

# MANAGING COMPLEX PROJECTS - A CUSTOMER PERSPECTIVE

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# MANAGING COMPLEX PROJECTS – A CUSTOMER PERSPECTIVE

- Complexity in Government projects
- Project Strategies
- Skills and Resources
- Governance
- Tools and techniques
- Need for New Approaches

# COMPLEXITY IN GOVERNMENT PROJECTS



# COMPLEXITY IN GOVERNMENT PROJECTS

- Body of Knowledge Definition of Project
  - Defined Product
  - Hard Interfaces
  - “Closed” System
  - Variations accounted for in Risk Management
  - Deal with Uncertainty by Making Assumptions (MADL)

But.....

# INCREASING NUMBERS OF PROJECTS DON'T PLAY BY THE RULES

- Increasing degrees of uncertainty
  - Outside Influence on critical project factors
  - Pace of technology change
  - Increasing interdependence
  - Dynamic Interfaces
  - Too many moving parts to use traditional risk management techniques

# CHARACTERISTICS OF COMPLEX PROJECTS

- Characterised by uncertainty, dynamic interfaces, and significant political or external influences
- Usually run over a period which exceeds the technology cycle time of the technologies involved
- Can be defined by effect, but not by solution
- Full Work Breakdown Structure can't be defined at the start

# COMPLEXITY IN GOVERNMENT PROJECTS

Budget  
Priorities

Technology  
Advances

Political  
Uncertainties

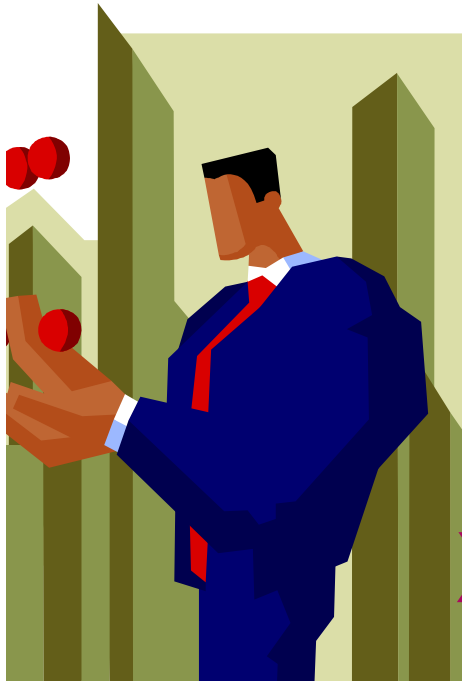
Stage 0 Innovation & Opportunity Selection	Stage 1 Preliminary Concept Definition	Stage 2 Full Concept Definition	Stage 3 Product Realisation	Stage 4 Production & In-Service Support	Stage 5 Continuing In-Service Support	Stage 6 End Of Life Disposal
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Context  
Evolution

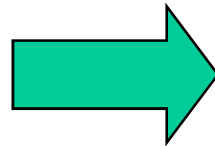
Dynamic  
Interdependencies

Environmental  
Laws and  
Policies

# COMPLEXITY EXAMPLE



X60



# COMPLEX PROJECT STRATEGIES

- Agreed definition of desired outcomes
- Critical Success Factors/Measurements of success
- Planning for Change
- Appropriate Tools and Techniques
- Incremental approaches

# COMPLEX PROJECT MANAGEMENT SKILLS

- Leading projects as ‘systems’
- Establishing where certainty exists, and applying traditional project management skills to deliver the known
- Equally establishing where certainty does not exist, and establishing strategies to manage uncertainty
- Coping with changing strategic needs while delivering coherent tactical solutions

# COMPLEX PROGRAMME GOVERNANCE

- Tools and techniques to measure progress towards desired outcomes
- Organisational ability to make decisions with uncertain outcomes
- Appropriate approval/decision timelines
- Budgeting for incremental delivery strategy
- Culture

Complexity Brings Programme Management into the Boardroom

# COMPLEXITY NEEDS NEW APPROACHES

- New underpinning science (eg Chaos theory)
- Systems thinking
- Project Leadership Paradigm
- Decision Criteria
- Tools, techniques, metrics

# WHAT CUSTOMERS NEED

- Adapting Complexity Theories to delivering projects
- New tools and techniques
- New skills for project managers
- Metrics
- Different decision criteria

Complexity requires new knowledge at the individual, project, and enterprise level

