Agency and Department Adoption of Agile: Lessons Learned and Recommendations

Presenters: Jerome Frese
Joshua Seckel
Agency Adoption of Agile

Agenda

• Intro
• Example Projects
• Implementation options
  • Vendor or Fed development?
• Cultural/Organizational Changes
• Successes and Impediments
  • IRS
  • CIS
  • Others
• Recommendations for new agency agile adoption
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Who we are

Joshua Seckel
Chief of Applied Technology Division at USCIS
Leads DHS Agile IPT
ICAgile Certified Expert Agile Coach

Jerome Frese
Chief Methodologist at IRS
Runs semiannual Interagency Seminar on Agile
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**DHS Agile IPT**

- DHS Agile IPT started in 2011
  - Biweekly meetings
  - Whitepaper on implementation
  - DHS level discussion
  - DHS wide Agile Expo for sharing
  - SELC rewrite
  - Agile Guidebook
Inter Agency SDLC Seminar

Purpose is to bring federal SDLC practitioners together so they can establish a network, learn about and share best practices and collaborate on new and innovative ways to support projects.

- Started 2009 – held 9 seminars
- Average 90+ attendees from more than 30 different agencies.
- More 80% of the attendees have government email addresses
- Focused on how AGILE is being implemented in the federal agencies

All presentations are stored on
Agency Adoption of Agile Implementation Model

Executive Sponsor/Champion

Product Owner

Scrum Master

Scrum Team
<table>
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<tr>
<th>Champion</th>
<th>Sponsor</th>
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<tr>
<td>• Knowledgeable of agile and possibilities</td>
<td>• Knows what isn’t working</td>
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<tr>
<td>• Works with the team to push boundaries</td>
<td>• Wants to try something new</td>
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<td>• Pushes on external bodies to accept changes</td>
<td>• Supportive of agile experiment</td>
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<td>• Drives change</td>
<td>• Pushes on results</td>
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Vendor Supplied

GSA
- Started by a Manager in Marketing
- Hired vendor developers
- Daily tells team what he wants
- Getting results, but burning out developers
- Vendor Management suggests structure
- Capture good metrics

VA
- Started by CIO
- Hired vendor developers who suggested AGILE
- Implements 6 month contracts
- Red Flags

Vendor Supplied Team

Government
- Executive Sponsor
- Product Owner

Vendor
- Scrum Master
- Scrum Team
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All Government

IRS

- Recommended by McKinsey
- Hired Scrum Masters and developers
- Didn’t train people hiring

All Government Team

Government
✓ Executive Sponsor
✓ Product Owner
✓ Scrum Master
✓ Scrum Team

Vendor
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Hybrid

Bureau of Fiscal Services

- Tank Commander
- Trained everyone
- 2 years to set up
- Strict compliance with AGILE principles
- Continuing Process improvement

Hybrid Team

Government
- Executive Sponsor
- Product Owner
- Scrum Team

Vendor
- Scrum Master
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Hybrid

Hybrid Team

Government
✓ Executive Sponsor
✓ Product Owner
✓ Scrum Master

✓ Vendor
✓ Scrum Team

US Citizenship and Immigration Services

- Trained Gov as PO and SM
- Hired development teams with agile coding skills
- Changes in contracting, organizational structure
- 8 AGILE principles required for all programs
- Continuing Process improvement
  - Moving to DevOps, AWS
Structure continuum of types
- Advantages of each type
- Disadvantages of each type
Regardless of implementation, agile requires cultural changes:

- **Transparency increase**
  - Willingness to open the kimono both up and down

- **Collaboration increase**
  - Across groups within OIT
  - Between OIT and Business
  - Between Contractor and Government

- **Flattening organization Structure**
  - Anyone can talk to anyone

- **Willingness to experiment** – unexpected results are OK
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Lessons Learned

Start with a Pilot

• Should be small to be successful
• Better success initially, when the Feds serve as the product owners, and contractors with a lot of Agile experience make up the rest of the scrum team.
• Essential to have a scrum master (and team members) with real life experience of how it all works. Being a Certified Scrum Master (CSM) is not enough.
Lesson Learned

- Education on Agile concepts is important to do to standardize terminology, concepts and roles
- AGILE is a total change in mindset.

* Source: Dr Steven Hutchison, Principal Deputy Developmental Test and Evaluation
Measure for Success

- Must collect good metrics, to validate success.
- **Business metrics are best to measure success.**
- Establishing velocity or cycle time is necessary to monitor progress
- Important to have fixed length sprints for scrum
- Measure frequency of deployment
Team composition

- Open communication between developers, testers and Business is critical.
- Co-location dramatically improves success
- 80-5 rule
- Team members must have the authority to make decisions

AGILE Oversight

- Imbed oversight into the teams
- Lean out oversight – encourage combined experiments
- Preventer of problems, not discoverer/auditor
- Need to use automated tools
Organizational

- Open communication between divisions, branches, sections is important.
- Reward risk taking and learning (not just success)
- Servant Leadership modeled throughout
- Push all decision authority as close to implementation as possible

AGILE Mindset

- Generalizing specialists aren’t just developers
- Focus on values and principles for adoption, not just practices
- Early failure is better than late failure
- Lose the blame mindset
• AGILE is not a Silver Bullet – it requires work across all the organization
• AGILE is about continuous experimentation and adoption
• Start somewhere and continuously improve, don’t wait to have it perfect

50 yards

1000 yards
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Don't Go Chasing Waterfalls

by TLC

Agile provides.

Complete and timely visibility into the program.

While Waterfall, they don't see anything until the end.
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