

A Practical Guide to implementing Complex Systems Governance Concepts on Projects

Professor Chuck Keating, Old Dominion University
Virginia, USA

Thursday 22nd August 2019, 9:00am – 5:00pm

The Canberra Rex Hotel, Canberra

Biography:



Dr. Keating is a Professor of Engineering Management and Systems Engineering and Director for the National Centers for System of Systems Engineering at Old Dominion University, Norfolk, Virginia USA. His research and teaching focuses on Complex System Governance, Systems Thinking/Theory, Systems Engineering, System of System of Systems Engineering, and Management Cybernetics. A Fellow and Past President of the American Society for Engineering Management, he received the society's most prestigious award (Sarchet Award) in 2015 for pioneer efforts in the field. He has authored 110+ peer reviewed publications, generated \$20M+ in research funding, and graduated 25 Ph.D.s. His research has spanned defence, security, aerospace, healthcare, R&D, and automotive sectors. Prior to faculty appointment in 1994, he served in leadership and technical engineering management positions for over 12 years in the U.S. Army and private industry. He holds a B.S. Engineering (United States Military Academy, West Point), M.A. Management (Central Michigan University), and Ph.D. Engineering Management (Old Dominion University). Memberships include American Society for Engineering Management, International Society for System Sciences, and International Council on Systems Engineering.

Overview:

The purpose of this workshop is to provide a hands-on experience for Project Management (PM) professionals for application of Complex System Governance (CSG) concepts. CSG is a new and novel approach to improve performance through purposeful design, execution, and evolution of essential system functions. These functions sustain project performance in the midst of external turbulence and internal flux. CSG addresses the 'messes' and 'wicked problems' that are the by-product of modern projects and continue to overwhelm PM practitioners. Application of CSG for PM is examined to: (1) appreciate and map the complex environment faced by modern PM, (2) discover sources of 'deep system' project failure modes that ultimately produce schedule delays, cost overruns, and missed performance targets, (3) explore the 'systems' basis for those failure modes, and (4) develop responsive and feasible systems-based strategies to preclude failure modes in the design, execution, and development of complex projects.

Workshop Objectives:

The workshop objectives are:

- (1) Examine the nature and implications of the complex problem domain facing PM professionals.
- (2) Explore CSG as a systems-based response to better deal with increasingly complex projects.
- (3) Apply CSG methods to discover 'deep system' failure modes in design, execution, or development of projects.
- (4) Determine feasible strategic responses to preclude or mitigate CSG failure modes in complex projects.

As a result of the workshop, participants will be better prepared and equipped to apply CSG concepts and tools. This will permit identification and assessment of systems-based project failure modes, mitigation of negative consequences, and identification of feasible actions improve project performance through design, execution, or development modifications.

Target Audience:

The workshop is primarily intended for persons currently performing or assuming responsibilities related to design, oversight, execution, or evaluation of projects, PM, or programs. This includes Project Directors, Program Directors and Managers, PMO and Contract Managers and Analysts, Senior Project Managers and project managers managing large complex projects.

Others who would benefit from attending this workshop include project stakeholders with oversight roles including members of Project Steering Committees or Governance Boards.

Topics:

- Complex system problem domain facing PM practitioners (Complexity Typing)
- Systems view of projects and PM (Project Systems Mapping)
- Mapping context for the complex system project problem domain (Force Field Analysis, Contextual Mapping, Advanced Stakeholder Analysis)
- Basis and nature of Complex System Governance in relationship to PM (CSG Principles, CSG Reference Model)
- Application of Complex System Governance to discover ‘deep system’ project failure modes (CSG Pathologies (Deficiencies), Failure Mode Effects and Criticality Analysis for PM)
- Identification of response strategies (CSG Deficiencies Assessment, Feasibility Indexing)

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| Venue: | The Canberra Rex Hotel, Canberra 150 Northbourne Ave, Braddon ACT 2612 |
| Room | TBA |
| Timeframe: | Thursday 22nd August 2019, 9:00am – 5:00pm |
| Cost: | \$1,250.00 |