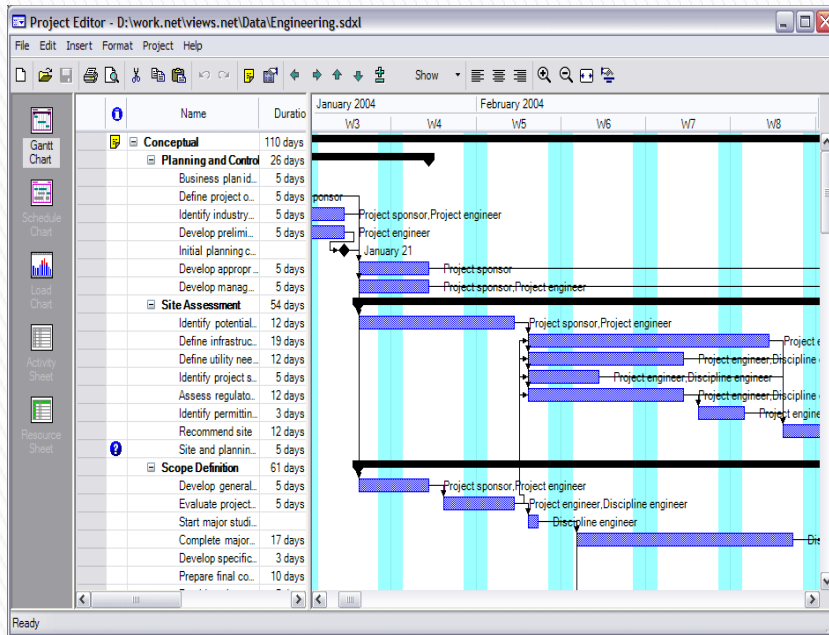
# Research Questions

- ▶ Can the probability of project management success be increased by adopting a new conceptual model for project management?
- ▶ If so, can a revised project management concept be taught/implemented in the DoD?

# Research Basis

- ▶ The Project Management Crisis
  - Project success rates continue at less than 50%
  - Agile/Incremental processes can bump that rate to 60%
  - GAO: “Government spends \$80B on IT projects with little to show”
- ▶ Corrective actions thus far have only provided marginal improvements

# Traditional Project View

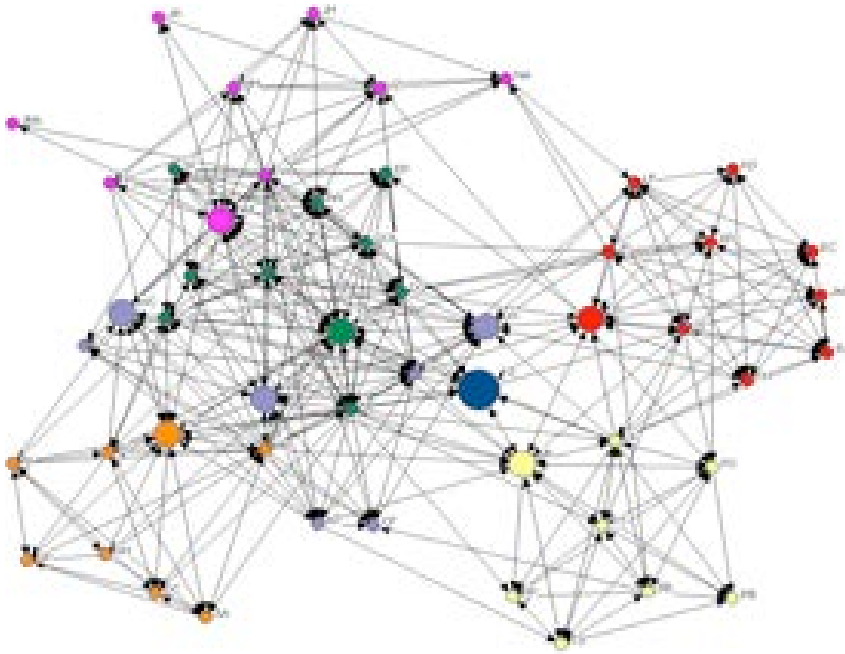


- ▶ Prescriptive, plan based approach
- ▶ Projects viewed as series of sequential tasks
- ▶ Execution and Control focuses on sticking to the plan
- ▶ Uncertainties obscured through assumptions

Traditional Project Model


Conceptual Framework

# New Conceptual Model for Projects



- ▶ Projects seen as Complex Adaptive System
- ▶ Characterized by rich, dynamic, nonlinear behaviors that cannot be predicted
- ▶ Emergent behaviors due to external stimuli
- ▶ Co-Evolution structure alters throughout the lifecycle
- ▶ Poised at the edge of chaos
- ▶ **System can be directed by interconnected autonomous agent (Project Team)**

# New Project Perspectives

- ▶ Journey of discovery rather than a trip down the freeway
    - Knowledge and experience coupled with the skill to apply
  - ▶ Unknown factors will influence results
    - Identify unknowns and plan for them
    - Recognize potential impacts early interact to guide and control results
  - ▶ Success in maximizing value based on state of world and management decisions
    - Decisions along the way matter
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# Project Manager Skills / Knowledge

- ▶ Early Involvement – Understand why! Shape Effort
- ▶ Plan is a verb! Conceptual planning to highlight options
- ▶ Emphasis on Execution not developing the plan
- ▶ Understand knowledge needs mapped to decision points
- ▶ Lead Execution. Exploration. Live off the land
- ▶ Respect constraints but understand flexibility
- ▶ Empathy – anticipate and react
- ▶ Know the cost of information
- ▶ Pragmatic Understand the need to decide

Similar to skills needed for command in contingency operations

# Project Manager Training

- ▶ Focus on planning at the operational level
  - Identify and understand options
  - Identify decision points
  - Define essential elements of information (EIs)
  - Understand the incremental cost of knowledge
- ▶ Manage within constraints
  - Use Agile estimation and planning tools (e.g. MoSCoW analysis)
  - Review priorities frequently
- ▶ Lead and Communicate
  - Empower the team/Train the leaders
- ▶ Develop mentor program
  - Identify and train mentors
  - Build experience



# Governance

- ▶ **Initial Review:**
  - Overall Concept of Operations
  - Key Decision Points/Information Requirements
  - Stakeholder Perspectives
- ▶ **Periodic Reviews linked to Key Decision Points**
  - Ensure continued alignment
  - Update stakeholders on current state of knowledge
- ▶ **Issue:**
  - Timeliness of reviews
  - Reduce organizational/process complexity

# Recommendations

- ▶ Look at and extend recent research
  - Understand complexity
  - Focus on success rather than analyzing failures
- ▶ Apply Critical Thinking
  - How does this revised concept impact project management
  - Pilot efforts with proven teams/mentors
- ▶ Reduce organizational and process complexity