NDIA

2018 AGILE IN GOVERNMENT SUMMIT

June 6 – 7, 2018

Kellogg Conference Center at Gallaudet University

Washington, DC

NDIA.org/AIG18

WELCOME TO AGILE IN GOVERNMENT SUMMIT

This is the ninth year that ADAPT has organized quality speakers eager to share experiences meet audiences excited to see where agile is going in Government organizations.

This year the theme of the event is Towards Mission Agility. Today government needs to respond to changes in environments that affect its ability to accomplish its mission, whether it is acquisition of capabilities or service to customers.

The ADAPT planning group has assembled an outstanding program to address the growing need for Government to be more agile. Across government, military and civilian, 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.

Thank you to our sponsors: CA Technologies, CollabNet, Inflectra, Project Management Institute and Tasktop. Without their support important meetings like this are much more difficult.

I hope you gain much from your participation here at Agile in Government Summit.

Dave Chesebrough
Vice President Divisions
NDIA

SCHEDULE AT A GLANCE

WEDNESDAY, JUNE 6

Registration and Breakfast
Pre-Function Area
7:30 am

General Session
Ballroom AB
8:30 am - 12:00 pm

Lunch
Ballroom C
12:00 pm - 1:00 pm

Concurrent Sessions
Ballroom AB, Ballroom D & Room 6ABC
1:00 pm - 5:00 pm

Day 1 of Summit Adjourns
5:00 pm

Meetup Program
Ballroom D
5:30 pm - 7:00 pm

THURSDAY, JUNE 7

Registration and Breakfast
Pre-Function Area
7:00 am

General Session
Ballroom AB
8:00 am - 12:00 pm

Lunch
Ballroom C
12:00 pm - 1:00 pm

Concurrent Sessions
Ballroom AB
1:00 pm - 2:30 pm

Book Signing with Don Reinertsen
Ballroom D
2:30 pm - 3:00 pm

Summit Concludes
3:00 pm

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WHO WE ARE

The National Defense Industrial Association is the trusted leader in defense and national security associations. As a 501(c)(3) corporate and individual membership association, NDIA engages thoughtful and innovative leaders to exchange ideas, information, and capabilities that lead to the development of the best policies, practices, products, and technologies to ensure the safety and security of our nation. NDIA's membership embodies the full spectrum of corporate, government, academic, and individual stakeholders who form a vigorous, responsive, and collaborative community in support of defense and national security. For more information, visit **NDIA.org**

ADAPT WORKING GROUP

AGILE DELIVERY FOR AGENCIES, PROGRAMS & TEAMS

WHO WE ARE

ADAPT is composed of industry and government representatives who are interested in advancing the adoption of agile methods in software acquisition. The purpose of ADAPT is to facilitate industry-government interaction in policy, legal/contractual and technical areas directly related to understanding, assessing and implementing agile methods in programs, projects and procurements. Such interaction is intended to promote understanding of agile methods, when they are appropriate for use, and how they may be implemented within the context of information system acquisition.

EVENT INFORMATION

LOCATION

Kellogg Conference Center at Gallaudet University
800 Florida Avenue
Washington, D.C. 20002

EVENT WEBSITE

NDIA.org/AIG18

EVENT CONTACT

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Eileen Wrubel
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Dr. Suzette Johnson
NGC

Stosh Misiaszek
Eliassen Group

Robin Yeman
LMCO

SURVEY AND PARTICIPANT LIST

A survey and list of attendees (name and organization only) will be emailed to you after the summit. NDIA would appreciate your time in completing the survey to help make our event even more successful in the future.

SPEAKER GIFTS

In lieu of speaker gifts, a donation is being made to the Fisher House Foundation.

WI-FI

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HARASSMENT STATEMENT

NDIA is committed to providing a professional environment free from physical, psychological and verbal harassment. NDIA will not tolerate harassment of any kind, including but not limited to harassment based on ethnicity, religion, disability, physical appearance, gender, or sexual orientation. This policy applies to all participants and attendees at NDIA conferences, meetings and events. Harassment includes offensive gestures and verbal comments, deliberate intimidation, stalking, following, inappropriate photography and recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome attention. Participants requested to cease harassing behavior are expected to comply immediately, and failure will serve as grounds for revoking access to the NDIA event.

AGENDA

7:30 am – 5:00 pm

REGISTRATION
PRE-FUNCTION AREA

7:30 am – 8:30 am

CONTINENTAL BREAKFAST
PRE-FUNCTION AREA

8:30 am - 8:35 am

WELCOME
BALLROOM AB

Dave Chesebrough
Vice President Divisions, NDIA

8:35 am - 9:00 am

KEYNOTE SPEAKER
BALLROOM AB

Maj Gen Sarah Zabel, USAF
Director of Information Technology Acquisition Process Development, Office of the Assistant Secretary of the Air Force for Acquisition

9:00 am- 9:05 am

LIGHTNING ROUND: COLLABNET

9:05 am - 9:35 am

INVITED SPEAKER
BALLROOM AB

Dr. George Duchak
Deputy Assistant Secretary of Defense for Cyber, Command & Control, Communications & Networks, and Business Systems

9:35 am - 9:40 am

LIGHTNING ROUND: CA TECHNOLOGIES

9:40 am - 10:10 am

ACQUISITION REFORM AND AGILE: SECTION 809 PANEL
BALLROOM AB

VADM Joseph Dyer, USN (Ret)
Chief Strategy Officer, National Spectrum Consortium and Strategist at Leap Second Consulting, Section 809 Panel Commissioner

10:10 am - 10:30 am

NETWORKING BREAK
PRE-FUNCTION AREA

10:30 am - 12:00 pm

The Basics: Introduction to Agile, SCRUM, DevOps and Lean
ROOM 6ABC

Dr. Suzette Johnson
Nothrop Grumman

Robin Yeman
Lockheed Martin

Creating An Effective Agile Acquisition Ecosystem
BALLROOM AB

Dr. Matt Kennedy
Office of the Comptroller of the Currency,
US Department of the Treasury

Makoto P. Braxton
Division Chief and Chief Contracting Officer, Assistant Secretary for Preparedness and Response (ASPR) Support Division, Office of Acquisitions Management, Contracts and Grants

12:00 pm - 1:00 pm

LUNCH
PRE-FUNCTION AREA

Agile Engineering for Complex Systems
ROOM 6ABC

SESSION CHAIR
Robin Yeman
LMCO

Contracting Case Studies
BALLROOM AB

SESSION CHAIR
Dr. Suzette Johnson
Northrop Grumman Corporation

Agile for Cyber
BALLROOM D

SESSION CHAIR
Ken Mills
CollabNet

1:00 pm - 1:30 pm

Agile and DevOPs in a Franchise-level Program: a Case Study
20528

Carla Sayan
Raytheon

Laura Santos
Raytheon

Iterating Effectively: A Case Study in Agile Contracting with SBA
20551

John Foster II
Fearless Solutions

Rapid Application of Compliance Frameworks in Highly Regulated Environments
20477

Joshua Burnett
Virescit Tactical Systems

1:30 pm - 2:00 pm

OPEN

Getting Your Agile on..
20554

Pramod Malhotra
Salient CRGT

Linking Continuous Integration with Risk Management Framework through Controlled Infrastructure
20545

Bryan Payton
Axiologic Solutions

| 2:00 pm - 2:30 pm | OPEN | Feature-based Agile Contracting for Planning and Monitoring 20549 | How to Address Both the Technical and Management Issues in Developing Software Which is Secure from Cyber-attacks – A Case Study 20535 |
| | | Matthew Reider Radiant Solutions | Girish Seshagiri Ishpi Information Technologies, Inc. |

| 2:30 pm - 3:00 pm | **NETWORKING BREAK** PRE-FUNCTION AREA |

CONCURRENT BREAKOUT SESSIONS

| | Digital Transformation ROOM 6ABC | DevOps for Government BALLROOM AB | Agile Architecture BALLROOM D |
| | SESSION CHAIR Dennis Ebersole Perspecta | SESSION CHAIR Eileen Wrubel Software Engineering Institute | SESSION CHAIR Dave Mayo Everware - CBDI |

3:00 pm - 3:30 pm	From Waterfalls to Pipelines: Digital Transformation in a Secure, Regulated Environment 20537	Implementing DevOps in Highly Regulated Environments 20565	Superior Mission Systems - Faster, Resilient, Secure & More Affordable 20501
	Nicholas Barrett Raytheon Company	Joseph Yankel Software Engineering Institute	David Manley Engility Corporation
	Blaine Boule Raytheon Company		

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	Mindy Bohannon Excella	Daniel Davis Excella Consulting	Rita Creel Software Engineering Institute
	Bianca Fitzpatrick DHS USCIS		

4:00 pm - 4:30 pm	**Mission Digital Transformation** 20572 **Srikant Mantravadi** Leidos	**Continuous Delivery in Organizations Terrified of Risk** 20544 **Mark Shead** Xeric Corporation	**Bimodal IT: Transforming the Titanic to the Littoral Combat Ship** 20561 **Melissa Bradshaw** Lockheed Martin **Beth Linnebur** Lockheed Martin
4:30 pm - 5:00 pm	**User Experience, Agile Development and DevOps - the Three Pillars of Digital Transformation** 20556 **Neal Smith** Salient CRGT	**Agile ATO: A New Approach to FedRAMP Documentation** 20569 **Michael Brown** Excella	**Architecting Agility into Technology Solutions** 20533 **Nicholas Barrett** Raytheon Company **Abraham Wu** Raytheon Company

5:00 pm   **SUMMIT ADJOURNMENT FOR THE DAY**

5:30 pm - 7:00 pm   **MEETUP PROGRAM – CONTRACTING FOR SAFe IN GOVERNMENT**
BALLROOM D

Making agile work in Government contracts is a challenge. Real issues arise when the program leadership wants to work in a Lean-Agile way, but the contractor workforce is bound by contractual language that enforces a waterfall model. How can you bridge this gap? In this session, Dr. Steve Mayner, SAFe Fellow and Principal Consultant at Scaled Agile, Inc. will lead a discussion and provide a preview of some of the answers provided to these challenges based on the SAFe for Government course

THURSDAY, JUNE 7

7:00 am - 2:00 pm   **REGISTRATION**
PRE-FUNCTION AREA

7:00 am - 8:00 am   **CONTINENTAL BREAKFAST**
PRE-FUNCTION AREA

8:00 am - 8:35 am   **WELCOME**
BALLROOM AB

Dave Chesebrough
Vice President Divisions, NDIA

8:00 am - 9:00 am

KEYNOTE SPEAKER
ACHIEVING FLOW IN AN UNCERTAIN WORLD: WHAT WE'VE LEARNED
BALLROOM AB

Don Reinertsen
Product Development Consultant, Reinertsen & Associates; Author

9:00 am - 9:05 am

LIGHTNING ROUND: SCALED AGILE

9:05 am - 10:00 am

DOD AGILE AND EVM DESKTOP GUIDE FOR PROGRAM MANAGERS
BALLROOM AB

John McGregor
Deputy Director for Earned Value Management, PARCA, Office of the Assistant Secretary of Defense for Acquisition

10:00 am - 10:30 am

NETWORKING BREAK
PRE-FUNCTION AREA

10:30 am - 10:35 am

LIGHTNING ROUND: TASKTOP

10:35 am - 12:00 pm

AGILE IN DHS: 5 PILOT PROJECTS
BALLROOM AB

William Pratt
Director, Strategic Technology Management, DHS Office of the Chief Technology Officer

12:00 pm - 1:00 pm

LUNCH
PRE-FUNCTION AREA

CONCURRENT BREAKOUT SESSIONS

Lean Startup in Government	Essentials for Agile Transformation
BALLROOM AB	**BALLROOM D**
SESSION CHAIR	**SESSION CHAIR**
Stosh Misiaszek	**Mark Fabian**
Eliassen Group	CA Technologies

1:00 pm - 1:30 pm

Raising the Curtain on Innovation Theater: Government Lean Startup That Works	Refactoring Team Interaction – Dealing with Dysfunctions within the Team
20521	20496
Jonathan Ruark	**Scott Grimes**
TRIAEM LLC	Northrop Grumman

| 1:30 pm - 2:00 pm | Leveraging existing government resources and agile software to provide orders of magnitude improvement in technology acquisition for US infrastructure advancement
20529

Dr. Darrall Henderson
Kentucky Science and Technology Corporation | Maintaining Your Authority to Operate (ATO) While Being Agile: Achieving Continuous Reauthorization with DevOps
20539

Timothy Chick
Software Engineering Institute - CMU |

| 2:00 pm - 2:30 pm | A Hybrid Approach Using LSM and Agile for Initial Planning of MBSE Projects
20505

Michael Pafford
INCOSE | 9 Essentials for a Successful Digital Transformation
20564

Fadi Stephan
Excella |

2:30 pm - 3:00 pm   **BOOK SIGNING WITH DON REINERTSEN**
BALLROOM D

3:00 pm   **SUMMIT ADJOURNMENT**

SESSION ABSTRACT DESCRIPTIONS

CREATING AN EFFECTIVE AGILE ECOSYSTEM: CONTRACTING

Kennedy, Braxton

"Agile Acquisition: Creating an effective Agile Ecosystem (Contracting)" This presentation will discuss key aspects of creating an effective Agile Ecosystem by addressing both the individual components (Contracting, Engineering, Budget, and Program Management) and how they interact with one another to produce an environment where a program can effectively deliver value using agile methods. Focusing on the contracting component, we will discuss various contracting approaches utilized over a 2.5-year period to rapidly deliver capabilities on an IT Program comprised of over 90 servers, geographically distributed databases, and 14 applications (desktop and web-based) that support the agency's core mission.

THE BASICS: INTRODUCTION TO AGILE, SCRUM, DEVOPS AND LEAN

Johnson, Yeman

This working session provides an introduction to DevOps and the concepts around creating a delivery pipeline. Following a brief discussion on the delivery pipeline, participants work in small teams to build and deliver products using chocolate and fuzzy sticks while getting paid for their deliveries into production. This activity emphasizes the organizational structure and collaboration across functional areas which are necessary for achieving a single piece flow delivery option. In this workshop participants collaborate around the Scrum framework to build products (fun toys) as defined by the needs of business team. The business team defines the value of each feature which helps teams in understanding the priorities and return on investment. Working with the Product Owner, each team creates a plan to deliver as much value as possible in each Sprint/Iteration while collaborating with the Security Team, Administrators, and their Release Manager. As the team make deliveries they begin encounter disruptions, vulnerabilities, and challenges around security and operations. Teams use their retrospectives to continuously evolve their organizational structure for improved collaboration, feedback, and flow.

RAPID APPLICATION OF COMPLIANCE FRAMEWORKS IN HIGHLY REGULATED ENVIRONMENTS

20477
Burnett

Rapid compliance for post-acquisition in order to support mission critical warfighter systems and functions. Virescit Tactical Systems uses the "fire-team" approach, relying on an Agile-team methodology, to mission critical systems compliance packages, in order to facilitate use of previously acquired systems. We can and will get the mission critical systems fielded… but is there a better way? Can our approach be done in tandem with the acquisitions process? The answer is yes… and in the long run, it will save time, tax payer dollars and, hopefully, lives. We aim to answer a very simple, oft ignored, question. Why we need to address acquisitions every time we update risk/cyber compliance frameworks? The USAF Combat Communications answer should be your organizations answer as well!

REFACTORING TEAM INTERACTION – DEALING WITH DYSFUNCTIONS WITHIN THE TEAM

20496
Grimes

Teams at all levels of maturity can be disrupted, the dysfunctions of disempowerment and broken communication can quickly damage the productivity of any team, but these disruptions will be especially felt in an agile software team reliant on interactions for success. What factors have the largest impact on teams? And what can team members, facilitators, and managers do to strengthen teams and avoid the pitfalls?

SUPERIOR MISSION SYSTEMS – FASTER, RESILIENT, SECURE & MORE AFFORDABLE

20501
Manley

Presentation of how design practices centered on Microservices can be adapted, cost effectively, to transform an existing mission system to an agile one with high sustainable change velocities. This proven approach enables a resilient, robust, and survivable architecture that is resistant to kinetic and cyber-attack as well as system failures and environmental events and lowers total Life Cycle Costs when compared to traditional approaches.

A HYBRID APPROACH USING LSM AND AGILE FOR INITIAL PLANNING OF MBSE PROJECTS

20505

Pafford

This session is an introduction to a hybrid approach to system solution Initial Project Planning (IPP) integrating specific process steps from the Lean Startup Method and Agile Scrum. Organizations including INCOSE, IEEE, and InfraGard, are using this hybrid IPP approach to collaboratively develop Project Focus Mechanisms they will use and share throughout the life cycle of ongoing Model Based Systems Engineering (MBSE) Micro-Grid Reference Model and Resilient Hospital Modeling projects.

RAISING THE CURTAIN ON INNOVATION THEATER: GOVERNMENT LEAN STARTUP THAT WORKS

20521

Ruark

Innovation theater is a real threat to today's mission. Like the early days of Agile, Innovation and Lean Startup techniques can quickly fall into the trap of "doing innovation" rather than "being innovative." Through direct support to one government customer, we have found a method that empowers the government workforce to make their ideas reality by buying down risk and improving their chance of success to be acquired by the organization. This talk will cover what actually works and what pitfalls to avoid if you truly wish for Lean Startup to succeed in your organization.

AGILE AND DEVOPS IN A FRANCHISE–LEVEL PROGRAM: A CASE STUDY

20528

Sayan, Santos

In this presentation, we will discuss our approach to scaling agile methods within engineering and non-engineering disciplines with cadence and synchronization with a domain planning focus for a franchise-level program. We will discuss how the use of agile methods at scale impacts traditional organizational groups and how development of a supportive ecosystem infrastructure and deployment integration into heterogeneous environments can automate the configuration and control of environments to support reproducibility.

LEVERAGING EXISTING GOVERNMENT RESOURCES AND AGILE SOFTWARE TO PROVIDE ORDERS OF MAGNITUDE IMPROVEMENT IN TECHNOLOGY ACQUISITION FOR US INFRASTRUCTURE ADVANCEMENT

20529

Henderson

The push to revitalize US infrastructure through innovative new technologies in a lean, efficient, and responsive manner is a pressing issue for the current administration and several federal agencies.

The government procurement process is often slow, onerous, and rigidly formal. Small businesses and innovative researchers often lack the capacity, resources, or understanding to compete with more established companies. Likewise, many acquisitions primarily target perceived areas of need for government agencies, but not the technological or structural weaknesses that may actually be the cause that generated the requirement.

Is there a better approach to accelerate the process by which new technologies are able to leave the lab, commercialize, and aid America's crumbling infrastructure?

This presentation will address the broader supply chain outside of existing companies or needs. We avoid programmatic duplication by streamlining the processes by which existing government resources are deployed, using a unique mix of existing federal, state, and local government resources, private partners. We will demonstrate how to create cross functional and agile teams at various levels in the government procurement process.

ARCHITECTING AGILITY INTO TECHNOLOGY SOLUTIONS

20533

Barrett, Wu

Raytheon IT uses agile micro-service architectures to build systems and solutions using iterative approaches to enable teams to address new and unforeseen needs by rapidly iterating and learning, while keeping focus on their mission. The architectures emphasize quality attributes such as agility, security, modularity and reusability through applying architecture methodologies with iterative processes--such as TOGAF. By using reference architectures, including data and application solution components, teams achieve time-savings, consistency and compliance with rigorous regulatory standards. This presentation focuses on strategies for tailoring architecture engagements to preserve architectural rigor while instilling iterative and agile approaches to deliver flexible architectures.

HOW TO ADDRESS BOTH THE TECHNICAL AND MANAGEMENT ISSUES IN DEVELOPING SOFTWARE WHICH IS SECURE FROM CYBER–ATTACKS – A CASE STUDY

20535
Seshagiri

Many agile software development teams find it difficult to deliver quality products, avoid technical debt, reduce software vulnerabilities, and reduce operations and maintenance costs of delivered product. We identify the underlying technical and management issues. We show how managers can address these issues and consistently outperform the competition in schedule, cost, and quality performance.

The main take-aways are:

1. Move from threat detection to threat prevention by adopting disciplined agile development

2. Make management decisions with "Vital Few" metrics to reduce vulnerabilities

3. Benchmark against best-in-class and industry average cost, schedule, and quality metrics

We share case-study of more than 15-years of real life project data resulting from disciplined agile development.

FROM WATERFALLS TO PIPELINES: DIGITAL TRANSFORMATION IN A SECURE, REGULATED ENVIRONMENT

20537
Barrett, Boule

Raytheon Missile Systems' IT team is undergoing a transformation in how it delivers technical solutions and capabilities by revolutionizing our organization to increase speed, agility and modularity while improving security postures and regulatory compliance. Utilizing modern tools and platforms, continuous integration and continuous delivery are becoming a reality, even in an environment where small teams work under unique security requirements. This presentation will focus on Raytheon Missile Systems' IT DevOps journey of redefining project roles and tasks, creating a delivery pipeline, and achieving buy-in from stakeholders to adopt DevOps processes, which is showing results of faster delivery, reduced risk, and increased awareness of how teams create technology solutions.

MAINTAINING YOUR AUTHORITY TO OPERATE (ATO) WHILE BEING AGILE: ACHIEVING CONTINUOUS REAUTHORIZATION WITH DEVOPS

20539
Chick

RMF is used for the Authorizing Official (AO) to accept all residual risk associated with a system in regards to information security. Using the RMF an AO will issue an authority to operate (ATO), which traditionally is good of 3 years. However this traditional 3 year period assumes no major changes to the system's cybersecurity posture will be made during this time. When changes occur the AO may require a reassessment and reauthorization, which impacts a programs's cost and schedule and can slow the release of subsequent functionality which is contrary to being Agile. In this presentation we will discuss how DevOps can be used to achieve what RMF refers to as an ongoing authorization decision, or continuous reauthorization, by instantiating a sufficiently robust system-level continuous monitoring program.

CONTINUOUS DELIVERY IN ORGANIZATIONS TERRIFIED OF RISK

20544
Shead

No matter how quickly new features are completed, they can't be used until they are deployed into production. By removing the risks and costs associated with manual deployment, organizations are free to deliver rapid small changes to running systems at much lower risk than traditional approaches. The very change management requirements that appear to be barriers to rapid deployment often provide the foundation for continuous delivery when risk is viewed holistically. This talk explores concrete ways to meet the governance requirements of large risk-averse organizations while decreasing the amount of time it takes to get capabilities and features into production with examples from the US Treasury.

LINKING CONTINUOUS INTEGRATION WITH RISK MANAGEMENT FRAMEWORK THROUGH CONTROLLED INFRASTRUCTURE

20545

Payton

This presentation will highlight a current U.S. DoD initiative that bookends a streamlined continuous integration process with secured and managed development and deployment environments.

The DoD is seeking to expedite application development and accreditation by linking the Risk Management Framework with the Agile Methodology. Current business operations require additional application delivery overhead to complete accreditation processes and security inspections before a product can be released to the customer. All-the-while, development environments continue to multiply and open-source products have become the de facto standard. As a result, product delivery has been observed as either fast and unsecure or slow and secure.

To combat this, Axiologic Solutions has implemented a DevOps Model that creates a secured and global development and deployment infrastructure to expedite product accreditation and delivery. Utilizing cloud platform offerings, a software repository was created and linked to developer instances to allow on-demand software installations and to trigger software accreditation. Combining this with version controlled baselines ensure applications and software utilize accredited products on accredited systems. This is backed with a security focused continuous integration process that provides detailed tests and quality inspections. Performing security inspections and accreditation in parallel with development have proven to minimize risks and latency.

FEATURE–BASED AGILE CONTRACTING FOR PLANNING AND MONITORING

20549

Reider

Feature First Contracting acts as a bridge between more traditional requirement/schedule approaches and newer agile approaches that use story points/iterations. User stories, story points, and tasks are often too nebulous and specific to allow for effecting planning or tracking. The agile "Feature" — a time-boxed, release-assigned work package — allows customers to define, refine, and prioritize individual features in a Product Roadmap of upcoming software releases. During execution, these Features are used for evaluation and tracking of progress against plan using traditional EVM metrics. Using the Features as a key for relationships, a feature can be mapped to business epics, traditional requirements, automated and witnessed testing, and all user stories and tasks that were required to complete them for a full picture of cost and scope - and are flexible enough to be used in a variety of contract approaches.

ITERATING EFFECTIVELY: A CASE STUDY IN AGILE CONTRACTING WITH SBA

20551

Foster

Agile contracting has been gaining traction as a means of improving investment in IT projects while reducing the risk of project failure within the Federal Government. The popularity of Agile development practices has led to an increase in the number of solicitations that specifically target this methodology. And while there have been many examinations of the success of the Agile procurement process, there has not been a similar examination of the execution and success of these contracts. Fearless Solutions wants to change that narrative. In this presentation, we will share our experiences of working alongside the Small Business Administration on an Agile iteration-based contract—the HUBZone Map Modernization project. These critical lessons learned will, we hope, help shape future Agile procurements, as we will detail: our successes and failures on this Agile contract, how the language of the contract affected project delivery, contract pitfalls, and—most importantly—what considerations Contracting Officers should take into account when crafting Agile contracts in the future.

GETTING YOUR AGILE ON…

20554

Malhotra

Traditional waterfall methodology and fixed price contract worked well for a long period of time, with the advent of Agile Methodology how contracts are structured need to change. With Agile Methodology focus has changed to providing incremental value to business with 2 weeks processes, reviews and presentation of working software. Also, with Agile Methodology determining the actual needs of the customer and prioritizing the delivery of value iteratively is become more important.

Going forward we recommend contracts to be based on providing "Agile Teams" and using DevOps, Metrics and Business Value achieved as criteria for success/evaluation. Also, since "Product Owner" plays a very critical role to the success of the minimum viable product, we will recommend a hybrid approach, shared responsibility between vendor and government with equal say.

Our presentation will show how contracts should be structured using Agile Teams and what metrics, DevOps and criteria's will be used for success. Example of USCIS use of Agile Teams to achieve the necessary outcome will be provided. We will further provide how on multiple contracts, our certified product owners in the absence of government product owners are able to deliver value working with government product owner, using them to traverse the user community and ensuring requirement are meeting end-user needs.

USER EXPERIENCE, AGILE DEVELOPMENT AND DEVOPS – THE THREE PILLARS OF DIGITAL TRANSFORMATION

20556

Smith

Delivering useful high quality software rapidly is the goal of most modernization efforts. This session will explore in story and in practical examples the integral nature of UX (User Experience Design), Agile, and DevOps in pursuit of modernization.

BIMODAL IT: TRANSFORMING THE TITANIC TO THE LITTORAL COMBAT SHIP

20561

Bradshaw, Linnebur

We were a Data Center "Titanic," and the CIO just approved "50:2:2020," a goal to move 50% of our unclassified infrastructure from 100 private data centers to two, and to move the rest to the cloud by 2020. How were we going to do that when we couldn't deliver services in less than eight months? This was our "Phoenix Project," to be sure.

In 2017, the Lockheed Martin enterprise Data Center Infrastructure (LM DCI) organization began embarking on a culture transformation to support the rapid pace of change. Years of restructure and strategic realignments left an organization that was fractured and frequently at odds, with part of the team defending legacy techniques, and another part craving to create new services and capabilities with lean agile and cloud.

Enter Bimodal IT, leveraging Mode 1 (enterprise strength and stability) and Mode 2 (rapid experimentation and deployment). In less than one year, we are delivering new services in 8 weeks rather than 8-18 months. How did we do it? We established a Common Service Lifecycle to unify the team's language. We created a single pane of glass for all work, to easily visualize and reprioritize in our landscape of continually changing demands. Finally, we reorganized the team and changed our culture and thought patterns. How did we do it? Join us to find out what we did and how we continue to evolve to the 55-MPH Littoral Combat Ship!

9 ESSENTIALS FOR A SUCCESSFUL DIGITAL TRANSFORMATION

20564

Stephan

Consumers today have more and more options and services right at their finger tips. They are now used to a variety of digital experiences whether it's hailing a car sharing service, reserving a room, booking a flight, making a dinner reservation, ordering groceries or a meal delivery. All of these experiences provide an instant immediate service that is completely automated and requires no forms to fill out or a call center to talk to. As consumer behaviors and expectations evolve, government agencies need to modernize and digitize their services to improve their interactions with citizens. In this talk we see how to apply lean discovery practices, agile delivery techniques and a DevOps mindset to build services customers love. We'll be covering 9 essential capabilities that are needed for a successful digital transformation and share how they've been applied at a government agency.

IMPLEMENTING DEVOPS IN HIGHLY REGULATED ENVIRONMENTS

20565

Yankel

In this talk, we discuss implementing DevOps practices in highly regulated environments (HREs). DevOps has become a standard option for entities seeking to streamline and increase participation by all stakeholders in their Software Development Lifecycle (SDLC). For a large portion of industry, academia, and government, applying DevOps is a straight forward process. There is, however, a subset of entities in these three sectors where applying DevOps can be very challenging. These are entities mandated by policies to conduct all or a portion of their SDLC activities in HREs. Often, the reason for an HRE is general security and protection of intellectual property. Even if an entity is functioning in a highly regulated environment, its SDLC can still benefit from implementing DevOps as long as the implementation conforms to all imposed policies. In this talk, we discuss the process of performing a DevOps assessment and implementation in an HRE which we refer to as HRE-DevOps.

FOUR THINGS TO CONSIDER WHEN DIGITIZING PUBLIC–FACING FORMS

20566

Bohannon, Fitzpatrick

Converting hundreds of paper forms to the reside on the internet takes planning and coordination. This session discusses four things to consider. Creating reusable components, partnering closely with USCIS departments, creating efficient teams using agile and scrum methodology and DevOps using continuous deployment.

HOW E-VERIFY DEPLOYS TO PRODUCTION OVER 300 TIMES A MONTH!

20568

Davis

Many teams within the Federal Government are looking for ways to accelerate software delivery, but few ever make it past deploying more than a handful of times per month. At USCIS, the constant need to deploy more frequently pushed the E-Verify team to expand its automation to the point where every commit triggers a build to production and is now one of the highest performing teams in the organization. E-Verify's success took a lot of engineering effort and in this talk, I'll highlight a few of the technical practices that our team adopted to make achieving continuous deployment possible.

AGILE ATO: A NEW APPROACH TO FEDRAMP DOCUMENTATION

20569

Brown

Creating, reviewing, and approving FISMA compliant systems requires a lot of collaboration between development, operations, and security teams. FedRAMP attempts to make improvements, but the natural waterfall workflow typically results in delays and budget overruns.

This talk will discuss patterns and open source tools that DevSecOps teams can leverage to develop FedRAMP compliant documentation using automated pipelines familiar to DevOps teams. These strategies enable iterative, incremental security review with feedback loops throughout the process.

AGILE TEAMS IN BUREAUCRATIC ORGANIZATIONS: OBSERVATIONS FROM COMPLEXITY LEADERSHIP THEORY

20571

Creel

The feasibility of applying agile methods in bureaucratic organizations is often questioned, with agile development failures cited as evidence of a hopeless gulf between responsive, adaptive teams and rigid, glacial administrative structures. But is the gulf truly hopeless or do these failures expose a missing element that can serve to mediate conflicts between the two? Complexity leadership theory offers a useful lens for studying these questions and developing an actionable response. This presentation introduces three complexity leadership functions that can guide us across the gulf between agile engineering teams and bureaucratic structures, enabling successful outcomes.

MISSION DIGITAL TRANSFORMATION

20572

Mantravadi

Through disruptive leadership and early adoption, game changing technology and innovative approaches can drive organizational agility. Srikant Mantravadi will use examples from his work to describe how disruptive leaders can drive mission digital transformation. He presents an early adoption framework where organizations can deliver on the promise of transformation with agility and momentum. With practical insight into challenges facing the government, he will attempt to share vision, hope and create enthusiasm for leaders at levels to drive digital change.

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BIOGRAPHIES

GEORGE DUCHAK

Deputy Assistant Secretary of Defense for Cyber, Command & Control, Communications & Networks, and Business Systems

Dr. Duchak is the Deputy Assistant Secretary of Defense for Cyber, Command & Control, Communications & Networks, and Business Systems. In this role he is responsible for the leadership for functional and acquisition oversight of all critical war fighting communications, command and control, and cyberspace capabilities in the Department of Defense (DoD). He is the founding Director of the Defense Innovation Unit Experimental (DIUx), a Secretary of Defense initiative chartered to build collaborative relationships with Silicon Valley firms. Prior to that assignment he served as the Director Rome Labs, a 1,200-person, $1.1B world-class research laboratory focused on information technologies for command & control, cyber security and exploitation, communications & networking, and intelligence exploitation. Selected as the 2015 Federal Laboratory Director of the Year, a significant honor sought by all 300+ federal laboratories.

VADM JOSEPH DYER, USN (RET)

Chief Strategy Officer, National Spectrum Consortium and Strategist at Leap Second Consulting, Section 809 Panel Commissioner

VADM Joseph W. Dyer Is a Commissioner on the Section 809 Panel. He was formerly the Chief Strategy Officer, Chief Operating Officer and President for Government and Industrial Robotics Division of iRobot Corporation. VADM Dyer serves as a Member of Board of Advisors at Maga Design Group Inc. and served for 32 years in the U.S. Navy. He retired as the Naval Air Systems Command at which he was responsible for research and development, procurement and in-service support for naval aircraft, weapons and sensors. He has been a Director at Rockwell Collins Control Technologies, Inc. since March 2005. He serves as Member of Advisory Board of Arxan Technologies, Inc. Prior to his 2003 retirement, he was the commander of the Naval Air Systems Command, where he had been responsible for the full lifecycle of Navy and U.S. Marine Corps manned and unmanned aircraft and air-launched weapons. His distinguished naval career also included positions as the commander of the Naval Air Warfare Center's, Aircraft Division, naval aviation's Chief Engineer and three years as the Navy's chief test pilot. He is an elected fellow in the Society of Experimental Test Pilots and the National Academy of Public Administration. He chairs NASA's Aerospace Safety Advisory Panel. components and other mission partners

JOHN MCGREGOR

Deputy Director for Earned Value Management, Performance Assessments and Root Cause Analyses, Office of Assistant Secretary of Defense for Acquisition

Mr. John S. McGregor is the Deputy Director for Earned Value Management in the Performance Assessments and Root Cause Analyses organization in the Office of the Assistant Secretary of Defense for Acquisition. Mr. McGregor's office serves as the Department of Defense focal point for all policy, guidance, and competency relating to Earned Value Management. To facilitate consistent EVM implementation across the Department, Mr. McGregor's office is responsible for the development and communication of DoD EVM policy, guidance and interpretation, as well as for managing the EVM Central Repository as the authoritative source of EVM data for the Department.

DON REINERTSEN

President, Product Development Consultant, Author
Reinertsen and Associates

Don is the President of Reinertsen & Associates, a consulting firm specialized in the management of product development. He has worked with leading product development organizations for over 35 years, and taught executive courses at Caltech for 15 years. He is the author/co-author of three best-selling books on product development, and is considered one of the leading thinkers in the field of lean product development. His latest awarding winning book, The Principles of Product Development Flow: Second Generation Lean Product Development, has been praised as, "… quite simply the most advanced product development book you can buy."

MAJ GEN SARAH ZABEL

Director of Information Technology Acquisition Process Development
Office of the Assistant Secretary of the Air Force for Acquisition

Maj. Gen. Sarah E. Zabel is the Director of Information Technology Acquisition Process Development, in the Office of the Assistant Secretary of the Air Force for Acquisition. In this role, she devises and implements strategies to responsively deliver IT capabilities to the point of need. Prior to this assignment, General Zabel was the Vice Director of the Defense Information Systems Agency, where she helped lead a global organization of 16,000 military, civilian and contract personnel who plan, develop, deliver and operate joint, interoperable, command and control capabilities and a global enterprise infrastructure in direct support of the President, Secretary of Defense, Joint Chiefs of Staff, Combatant Commanders, Department of Defense components and other mission partners across the full spectrum of operations.

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