10th ICCRTS:
New Policy Developing Edge
Organization Premised in Governance

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Application of Agency Theory to Transform Government Business Enterprise Governance

Applicable to large joint acquisition ACAT programs

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Problem Statement

- No Formal Policy Articulates Creation of The Edge Organization

- Hierarchies Persists in Institutional Processes
  - No Alternative Methodology
  - Blunting effectiveness & efficiency while stifling innovation

Enact Governance Policy for Joint Acquisition:

Create Agile Edge Organization
Need for Agile Edge Organization Governance Arises from Issue of Limited Liability

- **All Liability** in Major Defense Acquisition Resides with:
  - Joint Warfighters (potent)
  - Taxpayers (diluted)
  - Agents (traditional)
  - Contractors
  - Other Performers

- **Near-zero Liability** to Principals/Governors
  - Sanctions virtually non-existent except for:
    - Criminal situations
    - Major ethics violations

- **Shift Liability** to Principals/Governors:
  - Accountable Self-Monitoring Edge Organization
  - Decisive Incentive Policy
    - Sanctioning
    - Long-term reward (strategic)

Behavioral Issues Impose Agency Costs & Degrade Programs
Agency Theory

- Body of knowledge prescribing a set of tradeoffs for organizing relationship/contracts between: Principals, Agents, and Stakeholders

- Objective: Minimize agency & governance costs while protecting the interests of the primary stakeholders (warfighter)

- Principal determines the work that the agent undertakes:
  - In the face of maligned goals & imperfect (non-rational) behaviors
    - Conflict of Interest
    - Self-interest
    - Self-control issues (opportunism)

Mitigate sunk-cost agents engender Through a Nexus of Contracts
1) Moral Hazard – failure of integrity, in attempt to reap reward when acting unfaithfully or not putting forth maximal effort (shirking)
   - Hidden action
   - Inefficient reward/punishment incentives

2) Adverse Selection – failure of agent to accurately represent ability to perform required duties
   - Hidden information
     - Deficient Discipline – poor manager faces too low a probability in being fired, undermines monitoring
     - Distorted Discipline – good manager faces too high a probability of being fired, maximize short-term at detriment of long-term

Behavioral issues derive from incentive structure, more than “bad” agents
Countervailing Agency Theory is Countervailing Agency Theory

Based upon self-actualization:
- Need to achieve
- Intrinsic satisfaction from performing challenging work
- Exercise in responsibility and authority
- Gain of Recognition (Imperative Program)

Critical switching factor postulated to be whether the fundamental organization is secured or jeopardized

Robust Governance Considers Both Stewardship and Agency Theories
Non-Rational Behavioral Factors Lead to Program De-Escalation

- Escalating commitment to a failing course of action
  - Throwing good money after bad

- Sunk cost effect
  - Having too much invested to stop now

- Completion effect
  - Strong pull of assumed proximity to a goal

- Groupthink
  - Collective false belief that systematically reinforces the up-side, or problem solving routines that do not address root causes

- Cognitive bias and alignment among stakeholders

- Micromanagement
  - Default position of managing everything w/o regard to relevancy or priority

Subtle non-rational behaviors can systematically de-escalate the program

Program De-Escalation Phases

- **Phase I**
  - Drift, confusion, lack of consensus
  - Lack of shared understanding in objectives and scope

- **Phase II**
  - Difficulties universally perceived
  - Incremental adaptation
  - Small reactive measures on symptoms
  - Periods of rationalization, justification and defense

- **Phase III**
  - True problem recognition
  - Search for alternatives
  - Exit strategy

Dwindling support leading to precipitous redirection or termination/abandonment

Role of Governance & Management as a Solution

- Organizing
- Planning
- Monitoring
- Controlling

Governance

Agency Cost Mitigation Through Monitor & Control (core)
Governance Cost of the Hierarchical Organization

Governance Cost = \( \sum_{i} \text{Monitor}(i) + \sum_{j} \text{Liaison}(j) \)

Governance in Agent Domain is Inefficient
Corporate Governance Based on Theory of Agents

Starting Point Examines Governance of Corporate Setting (Derived from Agency Theory)

Enterprise Architecture Operational View of Governance

Principal

Authority flow

Delegation of Responsibility

Communication channels

Results & Outcomes

Accountability flow

Control

Agent

Monitor

Operational View Model of Principal-Agent Contract

This is what you should manage

This is often managed
Net-Centric Governance Framework
For DoD Joint Programs

Checks and Balances: Self Monitoring and Control
Primary Sections Under Corporate Governance

- Governance Principals – guidelines and assumptions
- Board Independence – definitions of
- Director Nomination Process – diversity and ability to stave off adverse selection
- Code of Ethics and Conflicts of Interest – adherence to policy and sanctions
- Lead Director - duties
- Communication with the Board - procedures
- Stock Ownership Guidelines
- Policy on Shareholder Rights Plans
- Director Education – training and encouragement
- Board and Committee Evaluation Process – assessment of board performance

Eight Sections Applicable to DoD
Governance Responsibilities

- **BoD Responsibilities:**
  - Sets Vision, Mission, Scope and Bounds through a strategic planning process
  - Reviews & approves: acquisition strategy, and R&D funding based on mgmt recommendations
  - Must be perceptive enough to foresee opportunities, and must anticipate threats as they arise
  - Act independent of management to extent of exercising loyalty and care directed first and foremost to warfighters, whom are the end users (owners)

- **Management Responsibilities:**
  - Monitor, control/direct, plan, and organize operations associated with production and distribution of acquisition system(s)
  - Develop & recommend: acquisition strategy and R&D funding needs
  - Manage technology transition and spiral development through rigorous systems engineering practices
  - Manage contractor activities
  - Accountable in fulfilling BoD vision, note: BoD answers to warfighter
  - Report financial performance and budgeting recommendations to BoD

- **Warfighter Responsibilities:**
  - Develops MCPs (goals and objectives to be allocated into acquisition)
  - Assign Independent Lead Director for each warfighter voice
  - Maintain on-going connectivity and communication throughout acquisition process
**BoD Structure**

- **Dual BoD structure: 5-13 outside & inside directors for decisive decisions**
  - Inside & Outside directors – multidimensional yet small for timeliness
    - Outside independent – valuable source of innovation

- **BoD effectiveness achieves the following:**
  - Meeting preparation and attendance
  - Setting agendas and priorities
  - Overseeing processes are being followed
  - Obtaining resources
  - Reviewing relevant information & press releases
  - Asking relevant questions
  - Making timely sound difficult decisions decisively
  - Evaluating, rewarding & replacing top management/execs
  - Acting swiftly and decisively in cases of unforeseen crisis
  - Enforcing management incentive instruments

"Fiduciary" responsibility is accountability & conformance to warfighter needs
7 Steps for Building Edge
Governing Organization

Start with Net-centric Governance Framework
- General Needline Structure
- Node Placeholders

Engage Enterprise Architecture Techniques
- Specifics
- Names
- Organizations

Constitute Specific Functions and Activities
- Board Meetings
- Governing Contracts
- Symposium
- Risk Assessment

Define Incentive Program
- Award Fees
- Bonuses
- Contracts
- Sanctions

Define Metrics and Set Thresholds
- Nunn-McCurdy - Standard Deviations
- Behavioral (TBD)
- Multi-attribute utility
- Multi-level

Conduct Program Due Diligence

Quantify Agency Costs
- Award Fee
- Bonus Amounts
- Savings

• Performance
• Cost
• Schedule
• Risk Accountability
Risk Areas Not Yet Addressed

- **Integration with existing Capability Based Acquisition (CBA) Processes**
  - Tie in with 3170 JCIDS Process
  - Role of J-8 JROC Oversight
  - Role of Functional Control Board (FCB)
  - Gaps
  - UJTLS

- **Congressional Funding Impacts**
  - Reluctance to present bad aspects on the program of record (POR)
  - GAO
  - OMB

- **Outside Influences**
  - Lobbyist
  - Think-tanks
  - Free Press
Future Advanced Topics

- **Applied Mathematics To Economize Agency Costs**\(^1\) – Maximizing agent-utility and pricing agent-principal contracts

- **Incentive Structures** – trade-offs: monetary/non-monetary awards/punishments, budgeting cost of governance, simultaneous operating levels (PEO, BoD, Contractors), and behavioral guides

- **Governance Performance Measures** – Program-PEO-BoD levels, quantitative/qualitative weighted aggregation, ‘causal chains’\(^2\)

- **Risk Reducing Intervention Frameworks** – ‘Real Options’\(^3\) Analysis offers flexible strategic decisionmaking; the right not obligation to take long-term pre-planned strategic intervention options

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\(^1\) Edi Karni, “Axiomatic Foundations of Agency Theory”, Department of Economics, Johns Hopkins University, Baltimore, MD, 21209.


✓ Use Enterprise Architecture with Theory of Agents framework to build Check and Balances Edge Organization with disciplined accountability

✓ Consider Active Incentivized Acquisition BoD of internal/external directors for Joint ACAT Programs

✓ Institute on-going & rigorous cross-cutting (PEO, BoD, CNTR) due diligence

✓ Incorporate long-term and behavior-oriented incentive structure based on governance integrity

✓ Censure principals/agents, accountable to BoD, when persistent adverse behavior goes against best interests of primary stakeholders