

Software Acquisition Pathway: SEI Technical Work

SEI Virtual Tour
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SEI Providing Cross-Cutting Support for Modernization of DoD Software Acquisition Practice

SEI personnel on site at Pentagon / Mark Center, part of OSD's Acquisition Enablers team

- Government lead: Mr. Sean Brady, ODASD(AE)
- Team also includes government, MITRE, BAH personnel
- SEI provides deep technical expertise in a variety of software engineering topics

DoDI 5000.87 (Software Acquisition Pathway) became effective October 2, 2020.

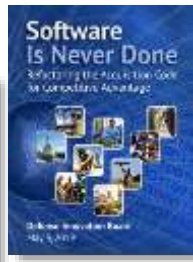
- Represents the capstone of multiple, empirically based lines of work
- Pilot programs (2018 NDAA Sec 873/874) were effective inputs and change agents.

Current work focused on institutionalizing Pathway and related practices; and supporting programs as they restructure to adopt the programs

Software Pathway is being used and supporting programs in speedy, iterative delivery of capability to the warfighter

SEI Technical Work Impacting the Acquisition Workforce

Prior SEI Research



Studies

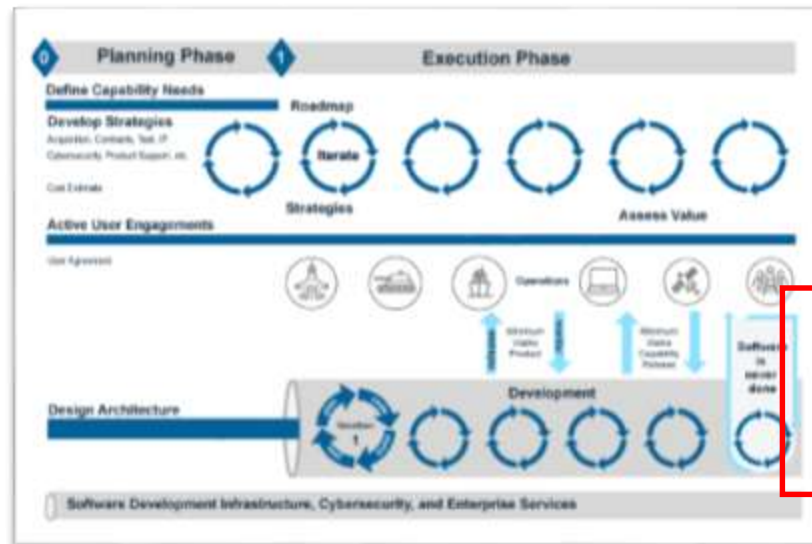
Pilot Programs – Demonstrated software capabilities can deploy in weeks or months, not years.



Interim Policy – Early Adopters

Technical Exchanges across the Acquisition Ecosystem

Policy



Templates and Guidance

- Agile
- Contracting
- Minimum Viable Product
- Roadmaps
- Etc.



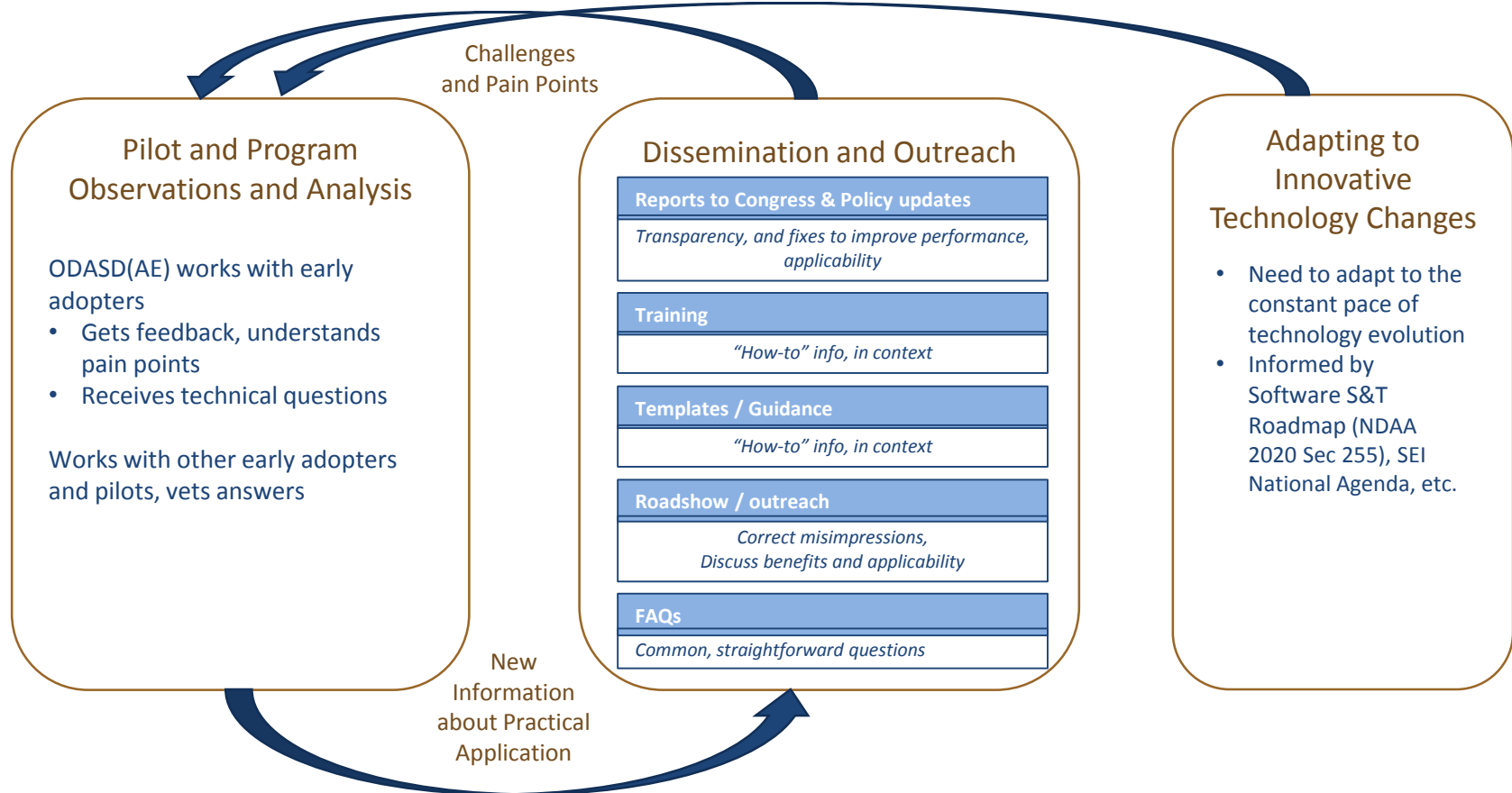
SW Acq. Pathway: A Radically Different Approach for DoD



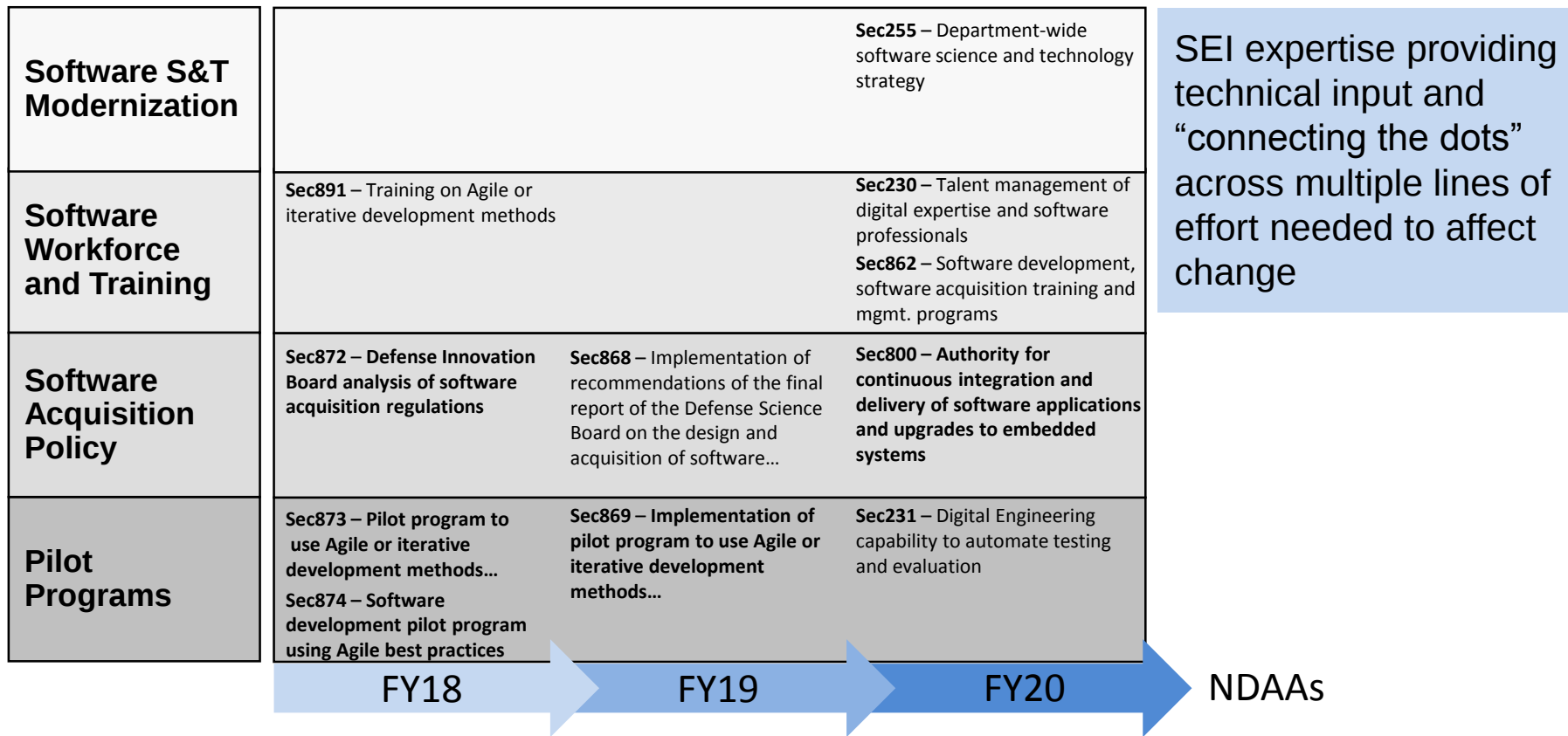
- **Rapid and iterative delivery to the operational environment to meet the highest priority user needs**
- Use of modern software development practices (Agile, DevSecOps, Lean)
- Capitalizes on active user engagement and enterprise services
- Tightly coupled mission-focused government-industry software teams
- Automated tools for development, integration, testing, certification

Source: [DODI 5000.02 Section 4.2](#)

Learning from Pilots, Programs, and Feedback from the Field



Policy is Only One Piece of the Solution



What's Next?

- Large-scale organizational change is a **long-term endeavor**.
- SEI has the competencies to continue playing a key role in **scaling up and institutionalizing** the progress made to date.

Specialized software expertise to evolve practices across the acquisition ecosystem, e.g.

- Cost estimation
- Interoperability
- Test and Evaluation

Program acquisition, to help programs instantiate the policy appropriately for context.

Empirical methods and measurement to learn from ongoing pilots and/or pathfinders:

- Early adopters of the Sw Pathway
- Agile adoption (2018 NDAA Sec 873)
- Software appropriations (BA-08)
- Digital Engineering (2020 NDAA Sec 231)
- And others...

Questions and Discussion

- Thank you to the other SEI members of the team, and the many staff who have helped on specialized topics.
- Additional thoughts or feedback?
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