



GovInfo - Final Presentation

Team Black-Oak

Haoting Gao, Zehan Ge, Yian Gong, Xilei Liu

Agenda

01 Introduction
Who conducted the test? Overview and purpose of this test.

02 Interaction Map
Main interaction flows of the website.

03 Interview
How did we conduct the interviews? What are the findings?

04 Survey
How did we conduct the survey? What are the findings?

05 Comparative Analysis
How did we conduct comparative analysis?

06 Heuristic Evaluation
How did we conduct heuristic evaluation?

07 Usability Testing
How did we conduct the usability test?

08 Findings & Reflections
What are the findings and reflections of the previous three sections?

09 Next Step
What are the next steps?

10 Conclusions
Final wrap-up

Our Team



Yian Gong
UX Designer



Zehan Ge
UX Designer



Xilei Liu
UX Designer



Haoting Gao
UX Designer

Introduction

GovInfo.gov Overview

GovInfo.gov provides the public free access to an extensive collection of **official publications** from diverse branches of the Federal Government.

Project Purpose

Our team was tasked with conducting comprehensive research to **assess the overall usability** of GovInfo.gov.

Interaction Map



User Needs Assessment

Interviews



✓ 5 Total Interviews

✓ 1 Stakeholder Interview

✓ 4 Streaming Users Interviews

Persona



Jennifer Tylor

43 years · University Librarian

Active Hard working Productive



Ben Harrison

37 years · Government Employee

Caring Proactive Open-minded



Anna Mason

60 years · Government Librarian

Experienced Hard working Rigorous

“ Verbatim

I have worked as a librarian for 23 years and an entry level programmer.

“ Verbatim

I've been working in the government sector for a while, and familiar with government terminology.

“ Verbatim

I have worked at government tax department for 25 years and have a lot of experience with government documents.

Reminder: Each persona is fictional, not real person

User Needs



Jennifer Tylor

43 years · University Librarian

Active Hard working Productive

- Providing access to high-quality information resources
- Promoting information literacy



Anna Mason

60 years · Government Librarian

Experienced Hard working Rigorous

- Easy sharing link: Sharing long documents effectively is very important
- Consistent monitoring of new publications



Ben Harrison

37 years · Government Employee

Caring Proactive Open-minded

- Accurate search filters to narrow down results.
- Easy and accessible guides to search methods.

Pain Points



Jennifer Tylor

43 years · University Librarian

Active Hard working Productive

- Inconsistencies in search algorithms across platforms
- It's hard to find the share button to share digital version and copy



Anna Mason

60 years · Government Librarian

Experienced Hard working Rigorous

- Difficulty finding specific publications
- Lack of access to some publications
- Unfamiliarity with archives and search techniques



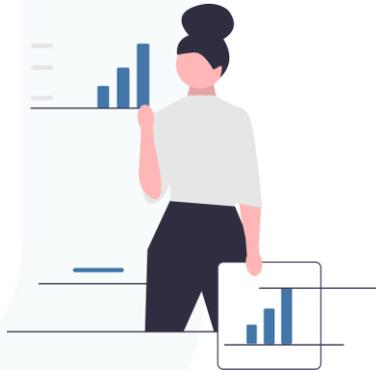
Ben Harrison

37 years · Government Employee

Caring Proactive Open-minded

- Lack of accurate filters
- Unfamiliarity of search methods

Survey



✓ 123 valid answers to the survey

✓ Demographic Information

✓ Browsing Habit

Demographic Data

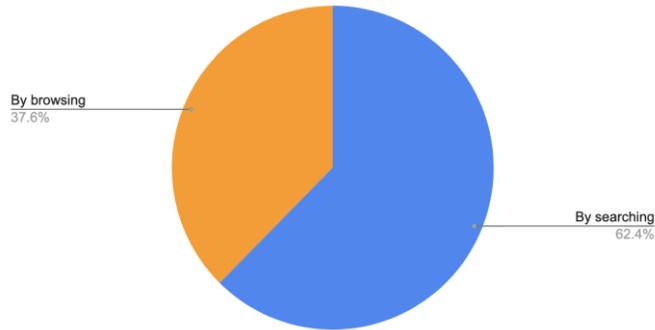
- **90% +** of users work as Librarian
- **50% +** of users are > 50 years old
- **90% +** of users have a master degree

Browse Habit

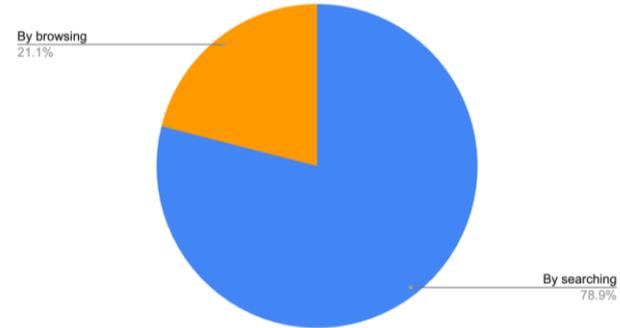
- **70% +** of users use GovInfo.gov **at least once a week**
- Users also use congress.gov and Heinonline.com most frequently to find governmental documents.

Survey - Insight 1

The method preference for those who are satisfied with search time(%)



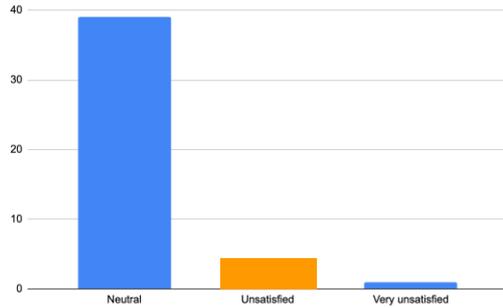
The method preference for those who are not satisfied with search time(%)



- People who are unsatisfied with the search process (15%) of finding the documents have a larger percentage of using search method to find the document than those who are satisfied. This may imply that the time it takes to use search method to find a document may contribute to their dissatisfaction.
- We only found that they were not satisfied with the search time according to the questionnaire, but we did not specifically analyze why they were not satisfied with the search time. This is where further research might be needed.

Survey - Insight 2

Satisfaction with the search process



AI	AJ	AK	AL	AM
Q16. If you prefer to use searching, could you see Q17. Are you satisfied with the av Q18. How satisfied are you with the search process of finding the documents on Govinfo.gov ?				
	Advanced		No	Unsatisfied
Citation	Advanced		No	Unsatisfied
Citation	Advanced		No	Unsatisfied
	Advanced		No	Unsatisfied
	Advanced	Keyword	No	Very unsatisfied

- People who have a dissatisfied attitude with the document searching process (4%) all prefer to use the advanced search function.

Usability Evaluation

Comparative Analysis

Why did we do?

Examining GovInfo.gov's competition and reveal **what's good and bad** about it.

Help us get a better sense of **what features and qualities are expected** among products in a similar space.

What did we do?

Compared GovInfo.gov with **7** competitors and developed a scaled matrix on the presence of **8** main features.

Employed **3** criteria to assess each feature on each competitor: not supported, supported but lacking necessary functionality, and fully supported with exemplary functionality.

Competitors

Direct Competitors

Heinonline.com
ProQuest Congressional

Indirect Competitors

Librarian

Parallel Competitors

Jstor
Regulations.gov

Partial Competitors

congress.gov
library of congress

Analogous Competitors

ChatGPT

Nielson Norman's

Heuristic Evaluation

Visibility of System Status ●

● Recognition rather than Recall

Match Between System & Real World ●

● Flexibility and Efficiency of Use

User Control and Freedom ●

● Aesthetic and Minimalist Design

Consistency and Standards ●

● Help Users with Errors

Error Prevention ●

● Help and Documentation

Usability Testing

Usability testing is an effective method to observe how users interact with a product features and identify areas for improvement.

✓ pre-test questionnaire

✓ 6 usability testing with 1 pilot test

✓ post-test questionnaire

What did we find?

What does GovInfo.gov do well?

01

Clear and consistent layout

Every block of information is well organized and provided everything users might need.

02

The homepage is clear

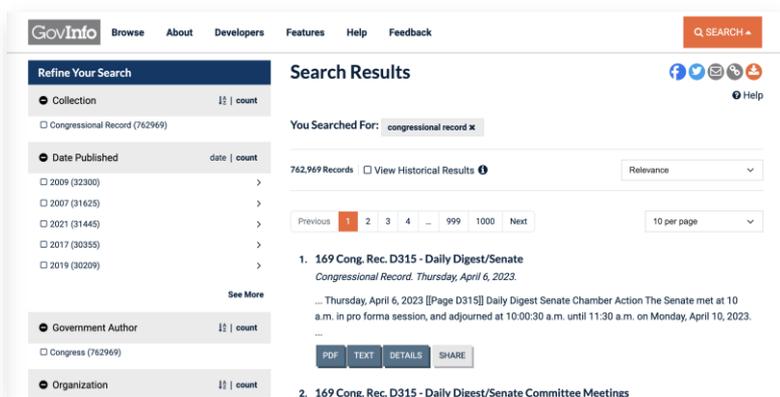
"The front page is fantastic with the timely features and then the popular and recent documents. It's almost everything I need on a regular basis."

03

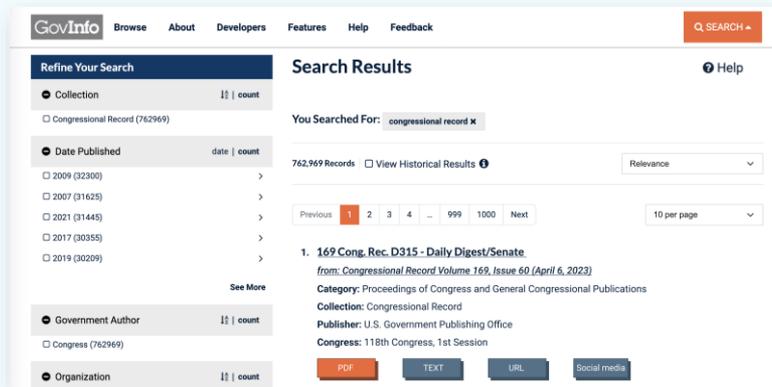
Effective and intuitive browse function

"It is organized well, and especially like the browse function. It is logical and intuitive."

Search Results Page Redesign



Before



After

Finding 1.1

- Information architecture of introduction section is not very informative as it lacks unique identifier.

"I would expect to find all information that can uniquely identify with the proper hierarchy' on the results page."

1. 169 Cong. Rec. D315 - Daily Digest/Senate

Congressional Record. Thursday, April 6, 2023.

... Thursday, April 6, 2023 [[Page D315]] Daily Digest Senate Chamber Action The Senate met at 10 a.m. in pro forma session, and adjourned at 10:00:30 a.m. until 11:30 a.m. on Monday, April 10, 2023.

...

PDF TEXT DETAILS SHARE

Recommendation 1.1

- ✓ Add unique information for the document & remove less efficient information
- ✓ Redesign icons

1. 169 Cong. Rec. D315 - Daily Digest/Senate

from: Congressional Record Volume 169, Issue 60 (April 6, 2023)

Category: Proceedings of Congress and General Congressional Publications

Collection: Congressional Record

Publisher: U.S. Government Publishing Office

Congress: 118th Congress, 1st Session

PDF

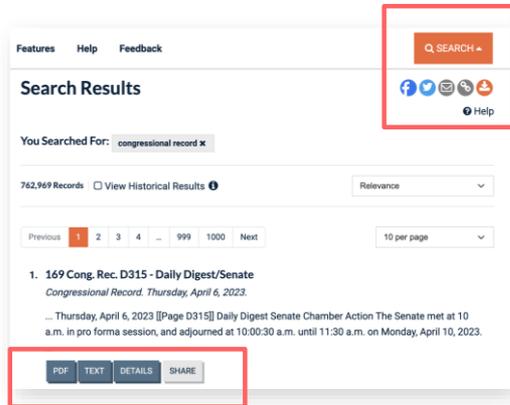
TEXT

Details

Finding 1.2

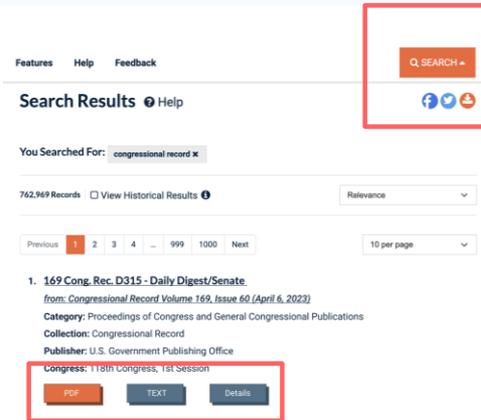
- The "link" and "email" icons are hardly used, leading to inefficient organization.

"I never use the email icon to share documents via email because there is a risk that your email would be in junk folder."



Recommendation 1.2

- ✓ Reorganize the arrangement and composition of the icon.
- ✓ Removed 'link' and 'email' icon



Filter Redesign

Refine Your Search

Collection 11 | count

- Congressional Record (762969)

Date Published date | count

- 2023 (2395)
- 2022 (14163)
- 2021 (31445)
- 2017 (30353)
- 2013 (20225)

[See More](#)

Government Author 11 | count

- Congress (762969)

Organization 11 | count

- Committee on the Judiciary (38052)
- Committee on Armed Services (20972)
- Committee on Finance (19028)
- Committee on Foreign Relations (18514)
- Committee on Appropriations (17089)

[See More](#)

Person 11 | count

- Reid, Harry (11145)
- McClellan, Michael (14526)
- Biden, Richard J. (13930)
- Jackson Lee, Sheila (8235)
- Schumer, Charles E. (7593)

[See More](#)

Congress Number Congress | count

- 111th Congress (2009 - 2010) (85247)
- 110th Congress (2007 - 2008) (56942)
- 109th Congress (2005 - 2006) (56918)
- 117th Congress (2021 - 2022) (24148)
- 112th Congress (2011 - 2012) (30011)

[See More](#)

Section and Type 11 | count

- House (28175)
- Senate (26574)
- Extensions of Remarks (17924)
- Daily Digest (3594)

Congress Member 11 | count

- Reid, Harry (80) (14144)
- McClellan, Michael (97) (4526)
- Biden, Richard J. (1) (13930)
- Jackson Lee, Sheila (7) (8235)
- Schumer, Charles E. (N5) (7593)

[See More](#)

Associated Legislation 11 | count

- House Bill 2-18 (114938)
- Senate Bill 23 (87443)
- House Resolution (H. Res.) (2602)
- Senate Resolution (S. Res.) (2417)
- House Concurrent Resolution (H. Con. Res.) (31387)

[See More](#)

Contains Votes 11 | count

- Contains House Vote (1543)
- Contains Senate Vote (244)

Volume 11 | count

- 105 (2229)
- 103 (21625)
- 101 (21991)
- 102 (23376)
- 104 (28155)

Before

Refine Your Search

Collection 11 | count

- Congressional Record (762969)

Date Published \updownarrow date | count

- 2023 (7817)
- 2022 (25416)
- 2021 (31445)

[See More](#)

Government Author 11 | count

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Volume 11 | count

- 105 (2229)
- 103 (21625)
- 101 (21991)
- 102 (23376)
- 104 (28155)

After

Finding 2.1

- The "date" filter is displayed in "count" sequence rather than in "date", it led confusion to the users. Users are more comfortable with date-related items being arranged in chronological order.

"I don't know why it is shown in "count", showing in date sequence makes more sense to me."

☰ Date Published	date count
<input type="checkbox"/> 2009 (32300)	>
<input type="checkbox"/> 2007 (31625)	>
<input type="checkbox"/> 2021 (31445)	>
<input type="checkbox"/> 2017 (30355)	>
<input type="checkbox"/> 2019 (30209)	>

See More

Recommendation 2.1

- ✓ Change the default display to "date" from "count"
- ✓ Add sort from latest to oldest and vice versa

☰ Date Published	date ↓ count
<input type="checkbox"/> 2023 (7817)	>
<input type="checkbox"/> 2022 (25416)	>
<input type="checkbox"/> 2021 (31445)	>
<input type="checkbox"/> 2020 (21931)	>
<input type="checkbox"/> 2019 (30209)	>

See More

Finding 2.2

- All the filters are expanded on the search result page, which extend users' browsing time unnecessarily.

Compared with its competitors, GovInfo.gov expands all the filters all at once. It might be unnecessary for users to see all the filters for one time because they will not use all of them.

Recommendation 2.2

- ✓ Display the first prioritized 4 filters, with 3 items expanded
- ✓ Fold other filters below and let the users expand based on their needs

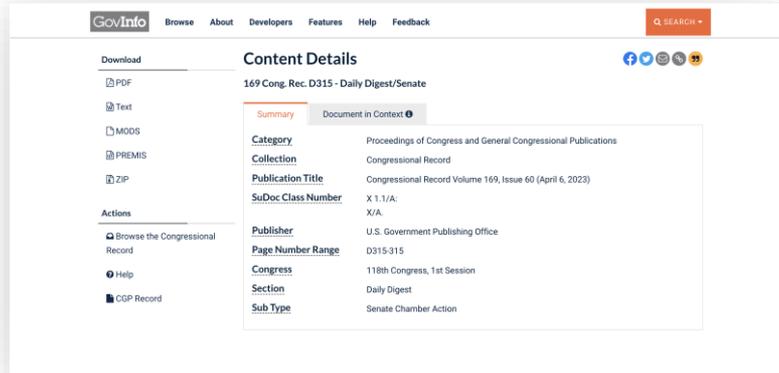


Before

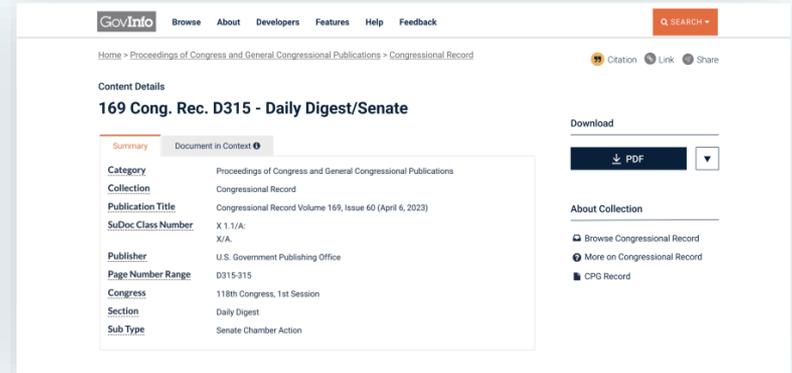


After

Content Detail Redesign



Before



After

Finding 3.1

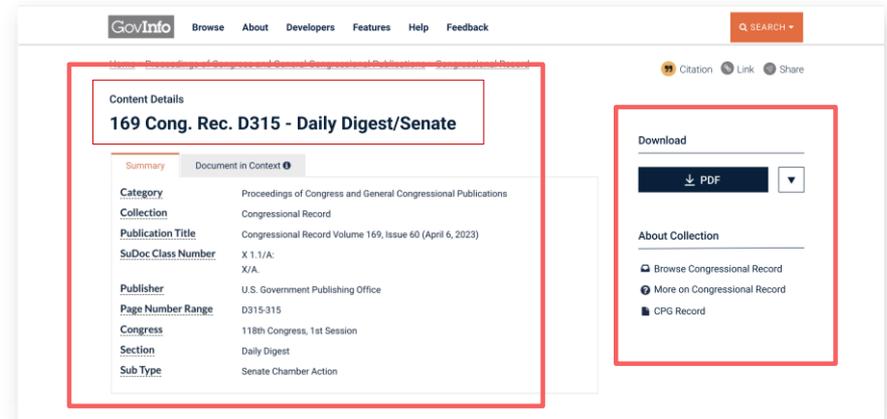
- Giving visual prioritization to the "title" and download options, may not align with the users' intended purpose for visiting the page.

"What catches my eye in the 1st place is, out of obviously where it says content detail"

"This whole area here (on the left) is easy to miss ... a lot of my students miss that when they're in the details, (the button) to get to the PDF is right there."

Recommendation 3.1

- ✓ Change the layout of "left download - right summary" to "left summary - right download"
- ✓ Instead of bolding the "Content Detail", change to bolding the actual document title.



Finding 3.2

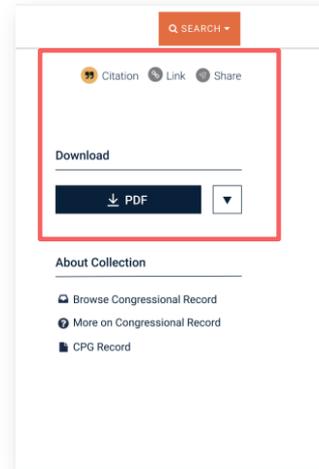
- The sole use of the icon may not tell enough information about the function
- The use of icon and buttons should prioritize what users used most often. eg: prioritize most used download option, prioritize function users find most useful

All participants prioritize to download the PDF version of the document.

"(the quotation mark) is handy but I never get it .. for me it's not intuitive. What you need is some information that pop up when you hover over, it that tells you what that does"

Recommendation 3.2

- ✓ Prioritize the PDF download option, make it more salient, and hide other options in the drop button.
- ✓ Add text to all icons and prioritize the citation icon over the others and hide other share options under "Share".



Finding 3.3

- The ordering of information should follow some standards like prioritization of information or specificity.

"I don't think it is (intuitive). My students get confused a lot. I would put publication title at the top."

"I would de-prioritize the SuDoc class number for users like that is a niche piece of information."

Recommendation 3.3

- ✓ reconsider the ordering of summary items



The screenshot shows a document summary page with two tabs: "Summary" (selected) and "Document in Context". The "Summary" tab displays a list of metadata fields and their corresponding values.

Field	Value
Category	Proceedings of Congress and General Congressional Publications
Collection	Congressional Record
Publication Title	Congressional Record Volume 169, Issue 60 (April 6, 2023)
SuDoc Class Number	X 1.1/A: X/A.
Publisher	U.S. Government Publishing Office
Page Number Range	D315-315
Congress	118th Congress, 1st Session
Section	Daily Digest
Sub Type	Senate Chamber Action

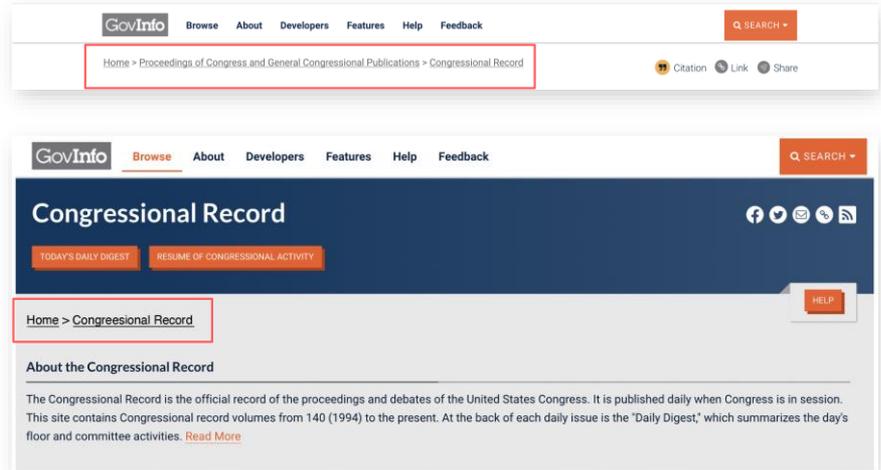
Finding 3.4

- The user often struggles to determine their current location within the website's hierarchical structure and finds it difficult to navigate back to previously visited pages.
- There is no way for users to track what pages they passed just now and go back.

"I don't know how to go back to the previous page. I don't know where I am now. I can only go back to the home page and repeat the search process."

Recommendation 3.4

- ✓ Adding breadcrumbs to the interface can be highly beneficial.



The help page should guide users to find what they need.

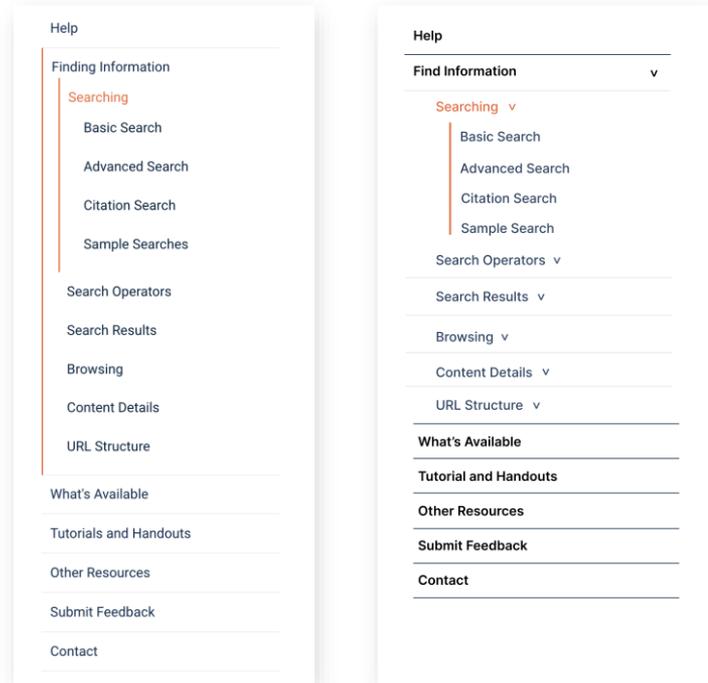
Finding 4.1

- The navigation should tell enough information of what to expect under each section.

"I do not know what's under this (menu)"

- ✓ Restructure the help navigation and use color and font weight to differentiate layer.
- ✓ Add arrow when to signify that the section is clickable.

Recommendation 4.1



Before

After

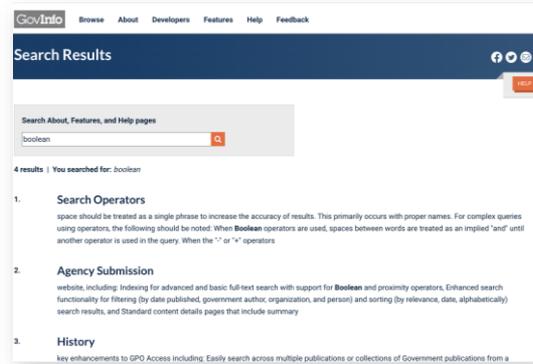
Finding 4.2

- The search does not tell user of enough information what they are searched for.

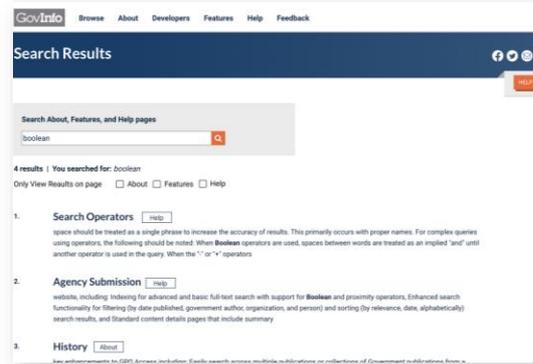
Heuristic evaluation revealed that users might lose control over what they are searched for.

- ✓ Allowing users to search within a specific category.
- ✓ Indicate where the search results come from.

Recommendation 4.2



Before



After

Reflection

01

Biased Participants: The findings may be biased since most of our participants are professional librarians. Our findings may not cover the needs of the general public.

02

Lack of Testing: Our redesigned interfaces were not subjected to usability testing and lack proper verification, which limits their usability. However, they can still be used as a reference.

03

Uncovered: We have not covered everything from our research, but points we consider as significant and frequently mentioned.

04

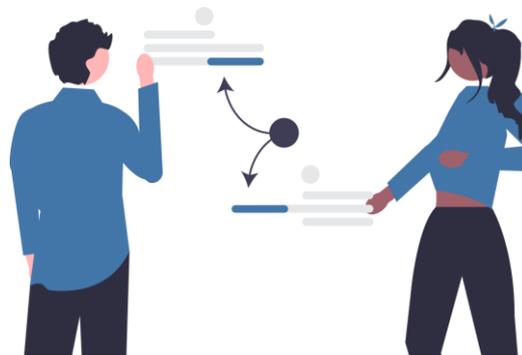
Uncovered: We have received feedbacks for content updates. eg: unable to know if documents are updated, confusion on naming conventions etc. But not included due to scope of the project.

Next Step

✓ Make an action plan based on available resources.

✓ Implement!

✓ Consider conducting periodic user testing



Summary

01

We did usability assessment for GovInfo.gov. It includes:

- Interview
- Survey
- Competitive Analysis
- Heuristic Evaluation
- Usability Testing

02

Based on our findings from all of the research, we suggest GovInfo.gov pays more attention to the details of UI elements, information hierarchy and content in the future to make it more perfect.