Cross Cutting IT Modernization Center of Excellence: 

Measuring the Risks, Mission Value and Lifecycle Cost of IT Modernization Investments

Board of Advisors:

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Dr. Dale Meyerrose, MGEN, former DNI CIO
John Weiler, IT-AAC Managing Director
Josh Harbert, Exec Director, TBM Council
Todd Tucker, VP, Standards, Research & Education for the TBM
Assuring IT Enabled Outcomes
exposing innovations & proven practices and standards
emanating out of the $4T Global IT market

- **IT-AAC 501c6**
  - Public/Private Partnership of Standards Bodies, Academia, Think Tanks and Non-Defense COIs.
  - Conduit to $4 Trillion Global IT Market best practices/innovations
  - Greybeard Council
  - Focus on sharing Commercial IT standards of practices and lessons learned
  - Resource for Mentoring and Training; TBM, Agile Acquisition, Risk Management, Service Level Management, PtF Mgt, CPIC

- **Interop. ClearingHouse (ICH)**
  - Govt Chartered research institute (SWOB) GSA Sched 70
  - Clearinghouse of; IT Standards, Design Patterns, COTS Innovations, Proven Practices
  - Contracting arm for IT-AAC and its SDO Partners
  - Focus on measures and metrics for interoperability, value, security, service levels, commerciality & risk.
  - Just-in-Time SMEs to mentor, train and equip IT/Cyber workforce
  - Conflict free, no rice bowls
# IT-AAC Public/Private Partnership

**reaching over 108k innovators**

<table>
<thead>
<tr>
<th>IT-AAC Partners</th>
<th>Agile Methods</th>
<th>IT/Cloud Standards</th>
<th>Innovation Access</th>
<th>IT Risk Mgt</th>
<th>Industry Best Practices</th>
<th>Pilots &amp; Contracts</th>
<th>IT Policy &amp; Governance</th>
<th>Number of Companies (SMEs)</th>
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<td>Telecommunication Industry Association (TIA)</td>
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1. **INDUSTRIAL AGE IT ACQUISITION & MANAGEMENT PROCESSES:** Industrial age frameworks (DODAF, JCIDS, CPIC) obscures value of commercial IT standards and waste billions annual in non-value paperwork. Current approach results in 75% failure rates and significant cost overruns in spite of legislations directives to change (FITARA, CCA, IT MGT Act, EO13800, PMA).

2. **ILL-EQUIPED FEDERAL IT WORKFORCE:** Government PMs and Acquisition Core, CxOs lack expertise, experience and knowledge to leverage of business value of commercial IT. Focus on compliance not outcomes.

3. **DECISION AVOIDANCE vs RISK MGT:** Agencies lack mature Risk Based Decision Analytics Frameworks needed to model risks and guide modernization of legacy stovepipes. Commercial standards of practice are key to change (Agile Aqui, TBM, RMF, SCRM).

4. **BARRIERS TO IT INNOVATIONS and BEST PRACTICES:** Decision makers lack access to commercial standards and innovations that drive a $4 Trillion dollar global IT Market (of which the DIB represents less than ½ of 1%).
FITARA Agile Acquisition Scorecard

- Measurement and discussion in governance committees goes a long way to setting behavior
- You can only manage what you measure. Codify Gate controls that measure risk/value

Transform Acquisition and CPIC Policy

- Transform IT Acquisition that enable continuous measurements of risk/value
- Require vendors to provide CISQ scores/certificate for each release
- Streamline processes that Mission Driven, Evidenced Based, and Agile

Service Level Management

- SLAs that treat software enhancements and maintenance as a service; track levels, penalties, credits
- Align SLAs with Mission Outcomes and Incentives

Risk Mgt Acceptance criteria

- Measure and demand minimal set of acceptance criteria for any new development or modernized systems
- Modernize IT Infrastructure Services based on commercial design patterns (14 SOA Services)
Agile Acquisition, CISQ and TBM
Process Flows for Measuring Investment Risk, Value and Cost

Mission Needs:
Value Stream Analysis:
• Problem ID
• Mission Rqts
• Prioritization
• Constraints

Performance Management Assessment:
• Feasibility
• Service Attributes
• SLAs
• Shared Services

Solution Architecture Modeling:
• Selection
• Certification
• Interop Spec
• Openness

AAM Tools
Problem Statement
Capability Analysis
Solution Determination
Capability Prioritization
Feasibility Assessment
Economic Analysis
Roadmap
Risk Dashboard Assessment
AAM, CISQ & TBM Frameworks
A Data Driven Modeling Approach

Mission Capability No High level Capability
1 2 Reduce time to deploy infrastructure
2 2 Reduce infrastructure cost
3 3 Improve Reliability, Availability, Survivability (RAS)
4 4 Work within current Security Management Posture

Prioritized Capabilities
- Support for AF Use Cases
  - 5.1: Provide support for client type - Unmanaged
  - 12.5: Support SBC storage strategy
  - 6a: Provide server-side storage of System data and/or system images
  - 6b: Provide server-side storage of enterprise data
  - 6c: Provide server-side storage of user data and/or system images
  - 6d: Provide server-side storage of application
  - 6e: Provide server-side storage of enterprise application data

Solution Determination Alternatives
- Call Manager Capabilities
- Web Conferencing Capabilities
- Video Teleconferencing Capabilities

Road Map
Feasibility Assessments & Management Risks
- Economic Analysis/TCO/ROI Tradeoff

Support for client type - Remote
Builds On

Economic Analysis/TCO/ROI Tradeoff
Builds On
<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Contract Value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy: Assessment of AFLOAT Program –</td>
<td>CANES SOA &amp; Security Strategy</td>
<td>$350k</td>
<td>Eliminated hi-risk Requirements by 23%, $100Ms in potential savings</td>
</tr>
<tr>
<td>USAF: Streamlined COTS Acquisition Process.</td>
<td>Applied to Server Virtualization.</td>
<td>$500k</td>
<td>Established optimal arch with ROI of 450% &amp; $458 million savings</td>
</tr>
<tr>
<td>AFISRA: Applied AAM to conduct ISR</td>
<td>Portfolio Risk Assessment (PRA)</td>
<td>$500K</td>
<td>Guiding reorganization and restructure of ISR Portfolio</td>
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<tr>
<td>DISA CAE: DISN GSM-O Recompete</td>
<td>Restructured performance metrics, acquisition strategy and SLAs to enable 30% savings on existing DISN Mgt</td>
<td></td>
<td>Greatly Exceeded Forecasted Saving in both analysis and acquisition</td>
</tr>
<tr>
<td>GSA CFO: Financial Mgt System consolidation</td>
<td>using AAM.</td>
<td>$500k</td>
<td>Moved GSA FMS from OMB “red” to “green”. Eliminated duplicative investments that saved $200M</td>
</tr>
<tr>
<td>BTA DBSAE: Transformed DOD’s Requirements and</td>
<td>Agile process, with 2 successful pilots</td>
<td>$800k</td>
<td>$300 million in potential savings with minimal investment</td>
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<tr>
<td>Discovery Channel: Apply AAM to complete AoA</td>
<td>Financial Mgt System consolidation using AAM.</td>
<td>$330k</td>
<td>Provided actionable roadmap for worldwide multi-media web services</td>
</tr>
<tr>
<td>GPO: Developed Acquisition Strategy for</td>
<td>Future Digital System FDSys</td>
<td>$150k</td>
<td>Led to successful acquisition and implementation on time, on budget and 80% cheaper than NARA RMS</td>
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<td>DHS CIO: Agile Acquisition Roadmap</td>
<td>Applying AAM to comply with NDAA/FITARA IT Reform Directives</td>
<td></td>
<td>Partnered with DHS FFRDC to shift DHS away from failed weapon systems approach to IT acquisition</td>
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</table>

*“we believe that it is necessary to develop a comprehensive set of metrics to give transparency to program execution, avoid subjective judgment, and avoid the wasting of time in both executing commands and in oversight offices. This is consistent with the fundamental recommendations of the Packard Commission and Secretary Robert Gates’ initiative to eliminate inefficiency and waste.” PARCA-RAND Root Cause Analysis of Nunn-McCurdy Breaches*
IT Transformation Roadmap

how IT-AAC can drive Sustainable IT Reforms

Align responsibilities and authorities that establish clear lines of authorities and accountability (CIO, CFO, CAE).

Train, mentor and equip acquisition ecosystem on IT standards of practices (TBM, Agile, RMF, SCRM). Provide Just-In-Time SMEs to fill IT Expertise and Knowledge gap. Leverage public/private partnerships that expose real world innovations, best practices, lessons learned.

ORGANIZATIONAL REALIGNMENT

WORFORCE TRAINING EXPERTISE/KNOWLEDGE

IT MGT PROCESS & POLICY UPDATE

CHANGE MGT INCENTIVES/CULTURE

Establish Risk Based Decision Analytics and Performance Metrics that enable sound, fact based investment decisions as directed by CCA, FITARA, IT MGT Act, EO13800, and PMA.

Establish Value Streams, reward risk takers, encourage small failures, drive 80% COTS solutions that deliver mission outcomes. Create Agile TBM pilots that demonstrate new approach to IT Modernization.