

# Building an Agile IT Services Ecosystem

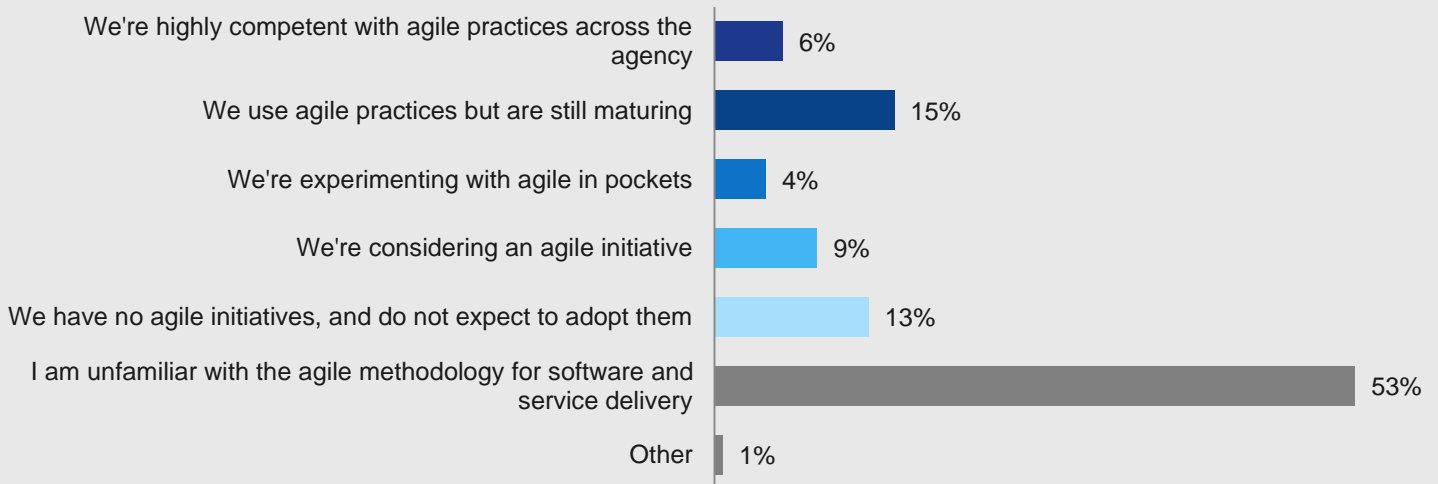
A Candid Poll on Trends in Agile Software Development in Government

## Introduction

Traditional approaches to federal IT software development can be costly, time-consuming, and difficult to navigate with changing government requirements. Some agencies are looking to agile as an alternative to deliver value on time with the features and quality that users demand. But how deep-seated and fundamental is this shift? Government Business Council (GBC) polled a random sample of 141 federal government workers in December 2018 to find out.

## Fewer than one-third of respondents say their agencies use agile practices

*When it comes to software and digital services development, how would you describe your organization's level of agile maturity (a methodology that speeds up delivery by pairing incremental, fast-paced development with regular product testing)?*



Percentage of respondents, n=141  
Note: Percentages may not add up to 100% due to rounding

- **Only 6%** of respondents consider their agencies to be highly competent in agile practices.
- **A majority of respondents (53%)** are unfamiliar with the agile methodology for software and service delivery.

### Analysis

Despite respondents' modest assessments of their agency's level of agile maturity, 80% of major federal IT projects were characterized as 'agile' or 'iterative' in 2017.<sup>1</sup> This discrepancy may be connected to one of agile's remaining hurdles: better integrating traditionally siloed team structures and eliminating the "us versus them" paradigm that exists between the technology and business domains.

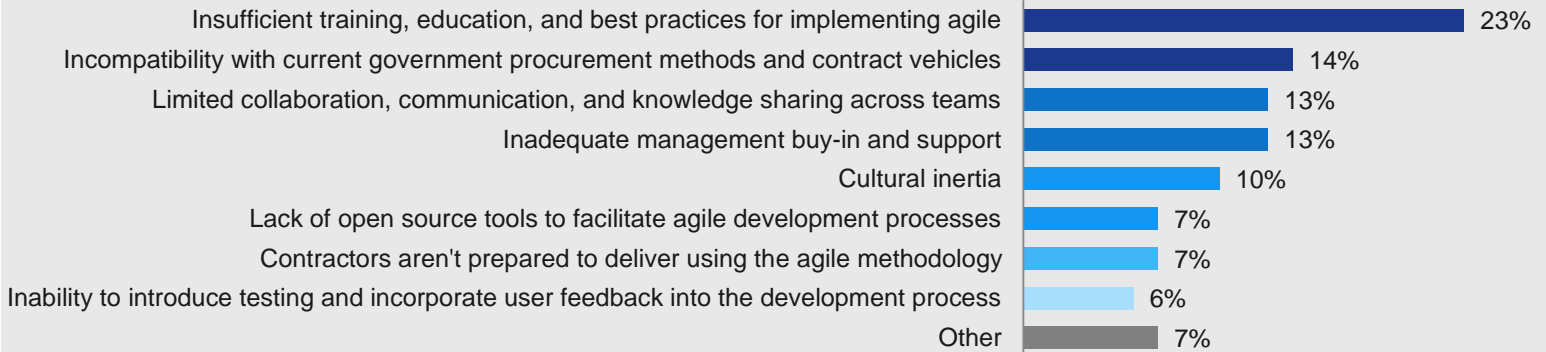


Everybody says they're doing agile. But when they say they are doing agile, they mean you stand instead of sitting down at meetings, and that you use sticky notes to track tasks."<sup>2</sup>

**Lieutenant Colonel Enrique Oti, Director of Kessel Run for the U.S. Air Force**

## The most common barriers to adopting agile are cultural and organizational

### What are the most significant challenges to adopting agile practices in your organization?



Percentage of respondents, n=78

Note: Respondents were asked to select their top three options

## Agile Implementation in Action

### Short Development Sprints



**Agency:** U.S. Citizenship and Immigration Services (USCIS)

**Issue:** The 20-year-old technology powering the organization's employment eligibility verification system (E-Verify) needed to be modernized to accommodate the increase in users, improve user experience, reduce errors, and increase the speed and accuracy of the verification process.

**Agile practice adopted:** The project team implemented short, highly automated development sprints to help them immediately identify and fix problems



The number one problem was our deployments were so few and there was so much red tape to get things out to production, [there was a fear to get things into production.](#)<sup>3</sup>

**Eric Jeanmaire, Branch Chief for the Verification IT Portfolio Modernization, USCIS**

**Impact:** Among the improvements to the new E-Verify system are a reduced number of pages and steps needed to close a case, as well as the capability to provide users with real-time feedback on errors, allowing for quicker case completion.<sup>3</sup> By making the site more usable and closely monitoring its progress, USCIS cut the attrition rate in half, reducing the percentage of people who gave up on the process before completing it from 60% to 30%.

### Product-Level Decisions



**Agency:** U.S. Air Force Operations Center (AOC)

**Issue:** After 10 years and \$750 million spent through an old DoD contract to redesign the entire AOC, no new operating software had been delivered. The AOC desperately needed a modern, automated system for managing aerial refueling operations to better fuse information, reduce errors, and improve refueling efficiency.

**Agile practice adopted:** The team began by working with low-level code and made decisions based on real-time conversations about users' needs at the product-level.



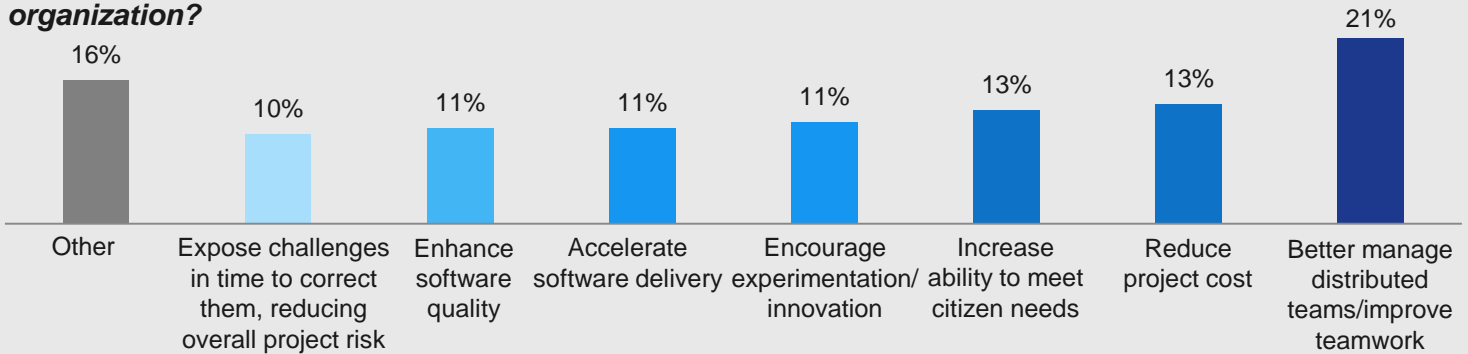
We within the DoD need to relook at how we do requirements. We have to be able [to take these technical requirements decisions and move them down to that product level](#), versus at the acquisitions level.<sup>4</sup>

**Lieutenant Colonel Enrique Oti, Director of Kessel Run for the U.S. Air Force**

**Impact:** The new planning tool, JIGSAW, was in use in combat operations within 4 months. JIGSAW reduces the time it takes to schedule refueling each day from 60 person hours to roughly 3 hours. Additionally, the improved management of their fueling needs has allowed them to launch 2-3 fewer tankers each day at a cost of roughly \$250,000 each, meaning JIGSAW's price tag of \$2 million was covered within a week.

## The biggest driver of agile adoption is a desire to enhance teamwork

What are the most important reasons you are adopting/want to adopt agile within your team or organization?



Percentage of respondents, n=73

Note: Respondents were asked to select their top three options

## HighPoint's Perspective

Federal IT investments are notorious for failing or incurring cost overruns and schedule slippages while sometimes contributing little to mission outcomes. Simply moving to agile processes will not change this. Agencies need to pay attention to the broader ecosystem and adopt agile in a way that make sense for the organization and creates the conditions for success. With personalized training as well as IT and quality assurance services, HighPoint helps agencies adopt agile values – such as transparency, collaboration, and iterative feedback cycles – in order to maximize the benefits of agile and its value to users.

### Methodology

GBC deployed a 3-question poll on agile software development to 141 federal government workers. The poll was fielded in December 2018.

### Sources

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2. **Steve Kelman:** "Agile at DoD – Going Beyond Sticky Notes and Standing Meetings." <https://fcw.com/blogs/lectern/2018/06/kelman-dod-agile.aspx>. June 18, 2018.
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4. **E-Verify:** "E-Verify Enhancements: April 2018." <https://www.e-verify.gov/about-e-verify/e-verify-data/e-verify-enhancements/april-2018>. April 23, 2018.
5. **Mark Wallace:** "The U.S. Air Force Learned to Code – and Saved the Pentagon Millions." <https://www.fastcompany.com/40588729/the-air-force-learned-to-code-and-saved-the-pentagon-millions>. July 5, 2018.

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