Accelerating the Adoption of Improved Acquisition Practices using Acquisition Pilots

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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 and Development Processes

Improved Technical & Management Practices

Systems/Software Developer Community

Acquisition Community

Operational Concepts

Needs

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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*Acquisition Pilot Process*

FY03 Acquisition Pilots: Results

FY04 Pilots

Lessons
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

Feasibility Study Phase

Milestone A
Feasibility Study Approval

Pilot Conduct Phase

Milestone B
Pilot Plan Approval

Milestone C
Pilot Complete
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
Outline

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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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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
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