Additional Viewer Submitted Questions and Answers

Contract Type

1. What contract type (Cost, T&M, FFP, and variations thereof) have the various agencies used to issue their Agile System development awards?
   a. 18F prefers to use T&M because of the expertise for running Agile projects housed within the organization. US Digital Service is advocating Firm Fixed price per iteration as the method to use because it reduces risk to the Government. As Agile is a Commercial item service process – Cost should rarely be used because it is not allowable under Commercial Item contracts. This decision should be carefully made after looking at market research and in the acquisition planning process.

2. So does agile rely heavily on firm fixed price based on results? It must, since the requirements are fluid.
   a. The technical requirements for the product/applications are fluid, however, the Contract Requirements are firm. The Contract requires a repeatable process for delivery of working product as the deliverable. For this reason, the iteration in an Agile process can be priced as the unit of measure.

3. In our acquisition courses we learn that the tenets for using a fixed price contract include; (1) requirements are completely known and accepted, and (2) the contractor assumes risk and therefore the contractor charges the Government more to assume that risk. Using agile with fixed price contracts seems to violate both of these, especially the latter. Now the Government is paying the premium for a fixed price contract and is also sharing risk. How do we address these concerns?
   a. As we discussed in the briefing, the Contractual requirements are fully known and accepted. The Government is buying a software delivery process which results in working product. The technical requirements for any given system or product do not have to be known at the time establishing the contract, as that negates the benefits of the Agile process.
   b. Additionally- risk is lowered as the risk related directly to the completion of a given increment – not to the total "product" or application delivered. Risk is actually minimalized under FFP Agile Software Development procurements because the deliverable is provided every 2-5 weeks.

4. How can agile work with a fixed price contract? It seems like agile works better with a cost contract, but we are not allowed to do those at our agency.
   a. See above

5. The Acquisitions community seems to be very resistive to anything other than firm-fixed-price contracts, but this seems to flow completely in the face of Agile - how to deal with this "friction"?
   a. Time & Material types can work, however, they are dependent on the concept that only the "best effort" for a solution is required to be provided and that we are only

paying for "time" not a functional working product. By shifting these acquisitions to Firm Fixed Price per Iteration – the Government is actually receiving product which can be held up to inspection clauses, warranty, and other terms & conditions that favorably support the Government in FFP contracts.

6. Firm fixed pricing methods was mentioned as an option per iteration. In this example, were the number of iterations determined in the PWS to arrive at a total firm fixed price for the contract?
    a. Yes- there is a total number of iterations proposed for the given period of performance. If you have 4 week iterations, a period of performance for a year, you can expect to receive roughly 16-17 iterations which, when combined, make up the total amount to be paid for the period of performance.

Agile Methodology

7. If a contract exists which was written for providing Agile Services, however, the selected vendor is using something more akin to Waterfall, based on their proposal, what would the options be?
    a. Based on what was accepted in the proposal, the Government has the responsibility to ensure contracts perform how they are accepted. If what the Government accepted was not the correct solution, bringing the CO, COR, PM to discuss the exit strategy that can be employed. Is there an option that doesn't have to be exercised? Can you renegotiate with the vendor within the Period of Performance? By working with the full team, determine a strategy to try to get out of the waterfall methodology. If nothing will work, and it is the agency decision to truly convert to full Agile, there is always the termination for convenience option.

8. I am using agile methodology for the first time and we have done a lot of things right but we are still mired in the waterfall reporting requirements. Stakeholders are demanding the SOW type deliverables list. How do I get them out of that thinking and on board with the agile methodology?
    a. First, refer the Stakeholders to one of the following sites:
        i. TechFAR Handbook https://playbook.cio.gov/techfar/
        ii. Digital Service Playbook https://playbook.cio.gov/
        iii. Digital Gov http://www.digitalgov.gov/
        iv. Acquisition Gateway https://hallways.cap.gsa.gov
    b. Second, try training options, conference on Agile or bringing in speakers, both from Government & Industry to educate on Agile Software development practices. Some agencies are developing Agile training and holding conferences for their own agencies since Agile is very different from traditional practices.
    c. Third, Join the Federal Buyers Club listserv to connect with other agencies doing similar acquisitions (You must be a federal employee and use a ".gov, .mil, or similar email designation" to gain access).
    d. Additionally, hiring an Agile Coach to advise is another step that can be taken by agencies who want to move forward in this space.

9. I'm a Contracting Officer and I asked the Program Office just this morning why they aren't considering the use of Agile in a procurement I'm placing on contract for them. The Program Office's concern was that Government staff shortages at EPA make it difficult for EPA staff to commit to the deep level of involvement necessary during the agile process. How have you addressed this concern at one of your agencies?
    a. Administrative convenience is understandable given staff shortages, but the traditional waterfall approach is more risky than an agile approach. Though agile sometimes requires more involvement, once an organization does one contract in this manner, they understand the benefits and how the value supersedes traditional approaches.
    b. At HHS, Mark worked with the program office to better understand agile and innovative acquisition methods because it significantly reduces risk of failure with IT service contracts.
    c. Again, sharing best practices, use cases, and developing a collaborative integrated project team will assist any program office, though significant hand-holding is likely needed for any first effort with agile.
    d. Additionally, by training up the entire team; COR's, Product Owners, Executives, Contracting Officers, Legal Counsel helps the entire team to understand the myths about converting to agile software development practices.

10. Based on your experience with agile contracts, how long it takes from the award date to have a fully functional vendor producing goods?
    a. This completely varies by requirement/situation, but the use of agile sprints minimizes time from award to minimal viable product (MVP).
    b. One task order Traci worked on was awarded in the last week of July and the basic system required to replace a legacy CRM system was successfully "turned on" October 1. This included training with end users and full launch into production.
    c. It also depends on how big of a product needs to be delivered. If it is a simple application, it may only need one or two iterations to fully complete. If starting off with a large complex product, it might make sense to break them down smaller components.

11. In the presentation, it was mentioned that full documentation isn't a requirement for agile development. In your experience, do you ask the contractor to complete the documentation as a final deliverable for the contract after all cycles are completed? If not, has the ability to compete the follow-on procurement been hampered by a lack of documentation?
    a. Documentation is required, however, it is not an end of contract deliverable as it typically has been. It is baked into the agile cycle and should be included in the acceptance of each iteration. By documenting in smaller "bites" it does not become overwhelming to the Government or the Partner to have to provide comprehensive system documentation at the end of a contract.

12. In agile development, would you consider the testing plan to also become agile? Meaning, as agile development is essentially an iterative approach, would you then view Integration testing as more dynamic?
    a. Usability and other testing approaches occur during/after each iteration. The entire process is iterative with consistent stakeholder feedback. Agile development is a dynamic process requiring frequent interaction with stakeholders and testing is one aspect of it.
    b. If an Agile proposal does not include testing in some form within the iteration, it is not a true agile process.

13. Before Waterfall/V-Model was in the main stream (in the 90's), software development was just like Agile. It seems Waterfall/V Model were created because of shortfalls of Agile (before it was termed Agile). Why such a push to go to Agile? Shouldn't some software projects be Agile and others be Waterfall/V-Model?
    a. Whether or not agile was being done prior to waterfall's height in the 90s, a new set of principles around agile emerged in the late 90s, as captured by the Agile Manifesto, in response to underlying issues with waterfall. Most of today's agile methodologies are based on these principles of the Agile Manifesto. There's strong empirical evidence that suggests agile is a superior approach over waterfall for certain types of situations, particular those in which the problem or solution is highly uncertain. In some cases, when the problem and solution is known, then waterfall might be suitable.
    b. There have been various approaches to development. Today Software Development typically follows a continuous development model. As such the specific details of the end-product are not predictable at the time of award. In addition the waterfall approach of build, test sustain is not practical for most SW solutions as technology stacks continue to evolve, There are of course circumstances where a waterfall approach is more appropriate. During the acquisition planning phase ask yourself the following questions:
        i. Can I clearly define an end state?
        ii. Are the technical requirements both predictable and stable?
        iii. Is there value in obtaining functional code throughout the development process or is there no product without an entire deliverable (e.g., a tank)?
    If the answers to the questions above are yes than waterfall may be appropriate. Be careful though that you are not falling victim of cultural norms and not challenging the process before you discount the agile approach.

14. We procure multiple major IT healthcare new or system rebuilds each year. How do the additional complexities of major IT systems alter the agile process compared to the referenced software development acquisitions?
    a. One of the primary reasons for use of agile processes is the prevalence of consistent rebuilds and new system developments. Additional complexities aside, software development is complex and virtually never-ending as technology is rapidly progressing. End user involvement and experienced agile software teams are needed more for complex major IT systems than ever before.

    b. Breaking out acquisitions from being one large bundled requirement for systems and services is another play to consider in these acquisitions. Putting the Government in control of the infrastructure, hosting, connection, platforms, etc. as a separate requirement from the Agile software development services can increase Government control of all the moving parts and allows for focus on services and delivery of results.

15. How do you minimize the burden on the End Users/subject matter experts? Do these iterative cycles tend to require a large time commitment for these individuals?
    a. The time commitment varies by requirement, but our experience tends to be that end users are the driving force behind any requirement and they need to be invested in any development to ensure they get what will fulfill their mission needs.
    b. Viewing end user involvement as a burden is not a favorable approach considering the high failure rate of IT service projects. Iterative sprint cycles do require a time commitment from end users, but the value and benefit created by this investment is essential to a successful project.

16. It makes sense that more collaboration would lead to a better end result. However, that collaboration comes at a cost to government. How do you account for those costs? It seems like the overall award should be for less money to account for the Government time that now needs to be spent being involved in daily meetings.
    a. Yes, collaboration leads to success and the time required of government stakeholders has a value to it. There isn't much research on those costs, but I think some groups approach or view agile as a burden when it shouldn't be.
    b. The cost of IT project failure, which happens more frequently than you may realize, is much higher than the cost of frequent government collaboration with contractors to ensure successful project outcomes.
    c. Contractors who win awards to develop IT service projects still provide the same or more effort and should be compensated accordingly, regardless of government's own time investment. IT service projects that utilize agile require frequent interaction and collaboration (as partners) to ensure the customer (government) receives the product they envisioned. Developing a project/product without the customer's frequent involvement will result in an outcome that is less valuable to the customer.

Examples/Resources

17. Can you offer an example of a Project/Program Management Plan (PMP) within the Federal Government space where all aspects of a large USG IT investment have implemented the techniques discussed in this webinar?
    a. Yes, and we are working to collect and vet those prior to distribution.

18. Is it possible to see some of the use cases you've discussed or to get a list of the publicly available tools you talked about?
    a. Yes, here is a direct link to one for HHS.

19. Can the panel members share any of the requirements for the successful projects related to Agile development?
    a. Yes, click on the link above, which will take you to a HHS use case where another link will provide access to the original Request for Proposal on FedBizOpps.
    b. Take a look at the 8ᵗʰ Annual State of Agile Survey (created by Version One).
        i. Note: This is not an endorsement of Version One or their survey.
            1. The material and language is educational, nonetheless.

20. Other than "small fieldable increments of code" are there any other deliverables or categories of deliverables that can be described?
    a. It really depends on your specific IT service acquisition. Some of us believe it's important to vet contractors based on their capabilities to perform during market research and/or the solicitation phase.
    b. Deliverables should vary by the nature of your acquisition. In some cases, a prototype is helpful. Many agencies are experimenting to find what works for them and their varying requirements. All IT service acquisitions reflect a need, problem, or gap that must be addressed, and it's essential for the acquisition plan and strategy (preferably developed by the Integrated Project Team) to clearly identify what's needed to mitigate risk of failure for any project.

21. Does HHS have artifacts they would be willing to share with other government agencies to help jumpstart initial steps into Agile contracting? Is the evolving Use Case doc sharable?
    a. Yes, here is the direct link to the same HHS use case mentioned earlier. More are being developed.
    b. Please visit the HHS Buyers Club to follow our progress.

22. Where would I learn more about the Buyers Club?
    a. See above for HHS Buyers Club (everything is publicly-accessible).
    b. The Federal-wide Buyers Club site (for now) can be found by going to www.BuyersClub.IdeaScale.com, though it requires a federal email address to access.

23. Are there resources, such as examples, we can use to develop Agile type contracts and tasks within IDIQ awards?
    a. We are working to collect and vet many resources, so please look out for additional materials.
    b. Chris Cairns of GSA's 18F program published this blog with several helpful links for any agile acquisition, including Labor Category Descriptions. It's worth a read!
        i. https://18f.gsa.gov/2015/03/10/Labor-Category-Descriptions-for-Agile-Procurements/

24. Are there examples of SOWs available for us to view?
    a. Yes, see the direct link above for the initial HHS use case, which also links to the original Request for Proposal.
    b. The RFP used a Statement of Objectives (SOO), which is preferable to a Statement of Work (SOW) for results-based IT services using agile acquisition methodologies.

c. Many of us are working to develop effective training, guidance, and templates to create modern and effective SOO's. Please be patient while we develop these for everyone's benefit and look to FAI.gov, the Buyers Club, USDS, and other agencies for updates.

<u>Miscellaneous</u>

25. What was the total awarded value and/or estimated value of the ASPE Web Mgmt System requirement?
    a. Every acquisition is different and the ASPE requirement shouldn't be used as a baseline or perfect example of what IT systems cost.
    b. Given the above, I'm not sure it's appropriate to share the total awarded value and/or estimated value of this specific contract since the purpose of Agile Acquisitions 101 is to educate our audience about the use of agile and its benefits rather than share specific costs.
    c. Should you feel the awarded value and/or estimated value are important to you, I recommend pursuing a Freedom of Information Act (FOIA) request and/or contacting the current Contracting Officer or Contract Specialist. The contract # is "HHSP233201400227A".

26. Can the speakers give us any insight on how to transition an existing system; that is, in operations and maintenance (with ongoing tweaks), into a good agile process? This isn't a "legacy" system, but a modern system that isn't starting from scratch.
    a. When implementing an agile software development approach, it can start at any time in system development. By taking the objectives of what needs to be done to improve a system and turning those into the User Stories, they can fit into the iterative development process. Shift the mindset that systems go into a "steady state" that need Operations & Maintenance, into the idea that you will always be developing and enhancing.

27. You mentioned using "Use Cases" several times during your presentation. Could you please define what a "Use Case" is and how it helps in the acquisition process?
    a. A Use Case is an executive summary of a project (in this situation, an acquisition for IT services) and should provide both high-level and granular detail about how the project came to be. It helps future acquisitions and their stakeholders by providing much-needed guidance to help them succeed.
    b. A Use Case should have the following, at a minimum:
        i. Initial Problem/Need Background
        ii. Process used for the requirement/acquisition
        iii. Outcome of the requirement/acquisition
        iv. Feedback from stakeholders, lessons learned, potential pitfalls, links to essential material, and anything that may help others with similar needs
        v. Things the team would've done differently

28. Where can we find any samples regarding the Two-Step, Down-Select Process? What does the Section L look like? If the requirement is a typical FAR 15, is there still a competitive range determination?
    a. Yes, here is a direct link to the use case Mark Naggar mentioned.
    b. Please see the link above, which has another direct link to the original RFP that details instructions and evaluation factors.
    c. This process has two sets of evaluations, given it's multi-staged approach to reduce the burden on all initial offerors.

29. Will it be a requirement for all the components of DHS to eventually use the agile methodology in the near future for the IT acquisition?
    a. We cannot speak for DHS, but we're aware of a major shift toward the use agile across the entire federal government.

ADDITIONAL RESOURCES:

1. FAI's New Media Library
    a. FAI is proud to announce the launch of a brand new section of FAI.gov - the **FAI Media Library**! In addition to housing all of the Acquisition Seminar videos, the Media Library provides quick and easy access to FAI's collection of video products, audio podcasts, lectures, and other materials, all relating to the many different initiatives happening across the Federal acquisition workspace.
2. OFPP's *Behind the Buy* Podcast
    a. The "Behind the Buy" podcast features audio stories told by members of the Federal acquisition workforce who have successfully executed best practice IT contracting strategies from the TechFAR and Digital Services Playbook to help their agency meet its mission.
    b. Click here to listen to the first two, but more are being added every week.

IMPORTANT NOTE; We are considering the development of other Agile Acquisition training courses and modules to benefit the entire Federal Government and all internal and external stakeholders so that we may consistently improve the process, best practices, lessons learned, use cases, and anything else to add value to stakeholders pursuing agile acquisitions.

- Agile Acquisitions 101 is just the beginning.
- What would you like to see in Agile Acquisitions 102, 103, 104, and so forth?
- What other materials, training, events, workshops, or other Agile-focused efforts would benefit you?
- Please share them with us as we continue to iterate and improve the acquisition of IT services for everyone to benefit.