

AT12

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Commonalities of Agile and DevOps Transformations for Large Organizations

Presented by:

Suzette Johnson and Robin Yemen

Northrop Grumman; Lockheed Martin

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Suzette Johnson

Suzette Johnson works for Northrop Grumman Corporation near Baltimore, where she leads Northrop Grumman's Agile Center of Excellence. As a Certified Agile Enterprise Coach and Scaled Agile Program Consultant, she has an interest in and passion for driving agile transformation across the organization. Her initial experience with agilef related practices began over fifteen years ago with product development for a commercial company focused on financial and enterprise management systems. Over the past fifteen years she has worked with many federal agencies and programs, supporting their transition and maturation of agile practices. She speaks regularly at agile and DevOps conferences and has trained more than three thousand people on agile practices. She received a doctorate of management at the University of Maryland, with a dissertation focus on investigating the impact of leadership styles on software project outcomes in traditional and agile engineering environments.

Robin Yemen

Robin Yeman works for Lockheed Martin Space in Orlando as a Lockheed Martin Fellow. She has over twenty years of experience in systems engineering, software, and IT across multiple business areas, building everything from satellites to submarines. She has been actively supporting and leading agile programs at scale both domestically and internationally for the last fifteen years and has multiple certifications, including Certified Enterprise Coach, Scaled Agile Program Consultant, Certified Scrum Practitioner, CSM, CSPO, PSM, PMP, PMI-ACP, INCOSE Certified Systems Engineer, and ITIL Practitioner. She actively coaches and trains teams through in-person coaching, agile workshops, and virtual training classes. She leads the Lockheed Martin's Agile Community of Practice and Center of Excellence and speaks at multiple conference engagements each year. Robin received her master's degree in software engineering from Rensselaer Polytechnic Institute.

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Agile and DevOps Transformation



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Work Across the Organization



Dr. Suzette Johnson (NG Fellow)

- Background
- "Delivering value to meet mission success"
- Domain(s)
 - Intelligence/Civil/DoD/International
 - Cyber and Federal Health systems
 - Embedded systems
 - Internal company structure

Challenge(s)

- · Fear / Resistance to change
- Active and engaged leadership
- Functional Silos
- Common Understanding
- Environment ownership (who owns production)
- Audits and legal compliance

Robin Yeman (LM Fellow)

- Background
- "Change the face of delivery in the government"
- Domain(s)
 - Intelligence / Civil / DoD / International
 - · Cyber / Data Analytics / IT
 - · Aeronautics / Space / Underwater/ Surface Ship

Strategies

- Communicate Vision / Develop quick wins
- **Executive Overviews**
- **Dotted line or Matrice Teams**
- Identify Coaches with DevOps experience
- Engage customers regarding how they would like to be engaged in process
- Look across the organization for improvements

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Cultivating Agile Teams and Culture



Challenge(s)

- · Knowledge / Awareness
- Skill sets
- Trust / Accountability
- · Cohesive Teams

Strategies

- Train on principles/practices/techniques
- **Support Learning Opportunities**
- Collaboration / Short Feedback loops
- Built Trust / enabled accountability
- Organize for Teamwork
- Align Incentives

Examples

- Aeronautics
- Data collection systems
- Health systems under HHS
- · Internal company structure

- Education / Build Awareness / Business Cases

Lessons Learned

- Training is not enough to build DevOps mindset
- Importance of systems thinking
- Guide but allow people to reach their own conclusions
- Show a path with line of site, not the end state to reduce fear

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Build the Infrastructure



Challenge(s)

- · Understanding importance to business
- · Legacy environments
- · Standardization / Consistency
- Tool Sets

Strategies

- · Business Cases
- · Incremental change / notice trends
- · Guidance and common frameworks
- Templates / Design Patterns
- · Integrated tool sets teams can leverage
- · Transparency and continuous monitoring

Examples

- DoD
- · Federal/Health Systems
- Internal company structure through Centers of Excellence supporting a wide range of government programs

Lessons Learned

- Shortcutting Infrastructure impacts results for teams by orders of magnitude
- · Respect the past
- Bring Configuration Management teams onside to ensure version controlling everything
- Pre-packaged integrated toolsets make practice less intimidating and use of Subject matter experts to provide initial support

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Measure Progress and Success



Challenge(s)

- · Asking the right question
- · Identifying how to easily extract
- · Understanding what results are telling you

Strategies

- Understand Mission
- What problem are we trying to solve and what story do we want to tell (responsiveness, schedule, cost, transparency, quality)
- Data Structure / Tools
- · Review results from multiple perspectives
- · Begin with what success looks like

Examples

- · Intelligence / International
 - · Lead vs Cycle time
 - · Improved/shortened delivery cycles

Lessons Learned

- Cycle time is a metric that only improves results when gamed
- Don't forget to measure morale / happiness
- Just because you can measure it does not mean you should
- Shout success from the rooftops
- Importance of recognition

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Agile and DevOps Transformation Summary









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