

Website Usability Report

U.S. Department of Energy Office of Inspector General

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Executive Summary and Introduction



The Users

• Given such a small sample of four users, those who were recruited varied in age and experience as much as possible.

The Test

• A **home page scroll** test allows users to share their immediate reactions to a website when they see it for the first time. This helps to determine if a website's home page has adequate information to allow a user to make an informed choice about their next step.

The Methods

- Moderated think-aloud protocol: Users are gently guided to "think out loud" when scrolling the page to verbalize their thoughts and actions.
- **Product reaction statements:** Users are asked to look at a list of words or phrases and choose ones that represent their reactions after scrolling.

EXECUTIVE SUMMARY

The Findings

- Users found the **design** modern and simple, with important **information** prominently displayed.
- The purpose of the website was **unclear**. Some users believed the site was a place for reporting those who wasted energy or defrauded energy customers.
- The **mobile** version of the site cannot be resized, zoomed in or out, or scrolled sideways.
- Some parts of the page seemed **unfinished**, lessening its professional image.

The Recommendations

- Make the point of the website clear—to report fraud and abuse within the department.
- Make the home page accessible on all devices to appeal to users with or without accessibility needs.
- Add a photograph of the Inspector General in its currently blank placeholder.



INTRODUCTION

I have conducted a brief review of the U.S. Department of Energy's Office of the Inspector General home page to quickly gauge its usability.

This concise report outlines key findings, shining light on areas of strength and identifying keys areas of weakness and recommendations for improvements.

Although this is not an in-depth analysis, it provides a "first glance" overview to guide subsequent, more detailed evaluations.

Methodology



METHODOLOGY

Experience	Moderated Think-aloud Protocol	Product Reaction Statements
Josh C. 52, NAE analyst Very experienced Windows/Chrome		✓
Susan H. 78, Retired programmer Experienced Windows/DuckDuckGo	✓	
Courtney J. 34, part-time teacher Inexperienced Android/Chrome		✓
Rachel N. 25, Nursing student Very inexperienced Windows/Chrome	✓	

To measure website usability, I recruited four people to perform a home page scroll using either:

- a) moderated think-aloud protocol, or
- b) product reaction statements

I chose to recruit people of varying ages, and with varied experience with government websites and programs, to ensure the data collected was as valid as possible with such a small sample.

Three users performed the testing on a Microsoft, Windows desktop PC, with one using an Android[™] mobile phone. Three used Google Chrome[™] browser and one used DuckDuckGo.

Home Page Scroll

A home page scroll allows users to share their immediate reactions to a website when they see it for the first time. Users are only allowed to scroll through the page in front of them; they cannot click or follow any links.

This helps to determine if a website's home page contains adequate information to allow a user to make an informed choice about their next step.

Users were given the following prompt prior to seeing the site:

"I am interested in your thoughts on a website.

I would like you to scroll through the homepage and ask yourself who it belongs to, what its purpose is, and how you would use it."

Two Approaches

The home page scroll was done using two methods:

Moderated Thinkaloud Protocol

I guided and reminded the users to "think out loud" when they were scrolling the page to verbalize their thoughts and actions.

Product Reaction Statements

I asked the users to look at a list of words and phrases and then choose the ones that most closely represented their own reactions after scrolling the page.

Findings





Areas of Strength

All users, regardless of experience level, agreed that the home page design was modern, clean, and simple, with pertinent information easily available, straightforward navigation and a calm yet businesslike feel.

"The hotline and email are front & center."

"A lot of info. Easy to find where to go."

"[I like] the modern design.

It's not too wordy."

Area of Weakness

The test subject's interpretations of the usability of the web site are closely related to their prior knowledge of the Department of Energy Inspector General's role.

Those with limited prior knowledge believe the site is a place to report energy fraud and abuse, not fraud and abuse within the Department of Energy.

Recommendation

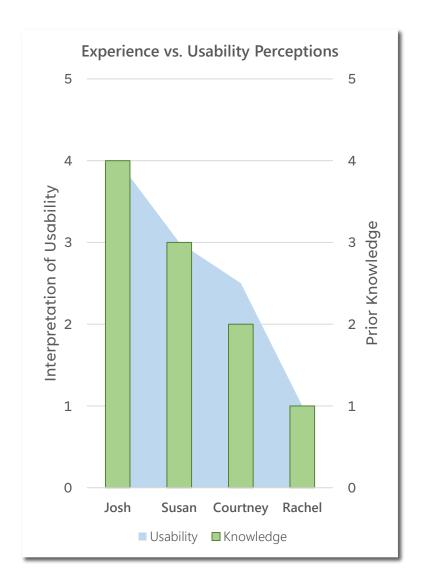
Ensure users of all experience levels understand the purpose of the site and the tools available.

Highlight the purpose of the office, with a headline:

Oversight division of the Department of Energy

Or, by re-wording the main image:

Report fraud, waste, and abuse within the Department of Energy



Area of Weakness

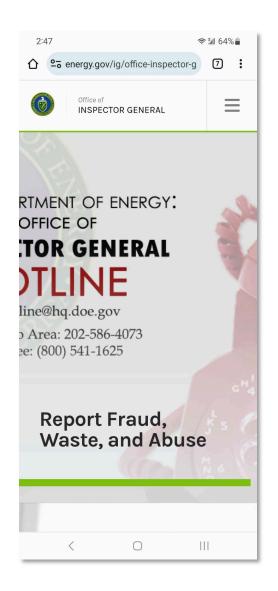
The mobile version of the home page cannot be resized or zoomed in/out.

This presents a usability issue for those who are sight impaired or who have smaller devices

Recommendation

Ensure all versions of the site are viewable and accessible to all users.

- Enable image and font resizing.
- Use accessibility tools such as screen readers, alt text, and keyboard navigation.



Area of Weakness

Not strictly a usability issue, but the lack of a photograph of the Inspector General in what appears as a space-holder is distracting and seems unfinished, which takes away from the site's professionalism.

Recommendation

Add a photo of the current Inspector General to the home page.



Conclusion



CONCLUSION

Testing

Four users

Home page scroll

Think-aloud protocol

Product reaction statements

Findings

Design = modern & simple

Information = prominent

Purpose = unclear

Mobile = accessibility issues

Recommendations

Make the site's **purpose** clear

Improve the site's accessibility

Add Inspector General's **photo**

References and Attributions



References and Attributions

- Department of Energy. *Office of Inspector General*. Retrieved September 26, 2023, from https://www.energy.gov/ig/office-inspector-general
- Microsoft and Windows are trademarks of the Microsoft group of companies.
- Android and Google Chrome are trademarks of Google LLC.
- The **DuckDuckGo** name, logos, trade dress, and other brand elements are trademarks of Duck Duck Go, Inc.
- Word cloud created at <u>worditout.com</u>.

Appendix



Appendix A – User Testing Data

Home Page Tour: Participant #1

Name: Rachel N.

Age: 25

Occupation: Nursing student

Experience: Novice

Access: Desktop (wide screen), Chrome browser

Three-minute scroll notes:

- Likes that hotline is bold
- Unsure what IG. DoE is for
- Likes clean, green color scheme, green = energy
- Initially thought it was for state of Texas, U.S. not prominent

What do you think the purpose of this site is?

Where to go if there is an energy shortage or someone is not disposing of waste properly.

Would you use the site?

Yes. It's simple to find, well-mapped if you see wrongdoing.

Was there anything confusing about the site?

No. It's straightforward.

What do you think is the strongest aspect of the site?

The main image, top three things shown first.

If you could change one thing about the site, what would it be?

It's not bad. It's good for someone who would rarely use it.

Appendix A – User Testing Data, continued

Home Page Tour: Participant #2

Name: Susan H.

Age: 78

Occupation: Retired computer programmer

Experience: Proficient

Access: Desktop (standard screen), DuckDuckGo browser

Three-minute scroll notes:

- Better than average government webpage
- No mission statement
- Good colors, calming, business-like, not red, white, & blue
- Offers what you need

What do you think the purpose of this site is?

To give information on who, what, and how to use the site.

Would you use the site?

Yes, if I had a reason to. It's easy to navigate.

Was there anything confusing about the site?

Not really, but I'm used to government sites.

What do you think is the strongest aspect of the site?

A lot of information, easy to find where to go.

If you could change one thing about the site, what would it be?

Add a picture of Teri Donaldson.

Appendix A – User Testing Data, continued

Product Reaction Statements: Participant #1

Name: Josh C. Age: 52

Occupation: Retired military, current government program analyst

Experience: Expert

Access: Desktop (wide screen), Chrome browser

Product Reaction Statements chosen:

Inconsistent	Impressive	Helpful	Boring	Trustworthy	Frustrating	Consistent
Easy to Use	Professional	Confusing	Useful	Ordinary	Simplistic	Organized
Efficient	Hard to Use	Unattractive	Intuitive	Intimidating	Old	Dated
Busy	High Quality	Clear	Usable			

What do you think the purpose of this site is?

Report fraud or see previous investigations.

Would you use the site?

Yes.

Was there anything confusing about the site?

No.

What do you think is the strongest aspect of the site?

Hotline & email are huge, front & center.

If you could change one thing about the site, what would it be?

Add Inspector General's name to top of site "above the fold."

Appendix A – User Testing Data, continued

Product Reaction Statements: Participant #2

Name: Courtney J.

Age: 34

Occupation: Part-time teacher, stay-at-home parent

Experience: Intermediate

Access: Android mobile, Chrome browser

Product Reaction Statements chosen:

Inconsistent	Impressive	Helpful	Boring	Trustworthy	Frustrating	Consistent
Easy to Use	Professional	Confusing	Useful	Ordinary	Simplistic	Organized
Efficient	Hard to Use	Unattractive	Intuitive	Intimidating	Old	Dated
Busy	High Quality	Clear	Usable			

What do you think the purpose of this site is?

Report energy fraud and abuse.

Would you use the site?

No. Maybe it's for commercial energy accounts?

Was there anything confusing about the site?

Who they are and why report fraud? What constitutes fraud & abuse?

What do you think is the strongest aspect of the site?

Modern design and not too wordy.

If you could change one thing about the site, what would it be?

Resize the images to fit the screen. Add an "About Us" section.



THANK YOU

Lis Cinelli

- liscinelli@my.unt.edu
- (518) 424-6430
- <u>University of North Texas</u>