



DIGITAL WEB SERVICES NETWORK

Bringing together digital product managers, designers, and engineers.

cdt.ca.gov/dwsn

DWSN Quarterly Forum

Thursday, April 18, 2024



California
DEPARTMENT OF TECHNOLOGY
STRATEGY INNOVATION DELIVERY



Digital Web Services Network

- Welcome to the DWSN forum, we will begin shortly.
- For the best experience, please use your computer to join the meeting.
- Mute your audio.
- Turn off your video.
- Use the raise hand button or the meeting chat for comments and questions.



**DIGITAL
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Opening Remarks

Koji Kumpulainen

State Web Services Manager
California Department of Technology

DWSN Forum Agenda

Opening Remarks.....	Koji Kumpulainen (5 minutes)
State Web Template / Design System updates.....	Artem Khomishen (10 minutes)
Statewide Analytics.....	Blaine Wasykiw (5 minutes)
Artificial Intelligence Community (AIC)	Katie Regan (10 minutes)
CalData.....	Britt Allen (10 minutes)
Accessibility.....	Linda Tracy (10 minutes)
Metadata, Open Graph and government websites.....	Luke Fretwell/ Elias Fretwell (25 minutes)
Suggested Future Topics / Closing Remarks.....	Koji Kumpulainen (10 minutes)



**DIGITAL
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State Web Template / Design System updates

Artem Khomishen

Web Development Manager
California Department of Technology

Web Template Updates

Latest release [Web template v6.3.1](#)

- Mobile navigation accessibility improvements
- Updated Google font delivery methods including a system-ui font fallback
- Continuing integration into [CAWeb publishing](#) (WordPress)

[State Web Template Website](#)



Eureka

CA's Design System

Update

What we've been working on (1 of 2)

Responsive cards using just html and CSS

Fluid typography based on ratios and clamping

Global navigation variations to meet the needs of websites of all sizes

Global header design to allow for better continuity across ca.gov websites while maintaining state entity branding

New themes with color palette variables that can be updated and customized more easily and globally

New patterns and components for marketing and special initiative type websites



Design

What we've been working on (2 of 2)

Reducing JavaScript Dependency by using pure HTML/CSS solutions for navigation menus enhancing performance and simplifies maintenance.

Improving Accessibility by incorporating appropriate “ARIA-” tags into the base markup to enhance the semantic meaning of elements.

Improving usability by reducing reliance on visual cues and designing menus that can be easily navigated using keyboard tabs.

Enhancing navigation by using the browser’s ability to track tab selections allowing us to create menus that expand and contract seamlessly.

Building in portability by leveraging Shadow DOM to encapsulate style and markup in web components.



<dev>

Up next...

Exploring pilot partnerships for website redesigns or specific component use cases

Continuing to design and build a foundational set of components and patterns towards a beta/v1

Facilitating more community engagement and feedback opportunities

designsystem@state.ca.gov





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Statewide Analytics

Blaine Wasykiw

Deputy Chief Technology Innovation Officer
California Department of Technology

Universal Analytics: July 1st Sunset Date

- Google's Universal Analytics going away July 1st
- Must be replaced with Google Analytics 4 (GA4) tags **before** that date
- To request a GA4 account/property that is managed by CDT, reach out to us at analytics@state.ca.gov
- For more info, visit <https://webstandards.ca.gov/analytics/>



Google Analytics



**Artificial
Intelligence
Community**

CA Department of Technology

AI Community

Katie Regan

State Data Services Manager
California Department of Technology

AIC Objectives

1. Demonstrate how leveraging AI technologies can improve the delivery of digital services.
2. Promote responsible and ethical use of AI.
3. Provide a coordinated and collaborative approach for implementing AI technologies.
4. Develop and increase the AI knowledge base and skill set of state professionals.
5. Support the creation and implementation of deliverables from Governor Newsom's Executive Order N-12-23.



AIC Scope

1. Examine use cases across departments from EO N-12-23.
2. Test technology training methods and resources and offer feedback.
3. Encourage participation in statewide AI initiatives.
4. Communicate AI developments from/to individual State entities.
5. Feature academic, non-profit, and industry partners as speakers to learn more from AI experts.



Register for the Next AIC

Thursday, May 9 from 2:30 – 4:00

Speakers:

- Renoir Pope – Overview of the new GenAI Guidelines
- Dr. Lauren Sanders – Overview of current AI uses at NASA and a look ahead to opportunities for using GenAI



Attend the AIC

- AIC meetings will be held every other month
- Attendees will need to register for each upcoming meeting
- Subscribe to the AIC listserv using the QR code for future meeting invitations



We want your feedback!

Use the QR code to submit your response to the AI Community survey



Accepting responses through April 19, end of business



DIGITAL WEB SERVICES NETWORK

CalData

Britt Allen

Role
Department



Background

Meet ODI



ODI works toward a state government that is:

- Modern
- Effective
- Provides exceptional customer service to all Californians

We serve other state departments by helping them improve tools and processes with:

- User research
- Human-centered design
- Data – read the strategy we are delivering: bit.ly/california-data-strategy
- Analytics

Data service offerings



Data Science Accelerator

Solve challenges using advanced statistical techniques

You bring us a problem that needs data science, and we work together to do the analysis and find a service change



Modern Data Stack Accelerator

Build your data house with modern tools, practices, and patterns

You bring us a data integration problem, and we help your team develop a solution using a modern cloud-based data stack



Data Science Accelerator

Data Science Accelerator overview



Data Science

Applying advanced statistical tools to existing data to generate new insights



Service Change

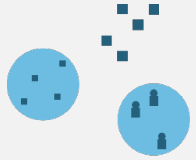
Converting new data insights into (often small) changes to state processes



Smarter Work

More efficient, effective, and equitable use of resources
More sustainable and safer practices
Enables data-driven decision making

What problems can be solved?



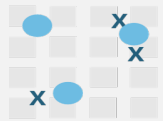
Find the needle in the haystack



Prioritize your backlog



Flag “stuff” early

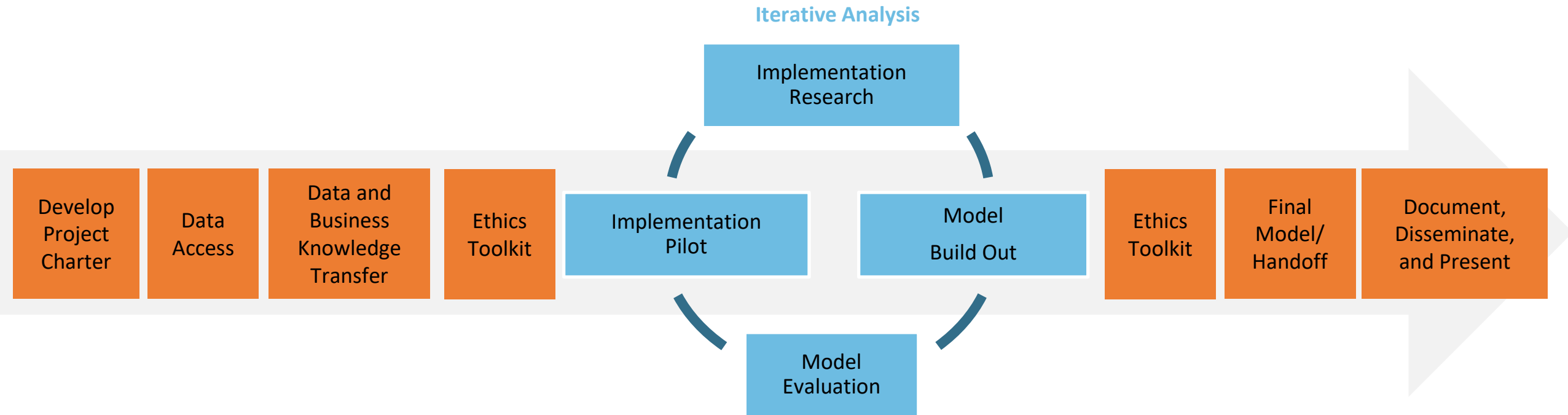


Optimize your resources



Forecast for effective planning

Typical project workflow



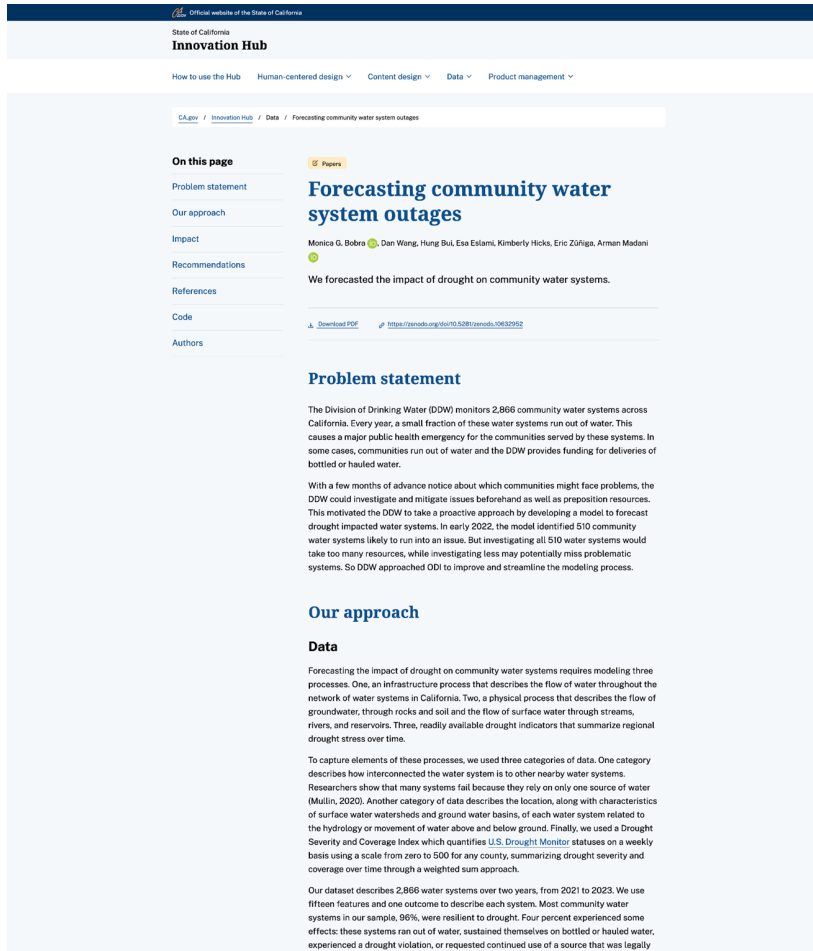
Document, disseminate, and present

Consists of:

- Write up of project in case study and blog post
- Client department and ODI comms approval

Your role:

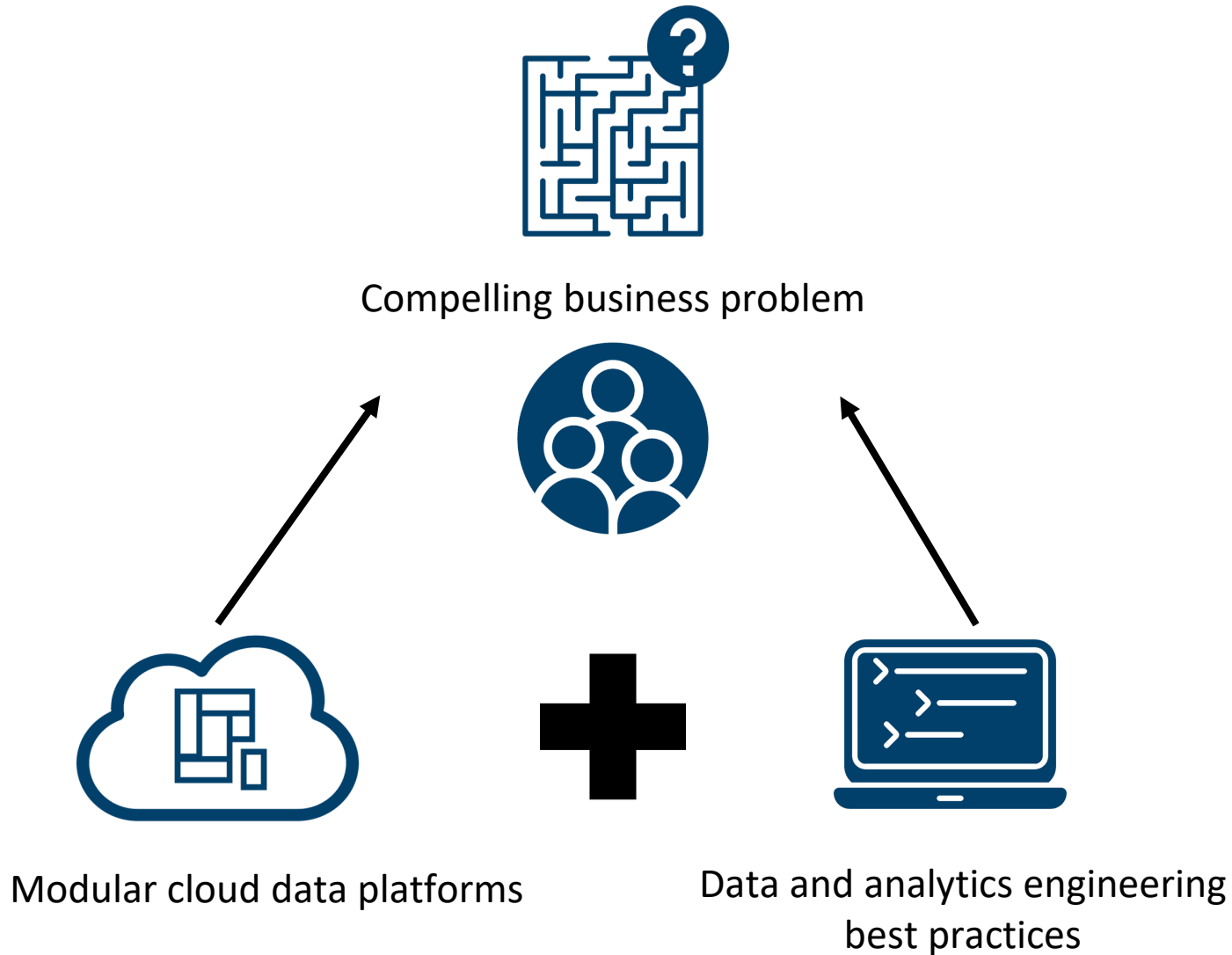
- Provide feedback/edits on write ups and/or slide deck
- Accelerator Demo Day presentation





Modern Data Stack Accelerator

What is it?



Expected outcomes

Improved capacity and staff development

Analysis-ready datasets tied to a business problem

Documented architectural patterns for your organization's use

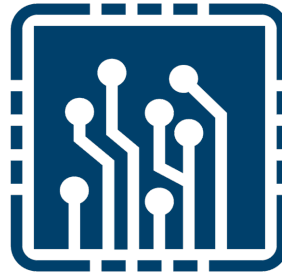
Pathway and plan to go from demonstration project to production in your organization

Who is this for?

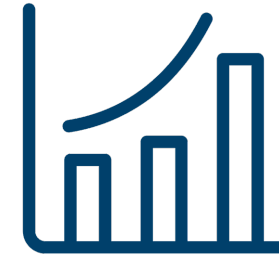
A partnership among an organization's...



Program



IT

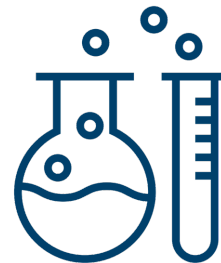


Data

In an organization that is...



Struggling to develop trustworthy sources of data

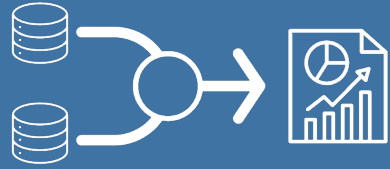


Open to trying new things and consciously experimenting



Interested in or already invested in a cloud data warehouse

What problems can the MDSA solve?



Combining multiple datasets efficiently and automatically for analysis and reporting



Automating manual data quality efforts for high visibility analyses or reporting



Moving, querying, and analyzing large datasets



Assessing or trying new data tools before making an investment

What should I expect?

Discovery and
Planning



Foundational
Training



Development
Sprints



Project Retro



Handoff



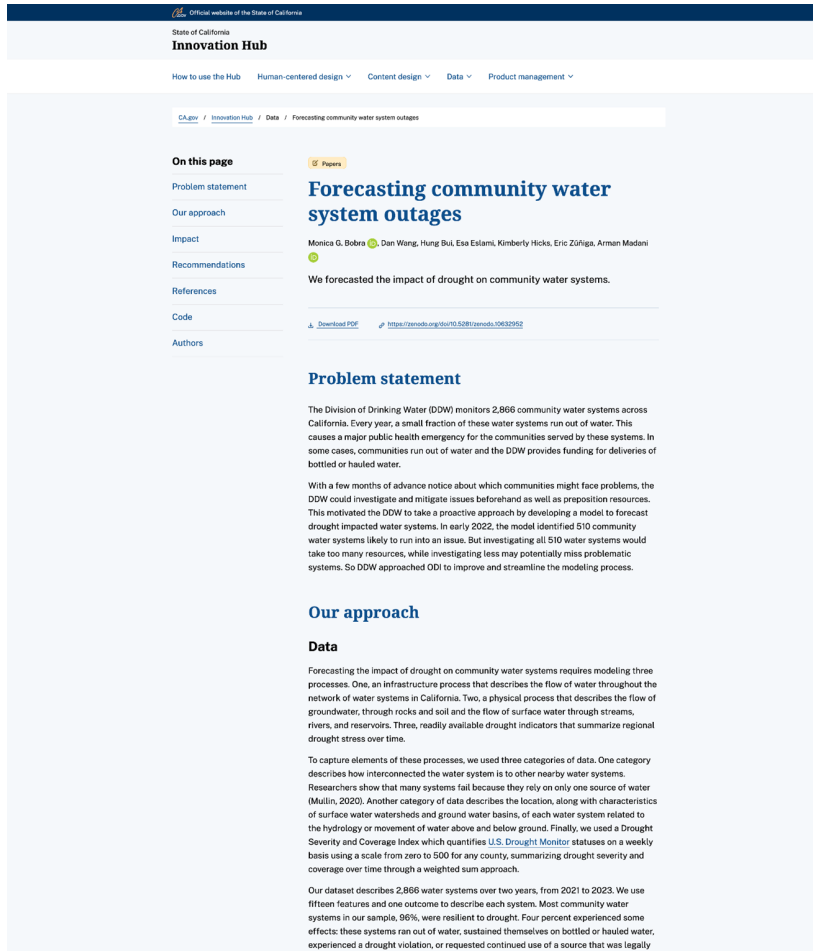
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Your role:

- Provide feedback/edits on write ups and/or slide deck
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5. Next steps

Your next steps

Review our presentation recordings

- docs.data.ca.gov/odi-data-services-dif/presentation-recordings

Sign up for an office hour session with us the week of 4/22*

- bit.ly/odi-data-office-hours

Questions? Email us at

- dif@innovation.ca.gov



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Accessibility

Linda Tracy

Senior Digital Accessibility Specialist
California Department of Technology

Web Content Accessibility Guidelines (WCAG) 2.2

What's new with WCAG 2.2 ?

- WCAG 2.2 includes 9 additional success criteria
 - For state agencies – 6 additional success criteria that are conformance level A or AA
- WCAG 2.2 has removed 1 success criteria

6 Additional Success Criteria (1/2)

Guideline 2.4 Navigable

- 2.4.1 Focus Not Obscured (Minimum) (AA)

Guideline 2.5 Input Modalities

- 2.5.7 Dragging Movements (AA)
- 2.5.8 Target Size (Minimum) (AA)

6 Additional Success Criteria (2/2)

Guideline 3.2 Predictable

- 3.2.6 Consistent Help (A)

Guideline 3.3 Input Assistance

- 3.3.7 Redundant Entry (A)
- 3.3.8 Accessible Authentication (Minimum) (AA)

Removed Success Criteria

Guideline 4.1 Compatible

- 4.1.1 Parsing (Obsolete and removed)

World Wide Web Consortium Resources

- [Web Content Accessibility Guidelines \(WCAG\) 2.2](#)
- [What's New in WCAG 2.2](#)
- [WCAG 2 FAQ – How and why is success criteria 4.1.1 Parsing obsolete?](#)

Policy Updates

Current Accessibility Policy

We are working on updating:

- [State Administrative Manual \(SAM\) 4833: Information Technology Accessibility Policy](#)
- [SAM 4833.1: Exceptions to Accessibility](#)
- [Statewide Information Management Manual \(SIMM\) 25A: Information Technology Accessibility Resource Guide](#)



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Metadata and government
websites

Luke Fretwell
Elias Fretwell
Civic Hacking Agency

Metadata and government websites

How we got here (and where we're going)

1. Elias/Luke began civic hacking together ([Civic Hacking Agency](#)) during COVID.
2. Built 'gov metadata' project.
3. Expanded to URL, sitemap, robots (now [ScanGov](#)).
4. Future developments include schema, accessibility, sustainability, etc.

State of government web metadata

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STATE

State governments average 'F' grade on website-metadata tracker

A new online tracker for government websites reveals that most state websites fail to provide basic metadata for their users.

BY [KEELY QUINLAN](#) • FEBRUARY 14, 2024



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TECH

On some basic metadata practices, US government gets an 'F,' per new online tracker

While OMB acknowledged issues raised by the Civic Hacking Agency's gov metadata project, there are also real signs of progress.

BY [REBECCA HEILWEIL](#) • FEBRUARY 8, 2024



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ICE pursuing privacy approvals related to controversial phone location data
BY [REBECCA HEILWEIL](#)

House Modernization panel advances bill to improve CRS's data access in first-ever markup
BY [MADISON ALDER](#)

Login.gov pilot to include option for biometric verification
BY [CAROLINE NIHILL](#)

Federal government metadata status

Grade/score

Average grade

F

Average score

46%

6 of 12 tags

State government metadata status



Digital experience and metadata

Metadata plays an important role in the web experience, including how page information displays in:

- Search engine results
- Social media posts
- Accessibility-oriented readers
- Browser tabs/bookmarks
- Bots (AI, etc.)

Metadata

Website metadata refers to:

- information embedded in a web page HTML code
- in the `<head>` section of the page
- not visible on the web page
- provides additional details about the web page
- used by web services to understand, categorize content

Example metadata tags

- **title**: Defines a page title
- **description**: Describes the page content
- **keywords**: A list of keywords related to the page content
- **viewport**: Tells how to display the page on different devices
- **canonical**: Unique page URL to avoid search results duplicates
- **og:image**: Image to display on social media
- **twitter:card**: Image specific to Twitter posts

Protocol

- HTML Standard
- Open Graph (Google, Facebook, LinkedIn, etc.)
- Dublin Core
- X (Twitter)

Metadata code

```
<meta name='robots' content='index, follow, max-image-preview:large, max-snippet:-1, max-video-preview:-1' />

  <title>The White House</title>
  <meta name="description" content="President Biden and Vice President Harris promised to move quickly to deliver results for working families. That's what they've done." />
  <link rel="canonical" href="https://www.whitehouse.gov/" />
  <meta property="og:locale" content="en_US" />
  <meta property="og:type" content="website" />
  <meta property="og:title" content="The White House" />
  <meta property="og:description" content="President Biden and Vice President Harris promised to move quickly to deliver results for working families. That's what they've done." />
  <meta property="og:url" content="https://www.whitehouse.gov/" />
  <meta property="og:site_name" content="The White House" />
  <meta property="article:publisher" content="https://www.facebook.com/WhiteHouse/" />
  <meta property="article:modified_time" content="2022-01-31T03:46:42+00:00" />
  <meta property="og:image" content="https://www.whitehouse.gov/wp-content/uploads/2021/01/wh_social-share.png" /
>

  <meta property="og:image:width" content="1200" />
  <meta property="og:image:height" content="630" />
  <meta property="og:image:type" content="image/png" />
  <meta name="twitter:card" content="summary_large_image" />
  <meta name="twitter:site" content="@whitehouse" />
```

Search engines and metadata

 <https://www.whitehouse.gov>

The White House

Get the latest news and updates from the **White House**, including executive orders, actions, and events. Learn about the Biden-Harris administration's agenda, policies, and achievements on topics such as infrastructure, health care, clean energy, and more.

Contact Us

Contact Us - The White House

Remarks by President

Remarks by President - The White House

Office of Management and Budg...

Office of Management and Budget - The White House

Live

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Briefing Room


Briefing Room - The White House

Get Involved

Get Involved - The White House

Social media and metadata (before/after)

Create a post

 Luke Fretwell Anyone








<https://www.usajobs.gov/job/661158500>

Executive Director of Customer Experience



usajobs.gov · 3 min read

DHS is recruiting for the Executive Director of the DHS Office of the Chief Inform...

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Director of Management Services for the Bureau of Diplom...
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The Bureau of Diplomatic Security is looking for highly qualified program management specialists to join our ranks. Check out the advertisement on USAJobs at: https://lnkd.in/etsT_qGb... ...see more



USAJOBS

Project Management Specialist
usajobs.gov · 1 min read

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Beyond web metadata

Think 'structured data'.

- Dynamic (vs. static) information
- Machine-readable
- Structured data markup (schema.org)
- Rich results (JSON-LD, microdata, RDFa)

Data mindset

- Supercharges government digital service experience
- Helps teams understand and adopt a data culture
- Moves content design beyond 'page' thinking
- Supports emerging tech (AI, interoperability)
- Builds for the future

Design with (structured) data

Principle 5

Design with data

Use research and analytics to understand how people use your services and products. This keeps us focused on their needs, not preconceived solutions.

Design System components work seamlessly with Google Analytics. This gathers information about the people who use your services and their needs.

Demo

- What we validate and why
- State of California state websites
- How to collaborate

Resources

- [ScanGov](#)
- [Google Search Console](#)
- [Facebook sharing debugger](#)
- [Twitter validator](#)
- [Structured data markup](#)
- [Schema markup validator](#)
- [Rich text results test](#)



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Suggested Future Topics Closing Remarks

Koji Kumpulainen

State Web Services Manager
California Department of Technology

Thank you

Post conference materials will be published on the [DWSN Website](#).

For questions, please write to: DigitalWebServicesNetwork@state.ca.gov



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Next DWSN Quarterly Forum Thursday, July 18, 2024