CALL FOR PRESENTATIONS

Agile in Government

May 6–7, 2020 • Hyatt Regency Dulles • Herndon, VA

Theme: *DevOps at Scale: Advancing Software Acquisition*

This annual event is organized by the NDIA ADAPT group, in partnership with the Carnegie Mellon University Software Engineering Institute, for the purpose of creating a robust exchange of experiences and best practices bringing iterative, agile software practices into government acquisition.

This year the theme of the event is *DevOps at Scale: Advancing Software Acquisition.* Software is at the heart of Government systems. The SWAP study concluded software is immortal - it outlives hardware and provides the basis for future system functionality. The Defense Science Board report on Design and Acquisition of Software for Defense Systems emphasized the importance of the software factory and the need for defense industrial base partners to adopt continuous iterative development best practices.

On January 3, 2020 the Undersecretary for Acquisition and Sustainment issued the Software Acquisition Pathway Interim Policy and Procedures based on recommendations of the Defense Innovation Board SWAP study and input from industry. The interim policy

- simplifies the acquisition model to enable continuous integration and delivery of software capability on timelines relevant to the Warfighter/end user.
- establishes the Software Acquisition Pathway as the preferred path for acquisition and development of software intensive systems.
- establishes business decision artifacts to manage risk and enable successful software acquisition and development.

The purpose of the interim policy is to establish an adaptive acquisition framework composed of acquisition pathways tailored to the unique characteristics and risk profile of the capability being acquired. The objective is to deliver effective and affordable solutions to the end user and enable execution at the speed of relevance.

Across government the rapid evolution of information technology has sparked a digital transformation in how government employs IT across all its business and organizational activities and processes. Similarly, Industry 4.0 represents the fourth industrial revolution in manufacturing and industry and is the digital transformation that is based on automation, data exchanges, cloud, cyber-physical systems, robots, big data, artificial intelligence, learning systems, IoT and autonomy. Today we understand that smart organizations – government and industry – are operating at intersection of people, new technologies and innovation.

The challenges are adopting agile at scale for programs, portfolios and agencies; creating cross-functional agile teams; scaling needs when agile principles are applied to business operations; governance in modular, incremental and iterative situations; agile for hardware; contracting, performance measurement and reporting.

We invite high-quality, professional presentations that reflect the theme and address the focus areas being featured in the event. Selected presentations will reflect the successes, and challenges, that organizations are experiencing and the impact agile is having on government.

PRESENTATION TOPICS

Presentations will be considered from business and Government that address the following topics:

Integrating Iterative Development with Acquisition

Government acquisition is still a traditional enterprise process. Fitting iterative software development into this traditional, waterfall-oriented mindset is a challenge. The 2018 DIB SWAP study recommended the software factory approach to iterative development. What are the challenges in implementing these concepts in acquisition? How are they integrated with the traditional processes of program and portfolio management? How should we approach traceability, progress measurement and metrics, and contractual performance when integrating iterative development into the acquisition process?

Performance Measurement

Acquisition contracting requires performance measurement and reporting. Several guides have been written regarding applying the Earned Value Management system to programs with agile development. Presentations are sought on types of agile metrics and how they integrate with acquisition management and oversight are welcome. Talks on software factory integrated tool chains and how they relate to acquisition artifacts such as design reviews, CDRLS, etc. are also applicable. Technology business management and lean portfolio management, and their alignment with budgeting, are also topics that may be addressed in these sessions.

Model-Based Systems Engineering (MBSE) and Agile

On large-scale projects collaboration and the consistent use of designs across multiple teams and contractors are critical to success. MBSE provides a platform to enable business analysts to collaborate with developers to produce precise, consistent design specifications that can derivative development automation and higher quality on a fast turnaround basis. How does iterative software development fit in MBSE? What are the benefits and challenges?

Agile and Cybersecurity

This session addresses how agile principles or DevOps can be applied to acquiring and evolving cyber capabilities to keep up with the rapidly changing threat. Compliance with NIST 800-171 and assurance of adequate security is compounded by the acceleration of change. Presentations will address various perspectives on agile cybersecurity. High assurance applications are of great interest. Examples are medical devices, highly regulated industries, or mission-critical systems impacting flight worthiness, or autonomous vehicles.

DevOps for Government – Case Studies and Approaches

DevOps is becoming increasingly important as Government strives for improvements both in acquisition speed and data protection. Terms such as SecDevOps or DevSecOps have been used to indicate the integration of security with continuous integration and delivery. Presentations are sought that address the concepts, challenges and successful practices of implementing DevOps processes. Pros, cons, case studies and challenges surrounding application of DevOps in Government organizations are welcome.

Agile Architecture

Agile architecture refers to both the use of agile methods in developing architectures of various types and levels (enterprise, solution, data, etc.) as well as the architecture necessary to integrate multiple activities for agile development on a large scale. This session will address

both perspectives of agile architecture and will provide insights from projects applying the concepts. Attendees will learn to appreciate the mutually reinforcing roles of architecture and agility.

Contracting Case Studies
Should contracts for employing Agile methods be structured differently than those used in traditional waterfall processes? Who should the product owner be and what drives application of agile – the proposal or the RFP? This session is looking for tips and lessons learned on how to successfully address agile within legacy contract mods, or new contracts, and case studies for reviews, and deliverables. Presentations may address RFP and contract language, clauses and deliverables. Topics including design reviews, deliverables, and government-contractor governance roles are encouraged.

ABSTRACT TIMELINE

March 20	**Deadline for Abstracts**
March 23 - 27	**Abstract Selection**
April 3	**Abstract Presenters Notified**

Abstracts must be submitted electronically at the following link:
https://application.ndia.org/abstracts/0a01/.

Selection of abstracts for presentation will be made by the program committee. Submitters will be notified by email on **April 3.** Abstracts not selected for this event may be identified for presentation in future ADAPT events.

As a part of the submission please provide a short synopsis that will be used in the program should your abstract be accepted.

ATTENDANCE
Speakers whose abstracts are selected for presentation may attend the conference at no charge for the day of their presentation. Visit the website for more attendance details:TBD.

SPONSORSHIP
Sponsorship opportunities are available. Sponsors have logos on materials, display tables and opportunity to speak during Lunchtime Lightning Rounds. For more information contact Tiffany Milnor, tmilnor@ndia.org.

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