Modern software development, procurement, and management fundamentals

Overview

This training covers modern software development, procurement, and management fundamentals through a set of training videos.

At the end of this training, you will:
- Understand how to acquire, manage, and conduct the development of modern software in government. This includes:
  - Agile iterative development
  - Product ownership
  - User-centered design
  - Modern software development practices
- Understand how to approach procurement to attract good vendors and empower the product team to iterate
- Know how to bring modern software practices to an existing project and how to work with your vendor to make incremental improvements

Accessibility

- The videos have a live transcript that can be viewed on the right side. The video may include some incorrect closed captioning. Please use the CC button in the video to switch to Audio Transcript.
- The presentations are available in an accessible HTML format that includes the presenter notes. To view this, please use the HTML link to download a zip file of the presentation and then unzip and open the HTML file.

Video Trainings

This training is a series of five videos. We strongly recommend that you watch all five videos in order, as they all build on each other and the topics all relate to one another.

We will be hosting a live Q&A session to further explore these topics and how they apply to your work.

1. Introduction and agile management

- Watch [Agile management video (40 mins)](#)
- Slides for reference

- ○ [Agile management slides (PDF download)](#)
- ○ [Agile management slides (HTML zip download)](#) (These are the same slides optimized for screen readers and assistive tools)

This video covers:
- Bad news/ Good news: Managing software projects is hard, but leading a team using agile methods can help you succeed.
- Opportunities: No matter what part of the project lifecycle you are in, you can start applying agile methodologies.
- What to prioritize: How to evolve your product or program.
- Am I doing it "right": Signs to gauge if you are on the right track. I will also give you examples of bad signs, and suggest how you might address the causes.

2. Product ownership

- Watch the [Product ownership video (35 mins)](#)
- Slides for reference:
  - ○ [Product ownership slides (PDF download)](#)
  - ○ [Product ownership slides (HTML zip download)](#) (These are the same slides optimized for screen readers and assistive tools)

This video covers:
- What product ownership is
- Why it is necessary for software projects
- How to apply product ownership practices to an existing project

3. User-centered design

- Watch the [User-centered design video (28 mins)](#)
- Slides for reference:
  - ○ [User-centered design slides (PDF download)](#)
  - ○ [User-centered design slides (HTML zip download)](#) (These are the same slides optimized for screen readers and assistive tools)

In this short video you will learn what user-centered design is, what to consider and why it's vital when building and buying software.

Participants will leave understanding:
- What user-centered design is
- Why user-centered design is important in building and buying software
- What user-centered design looks like in practice
- What to look for when creating or working with new teams

4. Software development practices

- Watch the [Software development practices video (42 mins)](#)
- Slides for reference:
    - [Software development practices slides (PDF download)](#)
    - [Software development practices slides (HTML zip download)](#) (These are the same slides optimized for screen readers and assistive tools)

This video covers:
- A look at classic software development practices
- Modern practices to enable product management and user-centered design
- Continuous delivery
- Continuous integration
- Automation
- Keys to adopting modern software development practices

5. Agile contracting

- Watch the [Agile contracting video (35 mins)](#)
- Slides for reference:
    - [Agile contracting slides (PDF download)](#)
    - [Agile contracting slides (HTML zip download)](#) (These are the same slides optimized for screen readers and assistive tools)

This video covers:
- A true story of how traditional procurement can go very wrong, from a participant.
- A true story of how a different approach to procurement led to better outcomes.
- Tips on how to approach planning and writing a solicitation focused on agile, incremental delivery.
- Walkthrough of an RFQ that led to a successful procurement and delivery of software.

Resources

Here are are some other recommended resources for this training:
- [18F Derisking Guide](#)
- [18F Product Guide](#)
- [18F Methods](#)
- [Request for Quote](#) example for agile software delivery team
- [Blog - An Agile Software Development Guide](#)

Feedback

18F is always looking to improve our trainings and we would love any feedback you have. For feedback, please [submit this short form](). For any questions on the training program, please contact the Office of Childcare (OCC) at occ@acf.hhs.gov.