Strategies for Prioritizing Agency Website Modernization Efforts

Building Roadmaps Based on OMB's Digital–First Public Experience Memorandum (M–23–22)

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A Customer Experience (CX) Focus

The focus on improving customer experience (CX) for consumers of Federal digital services on agency websites is not a trend, it's here to stay. CX improvements outlined in OMB's Digital–First Public Experience Memorandum (M–23–22) present implementation challenges for Federal agency digital leaders responsible for the technology, maintenance, and governance of a large portfolios of websites supported by limited resources.

Prioritizing the continuous improvement of agency websites—and compliance with M–23–22—is a daunting task and requires a thoughtful framework to guide these efforts. RIVA and MSG have partnered to develop the Digital Experience Modernization framework to help agencies prioritize website portfolio modernization efforts to achieve the best outcome and impact for internal and external users.

Digital Experience Modernization Framework

Assessing agency websites to ensure they are seamless, simple, and secure is time consuming. The Digital Experience Modernization framework is a simple guide that assists agency digital leaders in assessing and scoring agency websites on the 10 "Requirements for Websites and Digital Services" from M–23–22 .

These Digital Experience requirements cover the full-range of agency website priorities including accessibility, usability, findability, security, and flexibility.

Requirements for Websites and Digital Services

1 Accessible to People of Diverse Abilities

2 User-Centered and Data-Driven Design

3 Consistent Visual Design & Agency Brand Identity

4 Customized & Dynamic User Experiences

5 Content That Is Authoritative & Easy to Understand

6 Mobile-First Design That Scales Across Varying Device Sizes

7 Information and Services That Are Discoverable & Optimized for Search

8 Loose Coupling Architecture

9 Secure by Design, Secure by Default

10 Static Websites (or CDN)

The 10 OMB requirements are directly linked to digital customer experience (CX) best-practices and methodologies, including Human Centered Design (HCD), User Experience (UX) research and design, Content Strategy, Digital Analytics, Search Optimization, and Content Management (CMS) platforms.

In an ideal scenario, website managers would be able to monitor and assess websites against the 10 OMB requirements objectively, automatically, and continuously. For some requirements such as Section 508 compliance, usage of Search.gov, USWDS components, and secure HTTPS protocols, utilizing monthly Site Scanning data provided by GSA TTS/Digital.gov is a useful place to start, but has its limitations.

We have found a combination of objective and subjective measurement strategies is the most reasonable way to measure website compliance. These measures form the basis of our method for Prioritizing Agency Website Modernization Efforts outlined in this and subsequent white papers.

Getting Started — Objective and Subjective Assessment of Agency Websites

This white paper discusses examples of website requirements that require two types of assessment methods including objective and subjective evaluation. Using a sample of the OMB requirements, we will present several examples and considerations for how we assess requirements in both styles. Future articles will dive into how we develop a notional compliance score to assist with website prioritization.

For this article, we chose to highlight two different assessment methods presented with supporting examples from the 10 OMB Requirements. These examples are an introduction to our Digital Experience Modernization Framework, which is intended to help agency leaders begin to think about compliance assessment and how these elements may assist in prioritizing the modernization of large website portfolios. Additional examples and requirements will follow in subsequent articles.

Several of the more objective website requirements can assessed using automation, though interpreting results still often requires the correct analysis skill–set.

Objective
Which we define as requirements that can be assessed in a standardized, mostly automated manner

Many of the subjective website requirements will require a more hand–on approach by experts in the fields of HCD, Content Strategy, and Search Engine Optimization (SEO).

Subjective
Which we define as requirements that need a qualitative assessment approach

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Part One:

Objective Assessment Examples

In this section, we focus on objective assessments, things that can be measured in a standard and automated way, through the lens of two compliance requirements:

1 Accessible to People of Diverse Abilities

2 Mobile–First Design That Scales Across Varying Device Sizes

1 Accessible to People of Diverse Abilities

Requirements & Standards:

- Meet Section 508 compliance
- Meet WCAG standards – A, AA, AAA
- Use accessibility testing on website updates/releases – automated scanning + manual user testing with people with disabilities.
- Include people with disabilities in testing and research (create personas)
- Provide feedback mechanisms and accessibility statement

What does an industry-leading standard look like?:

- Full 508 Compliance – Alt text, labels, tags, section IDs, etc.
- WCAG AA compliance (AAA for websites explicitly serving populations with barriers to access)
- Screen-reader compatible
- Ensure APIs, multimedia, and other integrations are also accessible for people with diverse abilities

Tools/Methodologies to assess current state:

- <u>WAVE</u> (Web Accessibility Evaluation Tool): evaluates web pages for accessibility issues and provides visual feedback, highlighting areas that may not meet WCAG standards.
- <u>Lighthouse:</u> audits web pages for performance, accessibility, SEO, and best practices. Lighthouse generates comprehensive reports with accessibility audit findings and suggestions for improvement.

2 Mobile-First Design and Scales across Varying Devices Sizes

Requirements & Standards:

- Mobile-first and device-agnostic websites and digital services – with testing across multiple devices
- Use device usage patterns and optimize for performance
- Utilize modern protocols
- Avoid building unnecessary mobile apps

What does an industry-leading standard look like?:

- Responsive Web Design/Mobile-first design/Device-Agnostic – design for smallest screens first – with a focus on fast-loading, user-friendly experiences
- Viewpoint meta tag in HTML markup to ensure pages correctly render – avoid fixed-width and pixel-based measurements. Use relative units for scaling
- Flexible media and pictures with CSS for max-width and full screen
- Progressive Enhancement, so that all devices have an acceptable base-level of functionality
- Performance Optimization for fast loading times and smooth experience
- Prioritize critical rending path optimizations and lazy-loading techniques to prioritize above the fold content
- Touch-friendly design
- Cross-browser compatibility

Tools/Methodologies to assess current state:

- BrowserStack or Am I Responsive? – test website compatibility and responsiveness across different web browsers, devices, and operating systems
- Nightwatch.js or BackstopJS or other Visual Regression frameworks that assess JS frontending

Subjective Assessment Examples

In this section, we focus on subjective assessments, things that require qualitative research, through the lens of two compliance requirements:

1 **Consistent Visual Design and Agency Brand Identity**

2 **User-Centered and Data-Driven Design**

Consistent Visual Design and Agency Brand Identity

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Requirements & Standards:

- Utilize USWDS
- Have an established brand identity, that is maintained and applied consistently
- Centralized visual design and brand resources
- .gov domain
- Good design that accounts for user perception, limits user friction, and does not erode trust

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What does an industry-leading standard look like?:

- Comprehensive Brand Style Guide, including color palette, typography, iconography, and image usage guidelines
- Responsive design, mobile-first – uses Grid systems, visual hierarchy, whitespace, and consistent layout choices

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Evaluation Questions :

- Does the website have a brand identity and style guide?
- How comprehensive is the platforms design system documentation?

Tools/Methodologies to assess current state:

- Manual Inspection: experts review sites for design and brand consistency and adherence to agency style guides
- BrowserStack: assess responsive design and brand consistency across all devices/breakpoints

2 User–Centered and Data–Driven Design

Requirements & Standards:

- Users are central to research and design – establish wants and needs, pain points – based on user–research
- Engage users throughout design process – including feedback, testing, incentivized participation
- Review web analytics for user flows and behaviors
- GSA's Digital Analytics Program (DAP)

What does an industry–leading standard look like?:

- User research and personas are regularly reviewed and updated
- Involve users in design approach including testing, feedback, and preferences
- Information Architecture that is relevant to target audience
- Utilize A/B Testing and Multivariate design
- User Analytics to guide iterative design cycles
- Personalization and customization based on user–behavior, history, and profile

Tools/Methodologies to assess current state:

- Manual Inspection/Analysis: expert review of UX design delivery and improvement processes to gauge user involvement
- Google Analytics (or other platform analytics) – to determine traffic, top pages, and most common user behaviors

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Using a blend of objective and subjective assessment methods outlined in our Digital Experience Modernization framework, Federal agency digital leaders can begin to prioritize their website portfolio modernization efforts in alignment with OMB M-23-22 compliance measures with the goal of achieving the best outcome and impact for internal and external users.

We hope the examples mentioned in this white paper have been thought provoking and provided a baseline to begin the daunting task of website portfolio modernization. Our next white paper will dive into scoring methods and explore how to assign notional scores to create a visual dashboard for tracking compliance.

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