Release 1: Digital Services in the 21st Century Government

July 18, 2016

# Release Goal

Describe digital services in the 21st century, including what they are, who provides them, how they are delivered, and why they are important.

# Iteration 1.A: Digital Services Delivery (or How Solutions Get Done)

In this first two-week iteration, we will focus on the digital service professional and understanding what digital services are, who provides them (individuals, firms, government), how they are delivered (e.g., processes/methodologies like Agile and DevOps as well as tools and technologies used by digital service teams), and why successfully buying and delivering them is so critical.

**Learning Activities are labeled based on the following categories: 1) use as-is from the pilot; 2) tweak pilot materials (<30% revision), 3) revise pilot materials (30-70% revision), or 4) create new materials.**

**Yellow Highlighting indicates suggested content.**

| Performance Objective | Content Focus | Learning Activity | Seat Time |
| --- | --- | --- | --- |
| Define digital services and the problems they can be used to solve.  Identify key digital services roles/professionals in the digital services ecosystem and their challenges.  Identify modern design, development, and delivery methods used by digital services professionals.  Identify "who's who" in the digital services arena, including public and private sector organizations and individuals.  Illustrate your new role as a digital service acquisition professional and that of your team members. | * Introducing digital services to participants. * Recognizing the role of digital services professionals in the digital services ecosystem. * Identifying modern digital services professional methods. | * **Release Scenario Staging (tweak pilot to match updated learning objectives)** – Core exercise with 9 realistic scenarios that introduce Digital Services to users. This exercise gauges how well participants perform against the learning objectives for the release. * **Readings/Media**   + Most will stay as-is   + New Content: Include a Shadowing reminder that they will identify an organization/individual that they wish to shadow at some point during the course.   + **Required:**   + [Digital Government: Building a 21st Century Platform to Better Serve the American People](https://www.whitehouse.gov/sites/default/files/omb/egov/digital-government/digital-government.html)   + Digital Service Playbook   + TechFAR   + Star Spangled Geeks: <https://backchannel.com/inside-the-obama-tech-surge-as-it-hacks-the-pentagon-and-va-8b439bc33ed1#.o7hud07io>   + Video: <https://www.ted.com/talks/jennifer_pahlka_coding_a_better_government?language=en>   + **Elective:**   + [Industry Insight: Why DevOps is good for government](https://gcn.com/articles/2015/02/12/devops-defined.aspx)   + [Same, but different: A common international approach to digital government (UK DIgital Services)](https://gds.blog.gov.uk/2015/07/29/same-but-different-a-common-international-approach-to-digital-government/)   + [Obama and his Geeks (Fast Company)](http://www.fastcompany.com/3046756/obama-and-his-geeks)   + [Digital Services Categories and Examples](https://dapportal.net/asset-v1:OMBChallengeX+DAP01+2015_T1+type@asset+block/Digital_Service_Categories.pdf)   + [Large scale development culture change: Google and the U.S. Government (18F)](https://18f.gsa.gov/2014/12/11/large-scale-development-culture-change/)   + Haley’s Ted Talk: https://www.ted.com/talks/haley\_van\_dyck\_how\_a\_start\_up\_in\_the\_white\_house\_is\_changing\_business\_as\_usual?language=en   *GOLD LEVEL READING: Lean UX* [*http://www.jeffgothelf.com/lean-ux-book/*](http://www.jeffgothelf.com/lean-ux-book/)   * **Live Digital Assignment: Task 1 (revise)** – Continuation of Live Digital Assignment Activity from orientation.   + Participants need to develop product vision over the course of Release 1, as per revised MVP live digital assignment approach * **Online Learning***:* **Digital Services – The Who and What (tweak)**   + Digital Services – The Who and the What     - Defining Digital Services     - Digital Service Wheel   + Then and Now: USCIS.gov Use Case     - Who?     - What?     - Why?     - Where?     - How?   + Defining Digital Services: Another Take     - What is included in the information layer?     - What is included in the presentation layer?     - What is in the platform layer?   + Knowledge Checks   + The Digital Services Ecosystem (**tweak**)     - What other government agencies (federal, state, or municipal) provide digital services?     - What about mobile apps?     - Do only government agencies (federal, state or municipal) provide digital services?     - GovUK; state resources (Philadelphia 311 needles; adopt a fire hydrant in Boston during snow)     - <http://www.phila.gov/311/Pages/default.aspx>     - https://www.codeforamerica.org/products/adopt-a-hydrant     - Explore the UK Government Digital Service and how the U.S. Digital Service is working with them and adopting best practices from their work   + Who’s Who: Finding and following the leaders in Digital Services (**tweak**)     - Digital Services Developers (In-House)     - Digital Services Developers (Professional Service Vendors)     - Organization (Private Sector/Government Sector)       * Add: 18F and USDS       * Government/public sector (Code for America)       * Government-Private sector collaboration       * Professional organizations       * Thought Leaders (government and outside)       * Professional Organizations and industry/private sector collaborations         + This section should focus in on professional orgs and industry/private sector collaborations, market research agencies that are doing work in this area, as well as blogs/news/articles that participants should follow to get started on their journey both now and in the future. Could also explore thought leaders and industry leaders (without endorsing particular companies).     - Required Assignment: Find an organization or other thought leader in the digital service community to follow on social media (twitter/Linked in) or whose posts/resources you sign up to receive (e.g., Steven Levey) to continue to hone your awareness of who’s who in this industry. Post in the discussion topic for this assignment who you chose and why or what contribution to digital service made them interesting to you. The information shared by participants can then be referenced or compiled into a who’s who list. * **Online Learning: Define your role and your agency team members’ roles as digital service acquisition professionals**    + What is a business advisor? (NOT a rubber stamp, business advisor from the get-go; tweak 4.A content)   + Using your influence to effect positive change (Tweak 4.A content)   + Sphere of Influence Introduction (Tweak 4.A content)   + New Activity: Briefly define your role and your agency team member’s roles * **Online Learning: Digital Services – The How (as-is)**   + Digital Services – The How     - The Common Denominator   + Learn About Your User’s Needs     - Minimum Viable Product (MVP)     - A/B Testing     - Personas     - Journey Mapping     - *Required Component of this Section: https://medium.com/the-u-s-digital-service/introducing-a-new-digital-application-for-healthcare-at-va-610d8bac4c78#.7084vfcse*   + Contemporary Practices in Developing Digital Services     - Agile Development     - DevOps     - Modern Technology Stacks & Open Source     - Open Data     - The Cloud   + Connecting the Dots * **Activity: Contribute to the 18F Agile Guide (remove)** * **Guided Learning Webinars (Office Hours & Iteration Retrospective)** * **Elective Assignment (Create new materials)**   + Read 1 blog from each site (below) and write your personal thoughts about it in a discussion board answering these questions:   + Why did you select this blog post?   + What is your key take away from this post?   + Did you like how it was written and did it provoke any emotional reaction (excitement/call to action/dismay, etc.)?   + Did it make you want to learn more about the topic? Why or why not?   + <https://medium.com/@USDigitalService>   + <https://18f.gsa.gov/blog/>   + <https://gds.blog.gov.uk/> | **7.5 hours** |

# Iteration 1.B: The Digital Services World

A decade ago, the screen upon which you’re reading this document was technically unfeasible. Laptops had floppy disc drives, tablets were the white whale of personal computing, and the Blackberry was more status symbol than smartphone. What Moore’s Law has done for consumer technology is nothing short of amazing, and the race against the machine is challenging procurement organizations to keep pace with an accelerating software development lifecycle that shutters tech darlings and creates new ones overnight (Hello, Snapchat?). As we look across the field of technology, you will explore available sources of supply while considering how to introduce non-traditional vendors to the Federal marketplace.

| Performance Objective | Content Focus | | Learning Activity | | Seat Time |
| --- | --- | --- | --- | --- | --- |
| Identify the available sources of supply within the digital services market segments.  Identify the high-level principles of agile development that make it effective.  Describe what sets agile methods apart from traditional waterfall development and delivery methods. | | * Understanding sources of supply * Introducing agile development to build a foundational understanding * Delving into the key characteristics that set agile methods apart from traditional digital services | | * **Introduction (tweak)**   + Tweak language to remove pre-solicitation communication, and replace with agile content. * **Guided Learning Webinars (Office Hours & Iteration Retrospective) (Revise)**   + Guest speakers – XaaS, big data, open source (Alex Ose); digital service agency lead (Chris Lynch, Marina Martin) * **Online Learning: Understanding Sources of Supply (tweak)**   + Understanding Sources of Supply for Digital Services     - Segmenting the Digital Services Marketplace       * Add big data/open data to list   + Marketplace Segment: Cloud Services   + Marketplace Segment: Software Development   + Marketplace Segment: X-as-a-Service (tweak/a little deeper dive)   + Marketplace Segment: Open Source Software   + Marketplace Segment: Design Services   + Marketplace Segment: Big Data/Open Data   + Sources of Supply: The Suppliers * **Online Learning: Responsible Pre-Solicitation Communication (remove)**   + Relocate to 2.A * **Online Learning: Principles of Agile Development (Moved from 5.A)**   + Include [Neil’s video clips](https://dapportal.net/courses/course-v1:OMBChallengeX+DAP01+2015_T1/courseware/cbf6f2f294fd492499c3fb55fd242cf2/5bf057f9686a4b778a1ad1fbcc0e2b63/) that provide insight into these concepts (tweak) * **Readings (tweak)**   + **Required:**   + The CIO Problem, Part 1: <https://medium.com/code-for-america/the-cio-problem-part-1-678ae2e9d0bf#.3eossryj8>   + The CIO problem Part 2: https://medium.com/code-for-america/the-cio-problem-part-2-innovation-af24ebc038e5#.8rr3asspa   + [Case Study: Agile Government and the General Services Administration](http://www.agilegovleaders.org/case-studies/gsa/)   + [Fast Company’s Most Innovative Companies – 2015](http://www.fastcompany.com/welcome.html?destination=http://www.fastcompany.com/section/most-innovative-companies-2015)   + **Elective:**   + [Behind the Buy Podcast Series](https://www.fai.gov/media_library/items/show/78)     - [#1: Interview with Mark Naggar](https://www.fai.gov/media_library/items/show/78)     - [#2: Driving Agile IT Procurement](https://www.fai.gov/media_library/items/show/80)     - [#3: A Simple and Intuitive Approach for IT Procurement](https://www.fai.gov/media_library/items/show/82)     - [#4: Leveraging an Agile and Iterative Approach to Help Save American Lives](https://www.fai.gov/media_library/items/show/88)     - [#5: Managing and Delivering Digital Services for Agile Software Development](https://www.fai.gov/media_library/items/show/92)   + **Consider adding from 5.A:** [Scrum Guide](http://www.scrumguides.org/scrum-guide.html)   + [Industry Insight: Struggling with Scrum? Try Kanban for IT projects](http://gcn.com/articles/2015/03/11/kanban-basics.aspx)   + [Lean Startup Principles](http://theleanstartup.com/principles)   + [Industry Insight: Why DevOps is good for government](https://gcn.com/articles/2015/02/12/devops-defined.aspx)   + [18F: Don’t Underestimate the Danger of Technical Debt](https://18f.gsa.gov/2015/08/07/technical-debt-1/)   + [Industry Insight: Testing 1-2-3: Open-Source tools to ensure applications](https://gcn.com/articles/2013/12/10/software-testing.aspx)   + [ASI’s Solicitation Development Decision Tree for Part 8 Acquisition](https://mind42.com/mindmap/94a0ae5e-17e0-4ae3-b7f3-97c152ca1e77) * **Live Digital Assignment: Market Research/Pre-Solicitation Artifact (Remove)**   + Hypothesis and Product vision to be done by 2.A * **Activity: Trend Analysis of Fast Company’s Most innovative Companies (as-is)** * **Release 1 Assessment (Tweak)**   + Tweak to include big data/open data | 5.5 hours |