

### Reach 20% More Constituents by Using Inclusive Design and Usability Techniques

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Brightfind DISCOVERY

### **World Usability Summit**

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# Be My Eyes



Imagine

If your computer installed an update.

And then all you saw was a blank screen.



### **Today We'll Discuss**

Strategies your organizations can do to promote inclusivity:

#### Research Strategies

• Methods to learn about your users' needs

Content Strategies

- Tools to discover what your audience is looking for
- Implementation Strategies
  - Accessibility Standards



# Who We Are

#### ([]) Brightfind.

### **About Us**

#### Nina Amato

Senior User Experience Designer, Brightfind

- 10+ years of coding and testing 508-compliant websites & applications
- UX research, UX design, visual design, front end development
- Worked on websites and applications for multiple government agencies and nonprofits.

#### Nazhin Beiramee

User Experience Designer, Brightfind

- 10+ years of designing digital products
- UX research, UX design, visual design, branding campaigns
- Worked for government, nonprofit, higher education, startup, and entertainment organizations

**People living** with disabilities are the largest minority group in the world.<sup>1</sup>

#### In the United States...

- 1 in 5 Americans have a disability.<sup>2</sup>
- 2 million people are blind or unable to see.<sup>3</sup>
- 2 million people depend on a wheelchair for day-to-day tasks and mobility.<sup>2</sup>
- 7 million people experience difficulty hearing.<sup>3</sup>
- **19 million** people have trouble grasping things like a pencil.<sup>3</sup>

#### Worldwide ....

- 15% of the world's population experience some form of disability during their lifetime.<sup>4</sup>
- <sup>1</sup> Fact sheet on Persons with Disabilities
  <sup>2</sup> How many people use assistive devices?
  <sup>3</sup> U.S. Census
- <sup>4</sup> Disability Inclusion



# Lesson Learned = Screen reader users listen faster than I do.

Don't auto scroll text.

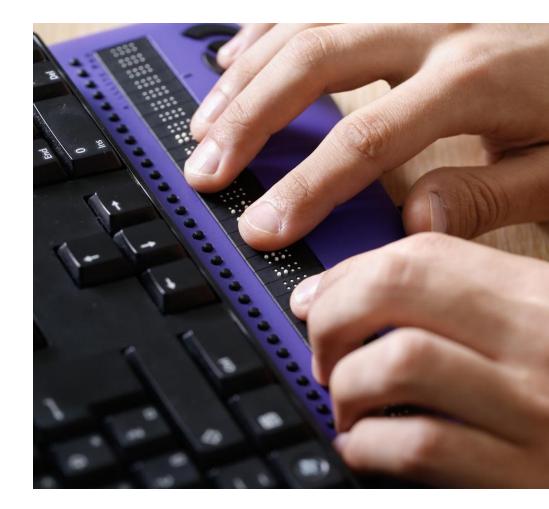
Offer a stationary text transcript for every video.

- Studies show that some people who are deaf read at a slower pace than people who are not deaf.<sup>1</sup>
- Adults over age 65 are more likely to be distracted while reading.<sup>2</sup>
- Glaucoma reduces reading speed.
  2% of adults over age 40 have glaucoma.<sup>3</sup>

<sup>1</sup> Skilled Deaf Readers have an Enhanced Perceptual Span in Reading.
 <sup>2</sup> Age and reading: The impact of distraction
 <sup>3</sup> Glaucoma and Reading Speed

### The False Consensus Effect

When we overestimate how many people share our beliefs and preferences.



# This is why accessibility testing is so important.





http://cdn.wonderfulengineering.com/w p-content/uploads/2013/11/You-Had-O ne-Job-32.jpg



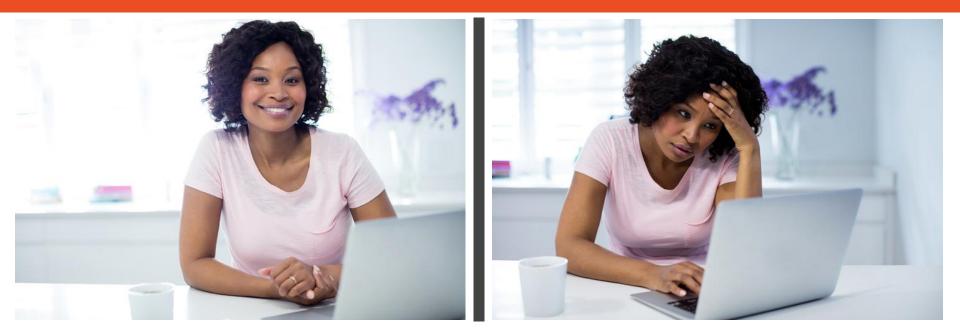
### **Ouch!**

https://brailleworks.com/wp-content/ uploads/2014/04/Braille-Fail-10.jpg



# **Design for website** visitors in different emotional states

### What are your website visitors feeling?



### Imagine these scenarios...

Seeking information about a health condition, maybe she was just diagnosed with gluten allergy. Or maybe her five-year-old daughter was just diagnosed with asthma.

She may be **worried** and **frightened**.

Looking for a new healthcare provider because she has a new health insurance plan.

• She may be **disappointed**.

In need of a tax attorney and may feel a sense of urgency.

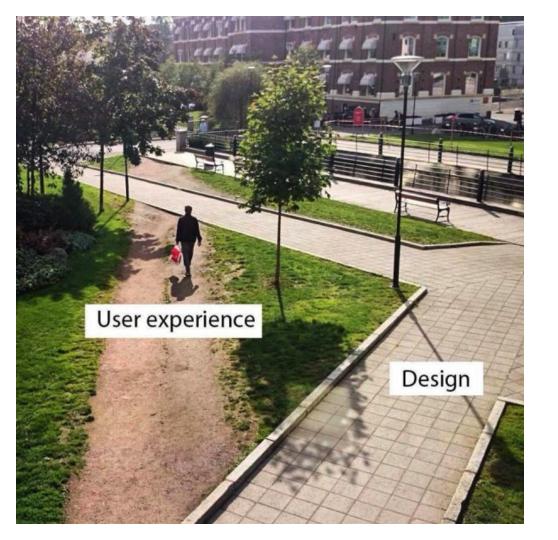
 She may feel stressed and overwhelmed.



## Strategies Your Organization Can Do to Promote Inclusivity

### **Promote Inclusivity:** Research Strategy

- Surveys: Locate constituents to gather information about their needs
- Focus Groups: Enables conversations among constituents to uncover common themes or patterns
- Interviews: One-on-one discussions with a user to learn his/her perspective
- Usability Testing: shows how a user interacts with a website



Remember, sometimes we think we know what the user wants to do, only to find out that he carved out his own solution.

We want to give them that best solution.

### **Promote Inclusivity:** Content Strategy

- Use terminology that is less likely to be misinterpreted or considered offensive
- Support multiple languages and accept multiple types of monetary currency
- Provide easy path for users who may be in a distressed emotional state and need to find content immediately

		foodallergy.	org Č		
Stay informed by signing up to receive the latest food allergy news and alerts. Sign Up					CLOSE 😣
FAR Food Allergy Research					Q DONATE
Life with Food Allergies	Common Allergens	Research Programs	Education & Awareness	Take Action	About FARE

Life with Food Allergies / Living Well Everyday / How to Read Food Labels

#### HOW TO READ FOOD LABELS

Managing life with a food allergy means reading packaged food labels—every time you purchase that food.

#### QUICK LINKS

- What Should I Look For?
- "May Contain" Statements
- Other Allergen Statements
- More Tips for Reading Food Labels

#### f 🔽 🗗

The only way to prevent a food-allergy reaction is to avoid the problem food. But you can't know whether a food contains an allergen simply by looking at it.

Laws and regulations like the Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) have made it easier for people with food allergies to identify problem foods and avoid them.

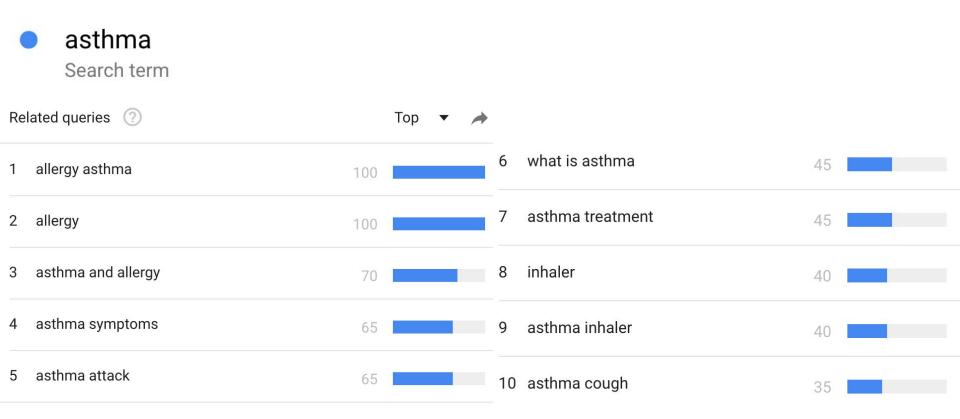
Managing life with a food allergy means reading packaged food labels-every time

#### Screenshot of www.foodallergy.org

### Promote Inclusivity: Content Strategy

- Look at **search terms** in Google Analytics
  - Search terms visitors typed into the search box on your website
  - Search queries people entered into Google
    to get to your website
- Look at the paths visitors follow in Google Analytics
- Review Google **Trends** to find the top search terms people use

Search Query			
brightfind			
brightfind silver spring			
higher logic			
episerver			
cms implementation			
cms implementation plan			
digital agency washington dc			
e commerce architecture ppt			



Promote Inclusivity: Implementation Strategy

### WCAG 2.0 Level AA

· Webinar on Brightfind's website:

http://info.brightfind.com/accessibility\_webinar



Accessibility & 508 Compliance Explained

Thursday, July 21 @ 2:00 p.m., EST

# Sighted users scan bold section headings

### Standards Schmandards - A Pragmatic Approach to Web Standards

#### Fangs: The Firefox Screen Reader Emulator Extension

Orbiting the planet at maximum velocity. The moon with the Rebel base will be in range in thirty minutes. This will be a day long remembered. It has seen the end of Kenobi and it will soon see the end of the Rebellion.

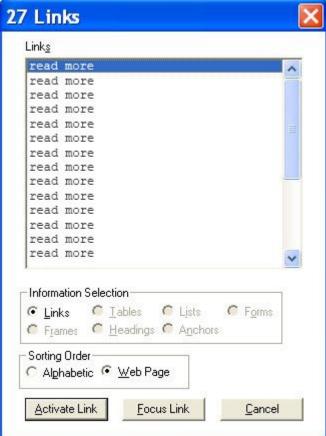
#### The Sound of the Accessible Title Tag Separator

Stretch out with your feelings. You see, you can do it. I call it luck. In my experience, there's no such thing as luck. Look, going good against remotes is one thing. Going good against the living? That's something else. Looks like we're coming up on Alderaan. You know, I did feel something. I could almost see the remote. That's good. You have taken your first step into a larger world.

#### Screen reader users scan headings too, but only if they are coded as headings Heading List X Standards schmandards - a pragmatic approach to web standards : 1 Move To Heading Fangs: The Firefox Screen Reader Emulator Extension : 2 The Sound of the Accessible Title Tag Separator : 2 Cancel Information structures: The grouped table : 2 Standards-wielding maniacs : 2 The Aural Text Class: 2 Working with content to increase accessibility : 2 Toolbox and links. This content is static for all pages in the site. : 1 Categories: 2 Sort Headings In Tab Order Alphabetically Display All Headings C Level4 Headings C Level5 Headings C Level1 Headings C Level6 Headings C Level2 Headings C Level3 Headings

### Avoid "read more" links. Hyperlink article titles instead.

#### ← → C = 文 What Your Members Really Want What do your members really want? Our research reveals all. read more .... How To Retain Members What do your members really want? Our research reveals all. read more ...

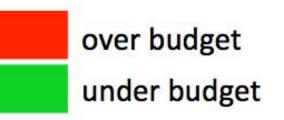


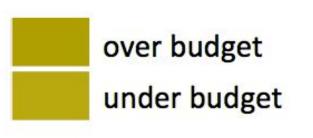
#### **Original Design**

#### **Color-Blind View**

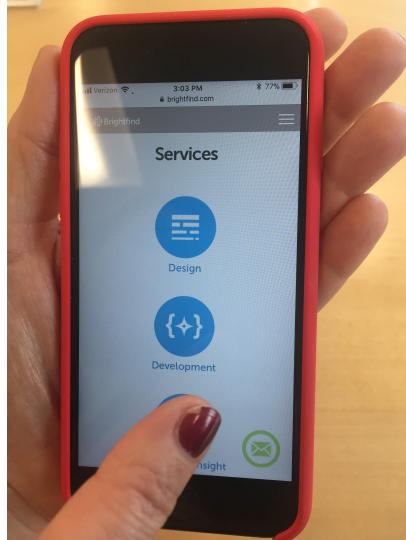
Project	Money Spent
Project 1	\$5200
Project 2	\$4000
Project 3	\$6100

Project	<b>Money Spent</b>		
Project 1	\$5200		
Project 2	\$4000		
Project 3	\$6100		





# pass Can you read this text? pass How about this? fail Is this getting too light? fail How about now? fail Or now?



**Touch points on** tappable items on a website should be the size of a fingertip.



### Navigating Without A Mouse

- People who navigate a website without a mouse include:
- People who struggle with fine motor control due to:
  - a stroke
  - arthritis
  - muscle control impairment
  - cognitive challenges

 Someone with a broken or missing arm

 People who are paralyzed and operate a computer with a mouthpiece

### Show The User Where They've Tabbed

We invite submissions under the following article types:

Original Research Articles Reviews and Mini-reviews White Papers, Commentaries, and Editorials Meeting Reports Brief/Technical Reports and Rapid Communications Regulatory Notes Tutorials Protocols in the Pharmaceutical Sciences

Learn more about the editors and editorial advisory board.

It's more cost effective to build a ramp into the design, rather than to rip out the stairs and add the ramp later.

E.

2515

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Remember how frustrating it can be to not be able to use your computer.

This is why our websites must be accessible.



# Thank You