



Department of Energy Office of Inspector General Home Page Usability Report

Theodore Griffin



Summary and Introduction



Executive Summary

This report will explain the methodology and findings of usability testing performed on the Department of Energy Office of Inspector General home page using the home page tour and product reaction statements protocols.

My analysis of the usability testing found that:

- The simplicity of this homepage was considered a strength.
- The drop-down menus on the home page are difficult to identify.
- The purpose of the home page is unclear.
- Users consider the home page to be helpful and usable.
- The home page uses some intimidating and confusing language.

Based on my analysis of the usability testing, I recommend:

- Changing the design of drop-down menus to make them easier to identify
- Altering the size and positioning of the graphic delivering information about a hotline
- Changing the phrasing of several links to reduce confusion



Introduction

The purpose of this report is to evaluate the effectiveness of elements of the Department of Energy Office of Inspector General home page based on usability testing and offer recommendations to improve the page.

The home page was evaluated using home page tour and product reaction statements protocols with two participants per protocol to identify strengths and weaknesses. The participants ages range from 24 to 60, and they span a range of internet proficiencies. Full demographic information about the participants is available in Appendix 3.

This report discusses strengths and weaknesses revealed during usability testing and provides recommendations on how to resolve identified weaknesses. This report identifies simplicity and usability as strengths and confusing jargon, difficulty identifying drop-down menus, and confusion over the purpose of the page as weaknesses. In this report, I offer recommendations on how to resolve these issues.



Methodology

Home Page Tour and Product Reaction Statements



Home Page Tour

A moderated homepage tour protocol was performed with two participants to allow users to freely share their immediate reactions to exploring the home page. This test allows participants to openly express their thoughts and emotions in reaction to the home page.

Participants were directed to explore the homepage while talking out loud about their impressions and thoughts about the page. After 3-5 minutes of exploring the homepage, the participants were asked five follow-up questions to prompt more specific feedback.

This test was administered virtually using Discord's voice call and screen sharing functions. As the evaluator, I was able to hear and speak to the participants and see their screens.

Product Reaction Statements

A moderated product reaction statement protocol based on the Microsoft Desirability Toolkit was performed with two participants to acquire data more useful for quantitative analysis. This test directs participants to select a set of 5 words or phrases out of a list of 25 to best describe the home page. This limited vocabulary allows direct comparison between participants' responses.

Participants were directed to explore the home page for 3-5 minutes and remember their thoughts and reactions. After 3-5 minutes of exploring the homepage, the participants were asked to select five words or phrases from a curated list of 25 words and phrases from the Microsoft Desirability Toolkit to best describe the home page. Finally, the participants were asked five follow-up questions to give more context to their reaction statements.

This test was administered virtually using Discord's voice call and screen sharing functions. As the evaluator, I was able to hear and speak to the participants and see their screens.



Findings



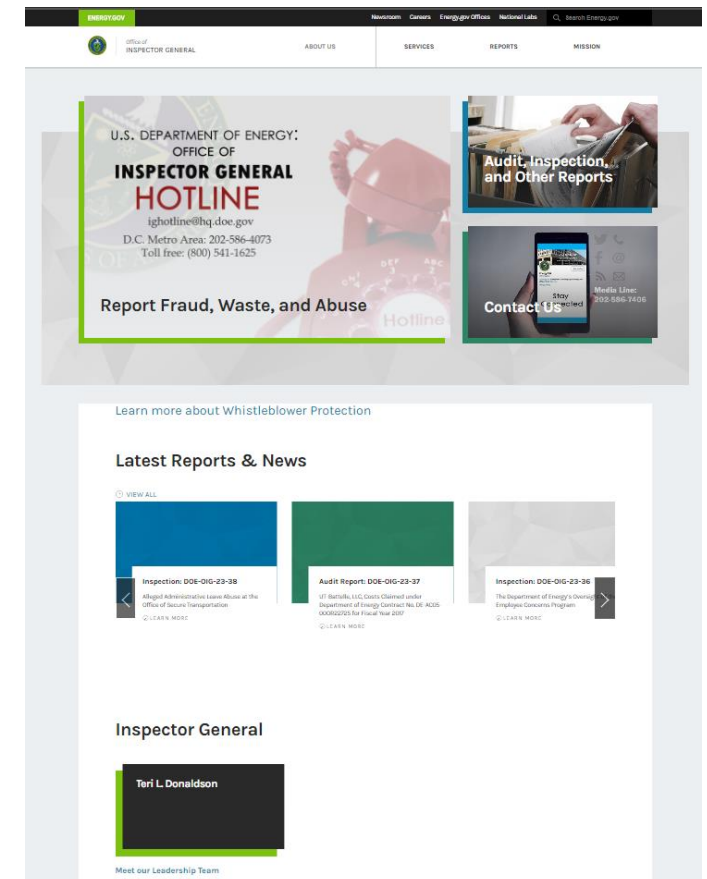
Home Page Is Simple

100% of participants in both the home page tour and product reaction statements protocols said that the design of this homepage was simple or basic.

Participant 3 said that they thought that the simplicity of the home page was its strongest aspect during the follow-up questions section of the home page tour. Participant 2 said that the strongest aspect of this home page was that “it does what it needs to do” during the follow-up question section of the product reaction statements protocol.

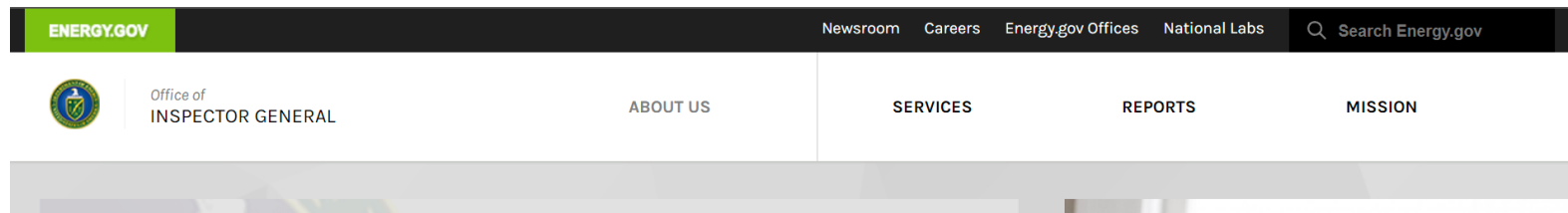
On its own, the simplicity of this home page was perceived as a strength during testing.

Picture of the Department of Energy Office of Inspector General Home Page



Drop Down Menus Are Difficult to Identify

Picture of drop-down menus at the top of the Department of Energy Office of Inspector General Home Page



During both the home page tour and product reaction statement protocols, 100% of participants said that they did not initially notice that the elements at the top of the home page titled “About Us”, “Services”, and “Reports” were drop-down menus.

Participant 3 said that they were surprised that these elements were drop-down menus during the homepage tour because they expected drop-down menus to have arrows on them to indicate that they were interactable.

Participant 1 said that they felt like links in the drop-down menus were hard to find and suggested turning the drop-down menus into static menus and permanently displaying these links on the page during the follow-up question section of the product reaction statements protocol.

Drop Down Menus Are Difficult to Identify

I recommend modifying the design of these drop-down menus to make it more obvious that they can be interacted with to display more information because 100% of participants in both the home page tour and product reaction statement protocols said that they did not notice upon first inspection that these elements are drop-down menus.

Participant 2 suggested that the drop-down menus at the top of the home page titled "About Us", "Services", and "Reports" should have arrows pointing downward to clearly indicate that they are drop-down menus.

I recommend adding an arrow pointing downward to these drop-down menus or making them a different color than the background to more clearly indicate that these elements can be interacted with by hovering to display additional information.

Purpose of Home Page is Not Clear

The purpose of this home page was identified as providing information about reporting fraud by 100% of participants in both the home page tour and product reaction statements protocols.

No participant identified providing information about the office of the Inspector General or access to audits, inspections, and other reports as the purpose of this website.

Participant 4 said that they determined the purpose of the home page by looking at the large graphic in the center of the page displaying information about the Department of Energy Office of Inspector General hotline during the follow-up question section of the home page tour.

I recommend decreasing the size and prominence of this graphic or increasing the size and prominence of elements focused on the other purposes of the home page.

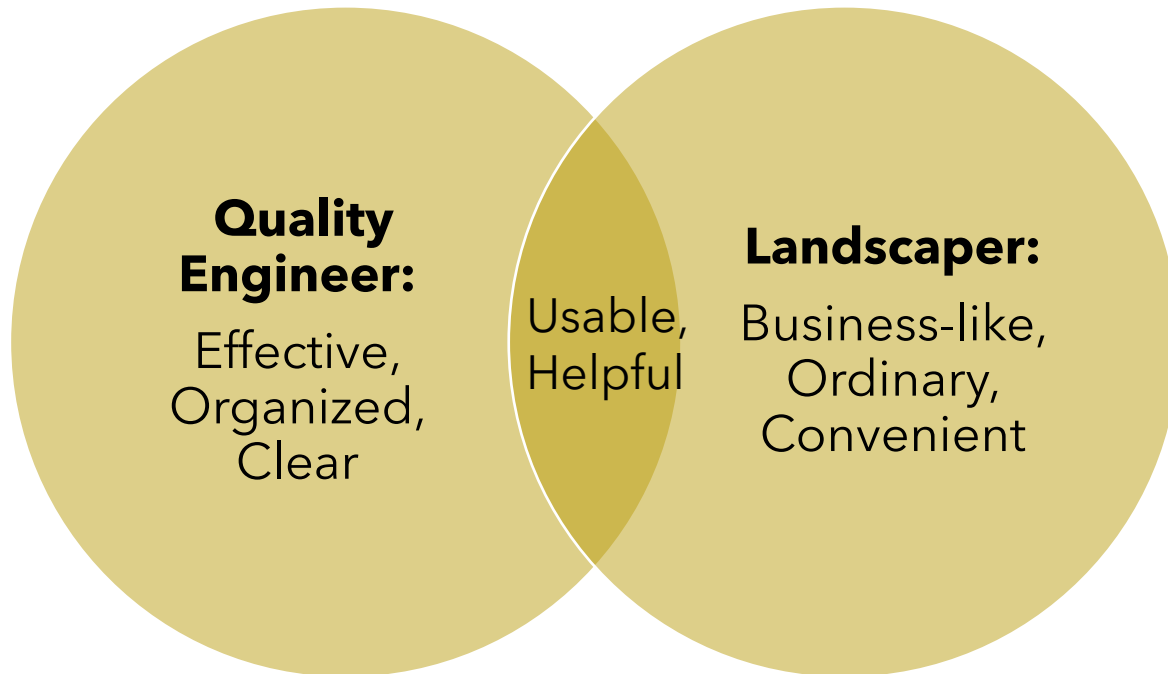
Picture of graphic displaying information about the Department of Energy Office of Inspector General hotline.



[Learn more about Whistleblower Protection](#)

Home Page is Helpful and Usable

Product Reaction Statements Chosen to Describe the Department of Energy Office of Inspector General Home Page, by Profession



100% of participants in the product reaction statements protocol described the home page as usable and helpful.

Participants in the product reaction statements protocol only used positive descriptions of the home page's functionality.

Intimidating and Confusing Jargon

Some of the language used on this home page is potentially intimidating or confusing. 50% of participants in both the home page tour and product reaction statements protocols expressed confusion about certain vocabulary used on the home page.

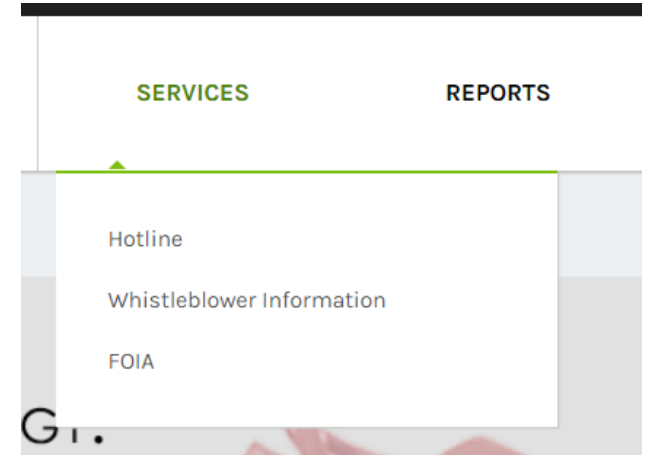
Participant 1 said that they were confused by the menu item "FOIA" during the follow-up questions portion of the product reaction statement protocol. When the meaning of the acronym was explained to them, they said that they were familiar with the Freedom of Information Act but were unable to recognize it by the acronym.

Participant 1 suggested renaming the menu item "FOIA" to "Freedom of Information Act" to reduce confusion.

Participant 4 said they felt intimidated and confused by the term "whistleblower" during the follow-up questions because they felt that the term had negative connotations.

I recommend replacing the link titled "FOIA" with a link to the same page titled "Freedom of Information Act" and the link titled "Whistleblower Information" with a link to the same page titled "Information about Reporting Wrongdoing" in accordance with participants 1 and 4's suggestions to reduce user confusion.

Picture of drop-down menu containing vocabulary identified by participants as confusing or intimidating





Conclusion



Conclusion

The usability of the Department of Energy Office of Inspector General home page was tested to identify strengths and areas to improve upon.

Users described the home page as simple and thought of this as a strength.

Users described difficulty identifying drop-down menus as interactable elements and thought that links in these menus were hard to find. I recommend changing the design of these menus to make it more obvious that they can be interacted with by adding a downward-pointing arrow or contrasting the color of the option with the color of the background.

Users consistently identified reporting misconduct as the sole purpose of this page. I recommend increasing the size and prominence of the positioning of other information to highlight overlooked elements.

Users described the home page as helpful and usable.

Users described some of the language used to title links on the home page as confusing and intimidating. I recommend rephrasing these links to reduce confusion and intimidation.

Appendix 1

- The following directions were given to home page tour participants:
- “I want you to talk to yourself out loud about your thoughts. For the first part of this activity, pretend that I’m not here and narrate your thoughts about what you see. I’m looking for your personal impressions, so there are no right or wrong answers.”
- “Look at the webpage and tell me what you think about it. Consider the following questions as you explore this page and talk: What do you notice about this site? Who do you think operates this site? What do you think you would do on this site? What is the purpose of this site? Look around this site a bit and tell me your thoughts about it. You can scroll up and down to see the entire webpage, but please don’t click on anything that will make you leave this page.”

Appendix 2

- Participants were asked the following follow-up questions after completing the homepage tour or product reaction statements:
 - What do you think the purpose of this site is?
 - Would you use the site? Why or why not?
 - Was there anything confusing about the site?
 - What do you think was the strongest aspect of the site?
 - If you could change one thing about the site, what would it be?

Appendix 3

- The demographic information of participants is as follows:
- Product reaction statements:
 - Participant 1: 55-year-old quality engineer, accesses the internet on a Windows 10 laptop computer
 - Participant 2: 60-year-old landscaper, accesses the internet on a Windows 10 laptop computer
- Homepage tour:
 - Participant 3: 24-year-old computer science graduate student, accesses the internet on a Windows 10 desktop computer
 - Participant 4: 23-year-old retail employee, accesses the internet on a Windows 10 desktop computer

Appendix 4

- The following product reaction statements were used in testing:

Frustrating	Consistent	Business-like	Appealing	Hard to use
Convenient	Busy	Inviting	Ineffective	Professional
Unconventional	Intimidating	Clear	Expected	Overwhelming
Trustworthy	Unattractive	Effective	Irrelevant	Helpful
Ordinary	Distracting	Organized	Usable	Unprofessional