Accelerating the Adoption of Improved Acquisition Practices using Acquisition Pilots

Brian Gallagher
Director,
Acquisition Support Program

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Outline

Our Goal

Acquisition Pilot Process

FY03 Acquisition Pilots: Results

FY04 Pilots

Lessons
What We’re Trying to Achieve

The SEI mission is to provide the technical leadership to advance the practice of software engineering so the DoD can acquire and sustain its software-intensive systems with predictable and improved cost, schedule, and quality.
Better Buyer, Better Builder

Acquisition Community

Acquisition and Development Processes

Improved Technical & Management Practices

Systems/Software Developer Community

Needs

Operational Concepts

Acquisition

Engineering
Technology Adopter Categories

Innovators
Early Adopters
Early Majority
Late Majority
Laggards

Source: [Rogers 83]
Whole Product

Technical innovations are first used only by innovators.

Innovations are not widely adopted by early majority users until they satisfy the demand for a “whole product”.

The “whole product” expectation is for a core product, plus industrial strength training, tools, support, licensing, etc. needed to get the core product into sustained use.

Source: [Moore 91]
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Purpose

To accelerate the create-apply-amplify lifecycle of SEI practices within DoD acquisition programs.

To conduct experiments with maturing SEI products and services in real-world acquirer contexts.

To analyze the results and document the lessons learned.

Lessons learned from these experiments will be widely disseminated through case studies, course modules, workshop content, SEI publications, DoD and professional society conferences, and technical literature.
Acquisition Pilot Process

Milestone A
Feasibility Study Phase

Milestone B
Pilot Plan Approval

Milestone C
Pilot Complete

Time
FY03 Acquisition Pilots

• Use of *Options Analysis for Reengineering (OAR)* on Future Combat Systems – Principal investigator: Dennis Smith

• Applying *Software Product Line Acquisition - A Companion to A Framework for Software* at the Naval Underwater Warfare Center (NUWC) – Principal investigator: Sholom Cohen

• Applying *Standard CMMI Appraisal Method for Process Improvement (SCAMPI)* for use during *Source Selection/Contract Monitoring* at the NRO and SMC – Principal investigator: Charlie Ryan

• Applying *Team Risk Management (TRM)* to a suite of MILSATCOM programs – Principal investigator: Ray Williams

• Naval Open Systems Architecture – Principal investigator: Craig Meyers
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FY03 Acquisition Pilots: Results
- FCS use of OAR
- NUWC use of PLS
- Acquisition use of SCAMPI B/C

FY04 Pilots

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Lessons
FY04 Acquisition Pilots

• SCAMPI B/C Pilots in Acquisition Environments – Principal Investigator: Charlie Ryan

• GPS/FCS: Developing and Implementing a Re-use/COTS management plan – Principal Investigator: Julie Cohen

• CLIP: QAW/ATAM use during Source Selection and Contract Monitoring – Principal Investigator: Tim Morrow

• FCS: OAR Pilot continuation – Principal Investigator: Dennis Smith
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Lessons Learned

Adoption of SEI technologies can be accelerated

The SEI learns from these engagements and evolves practices based on usage in real acquisition programs

The Acquisition Pilot Process is working