

Software and Cyber Solutions Symposium 2018

Agile: Not just for software

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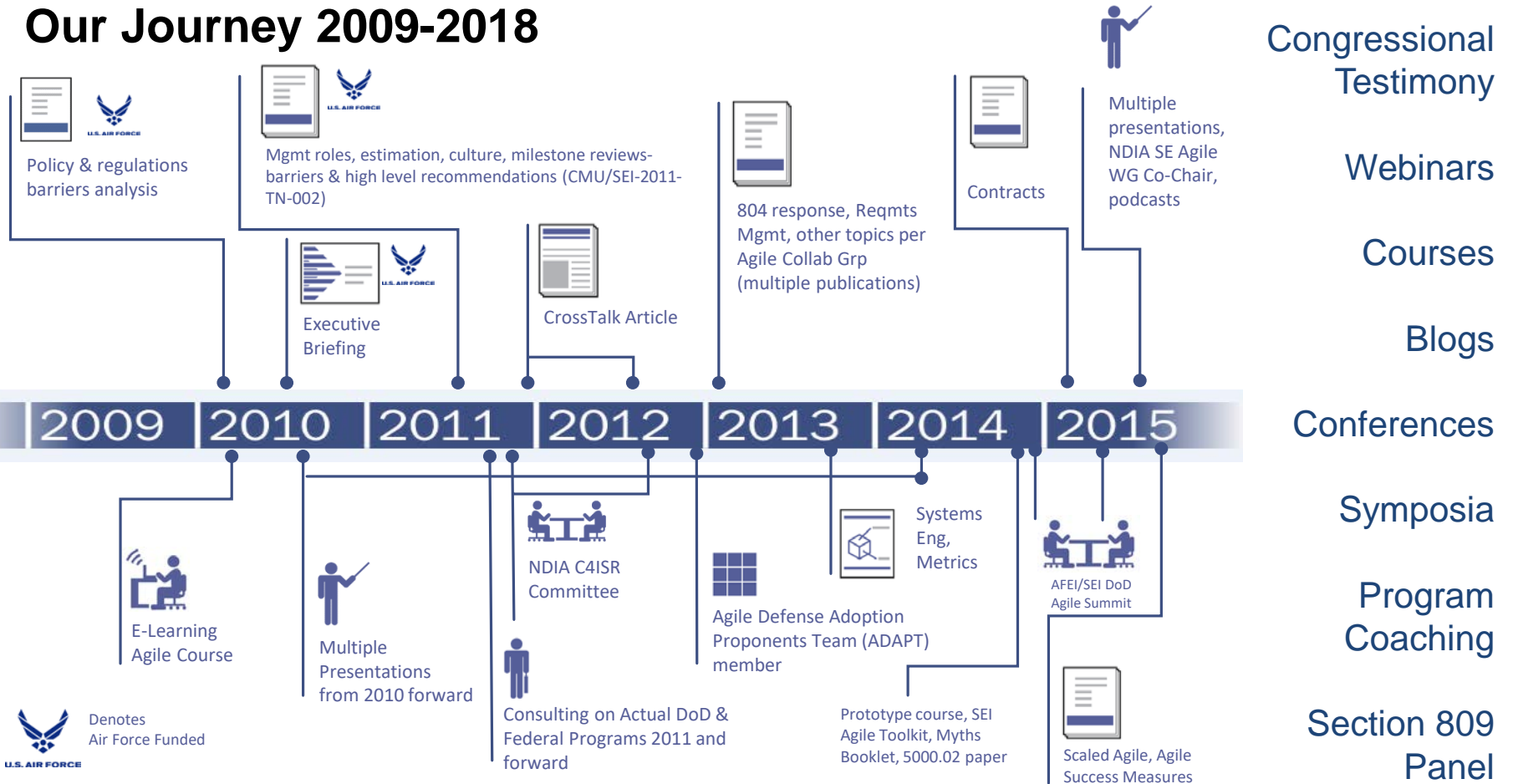
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Our Journey 2009-2018

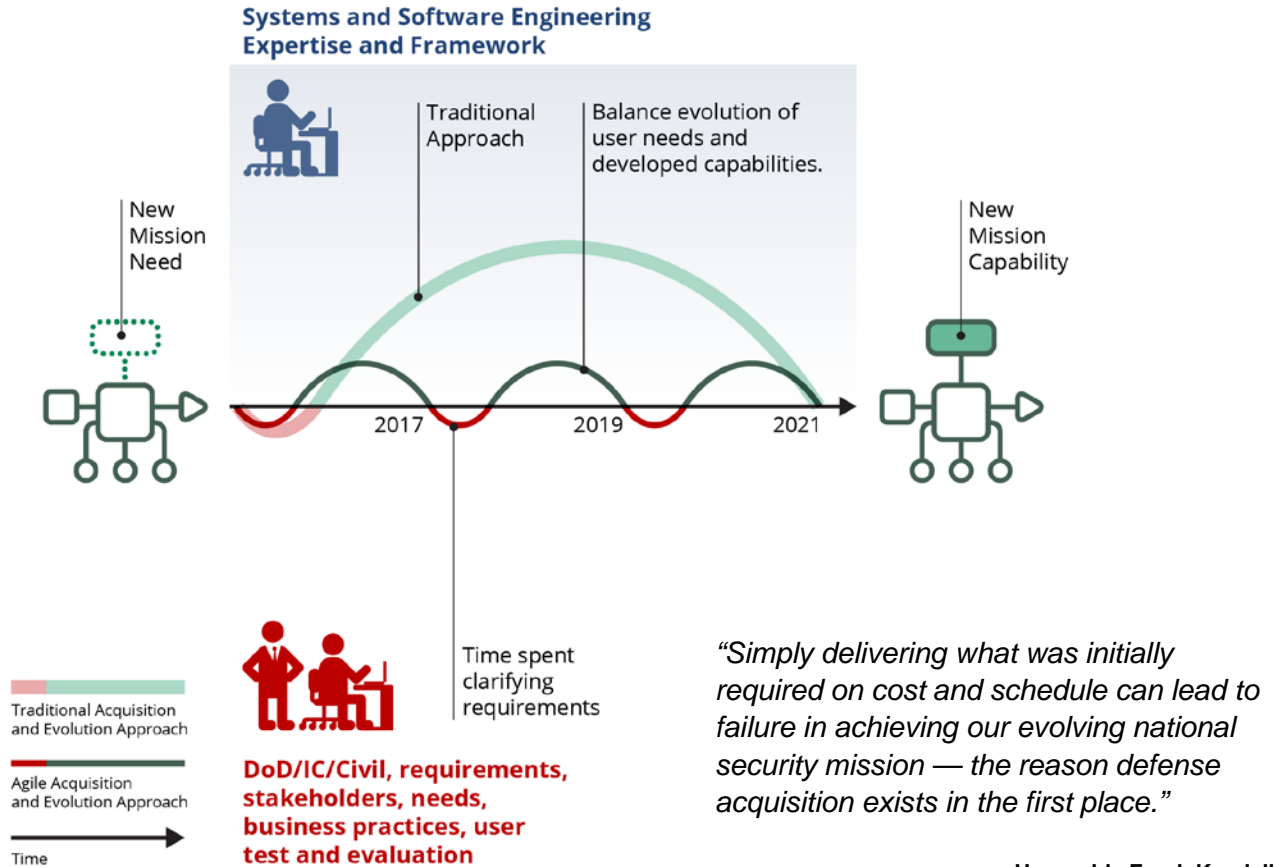


Why do we care?

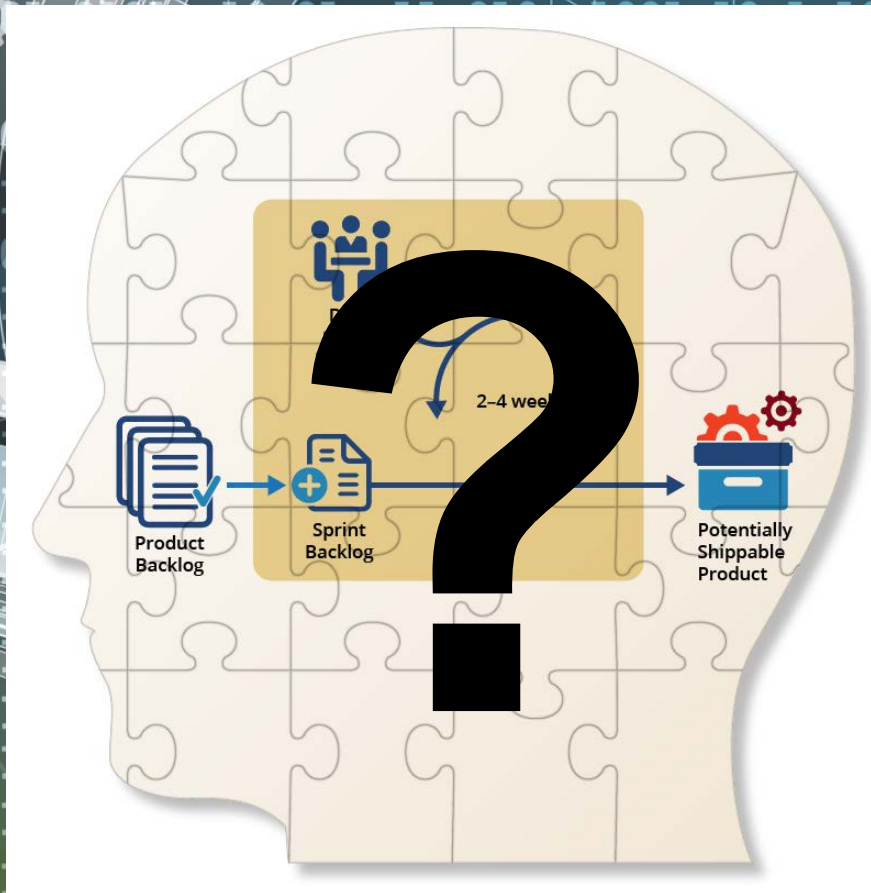
**Deliver performance
at the speed of relevance**

**Streamline rapid, iterative
approaches from
development to fielding**

National Defense Strategy Summary
Jan 2018



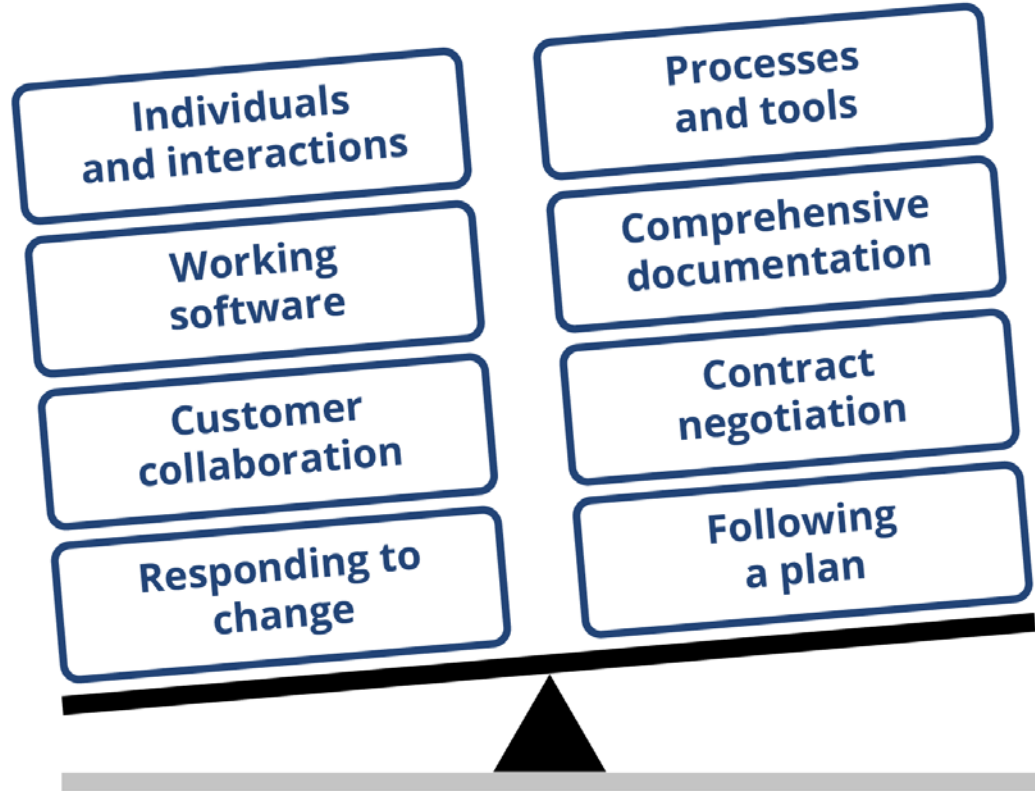
Honorable Frank Kendall
Under Secretary of Defense (AT&L)
2015 Performance of The Defense Acquisition System



Agile Manifesto

Through this work we have come to value:

That is, while there is value in the items on the right, we value the items on the left more.

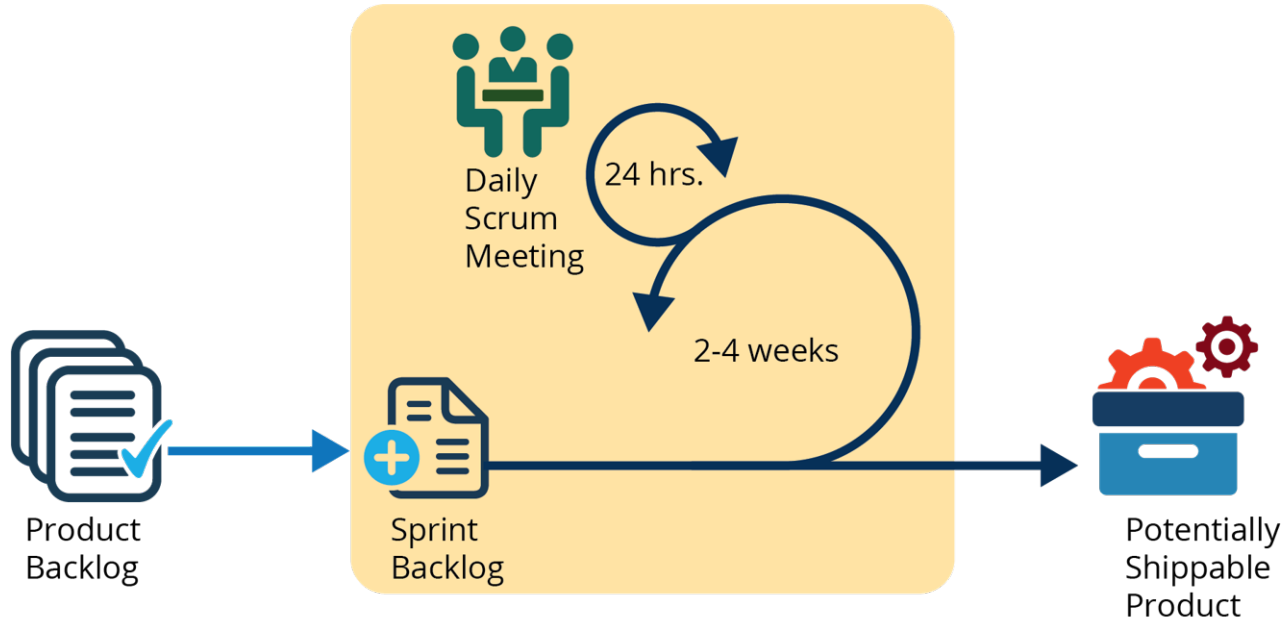


<http://www.agilemanifesto.org/>

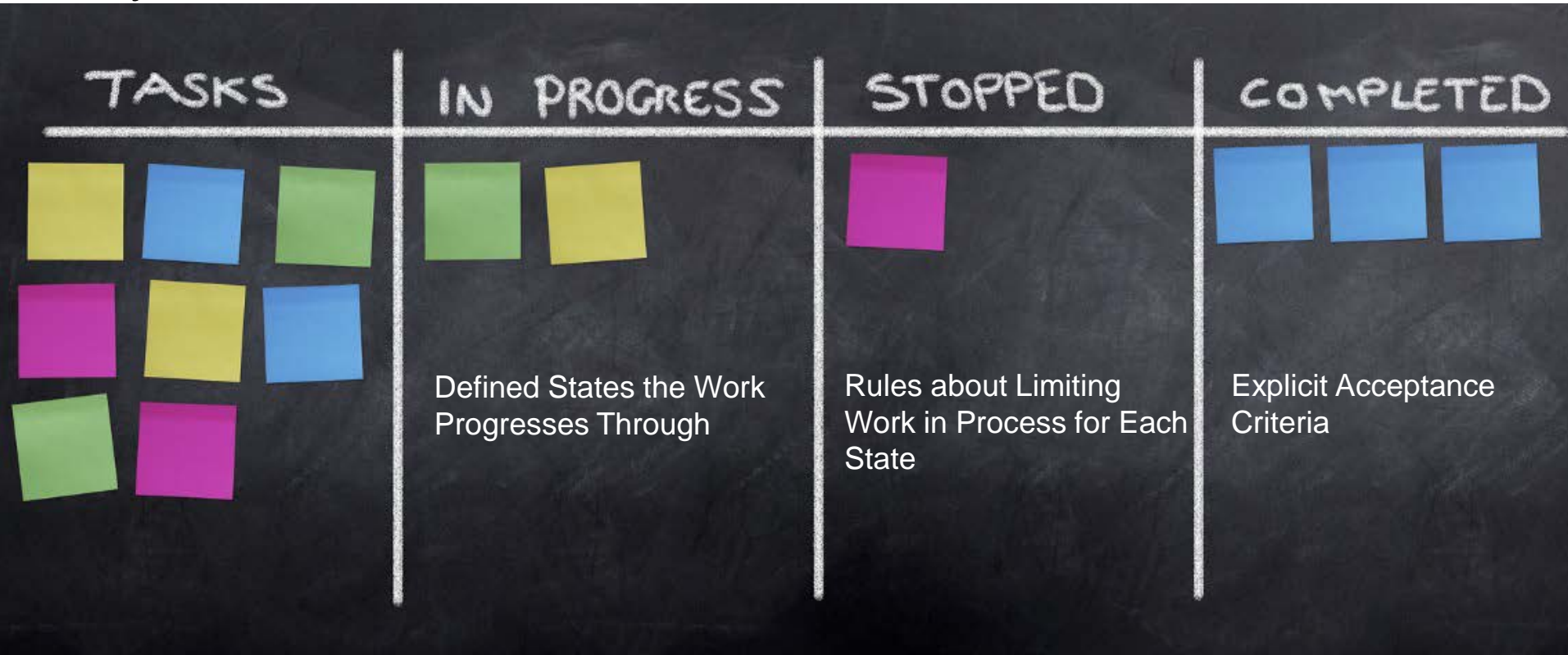
Twelve Agile Principles Support the Manifesto

1. Highest priority is satisfy the customer through early and continuous delivery of software
2. Welcome changing requirements, even late in development
3. Deliver working software frequently, from a couple of weeks to a couple of months
4. Business people and developers must work together daily throughout the project
5. Build projects around motivated individuals. Provide environment and support they need
6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation
7. Working software is the primary measure of progress
8. Agile processes promote sustainable development...a constant pace indefinitely
9. Continuous attention to technical excellence and good design enhances agility
10. Simplicity—the art of maximizing the amount of work not done—is essential
11. The best architectures, requirements, and designs emerge from self-organizing teams
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Key Elements of Scrum



Key Elements of Kanban



Useful for Tasks That Don't Easily Conform to a Time Box

SAFe Lean-Agile principles

#1 - Take an economic view

#2 - Apply systems thinking

#3 - Assume variability; preserve options

#4 - Build incrementally with fast, integrated learning cycles

#5 - Base milestones on objective evaluation of working systems

#6 - Visualize and limit WIP, reduce batch sizes, and manage queue lengths

#7 - Apply cadence, synchronize with cross-domain planning

#8 - Unlock the intrinsic motivation of knowledge workers

#9 - Decentralize decision-making

Economic View: What's valuable to you?

Spend time doing only
valuable work

Sequence work according
to value

Use decision rules about
value to communicate the
economic view

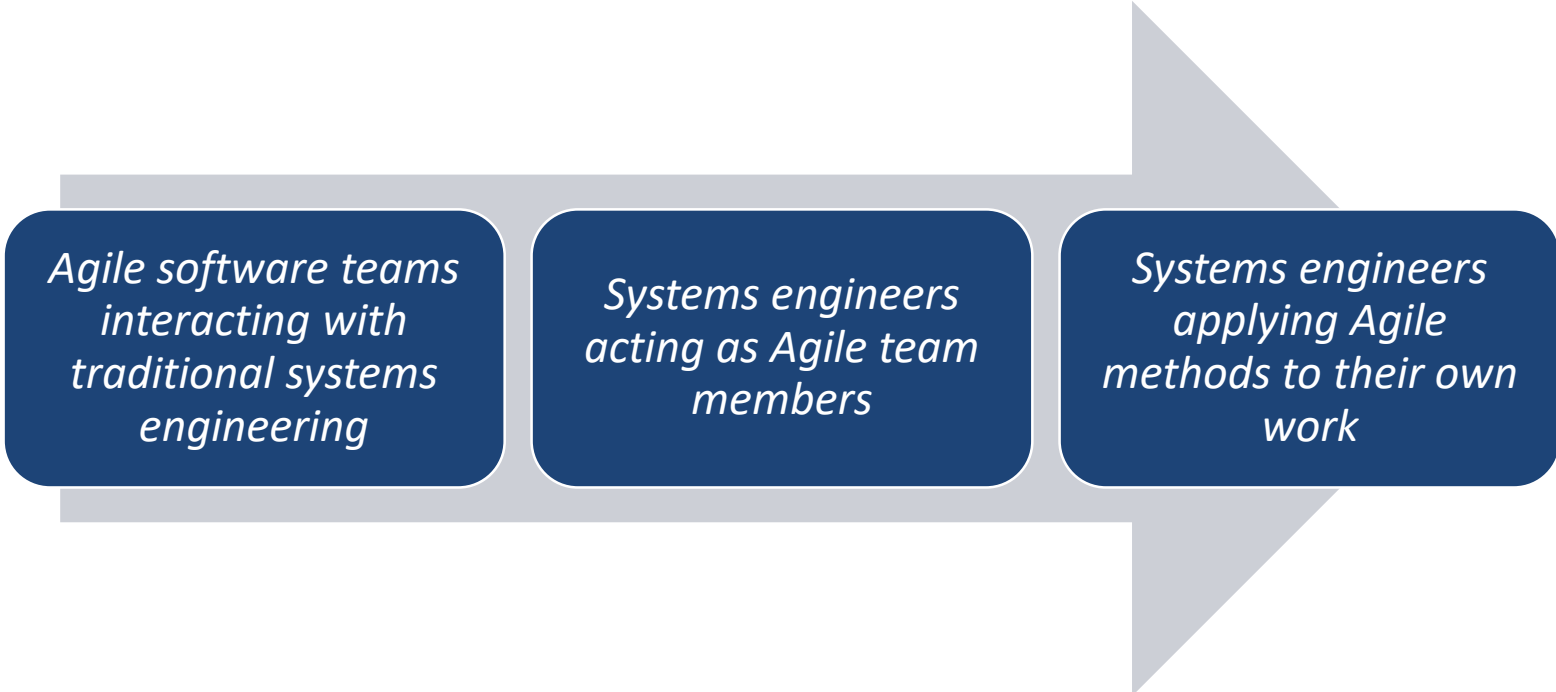


There's No One True Way

Assume there are multiple
ways to get from
here to there



Agile Software Teams + Systems Engineering Teams



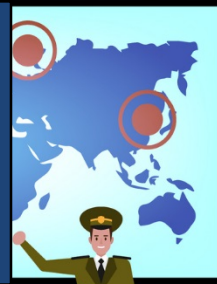
*Agile software teams
interacting with
traditional systems
engineering*

*Systems engineers
acting as Agile team
members*

*Systems engineers
applying Agile
methods to their own
work*

Agile software teams interacting with stakeholders

Stakeholders acting as Agile team members



Stakeholders applying Agile methods to their own work



Consider the Full Value Stream

- All stages from initial concept to final realization of value
- Optimize the flow across those stages, not the productivity of one stage over all others
- The *product* or *service* is a system too





Related Business Processes



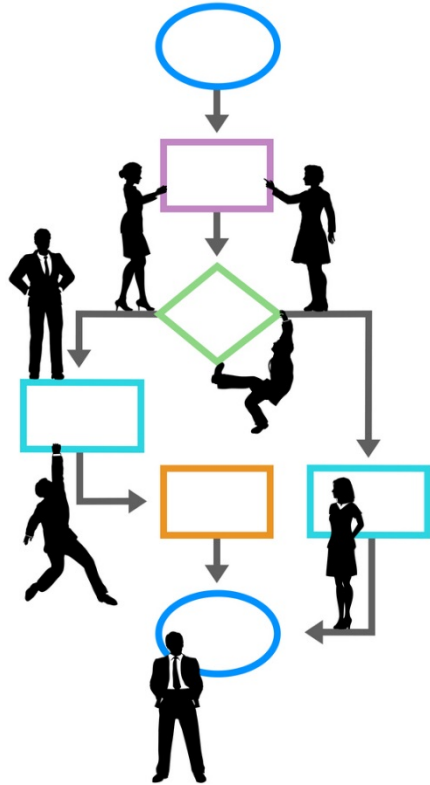
Agile & Lean IV&V



How do I take a 2-week slice of this?



Iterate on Both Process and Product



What's next?

How Agile can you get?



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