

U.S. Department of the Interior
21st Century Integrated Digital
Experience Act
Implementation Guidance

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Executive Summary

The 21st Century Integrated Digital Experience Act (Act, IDEA) requires the head of each executive agency that maintains a publicly available web site or digital service to modernize and standardize these services to make them more user-friendly and secure. Modernization and standardization apply to new or redesigned internet and intranet sites according to Executive Agency prioritization.

This 21st Century IDEA Implementation Guidance (Implementation Guidance) provides recommended actions that U.S. Department of the Interior (DOI, Department) employees can take to comply with the Act.

The Act specifically requires all executive branch agencies to:

- modernize websites;
- digitize services and forms;
- accelerate use of electronic signatures;
- improve customer experience;
- standardize and transition to centralized shared services; and
- report annually within the first five years of enactment of the Act.

Executive Sponsors for this Implementation Guidance include the following representatives from the Department's Office of Communication Officer (OCO) and Office of the Chief Information Officer (OCIO):

- OCO Executive Sponsor - OCO Director
- OCIO Executive Sponsor - Deputy Chief Information Officer - Program Management

Their responsibilities are to present this Implementation Guidance to senior leaders and to support adoption of this guidance to the degree that funding and resources may allow.

The Act requires agencies to prioritize websites and digital services that require modernization, estimate the costs and schedule of modernizing, and ensure funding is available to implement the Act. The recommendations contained in this document are intended as recommendations only, to assist bureaus and offices in fulfilling the requirements of IDEA but the degree of implementation is subject to bureau and office budget and resource availability.

[Appendix A](#), Table of Roles and Responsibilities, summarizes the actions recommended to implement the law. Other related laws and policies are listed in [Appendix F](#) for easy reference.

I. Introduction

A. Purpose of the Implementation Guidance

The U.S. Department of the Interior (DOI, Department) is issuing this guidance to aid in compliance with 21st Century Integrated Digital Experience Act (IDEA, Act) requirements for website and digital experience modernization and to establish department-level oversight capability. While the Act requires federal agencies provide funding to implement IDEA, the specific recommendations contained in this document are intended as recommendations only and the degree of implementation is subject to bureau and office budget and resource availability. Bureaus and offices may wish to review current website and digital service resource allocations and assess which, if any, may need additional resources to implement the recommendations of this guidance.

The intended audience is anyone who develops, manages, and supports digital and web services throughout the Department. The Implementation Guidance includes specific recommendations for the Office of the Chief Information Officer (OCIO) and the Office of Communications (OCO), who chairs the DOI Web Council, regarding web site modernization and annual reporting, as described in sections II and VII of this document.

This guidance is intended to assist the Department in complying with IDEA website modernization and digital services requirements and to enable more effective decision-making, including funding allocations.

B. Scope of the Implementation Guidance

This guidance is broken down into sections in accordance with the Act. Each section contains definitions, an assessment of the universe or inventory of web and digital services, discussion of prioritization and recommended actions, roles, and responsibilities to comply with the elements of the law. The sections are:

- II. Modernize Websites
- III. Digitize Services and Forms
- IV. Accelerate Use of Electronic Signatures
- V. Improve Customer Experience
- VI. Standardize and Transition to Centralized Shared Services
- VII. Annual Reporting to the Office of Management and Budget (OMB) and the Public

C. Overview of 21st Century IDEA

The [21st Century Integrated Digital Experience Act of 2018](#) (IDEA, Act) Public Law (P.L.) 115-336, requires an executive agency that creates or redesigns public websites or digital services to, among other things, ensure that the websites, web-based forms, or digital services are user-friendly, accessible to individuals with disabilities, and provided through an industry standard secure connection. A “service” is defined as the sum of help provided—by an agency and its partners—throughout the process a customer goes through to obtain, receive, or make use of a public offering or comply with a policy. In this case, service is DOI websites and digital services. The IDEA bill sponsor, Representative Ro Khanna, summed it up by saying, “*Government exists to serve citizens, and this bill ensures government leverages available technology to provide*

cohesive, user-friendly online service that people around this country expect and deserve.” [21st Century Integrated Digital Experience Act – Digital.gov](#)

The Act requires specifically all executive branch agencies to accomplish the following as listed above:

1. modernize any new or redesigned website, web-based form, web-based application, or digital service in accordance with eight criteria listed in section 3(a) of the Act;
2. digitize services and forms;
3. accelerate use of e-signatures;
4. improve customer experience and digital service delivery;
5. standardize and transition to centralized [shared services](#); and
6. report annually on progress within the first five years.

Furthermore, agencies are required to prioritize websites and digital services that require modernization to meet the requirements of the Act, develop an estimation of the cost and schedule of modernizing the websites and digital services, and ensure proper funding to support the implementation of this Act.

II. Modernize Websites

A. Define Modernization

The Act defines modernization by several factors focused on enhanced customer experience. In accordance with this definition, the Department shall ensure to the greatest extent practicable that any new or redesigned website, web-based form, web-based application, or digital service meets the following eight specific modernization requirements as outlined in the IDEA. In addition, it is recommended that public-facing websites and digital services use the [U.S. Web Design System standards](#).

1. **Accessible** - be accessible to individuals with disabilities in accordance with [Section 508 of the Rehabilitation Act of 1973 as amended](#) (Section 508)
2. **Consistent** - have a consistent appearance
3. **Authoritative** - not overlap with or duplicate existing websites
4. **Searchable** - contain a search function
5. **Secure** - be provided through a secure connection
6. **User-centered** - be designed around user needs with data-driven analysis
7. **Customizable** - provide an option for a more customized digital experience
8. **Mobile-friendly** - be functional and usable on mobile devices

See [Appendix B](#) for detailed definitions.

B. Inventory DOI Websites

The DOI Web Council maintains the [Inventory of DOI Websites](#). Bureaus and offices should begin to compile an inventory of internal websites. Each bureau or office is responsible for inventorying all external and internal websites. The Web Council Chair will contact bureaus and offices periodically to update the inventory of external and internal websites. See [Appendix C](#) for more detail.

C. Prioritize and Evaluate Websites

Each bureau or office is responsible for evaluating their existing websites against modernization criteria and prioritizing them for compliance according to the following suggested, tiered guidelines for evaluation and prioritization:

1. compliance with IDEA modernization criteria
2. designation as High Impact Service Providers as per [A11-280](#)
3. traffic (i.e., website usage)
4. bureau or office strategic priorities around services
5. resource and budget availability to bring each website up to compliance

D. How to Modernize Websites

Recommended Actions

Perform the following actions on all internal- and external-facing websites according to bureau or office prioritization based on the eight modernization criteria listed in section A above and described here.

1. Accessible
 - a. Evaluate all existing websites and content using [automated and manual testing methods](#) to determine compliance with IDEA accessibility requirements.
 - b. Incorporate accessibility throughout the planning, design, development, testing, and remediation phases when creating a website or conducting a redesign of an existing website. Recommended actions:
 - 1) Ensure that accessibility needs are addressed in website development project planning.
 - a) Consider accessibility needs in investment management and enterprise architecture decisions.
 - b) Allocate funding and time in project schedules to address accessibility assurance activities.
 - 2) Ensure that accessibility needs are addressed during requirements gathering, design and development when creating a website, or redesigning an existing website. Recommended actions:
 - a) Identify applicable Section 508 accessibility standards for features of websites and electronic content.
 - b) Use the [Guide to Accessible Web Design and Development](#) and the [Web Content Accessibility Guidelines 2.0 checklist](#) to identify applicable accessibility standards for websites.
 - c) Incorporate a Section 508 conformance assessment into the determination of each development checkpoint; otherwise, accessibility barriers may be missed and compound over time.
 - d) Include IT accessibility subject matter experts as decision makers at critical development checkpoints.
 - 3) Conduct Section 508 testing of websites and electronic content and resolve accessibility issues. Recommended actions:
 - a) Identify federal employees and/or contractors to perform testing.

- b) Utilize the testing methods endorsed by the [CIO Council Accessibility Community of Practice for web, software and electronic documents](#), and ensure testers are [DHS Trusted Tester certified](#).
 - c) Use automated testing tools and hands-on testing utilizing a repeatable, systematic testing methodology, such as the [DHS Trusted Tester Process](#), to validate full conformance of websites and electronic content to Section 508 accessibility standards. Note: the DHS Trusted Tester process is currently being used by DOI offices and a few DOI employees are certified as “Trusted Testers”.
- c. Offer annual Section 508 awareness training for DOI staff, and role-based Section 508 training courses targeted for:
- 1) developers and electronic content authors (how to develop accessible websites, recorded videos, electronic forms, and documents)
 - 2) testers (how to test for Section 508 conformance)
2. Consistent
- a. Ensure bureau and office websites have a consistent appearance by setting a bureau and office standard format for web site and web services.
 - b. Recommend implementing the [US Web Design System \(USWDS\)](#), and adopt US Web Design System principles, guidance, and code [incrementally](#).
 - c. Prioritize and adopt by starting to implement USWDS [design principles](#) in bureau and office projects.

Bureaus and offices can use the USWDS maturity model to build a solution that best meets their missions and users’ needs.

3. Authoritative
- a. Ensure content is not duplicated on multiple websites.
 - b. Consolidate multiple websites that have the same purpose or content into a single website. (This will require a high level of collaboration amongst multiple website owners.)
 - c. Set up redirects when removing redundant content or updating uniform resource locators (URLs).
 - d. Always use a .gov web address; incorporate partnerships into existing government websites rather than under a .org domain.
 - e. Implement the [USA banner from USWDS](#), which explains to users how to recognize official websites.
4. Searchable
- a. Ensure the site search function is quick and easy to find.
 - b. Ensure that the search results are relevant.
 - c. Allow users to search specific content types (e.g., multimedia, news articles, forms).
 - d. Allow users to filter the results.
 - e. Promote content associated with common queries.

- f. Generate a sitemap for search engines to easily index and return content in search results.
5. Secure
- a. Ensure all publicly hosted cloud services are approved by the Associate Chief Information Officer and registered with the [DOI Cloud Program](#).
 - b. Ensure all traffic is transmitted over a secure connection.
 - c. Do not [collect](#) or [store](#) any information from the user without proper authorization.
 - d. Host all cloud applications and databases in a Federal Risk and Authorization Management Program (FEDRAMP) certified platform.
 - e. Ensure Cloud First approach to Hosting—the resulting website and hosting infrastructure shall be in the cloud. Exceptions may be required.
6. User-Centered
- a. Consider qualitative and quantitative data obtained from across the agency relating to customer experience and satisfaction.
 - b. Consider the entire internal and external DOI customer base, understand their requirements, create a solution that is inclusive of their needs, and adapt to their future requirements.
 - c. Consider using a customer-centered design process which is an iterative cycle (i.e., each step is evaluated against the customer requirements until these requirements are met).
 - d. Consider following the user-centered design process outlined in the [US Digital Service Playbook](#). See also section V, Improve Digital Customer Experience, of this guidance for more information.
 - e. Prioritize audiences based on the Department's overall digital strategy so that focused time and resources are efficient and coordinated throughout the agency.
7. Customizable
- a. Evaluate opportunities to customize the experience for users where opportunities are appropriate and tied to the Department's overall digital strategy.
 - b. Provide the ability to create an account and save information to prevent the need to continually resubmit the same information if it makes sense for the application.
 - c. Provide a way for users to request to delete saved information.
 - d. Do not overwrite the user's browser or system settings, especially accessibility settings.
 - e. Allow users to manipulate the data in custom ways to meet their needs for open data.
8. Mobile-Friendly
- a. Ensure compliance with [44 USC 3559: Federal websites required to be mobile friendly](#).
 - b. Use responsive design techniques rather than separate mobile and desktop sites.

- c. Allow the user to complete all the same actions on mobile sites that they can complete on desktop sites.
- d. Ensure all click targets are at large enough for the average finger.
- e. Understand how performance impacts the user experience on mobile devices.
 - 1) Ensure content will load on slow and/or unreliable mobile networks.
 - 2) Be respectful of users with limited mobile data plans.

In addition to implementation of the above eight actions, IDEA also states, to best enable future transitions to centralized shared services, coordinate with other agencies and seek to maintain as much standardization and commonality with those agencies as practicable in implementing the requirements of this Act.

E. Roles and Responsibilities

The OCO chairs the DOI Web Council (Council) whose mission is to coordinate web site development across the Department. The Council consists of representatives with some form of webmaster responsibilities from each DOI bureau and office. The Web Council should coordinate web modernization efforts with content authors who contribute to their sites.

The Council may coordinate the following responsibilities:

1. Evaluate existing DOI website inventory to determine scope of projects.
2. Evaluate websites against the eight modernization criteria listed in section D above.
3. Prioritize websites for bringing them into compliance based on how often each website is used.
4. Incorporate website modernization into budgets. Consider allotting full-time or part-time positions for website modernization (Modernization could take many years depending upon scope of departmental web assets).
5. Provide a schedule for bringing all websites into compliance.
6. Ensure new content is compliant with the above eight modernization criteria before publishing to DOI websites.
7. Maintain the website inventory on an ongoing basis.
8. Ensure that accessibility needs are integrated throughout the planning, design, development, testing and remediation phases when creating a website or conducting a redesign of an existing website.
9. Bureau/Office Section 508 Coordinators should collaborate with the Departmental Section 508 Program Team to develop annual Section 508 awareness training and role-based Section 508 training courses offered to program leads and their staff. Note: OMB policy states agency Chief Information Officers (CIO) should designate a Section 508 Coordinator and DOI's 375 Departmental Manual 8 (section 8.7 C and D) requires bureaus and offices to designate a Section 508 Coordinator to support DOI's Section 508 Program . (See [Appendix F](#) for references.)
10. Collaborate with the Department or Bureau/Office Forms Manager and Information Collection Clearance Officers if a website is to have a web-based form (e.g., contact us form). This collaboration is necessary to ensure that the information being collected, especially from the public, is compliant with the Paperwork Reduction Act. In addition, the collaboration will engage Privacy, CUI, Section 508, and records management accordingly.

F. Schedule

1. Website inventory evaluation, prioritization, and schedule will be completed within one year of the issuance of this guidance.
2. Modernization compliance activities should be conducted on an ongoing basis.
3. Section 508 awareness training occurs annually, and role-based Section 508 training courses are scheduled through DOI Talent and occur monthly as available.
4. Each bureau or office should consider budget for web site modernization in accordance with OMB guidance beginning in Fiscal Year 2022 (FY22).

Web Site Modernization Recommended Roles and Responsibilities and Schedule

| Role | Responsibility | Schedule |
|---------------------------------|--|--|
| Web Council | Evaluate and maintain website inventory. Inventory of DOI Websites (internal and external) | Completed by 1 year after issuance of guidance |
| Web Council | Prioritize websites for bringing them into compliance. Modernize websites and digital services. Coordinate with Bureau or Office Forms Mangers and Privacy, CUI, Section 508, and records manager if necessary | Ongoing |
| CIO, Bureaus and Offices | Incorporate website modernization into budgets as able. | Beginning FY22 |
| Section 508 Program Coordinator | Schedule and host Section 508 training. | Annually |

III. Digitize Services and Forms

A. Define Services, Forms, and Digitization

The IDEA requires that forms and services shall, to the greatest extent practicable, be made available to the public in a digital format. Non-digitizable forms and services must be documented with a justification and/or solution. Forms and services should also be made available in a non-digital format such that individuals without the ability to use digital services are not deprived of or impeded in access to those digital forms and services. Physical forms that are Federal Records should be digitized.

1. Service Definition

A “[service](#)” is defined as the sum of the help provided—by an agency and its partners—throughout the process a customer goes through to obtain, receive, or make use of a public offering (or comply with a policy).

2. Form Definition

A “form” is defined as any arrangement of data fields with space for filling in data in a pre-determined format designed to collect systematically and repetitively, store, extract, and/or transmit the prescribed data, regardless of the medium. For more information on the categories of forms see [DM 387 Chapter 1: Policy and Guidance for Creating, Using, and Maintaining Forms](#).

3. Digitization Definition

Digitization is the activity of reproducing physical records digitally (i.e., scanning a physical document into a Portable Document Format (PDF) A format so it is text searchable) with the goal of disposing the original source records—designating the digitized version as the recordkeeping copy (36 CFR 1236.30).

B. Inventory Services and Forms

1. Forms

The Department and its bureaus and offices should create and maintain an inventory of all internal and external official forms. It is recommended to include the following information about each form:

- name of form;
- form number (if available);
- format of form (pdf, web, paper, etc.);
- OMB control number (if public-facing);
- whether or not the form meets Section 508 accessibility standards; and
- form owner/point of contact (if available) and/or responsible program office.

Consider consulting with the Bureau/Office Forms Manager, program leads, form owners, upper management, Information Collection Clearance Officer(s), and Department Forms Manager to create the inventory. The Department Information Collection Clearance Officer maintains an inventory of public facing forms with OMB approval. Consider expanding on the existing inventory to include all forms. Refer to following sections for roles and responsibilities and schedule to complete and to maintain including location of inventory.

2. Services

The Department and its bureaus and offices should create and maintain an inventory of non-digitized services. It is recommended to include the following information about each service:

- name or description of service;
- service format (e.g., paper-based, in-person, over the phone, non-digital);
- any forms associated with the service;
- service owner/contact; and
- distinguish whether the service is provided by a high-impact service provider.

C. Prioritize and Evaluate Digital Services and Forms

Bureau and Office Forms Managers should consider conducting the following analysis to evaluate and prioritize digital services and forms:

1. Identify paper-based forms or services for digitization.
2. Will digitizing this service or form:
 - a. decrease the cost of providing the service?
 - b. improve the customer experience?
 - c. increase digital conversion rates?
2. Use data-driven decision making and target high impact services. What form or service is used the most?
3. Evaluate level of effort to digitize the service or form.
4. Evaluate the inventory of services to determine the possibility/feasibility of digitizing that service. If a service cannot be made available in a digital format provide:
 - a. the title of the in-person government service, form, or paper-based process;
 - b. a description of the in-person government service, form, or paper-based process;
 - c. each unit responsible for the in-person government service, form, or paper-based process and the location of each unit in the organizational hierarchy of the executive agency;
 - d. any reasons why the in-person government service, form, or paper-based process cannot be made available under this section; and
 - e. any potential solutions that could allow the in-person government service, form, or paper-based process to be made available under this section, including the implementation of existing technologies, procedural changes, regulatory changes, and legislative changes.
 - f. To the greatest extent practicable, estimate cost to digitize the service or form. For the digitization of forms, consult with the Bureau/Office Forms Manager to estimate the cost of digitizing a paper-based form.

D. How to Digitize Services and Forms

Recommended Actions:

1. Work with Bureau/Office Forms Manager for guidance on the digitization of forms.
2. Consider the use of shared services or an existing platform to digitize a service. Consider the standardization guidance in this document provided in section VI.
3. Consider documenting the customer service experience.
4. Digitize paper-based forms by working with Bureau/Office Forms Manager and form owners. Forms should be designed to bureau and office and [department forms standards](#).
5. Create new forms in a digital format while ensuring all forms and services available in a non-digital format such that individuals without the ability to use digital services are not deprived of or impeded in access to those digital services.
6. The doi.gov/efrms website was updated 08/31/2021 and all DI OMB-controlled forms will be made available on it; in addition, direct links to bureaus/offices external, citizen-facing forms websites will be added, as applicable. All internal DI forms are available in the "Official Files for Production" folder on the Departmental

Forms Managers SharePoint site. There are varying levels of "forms" and only those that are official need to be centralized and separated (i.e., internal vs. external).

E. Roles and Responsibilities

1. Department Forms Manager - Maintain inventory of all forms. Work with program lead to make recommendations to Bureau and Office Associate Chief Information Officers (ACIOs) identifying responsible parties to collect and maintain an inventory of both digitized and non-digitized services. At the request of a bureau/office, supply any existing inventory of departmental forms if available.
2. Program Leads - Ensure that all forms related to their program are made available in a digital format by working with the Bureau/Office Forms Manager. To assist in the creation of building a forms inventory, program leads should communicate any known forms to the [Departmental Forms Manager Team/Forms Contacts](#). Maintain an inventory of non-digitized services related to their program. Assist with the evaluation of non-digitized services.
3. Bureau/Office Forms Manager - Create and maintain a collective inventory of forms by collaborating with program leads. Identify internal forms for digitization. Ensure any new forms created are made available in a digital format. Coordinate with the Department Forms Manager and Bureau or Office ACIO for recommendations on non-digitized services.

F. Schedule

1. Create initial inventories of forms within 180 days of issuance of this guidance.
2. Create an initial inventory of currently digitized services and complete inventories of non-digitized services within 180 days of issuance of this guidance.
3. Maintain and review inventories on an ongoing basis.
4. Convert paper-based forms to a digital format within one year of the issuance of this guidance. (The 21st Century IDEA deadline for paper-based forms to be made digital has passed as of December 20, 2020.)
5. Conduct the digitization of forms and services on an ongoing basis.

Digitize Services and Forms Recommended Roles and Responsibilities and Schedule

| Role | Responsibility | Schedule |
|---|---|---|
| Department Forms Manager | <p>Maintain inventory of all forms.</p> <p>At the request of a bureau/office, supply any existing inventory of all departmental forms if available.</p> | <p>Within 180 days of issuance of this guidance.</p> <p>Maintenance ongoing</p> <p>Upon request/Ongoing</p> |
| Program Leads with support from Bureau or Office Forms Managers | Ensure that all forms related to their program are made available in a digital format by working with the Bureau/Office Forms Manager. Assist | Convert paper-based forms to digital format within 1 year of issuance of this |

| Role | Responsibility | Schedule |
|--------------------------------|---|--|
| | with the evaluation of non-digitized services. | guidance. Maintenance ongoing |
| Bureau or Office Forms Manager | Create and maintain a collective inventory of forms by collaborating with Program Leads. Identify internal forms for digitization. Ensure any new forms created are made available in a digital format. | Within 180 days of issuance of this guidance. Maintenance ongoing |

IV. Accelerate Use of Digital and Electronic Signatures

A. Definition of Electronic and Digital Signatures

1. An electronic signature is an electronic sound, symbol, or process attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record.
2. A digital signature is a type of electronic signature. A digital signature is the highest level of assurance you can provide because it provides two-factor authentication—a personal identity verification (PIV) card and personal identification number (PIN) code. Digital signatures are best used for such things as financial or legal commitments or contracts. A digital signature is also the most readily available mechanism for DOI employees to adopt.
3. Alternative Digital Signature Standards and Methods are permissible in accordance with [OCIO Directive 2020-003 Digital Signature Policy](#). If current defined and accepted methods approved for use by the DOI are not useable or acceptable in certain cases (i.e., by the public), DOI personnel may request approval for alternative digital signature standards and methods according to the Recommended Actions listed in section C below.

B. Inventory and Prioritized Remaining documents Requiring Digital Signatures

While there is no DOI-wide inventory of digitized memorandums and other signed documents, it is recommended that an organization adopt the use of the [OCIO Directive 2020-003 Digital Signature Policy](#) for memorandums, forms, and other documents. Some examples include DI Forms, bureau forms, 7600A/B Agreement Forms, DOI Inter/Intra-Agency Agreement (IAA).

C. How to Adopt Digital Signatures

Recommended Actions

1. Review [OCIO Memo RMP-2020 01: Digital Signature Usage in Records dated June 11, 2021](#) as follow up to [OCIO Directive 2020-003 Digital Signature Policy](#).
2. Identify responsible parties within the bureau or office (e.g., Records Managers, Chiefs of Staff, Forms Managers) to conduct surveys or inventories across the organization to query—“Has your bureau or office adopted the use of OCIO Directive 2020-003?”

3. Provide written training and contact name for any questions. Consider utilizing Attachment 2 “How to Add a Digital Signature Field to a Portable Document Format (PDF) File” from the [OCIO Directive 2020-003 Digital Signature Policy](#)
4. Set and track electronic signature adoption targets.
5. For alternative digital signature standards and methods, the requesting official must complete a risk assessment with their Bureau or Office ACIO, or their designee, to determine the appropriate identity assurance level (IAL). This risk assessment will assist in determining the appropriate alternative methodology to use with external parties that do not have a DOI Access Card, (e.g., the public). The Office of the Solicitor must approve all alternative standards. The process for completing a risk assessment to utilize other digital signature technologies is:
 - a. Using [Appendix D](#) of this Implementation Guidance - Table 1 Category of Transactions (to be used for electronic signature) evaluate the category of transaction you intend to conduct based on the electronic signature.
 - b. If the evaluation requires either non-repudiation of the signature, or authenticity of the document, and the signers do not have a government issued PIV card to apply a digital signature, then a different technology can be selected.
 - c. Contact the ACIO to determine if the bureau or office already has approved digital signature technologies beyond the government-issued PIV card and if those technologies can be used.
 - d. If the current technologies are not acceptable, then the ACIO and staff will assist with completing the risk assessment with the OCIO and the Office of the Solicitor to meet the bureau or office specific needs.
6. In the DOI Adobe Enterprise Term Licensing Agreement (ETLA) Ordering Guide, Adobe Sign is now available, which would allow citizens to electronically sign documents; however, governance needs to be defined on when and how to use Adobe Sign in compliance with all laws, regulations, and policies. Ensuring the risk assessment to determine the appropriate level of assurance needed and workflow that would confirm the person's identity prior to applying an electronic signature. The Departmental Forms Managers Team is working on developing governance on using Adobe Sign for forms, especially since most external, citizen-facing forms are already in a PDF format. Using Adobe Experience Manager and Adobe Sign would be the preferred forms software for citizen-facing, OMB-controlled forms.

D. Roles and Responsibilities

1. OCIO/ACIO - Authorize the use of alternative methods to PIV digital signature usage that meet all laws, regulations, and legal requirements where adoption of the [OCIO Directive 2020-003 Digital Signature Policy is unattainable](#).
2. Administrative Staff - When finalizing documents, add date stamp and digital signature fields after converting the document to pdf and test/remediate for Section 508 compliance (i.e., manually tag the date stamp and digital signature form fields, check the correct reading order).
3. Departmental Staff - Ensure the document is Section 508 compliant and adopt PIV digital signatures unless an alternative is authorized by the ACIO/CIO. According to OCIO Directive 2020-003, to get authorization for an alternative to digital signatures, staff:

- a. Must complete a risk assessment and collaborate with the appropriate offices and staff (e.g., Responsible Records Officer, Privacy Officer, Office of the Solicitor) to determine the appropriate electronic/digital signature needed based on the identity assurance level for the document.
- b. Must obtain prior approval or concurrence by non-federal government organizations or individuals for use of digital signatures instead of a wet-ink, handwritten signature.
- c. Must obtain Office of the Solicitor and ACIO approval for alternative methods to PIV digital signature usage prior to use or implementation.
- d. Identified responsible parties within bureau or office (e.g., Records Manager, Forms Managers, Chiefs of Staff) - query and track adoption of digital memorandums and other documents both public facing and within the Department.

E. Schedule

1. Poll organizations on adoption and offer training materials within one year of issuance (by June 2022) of [OCIO Memo RMP-2020-01: Digital Signature Usage in Records](#).
2. Continue conducting polls and offering annual training as needed to ensure adoption of electronic and digital signature policy.

**Accelerate Use of Digital and Electronic Signatures
Recommended Roles and Responsibilities and Schedule**

| Role | Responsibility | Schedule |
|---|---|--|
| OCIO/Bureau and Office ACIOs | Authorize the use of alternative methods to PIV digital signatures that meet all laws, regulations, and legal requirements. | In accordance with Digital Signature Usage in Records RMP-2020-01 |
| Administrative staff | When finalizing documents, apply date stamp and digital or electronic signature field. | Ongoing |
| All Employees | Adopt PIV digital signatures unless alternative authorized by ACIO/CIO. | In accordance with Digital Signature Usage in Records RMP-2020-01 |
| Bureau and Office Forms Managers, Records Managers, Chiefs of Staff, etc. | Query and track adoption of digital memorandums and other documents both public facing and within the Department. | Within one year of issuance (by June 2022) of Digital Signature Usage in Records RMP-2020-01 and ongoing |

V. Improve Digital Customer Experience

A. Define Customer Experience

The IDEA states that agencies should ensure digital products are designed around user or customer needs and continually test the website, web-based form, web-based application, or digital service to ensure that they address customer needs and improve customer experience. Gathering requirements from customers and using a customer centered approach will require defining and prioritizing customers. DOI's customer base is large; therefore, a thoughtful approach will be required. The IDEA states that priority should be placed on web and digital services most viewed or utilized by the public or are otherwise important for public engagement. This may include High Impact Service Providers, those federal entities designated by the OMB to have high-impact, customer-facing service and required to implement the guidance in OMB Circular A-11, section 280.10–208.13. Within the Department this includes the National Park Service and the U.S. Fish and Wildlife Service.

Customer experience (CX) refers to a combination of factors that result from touchpoints between an individual, business, or organization and the Federal Government over the duration of an interaction and relationship. The following more detailed definitions are adapted from government-wide guidance, [OMB Circular A-11, Section 280 Managing Customer Experience and Improving Service Delivery](#) and [Digital.gov CX Toolkit](#).

1. **Customer Experience (CX):** a combination of factors that result from touchpoints between an individual, business, or organization and the Federal Government over the duration of an interaction and relationship. These factors can include ease/simplicity, efficiency/speed, and equity/transparency of the process, effectiveness/perceived value of the service itself, and the interaction with any employees. Like their application in the private sector, these factors can drive the overall satisfaction, engagement, advocacy, confidence and trust with the program, agency, and the government at large.
2. **Digital External Customers:** individuals, businesses, and organizations (e.g., grantees, public lands visitors, state and municipal agencies) who interact with agencies and programs through one or many digital services. These include websites, social-media, third-party applications (e.g., mapping, tracking, monitoring), and more.
3. **Digital Internal Customers:** employees and their experience with the myriad of internal digital platforms that span email and collaboration platforms such as FBMS, grants.gov, Bison Connect, DOI Talent, Concur and a whole host of Platform as a Service products and customer software applications used across the Department.

B. Customer-Centered Digital Service Delivery

Bureaus and offices should consider developing a digital service delivery strategy that will identify and prioritize high return on investment CX improvements. It is recommended that bureau and office strategies be informed by an initial inventory and audit of existing and potential digital services. This audit may identify what matters most to internal and external customers, assess usability and satisfaction with current services. [Digital.gov CX Toolkit](#) outlines a best practice and can help guide bureaus and offices in the development of their

strategy. Each bureau's and office's strategy may consider addressing the following core CX elements:

- on-going measurement
- governance and strategy
- culture and organization
- customer understanding and service design and improvement, defined by [OMB Circular A-11, Section 280.6 How should agencies manage CX?](#)
- prioritization

The strategy may be evaluated at least every other year to ensure bureaus and offices are continually making improvements to digital service delivery and ensuring end user experience satisfaction. To evaluate the strategy, on-going CX measurement may be incorporated into appropriate internal and external digital services.

As part of the measurement portion of the Digital Service Delivery Strategy, each bureau and office should consider identifying and prioritizing CX improvements through a comprehensive assessment of digital services offered to internal and external customers. This assessment should identify what matters most to internal and external customers, assess usability of current digital services, and prioritize improvements to highest impact digital services within the bureau or office. Once improvements have been identified, a Customer User-Centered Design approach should be used to systematically improve prioritized digital services. This approach includes analysis, design, usability testing, and validation to capture and adapt to customer needs and behaviors to monitor success and continually make improvements to meet both external and internal customer needs.

C. How to Measure Customer Experience

Recommended Actions

As stated above, the IDEA states that we should ensure our digital products are designed around user needs. This should be done with data-driven analysis influencing management and development decisions, using qualitative and quantitative data to determine user goals, needs, and behaviors, and continually test the website, web-based form, web-based application, or digital service to ensure that we address customer needs and improve customer experience. How this is done for a product depends on the goals of the product. General actions to consider for measuring customer experience include:

- a. Review resources such as the [How to Build and Analytics Strategy](#) guide and [Web Analytics Playbook](#) on [Digital.gov](#) which provide processes for defining the product's mission, goals, and Key Performance Indicators (KPIs).
- b. Consider using advisory boards that draw expertise from multiple subject matter experts with digital platform, CX/service delivery, and policy and acquisition expertise. An advisory board can facilitate collaboration, avoid redundancy, and ensure the delivery of customer-centered digital services. Advisory boards may be formed as budgets and resources allow.
- c. Measure success in achieving product goals using various web analytic, application analytic and social media analytic tools and surveys. Fortunately, there are many

quantitative and qualitative tools available to gauge the effect of the product and ongoing improvements (See [Appendix E](#)).

D. Roles and Responsibilities

The table below includes itemized list of recommended roles and responsibilities for Bureau and Office ACIOs, Bureau and Office Customer Service Leads, and bureaus identified as High Impact Service Providers.

E. Schedule

The table below includes a recommended schedule to implement the responsibilities.

**Improve Digital Customer Experience
Recommended Roles and Responsibilities and Schedule**

| Roles | Responsibilities | Schedule |
|--|--|-------------|
| CIO, Bureau and Office ACIOs | Budget as able for CX improvement, enactment of digital service strategy and interagency coordination. Coordinate with Bureau and Office CX Leads. | Annually |
| Bureau and Office CX Lead | Participate and/or assist in the development and implementation of bureau and office Digital Service Delivery Strategy that improves CX beginning with an inventory of customer digital experience input. Measure success in achieving product goals | Bi-annually |
| Bureau and Office CX Lead | Join or create an advisory board to facilitate collaboration, avoid redundancy, and ensure the delivery of customer-centered digital services. | Quarterly |
| Bureaus identified as High Impact Service Providers (HISP) (FWS and NPS) | Meet OMB Circular A-11 Section 280 requirements for High Impact Service Providers. | Ongoing |
| All Employees | Ensure the best CX and services by providing responses to customer experience queries in a timely manner. | Ongoing |

VI. Standardization and Transition to Centralized Shared Services

A. Definition

Centralized Shared services is a term defining an operational philosophy that involves centralizing certain services or functions of an organization that were once performed in separate divisions or locations. Services that can be shared among the various business units of a business may include administration, finance, purchasing, inventory, payroll, hiring, and information technology. The term "shared services" can also apply to partnerships formed between separate business or business lines with similar business processes or service needs. Finally, shared services are also available on the internet. An example of this form of shared services is Application Service Providers (ASPs) who offer numerous business clients access to online applications so they can avoid purchasing special systems and software.

B. Inventory Shared Services

Bureaus and offices should maintain and periodically provide the OCIO with an updated catalog of tools and services for which respective agencies demonstrate the ability to provide shared services opportunities. The catalog should include a list of services and tools with an explanation of what they do and an indication as to which ones might be suitable for a shared service. This facilitates the ability of the OCIO to coordinate implementation of the Act as required by law. Shared services should be classified by current scope of use as follows:

1. Bureau Specific

Shared service models demonstrating shared service or tools used to provide bureau-specific shared services that may be adaptable to others for their use (e.g., FWS ePermits, FWS MySupport).

2. Cross-Bureau Specific

Shared service models or tools utilized specifically to collaborate and share services with another bureau or office or multiple bureaus and offices but have not been adopted Department wide (e.g., Recreation.gov).

3. Departmental

Shared service models or tools maintained by a specified bureau, or the Department for use by all bureaus and offices to conduct specific business practices (e.g., Bison Connect, DOI Talent, DTS, MyAccount, FBMS, Bison Support System (BSS), DOI IT Storefront, ArcGIS Survey 123).

4. Government

Shared services may be adopted across the government (e.g., search.gov, api.data.gov, digital analytics programs, Touchpoints).

Shared services that traverse the DOI network will be adopted with approval from the Bureau or Office ACIO and the Information Management Technology Leadership Team (IMTLT) in accordance with the IMTLT Governance Charter Issued October 1, 2020. Bureau or office staff who host the shared service will oversee the day to day use of shared services.

C. Prioritize and Evaluate Shared Services

An inventory of existing shared services should be developed and prioritized. The OCIO has a list for [IT Enterprise Solutions Catalog Management](#). Other organizations within DOI may also maintain a list of shared services or catalogs. The DOI Web Council and other DOI Shared Service providers can assist in developing the inventory.

Prioritization may be given to those systems or services utilized by three or more bureaus and offices and those that save the most money for the Department. While developing the catalog of services, bureaus and offices should provide a best effort calculation of the cost per completed transaction in the shared service environment. The calculation may be holistic, encompassing all personnel assigned to a specific set of tasks, or broken down to specific task groups and based on cost per task completed. The method utilized and assumptions should be included for near equivalent comparison as possible. In addition to cost, bureaus and offices should develop Service Level Agreements (SLA), Operational Level Agreements (OLAs), Maturity Model Factors and KPIs that outline the processes utilized for the shared service tools.

D. How to Standardize and Transition to Centralized Shared Services

Recommended Actions

1. Publish and maintain a catalog of existing shared websites/services within the Department.
2. Consider creating an updated catalog that includes a list of services for which bureaus and offices demonstrate the ability or capacity to standardize and share.
3. The IMTLT may review the list to determine the participation benefits of standardized consolidated shared services.
4. For those services deemed appropriate to share across the Department, the IMTLT should consider developing a path forward to create the new shared services [e.g., including issuing a memorandum of understanding (MOU) to effectively maintain service relationships and support].

E. Roles and Responsibilities

The aim of any standardized, shared service is to create reliable processes that yield predictable results at a predictable cost. The following lays out suggested roles and responsibilities to create shared services:

1. The OCIO and IMTLT - create and maintain a shared service catalog.
2. Bureau and Office ACIOs or their delegates - develop and review a catalog of services and determine if Shared Service models or platforms should be pursued to improve services.
3. The OCIO and IMTLT - review and determine the ability to adopt new shared services or standardization of operation and maintenance of any Department-wide shared services, especially for those systems utilized by three or more bureaus and offices. For those selected shared services, create MOUs to effectively maintain service relationships and support.
4. Bureaus and Offices - consider developing internal agency MOUs for shared services internal to bureaus and offices to effectively maintain service relationships and support.

F. Schedule

1. Within 180 days of the publication of this guidance, publish and maintain a catalog of existing shared websites/services within DOI.
2. Within 1 year of the publication of this guidance, create an expanded list of services that have the capability of being shared.
3. Adopt shared services on an ongoing basis

**Standardize and Transition to Centralized Shared Services
Recommended Roles and Responsibilities and Schedule**

| Roles | Responsibilities | Schedule |
|--|---|--|
| OCIO and IMTLT | Publish a catalog of existing shared websites/services within DOI. | Within 180 days of issuance of this guidance |
| Bureau and Office ACIOs or their delegates | Develop a catalog of services and determine if Shared Service models or platforms should be pursued | Annually |
| OCIO and IMTLT | Maintain a shared service catalog. For shared services, create MOUs to maintain service, relationship, and support. | Ongoing |

VII. Annual Reporting to OMB and the Public

A. Definition: What are the Requirements for the IDEA Annual Report?

Section 3(b)(2) of the Act requires the head of each executive agency that maintains a publicly available website or digital service to submit an annual report to the Director, OMB for five years following the publication of the Act which includes:

1. a list of websites or digital services maintained by the executive agency that are most viewed or utilized by the public or are otherwise important for public engagement;
2. a prioritization of the list of websites and digital services that require modernization to meet the requirements of Section 508 of the Rehabilitation Act of 1973 as amended;
3. an estimate of the cost and schedule of modernization for the websites and digital services prioritized; and
4. the status of website modernization activities.

Department efforts as of December 2020 include the following:

1. Two annual reports following the 2018 issuance of the Act. Both reports are listed on the DOI OCIO Portfolio Management website. [U.S. Department of the Interior / Office of the Chief Information Officer / Policy and Management / Portfolio Management \(doi.gov\)](https://www.doi.gov/ocio/PortfolioManagement).
2. A prioritized list of websites targeted for modernization reporting to OMB, including a funding profile, developed by all bureaus and offices.

B. How to Create a Report

Recommended Actions

1. Monitor the status of website modernization
 - a. Continue to assess and annually report the status of website modernization activities beginning with the prioritized sites.
 - b. As resources allow, continue to assess and report on all Department websites until all sites are modernized.
2. For each prioritized public website URL, gather data on the following items as per IDEA in preparation for the annual report using [21st Idea Act Report.xlsx](#):

| IDEA Section | IDEA Requirement |
|--------------|--|
| 3(a)(1) | Compliance with Section 508 of the Rehabilitation Act |
| 3(a)(2) | Consistent appearance |
| 3(a)(3) | Verification that the site is not duplicative and that legacy sites are eliminated |
| 3(a)(4) | Search function |
| 3(a)(5) | Secure connection |
| 3(a)(6) | User-focused design based on data-driven analysis (customer service) |
| 3(a)(7) | Customized and efficient digital experience |
| 3(a)(8) | Full mobile functionality |
| 3(b)(2)(A) | Modernization Priority Est. |
| 3(b)(2)(B) | Cost to modernize |
| 3(b)(2)(C) | Estimated costs and schedule for modernization |
| 3(e) | Compliant with GSA Technology Transformation Services website standards |

C. Roles and Responsibilities

1. The OCIO and OCO, with input from the DOI Web Council, will work collaboratively to collect annual reporting data and develop the annual report. The CIO will issue the annual report to the Director, OMB and post it on the DOI public website.
2. The OCO Web Council Chair will maintain a list of websites for modernization, annually review and update the points of contact for each website to conduct the data call, and work with an OCIO representative to review and analyze data.
3. An OCIO representative will coordinate with the Web Council Chair to send out the October data call and will work with OCO Web Council Chair to review and analyze data and create the website modernization report.
4. All programs and offices with website POCs or those holding contracts involved in website modernization should provide the modernization data according to the schedule provided below (e.g., communications offices, business offices, IT departments).
5. Bureau and Office ACIOs will review data gathered prior to submittal to the CIO.
6. The CIO will review and sign the DOI report to the Director, OMB.
7. The OCIO will work with the DOI public website administrators to post the report to DOI.gov.

D. Schedule (for gathering data and issuing report)

The following table lays out the major milestones and schedule to create and issue the reports.

**Annual Reporting to OMB and the Public
Recommended Roles and Responsibilities and Schedule**

| Roles | Responsibilities | Schedule |
|---|---|----------------------------------|
| OCIO and OCO with input from DOI Web Council | Work collaboratively to collect annual reporting data and develop the annual report (Data Call). | Annually (beginning October 1) |
| All programs, bureaus, and offices with website POCs or holding contracts involved in website modernization | Provide modernization data. | Annually in October |
| Bureau and Office ACIOs | Review data gathered prior to submittal to CIO. | Annually in November |
| CIO | Review and sign DOI 21st Century IDEA Report to OMB. | Annually (by December 20) |
| OCIO | Issue Annual Report to Director, OMB, and post on DOI.gov (public website). | Annually through 2025 (December) |
| OCO Web Council Chair | Maintain list of website modernization and review and annually update the POCs for each website to conduct the data call. Work with OCIO representative to review and analyze data. | Ongoing |

VIII. APPENDIX A: Summary of Recommended Roles and Responsibilities

| Service | Role | Responsibility | Schedule |
|-----------------------------|---|---|--|
| Modernize Website | Web Council | Evaluate and maintain website inventory. Inventory of DOI Websites (internal and external). | Completed by 1 year after issuance of guidance |
| Modernize Website | Web Council | Prioritize websites for bringing them into compliance. Modernize websites and digital services. Coordinate with Bureau or Office Forms Mangers and Privacy, CUI, Section 508, and records manager if necessary. | Ongoing |
| Modernize Website | Bureaus and Offices and OCIO | Incorporate website modernization into budgets as able. | Beginning FY22 |
| Modernize Website | Section 508 Program Coordinator | Schedule and host Section 508 training. | Annually |
| Digitize Services and Forms | Department Forms Manager | Maintain inventory of all forms. At the request of a bureau/office, supply any existing inventory of all agency forms if available. | Within 180 days of issuance of this guidance. Maintenance ongoing Upon request/Ongoing |
| Digitize Services and Forms | Program Leads with support from Bureau or Office Forms Managers | Ensure that all forms related to their program are made available in a digital format by working with the Bureau/Office Forms Manager. Assist with the evaluation of non-digitized services. | Convert paper-based forms to digital format within 1 year of issuance of this guidance. Maintenance ongoing |
| Digitize Services and Forms | Bureau or Office Forms Manager | Create and maintain a collective inventory of forms by collaborating with Program Leads. Identify internal forms for digitization. Ensure any new forms created are made available in a digital format. | Within 180 days of issuance of this guidance. Maintenance ongoing |

| Service | Role | Responsibility | Schedule |
|---|---|---|--|
| Accelerate Use of Digital and Electronic Signatures | OCIO/Bureau and Office ACIOs | Authorize the use of alternative methods to PIV digital signatures that meet all laws, regulations, and legal requirements. | In accordance with Digital Signature Usage in Records RMP-2020-01 |
| Accelerate Use of Digital and Electronic Signatures | Administrative Staff | When finalizing documents, apply date stamp and digital or electronic signature field. | Ongoing |
| Accelerate Use of Digital and Electronic Signatures | All Employees | Adopt PIV digital signatures unless alternative authorized by ACIO/CIO. | In accordance with Digital Signature Usage in Records RMP-2020-01 |
| Accelerate Use of Digital and Electronic Signatures | Bureau and Office Forms Managers, Records Managers, Chiefs of Staff, etc. | Query and track adoption of digital memorandums and other documents both public facing and within the Department. | Within one year of issuance (by June 2022) of Digital Signature Usage in Records RMP-2020-01 and ongoing |
| Improve Digital CX | Bureau and Office ACIO | Budget as able for CX improvement, enactment of digital service strategy and interagency coordination. Coordinate with Bureau and Office CX Leads. | Annually |
| Improve Digital CX | Bureau and Office CX Lead | Participate and/or assist in the development and implementation of bureau and office Digital Service Delivery Strategy that improves CX beginning with an inventory of customer digital experience input. | Bi-annually |
| Improve Digital CX | Bureau and Office CX Lead | Join or create an advisory board to facilitate collaboration, avoid redundancy, and ensure the delivery of customer-centered digital services. | Quarterly |
| Improve Digital CX | Bureaus identified as High Impact Service Providers (HISP) - FWS and NPS | Coordinate with ACIO to meet OMB Circular A-11 Section 280 requirements for High Impact Service Providers. | Ongoing |

| Service | Role | Responsibility | Schedule |
|---|---|---|--|
| Improve Digital CX | All Employees | Ensure the best CX and services by providing responses in a timely manner. | Ongoing |
| Standardize and Transition to Centralized Shared Services | OCIO and IMTLT | Publish a catalog of existing shared websites/services within DOI. | Within 180 days of issuance of this guidance |
| Standardize and Transition to Centralized Shared Services | Bureau and Office ACIOs or their delegates | Develop a catalog of services and determine if Shared Service models or platforms should be pursued | Annually |
| Standardize and Transition to Centralized Shared Services | OCIO and IMTLT | Maintain a shared service catalog. For shared services, create MOUs to maintain service, relationship, and support. | Ongoing |
| Annual Reporting to OMB and the Public | OCIO and OCO with input from DOI Web Council | Work collaboratively to collect annual reporting data and develop the annual report (Data Call). | Annually (beginning October 1) |
| Annual Reporting to OMB and the Public | All programs, bureaus, and offices with website POCs or holding contracts involved in website modernization | Provide modernization data. | Annually in October |
| Annual Reporting to OMB and the Public | Bureau and Office ACIOs | Review data gathered prior to submittal to CIO. | Annually in November |
| Annual Reporting to OMB and the Public | CIO | Review and sign DOI 21st Century IDEA Report to OMB. | Annually (by December 20) |
| Annual Reporting to OMB and the Public | OCIO | Issue Annual Report to Director, OMB, and post on DOI.gov (public website). | Annually through 2025 (December) |
| Annual Reporting to OMB and the Public | OCO Web Council Chair | Maintain list of website modernization and review and annually update the POCs for each website to conduct the data call. Work with OCIO representative to review and analyze data. | Ongoing |

IX. APPENDIX B: Definitions and Legal Requirements

Customer Experience (CX): a combination of factors that result from touchpoints between an individual, business, or organization and the Federal Government over the duration of an interaction and relationship. These factors can include ease/simplicity, efficiency/speed, and equity/transparency of the process, effectiveness/perceived value of the service itself, and the interaction with any employees. Like their application in the private sector, these factors can drive the overall satisfaction and confidence/trust with the program, agency, and the government at large.

Customer User-Centered Design: the iterative process by which to plan, design, monitor and improve digital CX. The process centers on customers' desired experiences, needs and satisfaction.

Digital External Customers: individuals, businesses, and organizations (e.g., grantees, public lands visitors, state and municipal agencies) that interact with agencies and programs through one or many digital services. These include websites, social-media, third-party applications (e.g., mapping, tracking, monitoring), and more.

Digital Internal Customer: employees and their experience with the myriad of internal digital platforms that span email and collaboration platforms such as FBMS, grants.gov, Bison Connect, DOI Talent, Concur and a whole host of Platform as a Service products and customer software applications used across the Department.

Digital Signature: provides authenticity protection, integrity protection, and non-repudiation, but not confidentiality protection as per National Institute of Standards and Technology (NIST) 800-63-3. A digital signature is the highest level of assurance you can provide because it provides two-factor authentication, a personal identity verification (PIV) card and PIN code. Digital signatures are best used for such things as financial or legal commitments or contracts. A digital signature is also the most readily available mechanism for DOI employees to adopt. A digital signature is a type of electronic signature.

Digitization: the activity of reproducing physical records digitally (i.e., scanning a physical document into a PDF A format so it is text searchable) with the goal of disposing the original source records and designating the digitized version as the recordkeeping copy (36 CFR 1236.30).

Electronic Signature: an electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record.

Form: any arrangement of data fields with space for filling in data in a pre-determined format designed to collect systematically and repetitively, store, extract, and/or transmit the prescribed data, regardless of the medium. For more information on the categories of forms see [DM 387 Chapter 1: Policy and Guidance for Creating, Using, and Maintaining Forms](#).

High-Impact Service Providers (HISP): those federal entities designated by the OMB who provide the highest impact customer-facing services, either due to a large customer base or a high impact on those served by the program. An HISP is one that interacts with the public to provide a transactional service or perform a regulatory function in which time, money, or information is used to receive a good, service, or authorization.

Section 508 Program: the 1998 amendment to the Rehabilitation Act of 1973 that requires federal agencies make their electronic and information technology accessible to people with disabilities.

Service: the sum of the help provided—by an agency and its partners—throughout the process a customer goes through to obtain, receive, or make use of a public offering (or comply with a policy). In this case, service is focused on DOI website and digital services.

Website Modernization Elements from IDEA

Public-facing websites and digital services should use the [U.S. Web Design System](#) and meet eight specific requirements defined below from the [Act](#). Additional definitions may be found at [Digital.gov](#):

1. **Accessible:** Any new or redesigned website, web-based form, web-based application, or digital service is accessible to individuals with disabilities in accordance with Section 508 of the Rehabilitation Act of 1973 as amended (29 U.S.C. 794d).
2. **Consistent:** Any new or redesigned website, web-based form, web-based application, or digital service has a consistent appearance.
3. **Authoritative:** Any new or redesigned website, web-based form, web-based application, or digital service does not overlap with or duplicate any legacy websites and, if applicable, ensure that legacy websites are regularly reviewed, eliminated, and consolidated.
4. **Searchable:** Any new or redesigned website, web-based form, web-based application, or digital service contains a search function that allows users to easily search content intended for public use.
5. **Secure:** Any new or redesigned website, web-based form, web-based application, or digital service is provided through an industry standard secure connection.
6. **User-Centered:** Any new or redesigned website, web-based form, web-based application, or digital service is designed around user needs with data-driven analysis influencing management and development decisions, using qualitative and quantitative data to determine user goals, needs, and behaviors, and continually test the website, web based form, web-based application, or digital service to ensure that user needs are addressed.
7. **Customizable:** Any new or redesigned website, web-based form, web-based application, or digital service provides users of the new or redesigned website, web based form, web-based application, or digital service with the option for a more customized digital experience that allows users to complete digital transactions in an efficient and accurate manner.
8. **Mobile-Friendly:** Any new or redesigned website, web-based form, web-based application, or digital service is fully functional and usable on common mobile devices.

X. APPENDIX C: Inventory of DOI External and Internal Websites

The DOI Web Council maintains a list of DOI websites along with the website contact person at [Inventory of DOI Websites](#) (internal and external). This list will be periodically updated to reflect new internal and external websites and remove those that have become obsolete.

See below for an abbreviated version.

| # | Bureau or Office | Domain Name |
|----|------------------|--------------------------------|
| 1 | BIA | BIA.GOV |
| 2 | BIA | INDIANAFFAIRS.GOV |
| 3 | BIA | NATIVEONESTOP.GOV |
| 4 | BLM | ABANDONEDMINES.GOV |
| 5 | BLM | BLM.GOV |
| 6 | BLM | FIRECODE.GOV |
| 7 | BLM | FIRELEADERSHIP.GOV |
| 8 | BLM | FIRENET.GOV |
| 9 | BLM | FIRESCIENCE.GOV |
| 10 | BLM | GEOCOMMUNICATOR.GOV |
| 11 | BLM | NIFC.GOV |
| 12 | BLM | PIEDRASBLANCAS.GOV |
| 13 | BLM | UTAHFIREINFO.GOV |
| 14 | BOEM | BOEM.GOV |
| 15 | BOEM | BOEMRE.GOV |
| 16 | BOEM | MARINE.GOV |
| 17 | BOR | BOR.GOV |
| 18 | BOR | CUPCAO.GOV |
| 19 | BOR | GCDAMP.GOV |
| 20 | BOR | LCRMSCP.GOV |
| 21 | BOR | MITIGATIONCOMMISSION.GOV |
| 22 | BOR | USBR.GOV |
| 23 | BSEE | BSEE.GOV |
| 24 | BSEE | MMS.GOV |
| 25 | FWS | ANSTASKFORCE.GOV |
| 26 | FWS | FWS.GOV |
| 27 | FWS | KLAMATHRESTORATION.GOV |
| 28 | FWS | WILDLIFEADAPTATIONSTRATEGY.GOV |
| 29 | FWS | YOUTHGO.GOV |
| 30 | NPS | ALASKACENTERS.GOV |
| 31 | NPS | NPS.GOV |
| 32 | NPS | RIVERS.GOV |
| 33 | NPS | SIERRAWILD.GOV |
| 34 | NPS | SNAP.GOV |
| 35 | NPS | VOLUNTEER.GOV |
| 36 | OS | DOI.GOV |
| 37 | OS | DOIOIG.GOV |
| 38 | OS | EVERGLADESRESTORATION.GOV |
| 39 | OS | FCG.GOV |
| 40 | OS | GEOPLATFORM.GOV |
| 41 | OS | IAT.GOV |
| 42 | OS | INTERIOR.GOV |
| 43 | OS | INVASIVESPECIES.GOV |

| # | Bureau or Office | Domain Name |
|----|------------------|------------------------------------|
| 44 | OS | NBC.GOV |
| 45 | OS | NFPORS.GOV |
| 46 | OS | ONHIR.GOV |
| 47 | OS | SAFECOM.GOV |
| 48 | OS/ONRR | ONRR.GOV |
| 49 | OS/ONRR | revenuedata.doi.gov |
| 50 | OS/ONRR | http://onrrreporting.onrr.gov/ |
| 51 | OS/ONRR | https://portal.onrr.gov/ |
| 52 | OS/ONRR | https://dwportal.onrr.gov/ |
| 53 | OS/ONRR | https://onrr-connection.onrr.gov/ |
| 54 | OS/ONRR | https://onrrresource/ |
| 55 | OS/ONRR | https://onrrresource/MRMSS/ |
| 56 | OS/ONRR | https://budgettracking.onrr.local/ |
| 57 | OS/ONRR | http://centralfiles.onrr.local/ |
| 58 | OS/ONRR | http://dirt.onrr.local/ |
| 59 | OS/ONRR | http://documentum.onrr.gov/ |
| 60 | OS/ONRR | https://dews.onrr.local/ |
| 61 | OS/ONRR | https://idea.onrr.gov/ |
| 62 | OS/ONRR | http://idp.onrr.local/ |
| 63 | OS/ONRR | https://onrrresource/data-admin/ |
| 64 | OS/ONRR | https://onrrresource/Data-Models/ |
| 65 | OS/ONRR | https://mrmssir.onrr.local/ |
| 66 | OS/ONRR | https://msa.onrr.local/ |
| 67 | OS/ONRR | http://exitclearance.onrr.local/ |
| 68 | OS/ONRR | https://rmstats.onrr.local/ |
| 69 | OS/ONRR | https://sat.onrr.local/ |
| 70 | OS/ONRR | https://vt.onrr.local/ |
| 71 | OSMRE | OSM.GOV |
| 72 | OSMRE | OSMRE.GOV |
| 73 | USGS | ACWI.GOV |
| 74 | USGS | BIOECO.GOV |
| 75 | USGS | CORALREEF.GOV |
| 76 | USGS | EARTHQUAKE.GOV |
| 77 | USGS | FGDC.GOV |
| 78 | USGS | GCMRC.GOV |
| 79 | USGS | GEOMAC.GOV |
| 80 | USGS | JEM.GOV |
| 81 | USGS | LACOAOST.GOV |
| 82 | USGS | LANDFIRE.GOV |
| 83 | USGS | LANDIMAGING.GOV |
| 84 | USGS | LCA.GOV |
| 85 | USGS | LMVSCI.GOV |
| 86 | USGS | MRLC.GOV |
| 87 | USGS | NATIONALMAP.GOV |
| 88 | USGS | NEMI.GOV |
| 89 | USGS | NOLAENVIRONMENTAL.GOV |
| 90 | USGS | REPORTBAND.GOV |
| 91 | USGS | SCIENCEBASE.GOV |
| 92 | USGS | USGS.GOV |
| 93 | USGS | VOLCANO.GOV |
| 94 | USGS | WATERMONITOR.GOV |
| 95 | USGS | WLCI.GOV |

XI. APPENDIX D: Table 1 Category of Transaction (to be used for electronic signatures)

The following table is taken from [OCIO Directive 2020-003 Digital Signature Policy, Attachment 1 – Frequently Asked Questions](#).

| Category | Relationship (Internal or External) | Transaction Value * | Minimum Level of Assurance and Security | Preferred Method of Assurance and Security |
|----------|--|--|---|--|
| 1 | Intra-agency (within the same federal agency) | Funds Transfer; Contracts w/Financial or Legal Liability; PII/CUI; and/or Legal Liability | Password Token (no digital signature required; but must log into and use an official government system to execute the transaction). (IAL 2) | PIV Card to authenticate to an official government system (however, no digital signature required). (IAL3) |
| 2 | Intra-agency (within the same federal agency) | No Funds Transfer; No Contracts w/Financial or Legal Liability; No | Self-asserted, and no security required. (IAL 1) | Self-asserted, and no security required. (IAL 1) |
| 3 | Inter-agency (between federal agencies) | Funds Transfer; Contracts w/Financial or Legal Liability; PII/CUI; and/or Legal Liability | Soft Token or Hard Token (digital signature required on the electronic document). (IAL 3) | Government-issued PIV card used to apply a digital signature to the electronic document. (IAL 3) |
| 4 | Inter-agency (between federal agencies) | No Funds Transfer; No Contracts w/Financial or Legal Liability; No PII/CUI; and No Legal Liability | Self-asserted, and no security required. (IAL 1) | Self-asserted, and no security required. (IAL 1) |
| 5 | DOI and state/local government agencies | Funds Transfer; Contracts w/Financial or Legal Liability; PII/CUI; and/or Legal Liability | Soft Token or Hard Token (digital signature required on the electronic document). (IAL 3) | No centralized technical solution identified. |
| 6 | DOI and state/local government agencies | No Funds Transfer; No Contracts w/Financial or Legal Liability; No PII/CUI; and No Legal Liability | Self-asserted, and no security required. (IAL 1) | Self-asserted, and no security required. (IAL 1) |
| 7 | DOI and private organizations (contractor, business, university, non-profit) | Funds Transfer; Contracts w/Financial or Legal Liability; PII/CUI; and/or Legal Liability | Soft Token or Hard Token (digital signature required on the electronic document). (IAL 3) | No centralized technical solution identified. |
| 8 | DOI and private organizations (contractor, business, university, non-profit) | No Funds Transfer; No Contracts w/Financial or Legal Liability; No PII/CUI; and No Legal Liability | Self-asserted, and no security required. (IAL 1) | Self-asserted, and no security required. (IAL 1) |
| 9 | DOI and member of the public | Funds Transfer; Contracts w/Financial or Legal Liability; | Soft Token or Hard Token (digital signature required on the | No centralized technical solution identified. |

| Category | Relationship (Internal or External) | Transaction Value * | Minimum Level of Assurance and Security | Preferred Method of Assurance and Security |
|----------|-------------------------------------|--|--|--|
| | | PII/CUI; and/or Legal Liability | electronic document). (IAL 3) | |
| 10 | DOI and member of the public | No Funds Transfer; No Contracts w/Financial or Legal Liability; No PII/CUI; and No Legal Liability | Self-asserted, and no security required. (IAL 1) | Self-asserted, and no security required. (IAL 1) |

**NOTE: Transactions that involve funds, contacts, legal liability, or PII are a higher Transaction Value. Transactions not involving these items are a lower Transaction Value.*

XII. APPENDIX E: Suggestions for Developing Successful Website Analytics Measures

Some useful resources for collecting customer experiences include:

Website Analytics – The [Digital Analytics Program](#) (DAP) offers a free web analytics tool (currently Google Analytics) for public-facing federal websites. The tool is powerful and provides industry-standard analytics including the ability to set and measure specific goals. The [OMB M-17-06](#) also requires that DAP code be applied to all public-facing federal websites. DAP analytics provide the common metrics described in *Part I – Web Performance Metrics of Digital Metrics for Federal Agencies* on [Digital.gov](#).

App Analytics – The DAP does not currently provide services for public-facing apps. However, it is possible to negotiate federal-friendly terms of service through the DOI Office of the Solicitor to use products, such as Google’s Firebase, which includes basic analytics as well as app crash data.

Social Media Analytics – Social media platforms all have at least basic analytics. Some products, such as Hootsuite, can provide aggregated analytics for social media accounts.

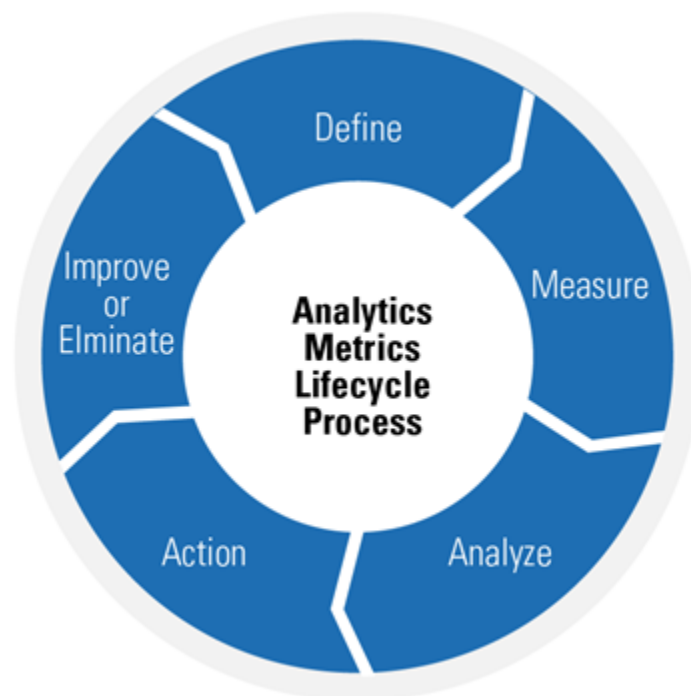
Customer Satisfaction Surveys – Whereas the above analytics options are particularly useful for quantitative data, customer satisfaction surveys can provide both quantitative and qualitative data. There are several providers who work with government entities to provide customer satisfaction surveys and work through the necessary OMB approval process. Examples include [CFI](#) and [Foresee](#), both of which provide industry standard Customer Satisfaction Index (CSI) scores that can help compare a product’s customer satisfaction to related entities in both government and the public sector. Such products also provide the common metrics described in *Part I – Customer Satisfaction Metrics of Digital Metrics for Federal Agencies* on [Digital.gov](#).

Other Surveys – For a product that requires targeted questions, [Touchpoints](#) is a GSA tool to create custom surveys for gathering customer feedback.

Functionality and Usability Testing – Functionality testing ensures the product is working as intended while usability testing can help identify any difficulties users may have using a product. Such testing can and should be performed **before launching a product** and **during that product’s life cycle** to make continuing improvements. [Functionality and usability testing resources](#) are available on [Digital.gov](#).

Suggestions for Developing Successful Website Analytics Measures

Analytics strategies (or plans) are derived from understanding, defining, measuring, and analyzing data as they relate to digital services and web assets. These plans measure audience reaction using analytics tools that collect data, enable analysis, yield reports, and support subsequent decision making and actions. The Analytics Metrics Lifecycle Process, shown below, allows for continued improvement of digital services and web assets from the pre-modernization phase to repeat revisions of products through time.



Federal minimum guidelines recommend using a set of common, baseline performance metrics across web dimensions. These dimensions include time, content, marketing, technology, and demographics from which we gain insights into occurrences, information sought, keywords utilized, devices used and audience characteristics. For more detailed information and assistance visit [Digital Metrics for Federal Agencies](#).

Analysts, developers, or content managers must develop the critical knowledge areas for understanding how the web analytics lifecycle, performance, and tools work. The following knowledge areas should be developed:

- begin to view the analytics process from a strategic business perspective
- understand stakeholders and web business objectives
- review the tools for capability to collect and deliver performance metrics
- build KPIs to support objectives performance
- understand analysis methods, correlation with objectives, and cross correlation with multiple tool collection results
- translate analysis findings into validated results and recommended site improvements, redesigns, and strategies

XIII. APPENDIX F: Additional Resources

1. [21st Century Integrated Digital Experience Act of 2018 \(IDEA, Act\)](#)
2. [21st Century Integrated Digital Experience Act – Digital.gov](#)
3. [Template Sample Website Modernization Report for Congress-21st Century IDEA](#) (Not required but offered by OMB as a possible template for annual reporting)
4. [44 USC 3559: Federal websites required to be mobile friendly](#)
5. [A11-280](#) (High-Impact Service Providers (HISP) - Federal entities designated by OMB that provide the highest impact customer-facing services, either due to a large customer base or a high impact on those served by the program)
6. [DM 387 Chapter 1: Policy and Guidance for Creating, Using, and Maintaining Forms](#)
7. [DOI Cloud Policy \(2018\)](#)
8. [OCIO Directive 2020-003 Digital Signature Policy](#)
9. [Records Management Digital Signature Policy RMP-2020-01](#)
10. [Section 508 of the Rehabilitation Act of 1973](#)
11. [IMTLT Governance Charter](#) issued October 1, 2020
12. <https://www.section508.gov>
13. <https://www.doi.gov/ocio/section508>
14. <https://accessibility.18f.gov/>
15. The [OMB Strategic Plan for Improving Management of Section 508 of the Rehabilitation Act, Appendix A](#) requires an agency's CIO to designate a Section 508 manager/coordinator. Also, [375 DM 8: Section 508 Program and Responsibilities](#) requires designation of a bureau/office Section 508 Coordinator to support DOI's Section 508 program (see section 8.7 C and D).