Agile Acquisition of Agile C2

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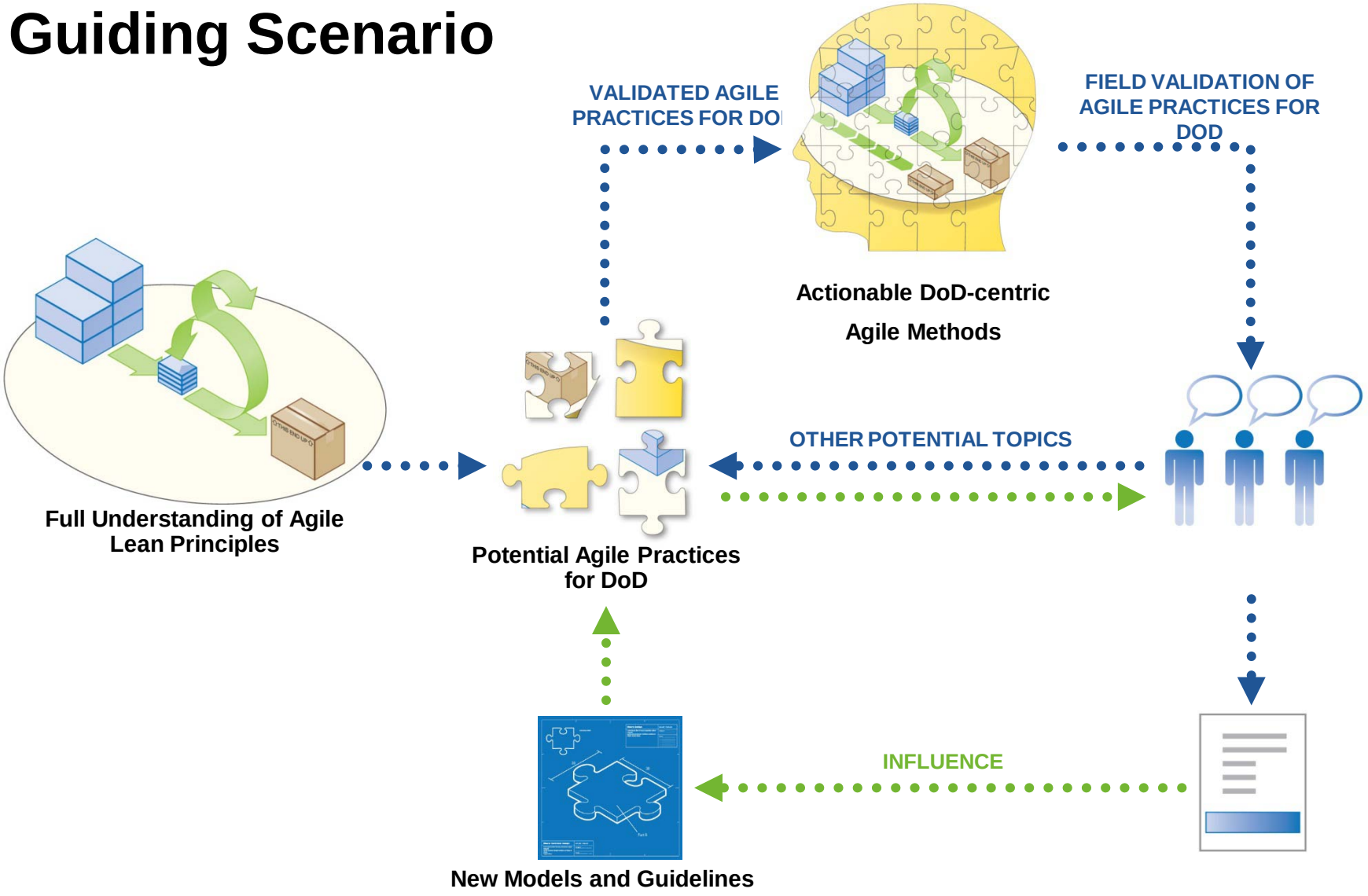
Introduction

- Commanders are increasingly more engaged in day-to-day activities
- There is a rapid pace of software creation, adoption, and demand
- The U.S. Government is in support of agile adoption
  - 2010 National Defense Authorization Act
  - DoD CIO 10 Point Plan to reform DoD IT

Agile DoD Compared to Traditional DoD

Element	Agile DoD	Traditional DoD
Organizational Structure	• Flexible and adaptive structures; • Self organizing teams, • Co located teams or strong communication mechanisms when teams are distributed	• Command and control structures that are difficult to change • Hierarchical, command and control-based teams
Rewards System	• Team is focus of rewards • Sometimes team itself recognizes individuals	• Individual is focus of the reward system
Communications & Decision Making	• Daily stand up meetings, • Frequent retrospectives, • Information radiators to communicate critical project information; • Evocative documents to feed conversation; • "Just enough" documentation. • Control and discipline comes from the Agile team itself.	• Top down communication; External regulations, policies and procedures tend to drive the work. Activities and processes documented; • Traditional, representational documents used by the PMO throughout the development life cycle to oversee the progress and discipline of the developer through formal and informal reviews.
Staffing Model	• Cross functional teams including all roles across the life cycle throughout the lifespan of the project; • Agile advocate or coach • End-user representative	• Uses traditional waterfall model with separate teams, particularly for development and testing • Different roles (e.g. developer, tester) are active at different defined points in the life cycle and are not substantively involved except at those times

Guiding Scenario



Features of Agility in Acquisition

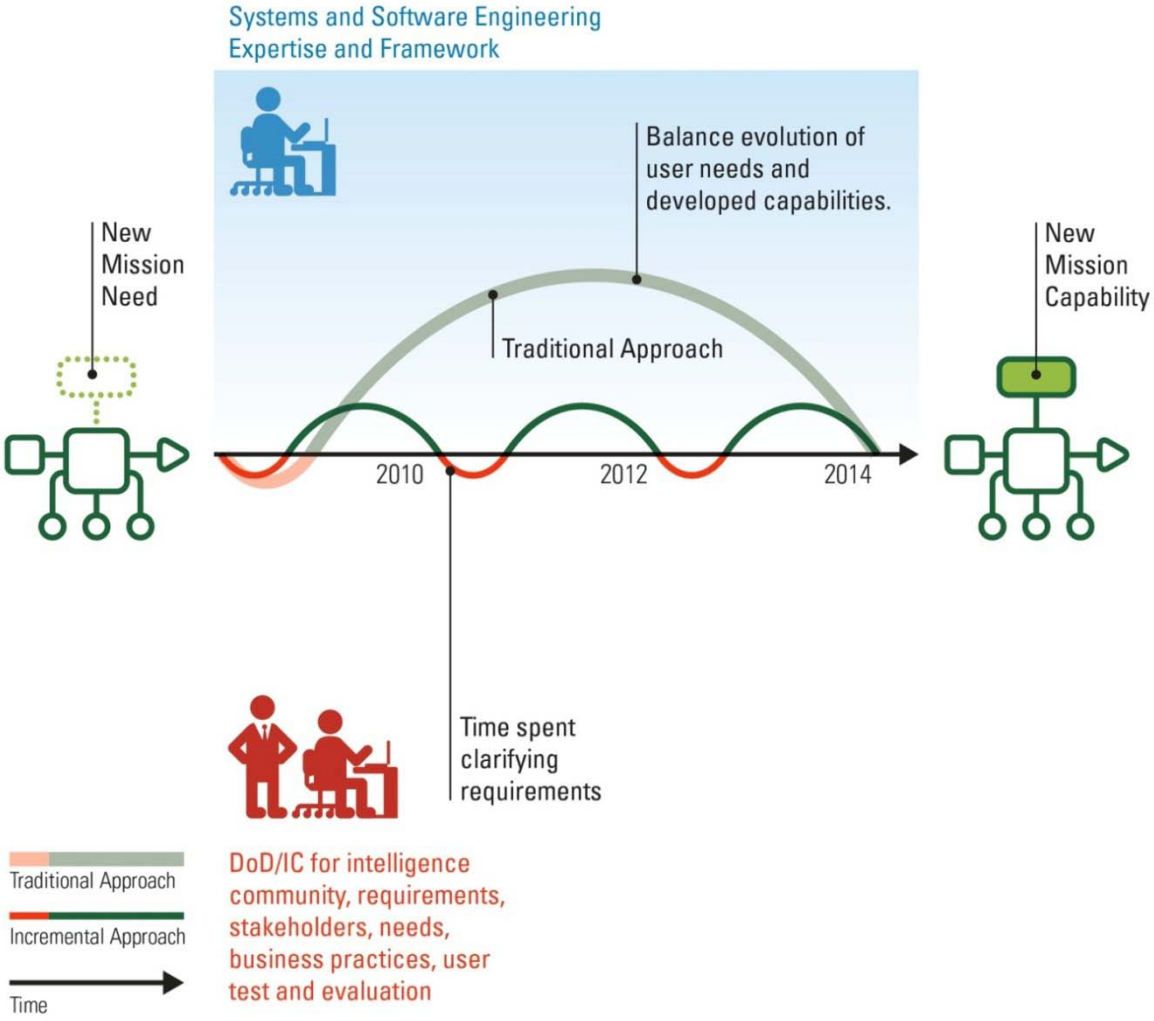
- Adopting an agile culture
- Incremental delivery
- Self organizing teams
- Flexibility
- End-user participation
- Risk management

Benefits of Agile Software Development

Better software can improve operational command and control by

- Ability to adjust quickly
- Ability to be responsive to changing customer needs
- “Uncertainty is inherent in the process of software development,” (Atkinson)
- Earlier insight into development problems
- More personal commitment to project

Innovation and Agility in Acquisition



Obstacles to Agility in Acquisition

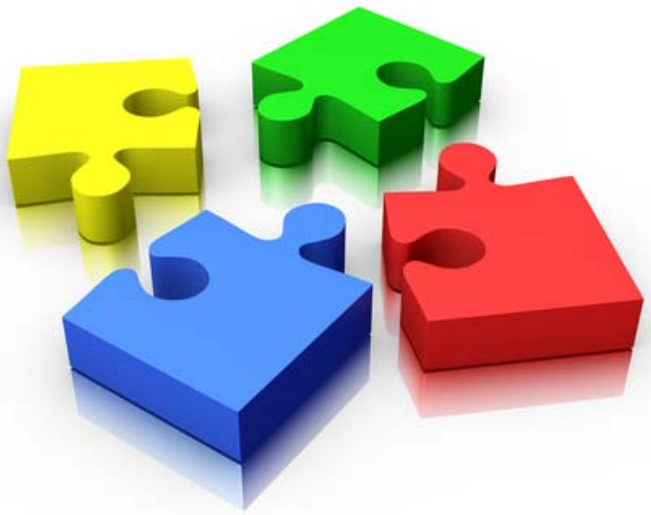
- Long DoD timelines
- Traditional contract constraints
- Culture shifts
- Rigid DoD requirements and oversight
- The element of the unknown
- Information overload
- Communication gaps
- Scaling and Architecture

How to Implement Agility in Acquisition

- DoD Oversight
  - Examine the formal and informal acquisition process
  - Examine the requirement process
  - Require cultural shift
  - Retool contracts for agile acquisition
  - Research how to scale agility
- PEOs and PMs
  - Push back when needed
  - Understand requirements and intent of requirements
  - Stay connected with users

How to Implement Agility in Acquisition

- Engineers and Developers
  - Demand more authority in setting schedule, resources
  - Commit to plan
  - Produce to schedule
  - Learn from each iteration, improve ability to plan and produce
  - Where possible live in the users shoes



Conclusion

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