

NDIA Systems Engineering Division Software Committee Report

17 June 2015

Paul Croll and Ken Nidiffer (Co-Chairs)

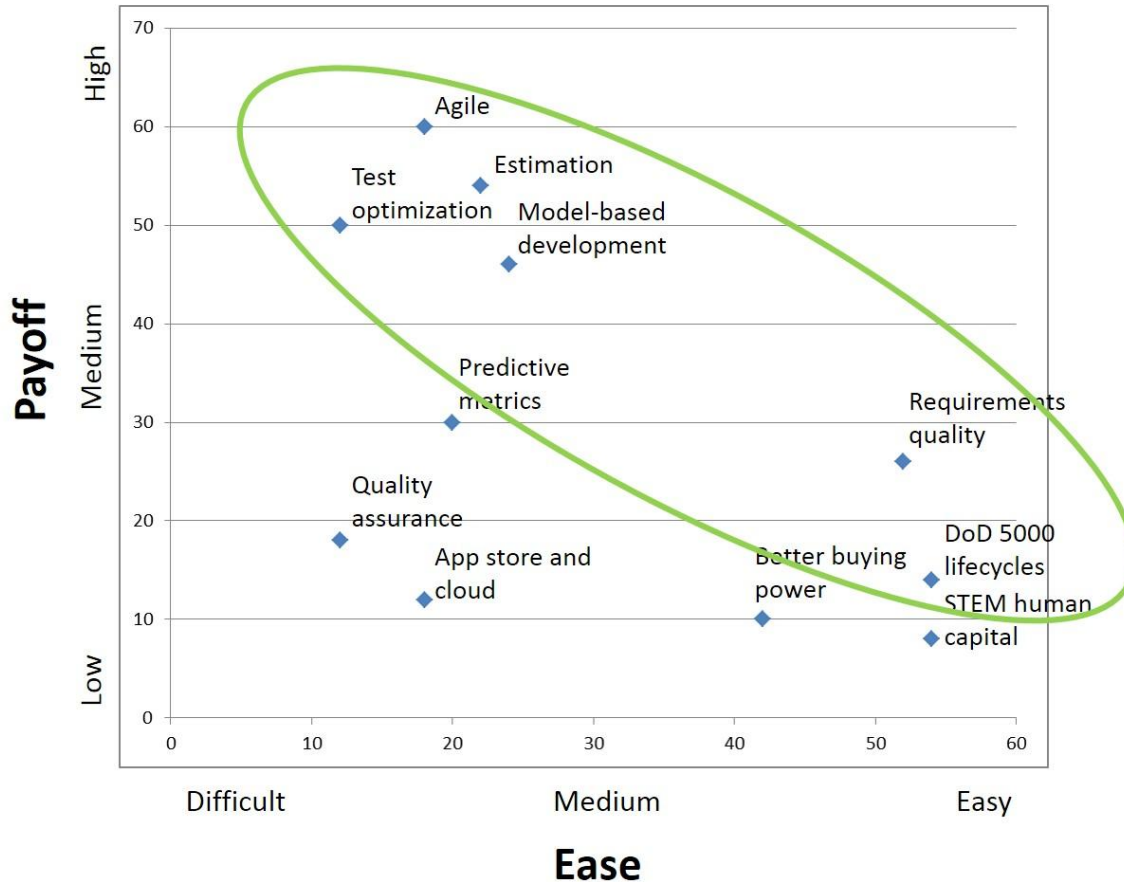
Overview

- **Background**
- **Recommendations for Software Initiatives**
- **Actions Since Last SED Committee Meeting**
- **Next Steps**

Background

- **Tom Hurt, DASD/SE requested the NDIA SED Software Committee to provide an industry perspective regarding opportunities for “DASD(SE) to improve the practice of software engineering”**
- **The Committee held several virtual meetings and identified eleven areas for consideration**
- **These areas were then ranked in terms of Payoff and Ease of Implementation**
- **Detailed recommendations were developed for seven opportunities for improvement**
- **Committee members included:**
 - Paul Croll, PR Croll LLC (Chair); JoAn Ferguson, General Dynamics; Gary Hafen, Lockheed Martin (retired); Cheryl McIntyre, Lockheed Martin; Cynthia Molin, Raytheon; Ken Nidiffer (Co-Chair), SEI; Shawn Rahmani, Boeing; Rick Selby, Northrop Grumman; Tim Walden, Lockheed Martin

Recommendations for Software Initiatives



Recommendations for Software Initiatives

- **Briefed to DASD/SE on 20 April 2015**
 - Kristen Baldwin
 - Rob Gold
 - Jim Thompson
 - Tom Hurt

- 1. Agile/Incremental Software Development
- 2. Improved Software Estimation and Integration with EVM and Technical Metrics
- 3. Test Optimization
- 4. Model Based System Development
- 5. Requirements Quality (Systems and Software)
- 6. DoD 5000 Lifecycles: Incorporation of High-Impact Software Enabling Technologies
- 7. Software Assurance in Acquisition, Development, and Sustainment

Actions Since Last SED Committee Meeting



- **Discussed DASD/SE 20 April 2015 briefing comments with Tom Hurt and the team**
 - Action to prioritize recommended initiatives
 - Define next steps for moving forward

Next Steps

- **Based on DASD/SE priorities, develop a master plan with 6 month, 12 month, and 18 month milestones, expected outcomes, and responsibilities resulting in workable guidance for implementing initiative recommendations**
 - Phase 1 (Immediate)
 - Model-Based Systems Development
 - Software Assurance
 - DoD 5000 Lifecycles
 - Phase 2 (Deferred)
 - Agile/Incremental Software Development
 - Improved Software Estimation and Integration with EVM and Technical Metrics
 - Test Optimization
 - Requirements Quality (Systems and Software)

Questions?

Paul Croll and Ken Nidiffer
Co-Chairs, NDIA SED Software Committee
pcroll@computer.org
nidiffer@SEI.cmu.edu