

CMS Claims Data API Websites Redesign Case Study

My Role

I drove this project as the lead strategist, researcher, designer, and developer. I worked closely with a content strategist and was supported by a talented team of product managers and developers.

Goals

1. Drive adoption and engagement of the three CMS Claims Data APIs (AB2D, BCDA, and DPC)
2. Improve the sites' developer experience
3. Establish a standardized design system, templates, and processes.

Research Methods

- User Journey Map IMG
- Current State Site Mapping
- Gap Analysis
- Card Sort IMG
 - 34/36 task flows validated under new information architecture
- Competitive Analysis IMG
- Usability Testing
 - For example, "Where would you go to learn more about how you might use AB2D for your business needs?" instead of "Does this product fit your business needs?"
 - Users expressed frustration when searching for the About and Use Cases pages.

- "Where'd that page go? " – Engineer
 - "Ok, where was I before?" – Designer
 - "I want to find permitted uses next since I read that on home. Now where?" – Product Manager
 - "Is there an easier nav to find these things?" – Designer
- 3/7 users could not find the Onboarding page in under 2 minutes

AB2D-Specific Research

- User personas
- Qualitative user interviews focused on API use cases
- Web Analytics
 - Example: Content drilldown informed navigation hierarchy
 - Top pages that users navigated to from the homepage:
 - 42% - Try the API
 - 20% - Understanding the Data
 - 18% - Getting Started
- Pain Point Inventory
- User needs statements

Approach

- Focus on the developer experience
 - Diataxis documentation framework
 - AAARRRP framework for developer relations strategy
- Focus on standardized site components, templates, and design patterns
 - Faster time to delivery
 - Repeatability
 - Easier long-term maintenance
 - User-tested and validated
- Content-first
 - Plain language
 - We developed a content style guide for the Data Analytics and Strategy Group (DASG) at CMS to establish program-specific guidelines

- Agile and iterative
 - Pages with complex content or user needs were mocked up in Figma for quicker reviews, experimentation, and iteration.
 - Pages with straightforward content, such as documentation pages, were built directly on Jekyll templates in the development environment.
 - After all pages were built, we proceeded with final team review and approval

Design

- Implemented a researched, user-tested and validated universal information architecture.
- Leveraged USWDS for maintainability and consistency with other CMS Claims Data API and government websites.
- Created an AB2D brand style guide
- Designed templates for each type of page based (Home, About, Documentation, etc) Templates are:
 - User tested and validated
 - Conformant with industry standards
 - Responsive
 - Accessible (WCAG AA)
 - Customizable with Markdown and HTML
- Documentation Template IMG (the one where each component is explained)
- User testing
 - Quote from user testing: When asked, "Where would you go to learn more about how you might use AB2D for your business needs?" 100% of users brought up use cases
 - User Testing Insight
 - In AB2D usability tests, technical task flows using this navigation template had a perfect success rates with technical users.
 - The AB2D Data pages did NOT use this template at the time of testing, which provided a control.

- Quote: "I'd expect to find a Data Dictionary and sample files here....
[clicked on page] And yeah, there they are." – CMS Engineer