SPEAKERS

Bob Moore

Business Transformation Institute

- 32+ years of experience as a manager, systems engineer, process improvement implementer & applied mathematician

- Co-founder of Business Transformation Institute, which synergizes workflow automation tools, data science & traditional process improvement approaches

- Lead systems engineer on a major US intelligence system development program
  - Influenced implementation of solid process structure to efficiently manage change
  - Invited to testify to committees of the U.S. Congress

- DevOps practitioner, CMMI Certified High Maturity Lead Appraiser, Certified Six Sigma Black Belt, Certified Systems Engineering Professional

- Senior Member of American Society of Quality & Member of International Council on Systems Engineering

SPEAKERS

Ron Lear

- Director of Enterprise Solutions Product Management & IP Development, Chief Architect of CMMI Products/Services, including CMMI V2.0

- 34+ years of experience in continuous performance improvement, quality, and process management

- Key leader/SME in product development at CMMI Institute (CMMI V2.0, Medical Device Discovery Appraisal Program (MDDAP), CMMI Cybermaturity Platform (CCP)

- Certified High Maturity Lead Appraiser and CMMI Instructor for over 300 organizations across the globe in a wide variety of industries, Certified Manager of Quality/Organizational Excellence

- Expertise in CMMI High Maturity, Agile, and DevOps concepts, adoption and improvement

- Member of American Society of Quality, International Council on Systems Engineering, (INCOSE), ISACA, and the National Defense Industry Associate (NDIA)
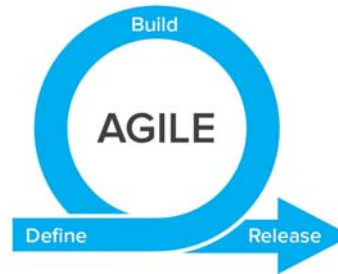
AGENDA

- **Discussion Overview:**

  - **Overview** – DevOps, Agile & CMMI

  - **DevOps 1st Way** – DevOps Toolchain, Process Integration & CMMI

  - **DevOps 2nd Way** – DevOps & CMMI Requirements Management, QA, Verification & Validation

  - **DevOps 3rd Way** – DevOps Toolchain, Processes & Root Cause Analysis

  - **DevSecOps & CMMI V2.0** – Outcomes, Performance & Measurement

  - **Agile in DevSecOps Context** – Balancing Agility, Flexibility & Disciplines Delivery Using CMMI V2.0

- **Live Polling**

  - 2 Key Questions for Audience on CMMI and DevOps

- **Q & A**

OVERVIEW
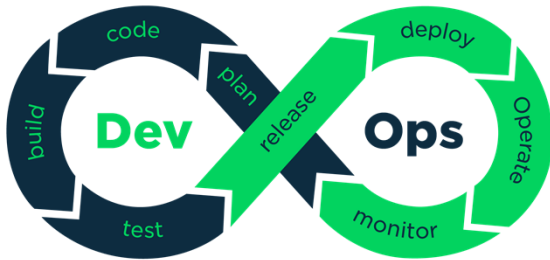
- What are the "3 Ways of DevOps?"
- How are DevOps and DevSecOps different?

- Agile vs. other Methodologies
- Agile Values - not permission to "wing it"

- DevOps and CMMI V2.0 – a common focus on outcomes, performance, and measurement

DEVOPS 1ST WAY

DevOps Toolchain, Process Integration & CMMI

Dev → **Ops**

Understand and increase the flow of work

– How does the work performed increase the value to the customer?

– How do we remove constraints on the work and help value flow smoothly?

– How to avoid local improvement that leads to sub-optimized global processes?

– Understand the entire system

DEVOPS 2ND WAY

DevOps & CMMI Requirements Management, QA, Verification & Validation

Shorten and speed-up feedback loops from customers back to the "developers"

– What are the needs of all stakeholders? ("paying customers", management, support, etc.)

– How will you respond to these needs?

– Are feedback loops as fast as possible?

– Is the knowledge and ability to respond embedded with the right people?

  • How many people, functions, offices, or organizations are interpreting the needs *before* they are communicated to the responders?
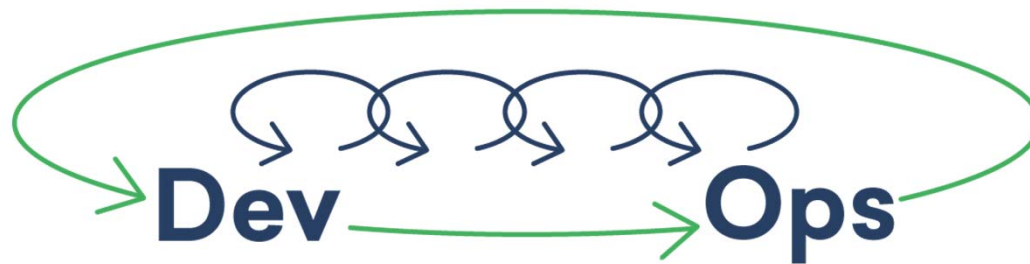
DEVOPS 3RD WAY

DevOps Toolchain, Processes & Root Cause Analysis

Experiment and learn

- What is the investment in improving routine work?

- How do you recognize and reward prudent risk-taking?

- If the system never fails, how can you learn resilience?

- What is the investment in innovation and experimentation?

DEVSECOPS

Everyone knows that the system they're delivering, integrating, and maintaining has to be secure (resistant to threats, both internal and external)

– How does <u>everyone</u> have a role in creating and maintaining a secure system?

– How do you make security part of all parts of systems development, integration, and maintenance?

CMMI V2.0

Designed to optimize business performance in an ever-changing global landscape, the CMMI V2.0 model is a proven set of best practices that enables organizations to build and benchmark the key capabilities that address their most common business challenges.

Business goals are tied directly to operations

- Proven best practices are continuously updated
- Guidance to strengthen Agile with Scrum projects
- New performance-oriented appraisal method
- Online access and adoption guidance

DEVOPS & CMMI V2.0

Common Focus on Outcomes, Performance & Measurement

CMMI V2.0	DEVOPS*
• Focus on performance and outcomes	• Teams like NASCAR racing crews – look at race from finish line to beginning
• Holistic framework for culture • Address work and performance at execution level, scale across organization	• Cultural movement that empowers Developers • Combination of People, Process, Automation
• Project-based and organizationally scalable • Measurable development and delivery approach for SECURE products/services	• Collaborative approach to building and delivering software

* "How to Explain DevOps in Plain English Rudder, Carla. DevOps Institute." *DevOps Institute*, 21 Aug. 2019.

AGILE IN DEVOPS CONTEXT

Balancing Agility, Flexibility, Automation & Security for Disciplined Delivery Using CMMI V2.0

- You might be misinterpreting DevOps if…

- You might be misinterpreting CMMI V2.0 if…

LIVE POLL #1

- On a scale of 1-5, assess your organization's readiness to transition to DevSecOps and CMMI:

    - **5**: We have already adopted DevOps/DevSecOps or CMMI

    - **4**: A DevOps/DevSecOps or CMMI implementation is currently underway

    - **3**: Some Planning for DevOps/DevSecOps or CMMI has been completed

    - **2**: We have considered using DevOps/DevSecOps or CMMI

    - **1**: We have not heard of or plan to adopt DevOps/DevSecOps or CMMI

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LIVE POLL #2

- What are the biggest risks you see in adopting a DevSecOps-CMMI-based approach?

  - Cost to implement/adopt

  - Impact on current development pipeline and capability (product release delays, cost overruns, quality, etc.)

  - Quality of products and services

  - Security and similar concerns

  - Too complex for my organization

Q & A

- Submit a question via the Chat Box on your screen

- Questions not addressed due to time constrictions will be answered in a follow-up email to all webinar attendees

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THANK YOU!

Webinar recording, slides, and full Q&A will be sent to all attendees in a follow-up email.

Additional questions? Email info@cmmiinstitute.com